Enclosure to Principal Chief Conserva[illegible] of Forest (HoFF),M.S. Nagpur Letter No.Desk-17/C[illegible] Nodal Cell/CR-40/1127/2019-20,Date 04/10/2019

Model Rate Structure for Compensatory Afforestation

Model No.4

Model rate Structure for plantation of mixed tree species having rainfall upto 800 mm and medium quality, medium drained soil.

Range- Aajra | Spacement 3m x 3m | Gut no. 71

Round - Aajra | Size of Pits 0.45 x 0.45 x 0.45 m | Plantion Area - 1.00 Ha.

Beat - | No. Of Seedlings 1111 per ha | Wage Rate - Rs. 425.96 Per day.

Villege -Gavase | | Total Plants -1111

Sr. No	Particulare of works	Per Hector				Area	As per condition on the spot 1.00 Hector				
		Man days	Weges	Material supply	Total (Rs.Per Ha.)		Man days	Weges	Material supply	Total (Rs.Per Ha.)	Sanction Letter Dt./ Model No./ Item No.
	A. Pre Monsoon Works PPO/PYO										
1	(a) Survey and demarcation	1.00	425.96	91.00	516.96	1	1.00	425.96	91.00	516.96	Letter Dt.07/03/2018 Irrigated & fencing Plantation Model no.1 Item No. 1a
	(b) Preparation of treatment map (100m X 50 m grid)	1.00	425.96	91.00	516.96	1	1.00	425.96	91.00	516.96	Item No. 1b
	(c) Digging trial pits of size 0.30 X 0.30 X 0.60 in corner of Grid.	0.40	154.89	0.00	154.89	1	0.40	154.89	0.00	154.89	Item No. 1c
	(d) Fixing 60cm X 0.05cm X 12 cm cement pillars upto 30cm deep in corner of Grid, painting with Grid No. Etc complete (3 pillars, Rs.75/- for each pillrs)	0.00	0.00	225.00	225.00	1	0.00	0.00	225.00	225.00	Item No. 3
	(e) Clearing of bushes and preparation of site (As per requirement)	10.00	4259.60	91.00	4350.60	1	10.00	4259.60	91.00	4350.60	Item No. 1e
2	Soil and moisture conervation works including collection of rubbles from areas upto 30 m etc.	31.00	12004.13	0.00	12004.13	1	31.00	12004.13	0.00	12004.13	Item No. 2
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 heigh 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)	0.00	0.00	182865.60	182865.60	1	0.00	0.00	182865.60	182865.60	As per SSR rates 2017/18 Item No. 1744
4	Alignment of Pits at 3m x 3m spacement. 1111 pits per 100 pits 0.26 M.D, M/S 8.18 per 100 pits	2.89	1119.09	91.00	1210.09	1	2.89	1119.09	91.00	1210.09	Item No. 4

	Diggng of pits of size 0.45 X 0.45 X 0.45m (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	0.00	28395.58	1	73.33	28395.58	0.00	28395.58	Item No. 5
	Construction of 5.00 Rmt wide Inspection Path 1M.D. Per 100 Rmt	1.00	425.96	0.00	425.96	1	1.00	425.96	0.00	425.96	Item No. 6
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	25.00	315.42	1	0.75	290.42	25.00	315.42	Item No. 7
8	Providing and fixing (4 feet x 3 feet) information board each per site	0.00	0.00	5000.00	5000.00	1	0.00	0.00	5000.00	5000.00	Item No. 8
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)	46.70	18083.64	4798.80	22882.44	1	46.70	18083.64	4798.80	22882.44	Item No. 9 , 20% casualty instead of 10%
	Total	**168.07**	**65585.24**	**193278.40**	**258863.64**		**168.07**	**65585.24**	**193278.40**	**258863.64**	
	Contingency 3%									7765.91	
	Labour Welfare 4%									10354.55	
	Grand Total									**276984.09**	
					B. First Year Operations						
1	Part Nuresry cost for maintenance of 1333 seedling per ha Rs. 2.64 per seedling (Wages Rs. 2.69, M & S Rs.0.81)	14.80	5731.00	91.00	5822.00	1	14.80	5731.00	91.00	5822.00	Letter Dt.07/03/2018 Irrigated & fencing Plantation Model no.1 Item No. 1 20% instead of 10%
2	Refilling of pits by good quality soil including application of single super phosphate (1.66 MD per 100 pits)	18.44	7140.52	1944.25	9084.77	1	18.44	7140.52	1944.25	9084.77	Item no.2
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	1	1.87	724.12	2426.00	3150.12	Item no.3 1333 plants instead of 1222
4	Planting of 1111 seedlings (1.0 M.D. Per 100 Seedlings)	11.11	4302.13	0.00	4302.13	1	11.11	4302.13	0.00	4302.13	Item no.4
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	17208.50	911.02	18119.52	1	44.44	17208.50	911.02	18119.52	Item no.5
6	Casualty replacement (20% 222 Seedlings per ha.) (2 M.D. Per 100 seedlings)	4.44	1719.30	0.00	1719.30	1	4.44	1719.30	0.00	1719.30	Item no.6 20% Instead of 10%
7	Part Nuresry 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)	7.78	3012.65	803.64	3816.29	1	7.78	3012.65	803.64	3816.29	Item no.8 20% Instead of 10%

	Watch and ward (9 months - 1 watcher per 10 ha)	27.38	10602.36	0.00	10602.36	1	27.38	10602.36	0.00	10602.36	Item no.9
	Soil working for naturally grower plants and singling (1.15 M.D. Per 100 plants)	1.15	445.31	10.00	455.31	1	1.15	445.31	10.00	455.31	Item no.10
	Fire tracing	2.00	774.46	0.00	774.46	1	2.00	774.46	0.00	774.46	Item no.12
	Total	133.41	51660.35	6185.91	57846.26		133.41	51660.35	6185.91	57846.26	
	Contingency 3%				1735.39					1735.39	
	Labour Welfare 4%				2313.85					2313.85	
	Grand Total				**61895.50**					61896	
	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	952.59	404.04	1356.63	1	2.46	952.59	404.04	1356.63	Letter Dt.07/03/2018 Irrigated & fencing Plantation Model no.1 Item No. 1 20% instead of 10%
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	120.04	404.04	524.08	1	0.31	120.04	404.04	524.08	Item no.2 20% Instead of 10%
3	Planting for casualty replacement 222 seedlings (2.00 M.D. Per 100 seedlings)	4.44	1719.30	0.00	1719.30	1	4.44	1719.30	0.00	1719.30	Item no.3 20% Instead of 10%
4	2 weedings and 1 soil working, with fertilizer application 2.5 M.D. Per 100 seedlings at M.S. Rs. 0.82 per seelings	27.77	10753.38	911.02	11664.40	1	27.77	10753.38	911.02	11664.40	Item no.4
5	Watch and ward 12 months - 1 watcher per 10.00 ha	36.50	14133.90	0.00	14133.895	1	36.50	14133.90	0.00	14133.90	Item no.6
6	Fire tracing	2.00	774.46	0.00	774.46	1	2.00	774.46	0.00	774.46	Item no.8
	Total	73.48	28453.66	1719.10	30172.76		73.48	28453.66	1719.10	30172.76	
	Contingency 3%				905.18		0.00	0.00	0.00	905.18	
	Labour Welfare 4%				1206.91		0.00	0.00	0.00	1206.91	
	Grand Total				**32284.85**		0.00	0.00	0.00	32284.85	
	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	6455.12	911.02	7366.14	1	16.67	6455.12	911.02	7366.14	Letter Dt.07/03/2018 Irrigated & fencing Plantation Model no.1 Item No. 1
2	Watch and ward 12 months 1 watcher per 10.00 ha	36.50	14133.90	0.00	14133.895	1	36.50	14133.90	0.00	14133.90	Item no.3
3	Counting of survival percentage Grid wise and Species wise and to Notethe same on Register in May and October.	2.00	774.46	25.00	799.46	1	2.00	774.46	25.00	799.46	Item no.5
4	Fire tracing	2.00	774.46	0.00	774.46	1	2.00	774.46	0.00	774.46	Item no.6

	Total	57.17	22137.94	936.02	23073.96		57.17	22137.94	936.02	23073.96	
	Contingency 3%				692.22		0.00	0.00	0.00	692.22	
	Labour Welfare 4%				922.96					922.96	
	Grand Total				**24689.14**		0.00	0.00	0.00	24689.14	

E. Fourth Year Operations

1	Watch and ward 12 months 1 watcher per 10.00 ha	36.50	14133.90	0.00	14133.895	1	36.50	14133.90	0.00	14133.90	Letter Dt.07/03/2018 Irrigated & fencing Plantation Model no.1 Item No. 1
2	Counting of survival percentage Grid wise and Species wise and to Notethe same on Register in May and October.	2.00	774.46	25.00	799.46	1	2.00	774.46	25.00	799.46	Item no.2
3	Fire tracing	2.00	774.46	0.00	774.46	1	2.00	774.46	0.00	774.46	Item no.3
	Total	40.50	15682.82	25.00	15707.82		40.50	15682.82	25.00	15707.82	
	Contingency 3%				471.23					471.23	
	Labour Welfare 4%				628.31					628.31	
	Grand Total				**16807.36**					16807.36	

F. Fifth Year Operations

1	Watch and ward 12 months 1 watcher per 10.00 ha	36.50	14133.90	0.00	14133.895	1	36.50	14133.90	0.00	14133.90	Letter Dt.07/03/2018 Irrigated & fencing Plantation Model no.1 Item No. 1
2	Counting of survival percentage Grid wise and Species wise and to Notethe same on Register in May and October.	2.00	774.46	25.00	799.46	1	2.00	774.46	25.00	799.46	Item no.2
3	Fire tracing	2.00	774.46	0.00	774.46	1	2.00	774.46	0.00	774.46	Item no.3
	Total	40.50	15682.82	25.00	15707.82		40.50	15682.82	25.00	15707.82	
	Contingency 3%				471.23					471.23	
	Labour Welfare 4%				628.31					628.31	
	Grand Total				**16807.36**					16807.36	

G. Six Year Operations

1	Watch and ward 12 months 1 watcher per 10.00 ha	36.50	14133.90	0.00	14133.895	1	36.50	14133.90	0.00	14133.90	Letter Dt.07/03/2018 Irrigated & fencing Plantation Model no.1 Item No. 1
2	Counting of survival percentage Grid wise and Species wise and to Notethe same on Register in May and October.	2.00	774.46	25.00	799.46	1	2.00	774.46	25.00	799.46	Item no.2

	Fire tracing	2.00	774.46	0.00	774.46	1	2.00	774.46	0.00	774.46	Item no.3
	Total	40.50	15682.82	25.00	15707.82		40.50	15682.82	25.00	15707.82	
	Contingency 3%				471.23					471.23	
	Labour Welfare 4%				628.31					628.31	
	Grand Total				**16807.36**					16807.36	

H. Seventh Year Operations

1	Watch and ward 12 months 1 watcher per 10.00 ha	36.50	14133.90	0.00	14133.895	1	36.50	14133.90	0.00	14133.90	Letter Dt.07/03/2018 Irrigated & fencing Plantation Model no.1 Item No. 1
2	Counting of survival percentage Grid wise and Species wise and to Notethe same on Register in May and October.	2.00	774.46	25.00	799.46	1	2.00	774.46	25.00	799.46	Item no.2
3	Fire tracing	2.00	774.46	0.00	774.46	1	2.00	774.46	0.00	774.46	Item no.3
	Total	40.50	15682.82	25.00	15707.82		40.50	15682.82	25.00	15707.82	
	Contingency 3%				471.23					471.23	
	Labour Welfare 4%				628.31					628.31	
	Grand Total				**16807.36**					16807.36	

I. Eighth Year Operations

1	Watch and ward 12 months 1 watcher per 10.00 ha	36.50	14133.90	0.00	14133.895	1	36.50	14133.90	0.00	14133.90	Letter Dt.07/03/2018 Irrigated & fencing Plantation Model no.1 Item No. 1
2	Counting of survival percentage Grid wise and Species wise and to Notethe same on Register in May and October.	2.00	774.46	25.00	799.46	1	2.00	774.46	25.00	799.46	Item no.2
3	Fire tracing	2.00	774.46	0.00	774.46	1	2.00	774.46	0.00	774.46	Item no.3
	Total	40.50	15682.82	25.00	15707.82		40.50	15682.82	25.00	15707.82	
	Contingency 3%				471.23					471.23	
	Labour Welfare 4%				628.31					628.31	
	Grand Total				**16807.36**					16807.36	

J. Ninth Year Operations

1	Watch and ward 12 months 1 watcher per 10.00 ha	36.50	14133.90	0.00	14133.895	1	36.50	14133.90	0.00	14133.90	Letter Dt.07/03/2018 Irrigated & fencing Plantation Model no.1 Item No. 1
2	Counting of survival percentage Grid wise and Species wise and to Notethe same on Register in May and October.	2.00	774.46	25.00	799.46	1	2.00	774.46	25.00	799.46	Item no.2

	Fire tracing	2.00	774.46	0.00	774.46	1	2.00	774.46	0.00	774.46	Item no.3
	Total	40.50	15682.82	25.00	15707.82		40.50	15682.82	25.00	15707.82	
	Contingency 3%				471.23					471.23	
	Labour Welfare 4%				628.31					628.31	
	Grand Total				**16807.36**					16807.36	

K. Tenth Year Operations

1	Watch and ward 12 months 1 watcher per 10.00 ha	36.50	14133.90	0.00	14133.895	1	36.50	14133.90	0.00	14133.90	Letter Dt.07/03/2018 Irrigated & fencing Plantation Model no.1 Item No. 1
2	Counting of survival percentage Grid wise and Species wise and to Notethe same on Register in May and October.	2.00	774.46	25.00	799.46	1	2.00	774.46	25.00	799.46	Item no.2
3	Fire tracing	2.00	774.46	0.00	774.46	1	2.00	774.46	0.00	774.46	Item no.3
	Total	40.50	15682.82	25.00	15707.82		40.50	15682.82	25.00	15707.82	
	Contingency 3%				471.23					471.23	
	Labour Welfare 4%				628.31					628.31	
	Grand Total				**16807.36**					16807.36	

Abstract for Modal No.4

Sr No.	Year of Operation	Man days	Wages	Material supply	Total	Other expenses	Total amount
1	Pre Monsoon works	168.07	65585	193278	258864	18120	276984
2	First Year Operations	133.41	51660	6186	57846	4049	61896
3	Second Year Operations	73.48	28454	1719	30173	2112	32285
4	Third Year Operations	57.17	22138	936	23074	1615	24689
5	Fourth Year Operations	40.50	15683	25	15708	1100	16807
6	Fifth Year Operations	40.50	15683	25	15708	1100	16807
7	Sixth Year Operations	40.50	15683	25	15708	1100	16807
8	Seventh Year Operations	40.50	15683	25	15708	1100	16807
9	Eighth Year Operations	40.50	15683	25	15708	1100	16807
10	Nineth Year Operations	40.50	15683	25	15708	1100	16807
11	Tenth Year Operations	40.50	15683	25	15708	1100	16807
	Total	40.50	**277617**	**202294**	**479911**	**33594**	**513505**

Cost per plant Rs. 462.20

Deputy Conservator of Forests,
Kolhapur Division Kolhapur