

Compensatory Afforestation Scheme

(As per Model Rate Structure for Compensatory Afforestation Model No. 5)

Fencing and Irrigated Plantation

Model rate structure for plantation of tree species in degraded areas having medium quality, medium drained soil.

Name of Division :- Shahapur
Protected Forest Gut No. 156 Survey No. 99

Name of Range :- Shahapur
Name of Taluka :- Shahapur
Area :- 5.00 Ha.
Size of pits - 0.45 x 0.45 x 0.45 m

Name of Round :- Shera
Name of Village :- Shei
Daily Wage Rate:- Rs. 432.92
No. of Seedlings per ha - 1111 per ha.

Spacement of pits - 3.00 m x 3.00 m

Sr. No.	Particulars of works	Mandays	Rate per Hectare		Mandays	Rate for		Hectare
			Wages Rs.	M&S Rs.		Wages Rs.	M&S Rs.	
A. Pre Monsoon Works P.P.O./ P.Y.O.								
1	a. Survey & Demarcation	1.00	432.92	91.00	5.00	2164.60	455.00	2619.60
	b. Preparation of treatment map (100m x 50m grid)	1.00	432.92	91.00	5.00	2164.60	455.00	2619.60
	c. Digging trial pits of size 0.30 x 0.30 x 0.60 in corner of Grid	0.40	173.17	0.00	2.00	865.84	0.00	865.84
	d. Fixing 60cm x 0.05 cm x 12cm cement pillars upto 30cm deep in corner of Grid, painting with Grid No. etc complete (3 pillars, Rs. 75/- for each pillar)	0.00	0.00	225.00	0.00	0.00	1125.00	1125.00
	e. cleaning of bushes & preparation of site (as per requirement)	10.00	4329.20	91.00	50.00	21646.00	455.00	22101.00
2	Soil & Moisture Conservation work including collection of Rubbles from areas up to 30 m.etc.	31.00	13420.52	0.00	155.00	67102.60	0.00	67102.60
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 50mm x 50m, 8 gauge thick and fixed 75mm above ground level complete as per SSR item No. 1744 for 2017-18)	0.00	0.00	182865.00	0.00	0.00	914325.00	914325.00
4	Alignment of pits at spacement of 3m x 3m spacement 1111 pits per Ha (0.25 Per 100 pits & M&S @ Rs.2.24 per 50 pits.)	2.78	1203.52	49.77	13.90	6017.59	248.85	6266.44

Sr. No.	Particulars of works	Mandays	Rate per Hectare		Mandays	Rate for		Hectare
			Wages Rs.	M&S Rs.		Wages Rs.	M&S Rs.	
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	31746.02	0.00	366.65	158730.12	0.00	158730.12
6	Construction of 5.00 Rmt wide Inspection Path 1 M.D. per 100 Rmt	1.00	432.92	0.00	5.00	2164.60	0.00	2164.60
7	Enumeration of all valuable plant species at plantation site and grid wise counting the same in Register (0.75 M.D.) per 100 plants	0.75	324.69	25.00	3.75	1623.45	125.00	1748.45
8	Providing and fixing (4 feet x 3 feet) information board each per site	0.00	0.00	5000.00	0.00	0.00	25000.00	25000.00
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	20221.69	4825.46	233.55	101108.47	24127.30	125235.77
	Total	167.97	72717.57	193263.23	839.85	363587.86	966316.15	1329904.01
	Contingency 3%	0.00	0.00	7979.42	0.00	0.00	39897.12	39897.12
	Labour welfare 4%	0.00	0.00	10639.23	0.00	0.00	53196.16	53196.16
	Grand Total	167.97	72717.57	211881.89	839.85	363587.86	1059409.43	1422997.29
B. First Year Operations								
1	Part Nursery cost of maintenance of 1333 seedlings per ha. 3.77 per seedling (Wages Rs. 2.69, M&S Rs. 0.81)	14.80	6407.22	1079.73	74.00	32036.08	5398.65	37434.73
2	Refilling of pits by good quality soil including application of single super phosphate (1.66 MD per 100 pits) @ 1.75	18.44	7983.04	1944.25	92.20	39915.22	9721.25	49636.47
3	Transport of 1333 seedlings from Nursery to plantation site including loading & unloading (0.14 MD per 100 seedlings & M&S Rs. 1.82 per seedlings)	1.87	809.56	2426.00	9.35	4047.80	12130.00	16177.80
4	Planting of 1111 seedlings (1.0 MD per 100 seedlings)	11.11	4809.74	0.00	55.55	24048.71	0.00	24048.71
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	19238.96	911.02	222.20	96194.82	4555.10	100749.92
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	25650.51	54395.00	296.25	128252.55	271975.00	400227.55
7	Casualty replacement (20% 222 Seedlings per ha.) (2 M.D. per 100 seedlings)	4.44	1922.16	0.00	22.20	9610.82	0.00	9610.82

Sr. No.	Particulars of works	Mandays	Rate per Hectare			Mandays	Rate for		Hectare
			Wages Rs.	M&S Rs.	Total Rs.		Wages Rs.	M&S Rs.	
8	Part Nursery cost for causalty 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	3363.79	803.64	4167.43	38.85	16818.94	4018.20	20837.14
9	Watch and ward (10 months -1 watcher per 10 ha.)	27.38	11853.35	0.00	11853.35	136.90	59266.75	0.00	59266.75
10	Soil working for naturally grower plants and singling (1.15 M.D. per 100 plant)	1.15	497.86	10.00	507.86	5.75	2489.29	50.00	2539.29
10	Fire tracing	2.00	865.84	0.00	865.84	10.00	4329.20	0.00	4329.20
	Total	192.65	83402.04	61569.64	144971.68	963.25	417010.19	307848.20	724858.39
	Contengency 3%	0.00	0.00	4349.15	4349.15	0.00	0.00	21745.75	21745.75
	Labour welfare 4%	0.00	0.00	5798.87	5798.87	0.00	0.00	28994.34	28994.34
	Grand Total	192.65	83402.04	71717.66	155119.70	963.25	417010.19	358588.29	775598.48
2. Second Year Operations									
1	Part Nursery cost for seedlings for causalty replacement (222 seedlings per ha) labour rate @ Rs. 3.77 and M.S. Rs. 1.82 per seedlings.	2.46	1064.98	404.00	1468.98	12.30	5324.92	2020.00	7344.92
2	Transportation of 222 seedlings for causalty replacement from nursery to plantation site (including loading and unloading) wages 0.14 M.D. per 100 seedlings & M.S. Rs. 1.82 per seedling	0.31	134.21	404.04	538.25	1.55	671.03	2020.20	2691.23
3	Planting for causalty replacement 222 seedlings (2.00 M.D. per 100 seedlings)	4.44	1922.16	0.00	1922.16	22.20	9610.82	0.00	9610.82
4	2 Weedings and 1 soil working with fertilizer application at 2.5 M.D. per 100 seedlings M.S. Rs. 0.82 per seedling	27.77	12022.19	911.02	12933.21	138.85	60110.94	4555.10	64666.04
5	Watering 1111 seedlings November, December, January and June 1 time each and in February to May 2 times each total 12 times 5 litre per seedling, replacing 10% plastic can/ matka @ Rs. 25/- each replacing 111 cans, supplying water @Rs. 0.50/- per litre and watering 150 seedlings per M.D.	88.88	38477.93	36105.00	74582.93	444.40	192389.65	180525.00	372914.65
6	Watch and ward (12 months) -1 watcher per 10 ha	36.50	15801.58	0.00	15801.58	182.50	79007.90	0.00	79007.90
7	Fire tracing	2.00	865.84	0.00	865.84	10.00	4329.20	0.00	4329.20
	Total	162.36	70288.89	37824.06	108112.95	811.80	351444.46	189120.30	540564.76
	Contengency 3%	0.00	0.00	3243.39	3243.39	0.00	0.00	16216.94	16216.94
	Labour welfare 4%	0.00	0.00	4324.52	4324.52	0.00	0.00	21622.59	21622.59
	Grand Total	162.36	70288.89	45391.97	115680.86	811.80	351444.46	226959.83	578404.29

Sr. No.	Particulars of works	Mandays	Rate per Hectare		Mandays	Rate for		Hectare
			Wages Rs.	M&S Rs.		Wages Rs.	M&S Rs.	
D. Third Year Operation								
1	1 Weeding and 1 soil working (1.50 M.D per 100 seedlings) applying fertilizer @ Rs.0.82 per plant	16.67	7216.78	911.02	83.35	36083.88	4555.10	40638.98
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	19256.28	16680.00	222.40	96281.41	83400.00	179681.41
3	Watch and ward 12 months -1 watcher per 10.00 ha	36.50	15801.58	0.00	182.50	79007.90	0.00	79007.90
4	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	865.84	25.00	10.00	4329.20	125.00	4454.20
5	Fire tracing	2.00	865.84	0.00	10.00	4329.20	0.00	4329.20
	Total	101.65	44006.32	17616.02	508.25	220031.59	88080.10	308111.69
	Contingency 3%	0.00	0.00	1848.67	0.00	0.00	9243.35	9243.35
	Labour welfare 4%	0.00	0.00	2464.89	0.00	0.00	12324.47	12324.47
	Grand Total	101.65	44006.32	21929.58	508.25	220031.59	109647.92	329679.51
E. Fourth Year Operation								
1	Watch and ward 12 months -1 watcher per 10.00 ha	36.50	15801.58	0.00	182.50	79007.90	0.00	79007.90
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	865.84	25.00	10.00	4329.20	125.00	4454.20
3	Fire Tracing	2.00	865.84	0.00	10.00	4329.20	0.00	4329.20
	Total	40.50	17533.26	25.00	202.50	87666.30	125.00	87791.30
	Contingency 3%	0.00	0.00	526.75	0.00	0.00	2633.74	2633.74
	Labour welfare 4%	0.00	0.00	702.33	0.00	0.00	3511.65	3511.65
	Grand Total	40.50	17533.26	1254.08	202.50	87666.30	6270.39	93936.69
F. Fifth Year Operation								
1	Watch and ward 12 months -1 watcher per 10.00 ha	36.50	15801.58	0.00	182.50	79007.90	0.00	79007.90
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	865.84	25.00	10.00	4329.20	125.00	4454.20
3	Fire Tracing	2.00	865.84	0.00	10.00	4329.20	0.00	4329.20
	Total	40.50	17533.26	25.00	202.50	87666.30	125.00	87791.30
	Contingency 3%	0.00	0.00	526.75	0.00	0.00	2633.74	2633.74
	Labour welfare 4%	0.00	0.00	702.33	0.00	0.00	3511.65	3511.65
	Grand Total	40.50	17533.26	1254.08	202.50	87666.30	6270.39	93936.69

Sl. No.	Particulars of works	Mandays	Rate per Hectare			Mandays	Rate for 5.00 Hectare		
			Wages Rs.	M&S Rs.	Total Rs.		Wages Rs.	M&S Rs.	Total Rs.
G. Sixth Year Operation									
1	Watch and ward 12 months - 1 watcher per 10.00 ha	36.50	15801.58	0.00	15801.58	182.50	79007.90	0.00	79007.90
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	865.84	25.00	890.84	10.00	4329.20	125.00	4454.20
3	Fire Tracing	2.00	865.84	0.00	865.84	10.00	4329.20	0.00	4329.20
Total			40.50	17533.26	17533.26	202.50	87666.30	125.00	87791.30
Contingency 3%			0.00	0.00	0.00	0.00	0.00	2633.74	2633.74
Labour welfare 4%			0.00	0.00	0.00	0.00	0.00	3511.65	3511.65
Grand Total			40.50	17533.26	17533.26	202.50	87666.30	6270.39	93936.69
H. Seventh Year Operation									
1	Watch and ward 12 months - 1 watcher per 10.00 ha	36.50	15801.58	0.00	15801.58	182.50	79007.90	0.00	79007.90
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	865.84	25.00	890.84	10.00	4329.20	125.00	4454.20
3	Fire Tracing	2.00	865.84	0.00	865.84	10.00	4329.20	0.00	4329.20
Total			40.50	17533.26	17533.26	202.50	87666.30	125.00	87791.30
Contingency 3%			0.00	0.00	0.00	0.00	0.00	2633.74	2633.74
Labour welfare 4%			0.00	0.00	0.00	0.00	0.00	3511.65	3511.65
Grand Total			40.50	17533.26	17533.26	202.50	87666.30	6270.39	93936.69
I. Eighth Year Operation									
1	Watch and ward 12 months - 1 watcher per 10.00 ha	36.50	15801.58	0.00	15801.58	182.50	79007.90	0.00	79007.90
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	865.84	25.00	890.84	10.00	4329.20	125.00	4454.20
3	Fire Tracing	2.00	865.84	0.00	865.84	10.00	4329.20	0.00	4329.20
Total			40.50	17533.26	17533.26	202.50	87666.30	125.00	87791.30
Contingency 3%			0.00	0.00	0.00	0.00	0.00	2633.74	2633.74
Labour welfare 4%			0.00	0.00	0.00	0.00	0.00	3511.65	3511.65
Grand Total			40.50	17533.26	17533.26	202.50	87666.30	6270.39	93936.69
J. Ninth Year Operation									
1	Watch and ward 12 months - 1 watcher per 10.00 ha	36.50	15801.58	0.00	15801.58	182.50	79007.90	0.00	79007.90
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	865.84	25.00	890.84	10.00	4329.20	125.00	4454.20
3	Fire Tracing	2.00	865.84	0.00	865.84	10.00	4329.20	0.00	4329.20
Total			40.50	17533.26	17533.26	202.50	87666.30	125.00	87791.30
Contingency 3%			0.00	0.00	0.00	0.00	0.00	2633.74	2633.74
Labour welfare 4%			0.00	0.00	0.00	0.00	0.00	3511.65	3511.65
Grand Total			40.50	17533.26	17533.26	202.50	87666.30	6270.39	93936.69
Grand Total									
Total			40.50	17533.26	17533.26	202.50	87666.30	125.00	87791.30
Contingency 3%			0.00	0.00	0.00	0.00	0.00	2633.74	2633.74
Labour welfare 4%			0.00	0.00	0.00	0.00	0.00	3511.65	3511.65
Grand Total			40.50	17533.26	17533.26	202.50	87666.30	6270.39	93936.69

