

COMPENSATORY AFFORESTATION SCHEME

Abstract model estimate for Rasing Compensatory Afforestation over an area of 3.04ha in the Non-Forest land during 2022-2023 under State CAMPA Scheme.

1	Compensatory Afforestation area (in ha)	3.04 ha
2	No. of seedlings proposed per ha	1000 Nos
3	No. of seedlings	3040 Nos
4	Add for 10% casuality replacement	304 Nos
Total		3344 Nos

Sl.No.	Details of work	Proposed amount (in Rs.)	Remarks
1	Raising nursery - 3344 Nos	4,40,000.00	1000 Nos of seedlings per ha has been proposed
2	Planting operation - 3040 seedlings	15,07,000.00	10% Weightage towards escalation of labour wage rate during 2023-2024
3	1 st year maintenance	7,92,000.00	20% Weightage towards escalation of labour wage rate during 2024-2025
4	2 nd year maintenance	6,24,000.00	30% Weightage towards escalation of labour wage rate during 2025-2026
5	3 rd year maintenance	6,72,000.00	40% Weightage towards escalation of labour wage rate during 2026-2027
6	4 th year maintenance	27,000.00	50% Weightage towards escalation of labour wage rate during 2027-2028
7	5 th year maintenance	29,700.00	60% Weightage towards escalation of labour wage rate during 2028-2029
8	6 th year maintenance	32,670.00	70% Weightage towards escalation of labour wage rate during 2029-2030
9	7 th year maintenance	35,940.00	80% Weightage towards escalation of labour wage rate during 2030-2031
10	8 th year maintenance	39,540.00	90% Weightage towards escalation of labour wage rate during 2031-2032
11	9 th year maintenance	43,500.00	100% Weightage towards escalation of labour wage rate during 2032-2033
12	10 th year maintenance	47,850.00	110% Weightage towards escalation of labour wage rate during 2033-2034
13	Hanging Solar Fencing around plantation to prevent biotic pressure including 10 year maintenance (750m @ Rs.1370 / RM)	10,27,500.00	10 year maintenance with 20% cost escalation for 2024-2025.
Total CA cost for 3.04ha		53,18,700.00	


Prorata for 1.00ha area


17,49,572.00

(or)

17.500

lakhs


Wildlife Warden,
Hosur Forest Division,
Hosur.


28/10/2022

Model estimate for raising nursery for native tree species for Compensatory Afforestation over an area of 3.04ha in the Non-Forest land during 2022-2023 under State CAMPA Scheme.

(i) Size of poly bags	: 13x25x250G	Total Area	: 3.04 ha
(ii) Transplanting size of poly bags	30x45x600G	Seedlings per ha	: 1000 Nos.
(iii) Proposed espacement	: Gap planting	Total No. of seedlings	: 3040 Nos.
(iv) Species proposed for planting		Add for casuality 10%	: 304 Nos.
		Total	3344 Nos.
		Labour rate for 2022-2023	: Rs. 475.75

Sl. No.	Qty.	Description of work	FSR. item No.	FSL	Rate per unit			Amount
(A)	PART-I Size of poly bags - 13x25x250G							
1	367.84 M ²	Preparation of nursery site by clearing and leveling the site for forming standard beds of 10m x 1m size. (110sq.m. / 1000 Nos.)	4.1	2.42	1,151.32	200	M ²	2,118.00
2	6.69 Kg	Cost of seeds (2kg / 1000 Nos)	LR		250.00	1	kg	1,673.00
3	3344.00 Nos.	Cost of 13x25x250G Polythene bags	Tender rate 2022-2023		775.00	1,000	No	2,592.00
4	10.00 M ³	Formation of germination bed of size 10mx1mx0.30m by heaping the soil (2500 No. per bed)	PWD SSR 2022-2023 (Item No.62)		106.25	1	M ³	1,063.00
5	1 Bed / 15 days	Watering the germination beds twice daily with the rose can for 15 days.	4.5.1	0.82	390.12	10	Bed / day	585.00
6	1 Bed / 15 days	Watering the germination beds once daily with the rose can for 15 days.	4.5.2	0.41	195.06	10	Bed / day	293.00
7	2.81 M ³	Collection and supply of sand, silt and red soil according to the requirement for preparation of soil mixture - 3/4th of the total volume. (0.84 M ³ /1000 Nos.)	LR		750.00	1	M ³	2,108.00
8	0.94 M ³	Cost and transport of Farm Yard Mannure for filling in polythene bags - 1/4th of the total volume. (0.28 M ³ /1000 Nos.)	LR		750.00	1	M ³	705.00
9	3344 Nos.	Preparation of soil mixture by breaking clods, sieving & mixing with red soil, silt and sand etc according to requirements and farmyard manure in the ratio 4:1 heaping at the filling site and filling in polythene bags and arranging bags in beds and pricking out the seedlings (excluding cost of soil mixture and FYM)	4.6.4	4.48	2,131.36	1,000	Nos	7,127.00
10	84 kgs.	Cost of Vermicasting @ 25 gms/seedlings	As per.Research wing rate		10.00	1	kg	840.00
11	33 kgs.	Cost of VAM @ 10gms/seedlings			18.00	1	kg	594.00
12	17 kgs.	Cost of Azospirillum @ 5gms/seedlings			27.00	1	kg	459.00
13	17 kgs.	Cost of Phosphobacteria @ 5gms/seedlings			27.00	1	kg	459.00
14		Watering the container plants with rose cans.						

Sl. No.	Qty.	Description of work	FSR. item No.	FSL	Rate per unit			Amount
	3344 Nos. / 15 days	a) Twice daily - 15 days.	4.10.7	0.23	109.42	1,000	Nos/day	5,489.00
	3344 Nos. / 30 days	b) Once daily - 30 days.	4.11.7	0.115	54.71	1,000	Nos/day	5,489.00
	3344 Nos. / 15 days	c) Alternative days spread over 30 days (15 watering days)	4.11.7	0.115	54.71	1,000	Nos/day	2,744.00
15	3344 Nos. / 60 days	Cost of water for watering the container seedlings - 60 days.	4.18 - FSR 1998-1999		0.85	1,000	Nos	171.00
16	44.59 Sq.m / 3 M	Land rent @ 7500 bags / 100 sq.m - 3 months	4.17 (FSR 1998-1999)		86.00	40	Sq.m / M	288.00
17	3344 Nos. / 2 Shift	Shifting the container plants, weeding, grading and replacement of casualties in the bags (shifting is to be done once in 21 days, first shifting not before 45 days after pricking out) - 2 shift	4.15.7	0.51	242.63	1,000	Nos/Shift	1,623.00
SUB TOTAL (A)								36,420.00
(B) PART-II Size of poly bags - 30x45x600G								
18	3344 Nos.	Cost of Polythene bags 30x45cmx600G	Tender rate 2022-2023		5,600.00	1,000	No	18,726.00
19	30.87 M ³	Collection and supply of sand, silt and red soil according to the requirement for preparation of soil mixture - 4/5th of the total volume (excluding the volume of earth in 13x25cm containers @ 9.23Cu.m. / 1000 Nos.).	LR		750.00	1	M ³	23,153.00
20	7.72 M ³	Cost and transport of Farm Yard Mannure for filling in polythene bags - 1/5th of the total volume (@ 2.31Cu.m. / 1000 Nos.).	LR		750.00	1	M ³	5,790.00
21	3344 Nos	Preparation of soil mixture by breaking clods, sieving & mixing with red soil, silt and sand etc according to requirements and farmyard manure in the ratio 4:1 heaping at the filling site and filling in polythene bags and arranging bags in beds and pricking out the seedlings (excluding cost of soil mixture and FYM)	4.6.7	28.57	13,592.18	1,000	Nos	45,452.00
22	117 kgs.	Cost of Vermicasting @ 35 gms/seedlings	As per Research wing rate		10.00	1	kg	1,170.00
23	50 kgs.	Cost of VAM @ 15gms/seedlings			18.00	1	kg	900.00
24	20 kgs.	Cost of Azospirillum @ 6gms/seedlings			27.00	1	kg	540.00
25	20 kgs.	Cost of Phosphobacteria @ 6gms/seedlings			27.00	1	kg	540.00

Sl. No.	Qty.	Description of work	FSR. item No.	FSL	Rate per unit			Amount
26	33 Maz.	Labour cost for transplanting seedlings from 13 x 25 cm container bags in to 30 x 45 cm containers - 10 mazdoor / 1000 Nos.	As per MTP ME		475.75	1	No.	15,700.00
27	3344 Nos.	Cost of vertical sticks(Casurina poles 5-8cm girth and 2.50m height for each plants	PWD SSR 2022-2023 (Item No.132-d)		43.75	1	No.	1,46,300.00
28	1672 Nos.	Cost of horizontal sticks(Casurina poles 5-8cm girth and 1.00m height for each plants	PWD SSR 2022-2023 (Item No.132-d)		17.50	1	No.	29,260.00
29	3344 Nos. 2 time	Tying plants to the vertical stick once in a month - 2 times.			0.40	1	time	2,675.00
30	3344 Nos. 2 time	Pruning side branches once in 2 month - 2 times.			1.00	1	time	6,688.00
31		Watering the container plants with rose cans.						
	3344 Nos. 15 days	a) Twice daily - 15 days.	4.10.7	0.56	266.42	1,000	Nos/day	13,364.00
	3344 Nos. 30 days	b) Once daily - 30 days.	4.11.7	0.28	133.21	1,000	Nos/day	13,364.00
	3344 Nos. 30 days	c) Once in alternative days - spread over 60 days (30 watering days).	4.10.7	0.28	133.21	1,000	Nos/day	13,364.00
	3344 Nos. 30 days	d) Twice in a week - spread over 105 days (30 watering days).	4.11.7	0.28	133.21	1,000	Nos/day	13,364.00
32	267.52 Sq.m 7 M	Land rent @ 500 bags / 40 sq.m.	4.17 (FSR 1998-1999)		86.00	40	Sq.m / M	4,026.00
33	3344 Nos. 7 Shift	Shifting the container once in 21 days first shift is after 45 days from the date of pricking out - 7 times.	4.15.7	2.69	1,279.77	1,000	Nos/Shift	29,957.00
34	3344 Nos. 105 days	Cost of water for watering the container seedlings from the private wells - 270 days.	4.18 - FSR 1998-1999		1.60	1,000	Nos	562.00
35	3344 No. 300 MD	Nursery Protection mazdoor @ 1No. / 1,00,000 Nos. for 30x45cm bags - 300 days (90 days + 210 days)	Wages rate	1	475.75	1,00,000	Nos /MD	4,773.00
36	LS	Add for GST @18% for the items No.3 and 18.						3,837.00
37	5 M 2 time	Provision for cost of pesticides and panchagavya and labour for application of pesticides - 2 times per month.	LR		200	1	time	2,000.00

Sl. No.	Qty.	Description of work	FSR. item No.	FSL	Rate per unit			Amount
38	LS	Photo and documentation charges						4,000.00
39	LS	Contingencies and unforeseen items of works.						4,075.00
SUB TOTAL (A)								4,03,580.00
GRAND TOTAL (A + B)								4,40,000.00

COST CALCULATION FOR RAISING NURSERY

- | | | | |
|---|--|---|-------------|
| 1 | Total cost for raising nursery for 3344 Nos. | : | 4,40,000.00 |
| 2 | Prorata for 1 seedlings | : | 132.00 |

Specifications :

- No. of seedlings has been proposed for planting based on the Government of India letter F.No.11-423/2011-FC dated 8-11-2017. Compensatory Afforestation has to be carried out at 1000 seedlings per ha. Hence, 3040 numbers of seedlings has been proposed for 3.04ha at 1000/ha with 10% of casuality i.e. 304. Totally 3344 Nos seedlings has been proposed.
- Bio-fertilizers may be applied as per norms prescribed by Research wing.
- The estimate has been prepared based on NHAI / MTP model estimate, FSR, PWD SSR for the year 2022-2023 and the local rate as per model estimate and Research wing rate.

K. K. T. T.
Wildlife Warden,
Hosur Forest Division,
Hosur.

B. B.

28/10/2022

Model estimate for planting of native tree species for Compensatory Afforestation over an area of 3.04ha in the Non-Forest land during 2022-2023 under State CAMPA Scheme.

(i) Size of poly bags	13x25x250G	Total Area	3.04 ha
(ii) Transplanting size of poly bags	30x45x600G	Seedlings per ha	1,000 Nos.
(iii) Proposed espacement	Gap planting	Total No. of seedlings	3,040 Nos.
(iv) Species proposed for planting		Add for casualty 10%	304 Nos.
		Total	3,344 Nos.

Labour rate for 2022-2023 Rs. 475.75

Sl. No.	Quantity	Description of works	FSR item No.	FSL	Rate	Per	Amount
1	3040 Nos	Aligning and marking in the plantation area	5.2.4	1.38	656.54	100 Nos	19,959.00
2	3040 Nos	Digging of 60 cm ³ pits in all types of soils during rainy season.	5.8.1	9.26	4,405.45	100 Nos	1,33,926.00
3	219 M ³	Cost and transport of poultry manure each plant (0.60x0.60x0.20 = 0.072 m ³)	Lowest quotation		750.00	1 M ³	1,64,250.00
4	3040 Nos	Application of poultry manure @ 500g per plant by mixing in the pit before planting - @ 1 Mazdoor for 200 plant.	FSL wages rate		475.75	200 Nos.	7,231.00
5	3040 Nos.	Cost of Bio-fertilizer including cost of application (Vermicompost-1kg, Bio-fertilizer-100g and VAM-100g).	NHAI ME		7.70	1 No.	23,408.00
6	3344 Nos.	Transporting saplings (transported to the radius of 40km) excluding loading and unloading by private vehicle.	NHAI ME		7.00	1 No.	23,408.00
7	3344 Nos	Loading & unloading the polythene container seedlings (30x45cm) in private lorry upto a leadof 2km excluding hire charges for the vehicles.	5.11.7	3.29	1,565.22	1,000 Nos	5,234.00
8		Distribution of polythene container saplings from where seedlings are stacked to the planting spot upto 500m in hills / hillocks.					
	1338 Nos	a) Upto 100m	5.16.1	18.00	8,563.50	1,000 Nos	11,455.00
	1338	b) Upto 200m	5.16.2	30.00	14,272.50	1,000 Nos	19,091.00
	669	c) Upto 500m	5.16.3	52.50	24,976.88	1,000 Nos	16,705.00
9	3040 Nos	Planting the container plants by refilling pits of 60cm ³ size in plains and hillocks.	5.22	1.71	813.53	100 Nos	24,731.00

Sl. No.	Quantity	Description of works	FSR item No.	FSL	Rate	Per	Amount
10	7600 RM	Cost of vertical sticks(Casurina poles 5-8cm girth and 2.50m height for each plants	PWD SSR 2022-2023 (Item No.132-d)		17.50	1 RM	1,33,000.00
11	304 Nos	Replacement of casualties by reopening failed pits of 60cm3 pits and planting the container plants by refilling pits of size 60cm3 (1/2 pitting rate + full planting rate).	5.23	6.34	3,016.26	100 Nos	9,169.00
12	3040 Nos	Scrapping for 1m dia and soil working 15cm depth around each plants and removing the grass roots away from the site of upturning the soil	5.24	1.23	585.17	100 Nos	17,789.00
13	3040 Nos	Forming catch water drains for each plant of size 0.90 x 0.45 x 0.30m in hillocks and hard gravelly soil.	5.26	6.84	3,254.13	100 Nos	98,926.00
14	3040 Nos	Providing Brush wood fencing around each plants	-	0.25	118.94	1 Nos	3,61,578.00
15	3040 Nos 15 days	Watering the plants once in 6 days during summer / non-rainy period from January to March @ 1 Mazdoor for 200 plants / watering day (15 watering days).	NHAI ME		475.75	200 Nos	1,08,471.00
16	912000 litre	Cost of water @ 20 litre per seedlings - 15 watering days 2000x20x15=6,00,000 litre)	NHAI ME		1,200	12,000 litre	91,200.00
17	180 MD	Plantation protection mazdoor from October to March - 180 Mandays.	Wages rate		475.75	1 MD	85,635.00
18	3040 Nos.	Removing / scrapping vizal monsoon or bothai grass for 1m dia around the plants.	5.27	0.21	99.91	100 Nos	3,037.00
19	5 M 2 time	Provision for cost of pesticides and fungasides and labour for application of pesticides - 2 times per month - 5 months.	LR		200	1 time	2,000.00
20	LS	Photo and documentation charges	LS				2,000.00

Sl. No.	Quantity	Description of works	FSR item No.	FSL	Rate	Per	Amount
21	LS	Contingencies and unforeseen items of works.	LS				7,797.00
						Sub total	13,70,000.00
						Add 10% escalation	1,37,000.00
						Grand total for 3.04ha	15,07,000.00

Specifications :

- 1 No. of seedlings has been proposed for planting based on the Government of India letter F.No.11-423/2011-FC dated 8-11-2017. Compensatory Afforestation has to be carried out at 1000 seedlings per ha. Hence, 3040 numbers of seedlings has been proposed for 3.04ha at 1000/ha with 10% of casuality i.e. 304. Totaly 3344 Nos seedlings has been proposed.
- 2 Rates for the works in Sl.No. 8 has been provided for hills / hillocks.
- 3 The estimate has been prepared based on NHAI / MTP model estimate, FSR, PWD SSR for the year 2022-2023 and the local rate as per model estimate and Research wing rate.


 Wildlife Warden,
 Hosur Forest Division,
 Hosur.

 28/10/2022

Model estimate for 1st year maintenance of Compensatory Afforestation plantation over an area of 3.04ha during 2022-2023 under State CAMPA Scheme.

(i) Size of poly bags	13x25x250G	Total area	3.04 ha
(ii) Transplanting size of poly bags	30x45x600G	Seedlings per ha	1,000 Nos.
(iii) Proposed espacement	Gap planting	Total No. of seedlings	3,040 Nos.
(iv) Species proposed for planting		Add for casualty 10%	304 Nos.
		Total	3,344 Nos.

Labour rate for 2022-2023 Rs. 475.75

Sl. No.	Quantity	Description of works	FSR item No.	FSL	Rate	Per	Amount
A NURSERY OPERATION							
1	304 Nos	Rasing cost of seedlings in 30X45cm size polythene bages	As per nursery estimate	-	132.00	1 Nos	40,128.00
	Sub total (A)						40,128.00
B PLANTING OPERATION							
1	22 M ³	Cost and transport of poultry manure each plant (0.60x0.60x0.20 = 0.072 m ³)	Lowest quotation		750.00	1 M ³	16,500.00
2	152 Nos	Application of poultry manure @ 500g per plant by mixing in the pit before planting - @ 1 Mazdoor for 200 plant.	FSL wages rate		475.75	200 Nos.	362.00
3	304 Nos.	Transporting saplings (transported to the radius of 40km) excluding loading and unloading by private vehicle.	NHAI ME		7.00	1 No.	2,128.00
4	304 Nos	Loading & unloading the polythene container seedlings (30x45cm) in private lorry upto a leadof 2km excluding hire charges for the vehicles.	5.11.7	3.29	1,565.22	1,000 Nos	476.00
5		Distribution of polythene container saplings from where seedlings are stacked to the planting spot upto 500m in hills / hillocks.					
a.	122 Nos	Upto 100m	5.16.1	18.00	8,563.50	1,000 Nos	1,041.00
b.	122	Upto 200m	5.16.2	30.00	14,272.50	1,000 Nos	1,736.00
c.	61	Upto 500m	5.16.3	52.00	24,976.88	1,000 Nos	1,519.00
6	304 Nos	Replacement of casualties by reopening failed pits of 60cm3 pits and planting the container plants by refilling pits of size 60cm3 (1/2 pitting rate + full planting rate).	5.23	5.57	2,649.93	100 Nos	8,056.00

Sl. No.	Quantity	Description of works	FSR item No.	FSL	Rate	Per	Amount
7	3040 Nos	Scrapping for 1m dia and soil working 15cm depth around each plants and removing the grass roots away from the site of upturning the soil	5.24	1.23	585.17	100 Nos	17,789.00
8	3040 Nos.	Cost of Bio-fertilizer including cost of application (Vermicompost-1kg, Bio-fertilizer-100g and VAM-100g).	NHAI ME		7.70	1 No.	23,408.00
9	3040 Nos 30 days	Watering the plants once in 6 days (excluding rainy days) from April to June and January to March @ 1 Mazdoor for 200 plants / watering day - (15 + 15 = 30 watering days).	NHAI ME		475.75	200 Nos	2,16,942.00
10	1824000 litre	Cost of water @ 20 litre per seedlings - 30 watering days 2000x20x30 =12,00,000 litre)	NHAI ME		1,200	12,000 litre	1,82,400.00
11	300 MD	Engaging protection mazdoor @ 1 Mazdoor from April to March - 12 month @ 25 days per month.	Wages rate		475.75	1 MD	1,42,725.00
12	LS	Contingencies and unforeseen expenditure to be restricted to as per actual.	LS				4,790.00
Sub total (B)							6,19,872.00
Prorata for 1st year maintenance (A+B)							6,60,000.00
Add 20% escalation for 2nd year							1,32,000.00
Total prorata							7,92,000.00

Specifications :

1 The estimate has been prepared based on NHAI / MTP model estimate, FSR, PWD SSR for the year 2022-2023 and the local rate as per model estimate and Research wing rate.

2 Rates for the works in Sl.No. 5 has been provided for hills / hillocks.

K. K. K.
Wildlife Warden,
Hosur Forest Division,
Hosur.

28/10/2022

**Model estimate for 2nd year maintenance of Compensatory Afforestation plantation over an area of 3.04ha during 2022-2023
under State CAMPA Scheme.**

No. of seedlings 3,040
Survival 100% 3,040

Labour rate for 2022-2023 Rs. 475.75

Sl. No.	Quantity	Description of works	FSR item No.	FSL	Rate	Per	Amount
1	3040 Nos	Scrapping for 1m dia and soil working 15cm depth around each plants and removing the grass roots away from the site of upturning the soil	5.24	1.23	585.17	100 Nos	17,789.00
2	3040 Nos.	Cost of Bio-fertilizer including cost of application (Vermicompost-1kg, Bio-fertilizer-100g and VAM-100g).	NHAI ME		7.70	1 No.	23,408.00
3	3040 Nos 30 days	Watering the plants once in 6 days (excluding rainy days) from April to June and January to March @ 1 Mazdoor for 200 plants / watering day - (15 + 15 = 30 watering days).	NHAI ME		475.75	200 Nos	2,16,942.00
4	1824000 litre	Cost of water @ 20 litre per seedlings - 30 watering days 2000x20x30 =12,00,000 litre)	NHAI ME		1,200	12,000 litre	1,82,400.00
5	75 MD	Engaging protection mazdoor @ 1 Mazdoor from April to March - 3 month @ 25 days per month.	Wages rate		475.75	1 MD	35,681.00
6	LS	Contingencies and unforeseen expenditure to be restricted to as per actual.	LS				3,780.00
Sub total							4,80,000.00
Add 30% escalation for 3 year							1,44,000.00
Total prorata							6,24,000.00

Specifications :

- The estimate has been prepared based on MTP model estimate, FSR, PWD SSR for the year 2022-2023 and the local rate as per model estimate and Research wing rate.

K. K. Thakur
Wildlife Warden,
Hosur Forest Division,
Hosur.

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28/10/2022

Model estimate for 3rd year maintenance of Compensatory Afforestation plantation over an area of 3.04ha during 2022-2023 under State CAMPA Scheme.

No. of seedlings 3,040
Survival 100% 3,040

Labour rate for 2022-2023 Rs. 475.75

Sl. No.	Quantity	Description of works	FSR item No.	FSL	Rate	Per	Amount
1	3040 Nos	Scrapping for 1m dia and soil working 15cm depth around each plants and removing the grass roots away from the site of upturning the soil	5.24	1.23	585.17	100 Nos	17,789.00
2	3040 Nos.	Cost of Bio-fertilizer including cost of application (Vermicompost-1kg, Bio-fertilizer-100g and VAM-100g).	NHAI ME		7.70	1 No.	23,408.00
3	3040 Nos 30 days	Watering the plants once in 6 days (excluding rainy days) from April to June and January to March @ 1 Mazdoor for 200 plants / watering day - (15 + 15 = 30 watering days).	NHAI ME		475.75	200 Nos	2,16,942.00
4	1824000 litre	Cost of water @ 20 litre per seedlings - 30 watering days 2000x20x30 =12,00,000 litre)	NHAI ME		1,200	12,000 litre	1,82,400.00
5	75 MD	Engaging protection mazdoor @ 1 Mazdoor from April to March - 3 month @ 25 days per month.	Wages rate		475.75	1 MD	35,681.00
6	LS	Contingencies and unforeseen expenditure to be restricted to as per actual.	LS				3,780.00
Sub total							4,80,000.00
Add 40% escalation for 4 year							1,92,000.00
Total prorata							6,72,000.00

Specifications :

1 The estimate has been prepared based on MTP model estimate, FSR, PWD SSR for the year 2022-2023 and the local rate as per model estimate and Research wing rate.

K.K. Kulkarni
Wildlife Warden,
Hosur Forest Division,
Hosur.

B.K.
28/10/2022

Model estimate for 4th to 10th year maintenance of Compensatory Afforestation plantation over an area of 3.04ha during 2022-2023 under State CAMPA Scheme.

No. of seedlings 3,040
Survival 100% 3,040

Labour rate for 2022-2023 Rs. 475.75

Sl. No.	Quantity	Description of works	FSR item No.	FSL	Rate	Per	Amount
1	3040 m	Scraping for 1m dia and soil working 15cm depth around each plants and removing the grass roots away from the site of upturning the soil	5.24	1.23	585.17	100 m	17,789.00
2	LS	Contingencies to meet out unforeseen items of works such as Documentation charges & Erection of Information Board etc. complete.	LS				211.00
	Sub total						18,000.00
	Add 50% escalation for 5 year						9,000.00
	Total prorata for 4th year maintenance						27,000.00

1	Fifth year maintenance (Including 10% cost escalation in the previous year rate)	Rs. 29,700
2	Sixth year maintenance (Including 10% cost escalation in the previous year rate)	Rs. 32,670
3	Seventh year maintenance (Including 10% cost escalation in the previous year rate)	Rs. 35,940
4	Eighth year maintenance (Including 10% cost escalation in the previous year rate)	Rs. 39,540
5	Ninth year maintenance (Including 10% cost escalation in the previous year rate)	Rs. 43,500
6	Tenth year maintenance (Including 10% cost escalation in the previous year rate)	Rs. 47,850

Specifications :

- The estimate has been prepared based on MTP model estimate, FSR, PWD SSR for the year 2022-2023 and the local rate as per model estimate and Research wing rate.

K. K. K. K.
Wildlife Warden,
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B. S.

28/10/2022

**Model Estimate for Installation of Solar Power Double line Hanging fencing (for 750m) around
Compensatory Afforestation area in S.F.No. 467 A/2 of Sanamavu village and near by RF
boundaries of Hosur Range of Hosur Forest Division during 2022-2023.**


Detailed / Abstract estimate


Sl. No.	Qty.	Particulars of works	Rate (in Rs.)	Amount (in Rs.)
1	0.75 km	VEGETATION CLEARING - in fencing area up to minimum 5mtrs width and pruning the vegetation and tree branches up to height of 15 feet if any.	13,000	9,750.00
2	30 No	BOTTOM FIXTURE MOUNTING (GI post bottom fixture should be plain cement concrete 1:2:4 of 24inch depth X 9 inch x 9 inches width)	150	4,500.00
3	1 No	ENERGIZER for 1.30km: With the following specifications. Must be from a reputed company Must confirm to National and International standards of safety IS-302-2-76. Switch to high and low power settings. Should possess the following output characters - Peak o/p voltage not more than 10 KV on 50 K load. - O/p energy 3.5J minimum - Pulse duration 1.01-3.0 m.sec - Pulse interval 1.1-1.4 sec - Peak current 7.0-8.0 A-High	29,265	29,265.00
4	2 No	SOLAR MODULE: With the following Specification minimum 150 watts, 12 volts rating with minimum 10 years warranty against manufacturing defects. and Solar charge controller to regulate the charging of the battery. MNRE approved make	10,500	21,000.00
5	1 No	MODULE STAND: With MS material with non-rusting paint coating ALL WEATHER PROFF	3,000	3,000.00
6	1 No	SYSTEM MOUNTING BOX: With MS material with non-rusting paint coating tilted to 13-15 degrees	11,500	11,500.00
7	2 No	BATTERY: Must have 12 Volts, 150 AH solar battery with at least 3years guarantee LOW MAINTAINANCE	19,450	38,900.00
8	1 No	LIGHTNING DIVERTER: Must be capable of diverting stray lightening. The diverter assembly must be adjustable for spark gaps. : Adequate earthing to be provided	2,200	2,200.00
9	6.00 No	EARTHING SYSTEM Must contain earth mixture capable of retaining moisture and 8mm dia stainless steel rod-non rusting quality of 4 feet long	400	2,400.00
10	20 No	WARNING SIGNS: Poly-ethylene plastic with statutory colors and signs	50	1,000.00
11	11.25 No	LEAD OUT CABLE: Must be double insulated withstanding 15 KV voltage and Inner core wire must be hot dip galvanized.	100	1,125.00
12	1 No	TOOL KIT (Cutting Pliers, Multi Meter, Double Ended Spanner Digital Volt Meter)	8,500	8,500.00
13	30 No	RAISER POST 20 Feet, class B. 50MMX50MMX2MM-GI SQUARE PIPE INCLUDING PAINTING	3,500	1,05,000.00

Sl. No.	Qty.	Particulars of works	Rate (in Rs.)	Amount (in Rs.)
14	30 No	PVC PIPE 16 FEET – 2 INCH.	460	13,800.00
15	2250 RM	STAINLESS STEEL WIRE 2.00mm 304 grade single core non rusting quality for main line DOUBLE LINE AND MIDDLE LINE 4 FFET ABOVE GROUND LEVEL	10	22,500.00
16	7500 RM	SS ROPE 1.5mm cable non rusting quality for hanging line 3.75 MTRS FROM TOP	18	1,35,000.00
17	750 RM	HIGH TENSILE WIRE 2.59mm ACSR as foper as per IS 398-1996 PART 2 Earthing line (Horizontal Line to be layed on ground for earthing connection)	10	7,500.00
18	5000 No	BULLETS (Connectors) - of copper material coated with stainless steel or nonrusting alluminium alloy having an inner core hole size of 2.5mm diameter and min 1 cm length.	4.25	21,250.00
19	0.75 km	ERRECTION OF HANGING FENCE INCLUDING TRANSPORTATION OF MATERIAL TO THE WORK SITE-fixing GI pipes into the bottom fixtures, fixing ropes and wires as per the design and commissioning of solar power generating system and intigration of smart fence watch.	31,000	23,250.00
20	. LS .	Maintenance of hanging solar fence for engaging labour of 5 Nos at 25 days per month for 3 months per year for 10 years including purchase of accessories (25 days X 2 months X 1 No X 10 years X Rs.475.75 per day)	Ls	2,37,875.00
		Sub total		6,99,315.00
21	LS	GST at 18% (CGST at 9% + SGST at 9%) is leviable for any Government contract, whether Civil or Electrical, irrespective of the GST rate applicable on purchase of goods used in the execution of Government Contract.		1,25,877.00
22	LS	Provsn for Labour welfare fund 1.00%		8,400.00
23	LS	Provsn for unforeseen items of works such as painting and writting awareness sign boards, documentation & photographic charges etc.		6,408.00
		Total for the year 2022-2023 for 750 metre		8,40,000.00

COST CALCULATION FOR HANGING SOLAR FENCING


- 1 Cost per RM for providing hanging solar fence during 2023-2024 (including 10% cost escalation) Rs. 1,240.00
- 2 Cost per RM for providing hanging solar fence during 2024-2025 (including 20% cost escalation) Rs. 1,370.00



 Wildlife Warden,
 Hosur Forest Division
 Hosur.


 28/10/2022

**Work Schedule for planting of taller saplings (30x45 cm size poly bags)
in the Non-Forest land to a extent of 3.04ha for Compensatory
Afforestation Scheme**

Sl. No.	Description of Work	Period of Work
1	Raising Nursery	December 2023 to September 2024
2	Planting operation	June 2024 to December 2025
3	1st year Maintenance	September 2025 to March 2026
4	2nd year Maintenance	September 2026 to March 2027
5	3rd year Maintenance	September 2027 to March 2028
6	4th year Maintenance	September 2028 to March 2029
7	5th year Maintenance	September 2029 to March 2030
8	6th year Maintenance	September 2030 to March 2031
9	7th year Maintenance	September 2031 to March 2032
10	8th year Maintenance	September 2032 to March 2033
11	9th year Maintenance	September 2033 to March 2034
12	10th year Maintenance	September 2034 to March 2035


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 28/10/2022