

Exclusive to Panchajanya Conservator of Forest (H&P) M.S. No. 44/1127/2019-20, 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 - Pendakhal
Round - Yelvan Jagai
Beat - Manjare
Village - Manjare

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

Multipad Out No -47
Plantation Area - 3.70 Ha.
Wage Rate - Rs. 438.42 Per day.
Total Plants - 4111

Sr. No		Particulate of works	Per Hectore				Area	As per condition on the spot 1.00 Hectore				Sanction Letter Dt/ Model No / Item No.
			Man days	Weges	Material supply	Total (Rs.Per Ha.)		Man days	Weges	Material supply	Total (Rs.Per Ha.)	
A. Pre Monsoon Works FFO/YO												
1	(a) Survey and demarcation	1.00	438.42	91.00	529.42	3.7	3.70	1622.15	336.70	1958.85	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	438.42	91.00	529.42	3.7	3.70	1622.15	336.70	1958.85	Item No. 1b	
	(c) Digging trial pits of size 0.30 X 0.30 X 0.60 in corner of Grid.	0.40	175.37	0.00	175.37	3.7	1.48	648.86	0.00	648.86	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 pillars)	0.00	0.00	225.00	225.00	3.7	0.00	0.00	832.50	832.50	Item No. 3	
	(e) Clearing of bushes and preparation of site (As per requirement)	10.00	4384.20	91.00	4475.20	3.7	37.00	16221.54	336.70	16558.24	Item No. 1e	
2	Soil and moisture conservation works including collection of rubbles from areas upto 30 m etc.	31.00	13591.02	0.00	13591.02	3.7	114.70	50286.77	0.00	50286.77	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. Loadplus 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 50mmX50mm, 8 gauge thick and fixed 75mm above	0.00	0.00	182865.60	182865.60	3.7	0.00	0.00	676602.72	676602.72	As per SSR rates 2017/18 Item No. 1744	
4	A) Alignment of Pits at 3m x 3m spacing. 1111 pits per 1 ha @ 0.26 M.D. M/S 8.18 per 100 pits	2.89	1267.03	91.00	1358.03	3.7	10.69	4688.03	336.70	5024.73	Item No. 4	
5	Digging 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	32149.34	0.00	32149.34	3.7	271.32	118952.55	0.00	118952.55	Item No. 5	
6	Construction of 5.00 Rmt wide Inspection Path 1M.D. Per 100 Rmt	1.00	438.42	0.00	438.42	3.7	3.70	1622.15	0.00	1622.15	Item No. 6	

Providing and fixing (4 feet x 3 feet) information board each per site	0.00	0.00	5000.00	5000.00	3.7	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	20474.21	4798.80	25273.01	3.7	172.79	75754.59	17755.56	93510.15	Item No. 9, 20% casualty instead of 10%
Total	168.07	73685.25	193278.40	266963.65		631.86	272635.42	701630.88	974265.50	
Contingency 3%									29227.97	
Labour Welfare 4%									38970.62	
Grand Total									1042464.09	
B. First Year Operations										
1 Part Nursery cost for maintenance of 1333 seedling per ha Rs. 2.64 per seedling (Wages Rs. 2.69, M & S Rs. 0.81)	14.80	6488.62	91.00	6579.62	3.7	54.76	24007.88	336.70	24344.58	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	8084.46	1944.25	10028.71	3.7	68.23	29912.52	7193.73	37106.24	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	819.85	2426.00	3245.85	3.7	6.92	3033.43	8976.20	12009.63	Item no.3 1333 plants instead of 1222
4 Planting of 1111 seedlings (1.0 M.D. Per 100 Seedlings)	11.11	4870.85	0.00	4870.85	3.7	41.11	18022.13	0.00	18022.13	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	19483.38	911.02	20394.40	3.7	164.43	72088.52	3370.77	75459.30	Item no.5
6 Casualty replacement (20% 222 Seedlings per ha.) (2 M.D. Per 100 seedlings)	4.44	1946.58	0.00	1946.58	3.7	16.43	7202.36	0.00	7202.36	Item no.6 20% Instead of 10%
7 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)	7.78	3410.91	803.64	4214.55	3.7	28.79	12620.36	2973.47	15593.83	Item no.8 20% Instead of 10%
8 Watch and ward (9 months - 1 watcher per 10 ha)	27.38	12003.94	0.00	12003.94	3.7	101.31	44414.58	0.00	44414.58	Item no.9
9 Soil working for naturally grower plants and singling (1.15 M.D. Per 100 plants)	1.15	504.18	10.00	514.18	3.7	4.26	1865.48	37.00	1902.48	Item no.10
10 Fire tracing	2.00	876.84	0.00	876.84	3.7	7.40	3244.31	0.00	3244.31	Item no.12
Total	133.41	58489.61	6185.91	64675.52		493.62	216411.57	22887.87	239279.43	
Contingency 3%				1940.27					7178.98	

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E. Fourth Year Operations											
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.50	16002.33	0.00	16002.33	3.7	135.05	59208.62	0.00	59208.62	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 Note the same on Register in May and October.	2.00	876.84	25.00	901.84	3.7	7.40	3244.31	92.50	3336.81	Item no.2
3	Fire tracing	2.00	876.84	0.00	876.84	3.7	7.40	3244.31	0.00	3244.31	Item no.3
	Total	40.50	17756.01	25.00	17781.01		149.85	65697.24	92.50	65789.74	
	Contingency 3%				533.43					1973.69	
	Labour Welfare 4%				711.24					2631.59	
	Grand Total				19025.68					70395.02	

F. Fifth Year Operations											
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.50	16002.33	0.00	16002.33	3.7	135.05	59208.62	0.00	59208.62	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 Note the same on Register in May and October.	2.00	876.84	25.00	901.84	3.7	7.40	3244.31	92.50	3336.81	Item no.2
3	Fire tracing	2.00	876.84	0.00	876.84	3.7	7.40	3244.31	0.00	3244.31	Item no.3
	Total	40.50	17756.01	25.00	17781.01		149.85	65697.24	92.50	65789.74	
	Contingency 3%				533.43					1973.69	
	Labour Welfare 4%				711.24					2631.59	
	Grand Total				19025.68					70395.02	

G. Six Year Operations											
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.50	16002.33	0.00	16002.33	3.7	135.05	59208.62	0.00	59208.62	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 Note the same on Register in May and October.	2.00	876.84	25.00	901.84	3.7	7.40	3244.31	92.50	3336.81	Item no.2
3	Fire tracing	2.00	876.84	0.00	876.84	3.7	7.40	3244.31	0.00	3244.31	Item no.3
	Total	40.50	17756.01	25.00	17781.01		149.85	65697.24	92.50	65789.74	
	Contingency 3%				533.43					1973.69	
	Labour Welfare 4%				711.24					2631.59	
	Grand Total				19025.68					70395.02	

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H. Seventh Year Operations										Letter Dt. 07/03/2018 Irrigated & Fencing Plantation Model no.1 Item No. 1
Watch and ward 12 months 1 watcher per 10.00 ha	36.50	16002.33	0.00	16002.33	3.7	135.05	59208.62	0.00	59208.62	
Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2.00	876.84	25.00	901.84	3.7	7.40	3244.31	92.50	3336.81	Item no.2
3 Fire tracing	2.00	876.84	0.00	876.84	3.7	7.40	3244.31	0.00	3244.31	Item no.3
Total	40.50	17756.01	25.00	17781.01		149.85	65697.24	92.50	65789.74	
Contingency 3%				533.43					1973.69	
Labour Welfare 4%				711.24					2631.59	
Grand Total				19025.68					70395.02	

I. Eighth Year Operations										Letter Dt. 07/03/2018 Irrigated & Fencing Plantation Model no.1 Item No. 1
Watch and ward 12 months 1 watcher per 10.00 ha	36.50	16002.33	0.00	16002.33	3.7	135.05	59208.62	0.00	59208.62	
Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2.00	876.84	25.00	901.84	3.7	7.40	3244.31	92.50	3336.81	Item no.2
3 Fire tracing	2.00	876.84	0.00	876.84	3.7	7.40	3244.31	0.00	3244.31	Item no.3
Total	40.50	17756.01	25.00	17781.01		149.85	65697.24	92.50	65789.74	
Contingency 3%				533.43					1973.69	
Labour Welfare 4%				711.24					2631.59	
Grand Total				19025.68					70395.02	

J. Ninth Year Operations										Letter Dt. 07/03/2018 Irrigated & Fencing Plantation Model no.1 Item No. 1
Watch and ward 12 months 1 watcher per 10.00 ha	36.50	16002.33	0.00	16002.33	3.7	135.05	59208.62	0.00	59208.62	
Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2.00	876.84	25.00	901.84	3.7	7.40	3244.31	92.50	3336.81	Item no.2
3 Fencing	2.00	876.84	0.00	876.84	3.7	7.40	3244.31	0.00	3244.31	Item no.3
Total	40.50	17756.01	25.00	17781.01		149.85	65697.24	92.50	65789.74	
Contingency 3%				533.43					1973.69	
Labour Welfare 4%				711.24					2631.59	
Grand Total				19025.68					70395.02	

K. Tenth Year Operations										Sl. No.
Count and ward 12 months 1 watcher per 10.00 ha	36.50	16002.33	0.00	16002.33	3.7	135.05	59208.62	0.00	59208.62	1. 10/05/2018 Invigilated & fencing Plantations Model no.1 Item No. 1
Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2.00	876.84	25.00	901.84	3.7	7.40	3244.31	92.50	3336.81	Item no.2
3 Fire tracing	2.00	876.84	0.00	876.84	3.7	7.40	3244.31	0.00	3244.31	Item no.3
Total	40.50	17756.01	25.00	17781.01		149.85	65697.24	92.50	65789.74	
Contingency 3%				533.43					1973.69	
Labour Welfare 4%				711.24					2631.59	
Grand Total				19025.68					70395.02	

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	272635	701630	974266	68199	1042464
2	First Year Operations	133.41	216412	22888	239299	16751	256050
3	Second Year Operations	73.48	119196	6361	125557	8789	134346
4	Third Year Operations	57.17	92739	3463	96202	6734	102936
5	Fourth Year Operations	40.50	65697	93	65790	4605	70395
6	Fifth Year Operations	40.50	65697	93	65790	4605	70395
7	Sixth Year Operations	40.50	65697	93	65790	4605	70395
8	Seventh Year Operations	40.50	65697	93	65790	4605	70395
9	Eighth Year Operations	40.50	65697	93	65790	4605	70395
10	Ninth Year Operations	40.50	65697	93	65790	4605	70395
11	Tenth Year Operations	40.50	65697	93	65790	4605	70395
	Total	40.50	1160862	734989	1895851	132710	2028561

Deputy Conservator of Forests,
Kolhapur Division Kolhapur