

Abstract cost Table

Raising nursery with 10 yr maintenance of Compensatory afforestation over an area of 7.00 Ha in in S.F.No. 416/1 Vinnamangalam CA Land (Now notified as Reserved Forests) for Diversion of 3.439 ha of forest land for formation of road from Muniranvattam to Necknamalai to a length 5.525 km and a width of 6 mts through Necknamalai Reserved Forests in Alangayam Range of Tirupattur division during 2020-2021 under CAMPA scheme

Sl. No.	Description of Work	Proposed estimate cost	Remarks
1	2	3	4
1	Raising nursery - 7000 Nos	1677717	1000 Nos of seedlings has been proposed
2	Planting operation	2312959	10% Weightage towards escalation of labour wage rate during 2021-22
3	1 st year Maintenance	391761	20% Weightage towards escalation of labour wage rate during 2022-23
4	2 nd year Maintenance	162499	30% Weightage towards escalation of labour wage rate during 2023-24
5	3 rd year Maintenance	167999	40% Weightage towards escalation of labour wage rate during 2024-25
6	4 th year Maintenance	184799	50% Weightage towards escalation of labour wage rate during 2025-26
7	5 th year Maintenance	203279	60% Weightage towards escalation of labour wage rate during 2026-27
8	6 th year Maintenance	223607	70% Weightage towards escalation of labour wage rate during 2027-28
9	7 th year Maintenance	245968	80% Weightage towards escalation of labour wage rate during 2028-29
10	8 th year Maintenance	270565	90% Weightage towards escalation of labour wage rate during 2029-30
11	9 th year Maintenance	297621	100% Weightage towards escalation of labour wage rate during 2030-31
12	10 th year Maintenance	327383	110% Weightage towards escalation of labour wage rate during 2031-32
TOTAL		6466161	

COUNTER SIGNED

District Forest Officer.

FOREST RANGE OFFICER,
AMBUR RANGE, AMBUR

Work schedule

Raising nursery with 10 yr maintenance of Compensatory afforestation over an area of 7.00 Ha in in S.F.No. 416/1 Vinnamangalam CA Land (Now notified as Reserved Forests) for Diversion of 3.439 ha of forest land for formation of road from Muniranvattam to Neckanamalai to a length 5.525 km and a width of 6 mts through Necknamalai Reserved Forests in Alangayam Range of Tirupattur division during 2020-2021 under CAMPA scheme

Sl. No.	Description of Work	Period of work
1	2	6
1	Raising nursery - 7000 Nos	February 2020 to August 2021
2	Planting operation	September 2021 to December 2021
3	1st year Maintenance	September 2021 to March 2022
4	2nd year Maintenance	September 2022 to March 2023
5	3rd year Maintenance	September 2023 to March 2024
6	4 th year Maintenance	September 2024 to March 2025
7	5 th year Maintenance	September 2025 to March 2026
8	6 th year Maintenance	September 2026 to March 2027
9	7 th year Maintenance	September 2027 to March 2028
10	8 th year Maintenance	September 2028 to March 2029
11	9 th year Maintenance	September 2029 to March 2030
12	10 th year Maintenance	September 2030 to March 2031

COUNTER SIGNED

[Signature]
District Forest Officer,
Tirupattur Division

[Signature] 19/8/20
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FOREST RANGE OFFICER,
AMBUR RANGE, AMBUR.

Model Estimate for raising nursery for Compensatory afforestation over an area of 7.00 Ha in in S.F.No. 416/1 Vinnamangalam CA Land (Now notified as Reserved Forests) for Diversion of 3.439 ha of forest land for formation of road from Muniranvattam to Neckanamalai to a length 5.525 km and a width of 6 mts through Necknamalai Reserved Forests in Alangayam Range of Tirupattur division during 2020-2021 under CAMPA scheme

Total Area = 7.00 Ha
 Prorata per ha = 1000 Nos/ Ha
 No of Seedlings = 7000
 10% Casualty = 700
 Total = 7700

Size of Polybags = 13 x 25 x 250g
 Size of Polybags = 30 x 45 x 600g
 Proposed Espacement = 5 M x 5M

Species proposed for planting

Vembu, Thuringi, Velvel, Kodavel
 Bamboo, Veppalai

Wage rate (From 1.4.2020) = Rs. 441.65

SL. No	Qty	Unit	Name of Work	FSR / SSR	FSL	Rate	Per	Amount
PART I - Small size bags.- 13X25 cm.								
1	1155	M ²	Preparation of Nursery site by clearing and levelling the site for forming standard bed of size 10mX1m (110M2/1000 Nos) - 25.6.15	4.1	2.42	1068.79	200 No	6172
2	15.4	Kg	Cost of seeds (2kgs/ 1000 Nos)	LR	--	250.00	1 No	3850
3	7700	Nos.	Cost of 13x25cmx250G jute bags	Tender rate 2016-17	--	30000.00	1000 No	231000
4	23.00	Cu.m	Forming Germination beds of size 10mx1mx 0.3m by heeaping the soil	PWD SSR item 62	--	73.10	1 cum	1681
5	23.00	Bed	Watering the germination beds twice daily with rose cans for 15 days	4.5.1	0.82	362.15	10 Beds / day	12494
6	23.00	Bed	Watering the germination beds once daily with rose cans for 15 days	4.5.2	0.41	181.08	10 Beds / day	6247
7	8.27	Cu.m	Collection & supply of sand,silt,and red soil according to the requirement for preparation of soil mixture - 4/5th of the total volume (1.074 M3/1000 Nos)	LR	--	800.00	1 Cu.m	6616
8	2.08	Cu.m	Cost and transport of Farm yard manure for filling bags - 1/ 5th of the total volume. (0.27 M3/1000 Nos)	LR		800.00	1 Cu.m	1664

9	7700	Nos.	Preparation of soil mixture by breaking clods, sieving, mixing red soil, silt, sand according to requirement and farm yard manure in the ratio of 4:1, heaping at the filling site and filling in poly bags, arranging bags in beds and pricking out the seedlings (excluding cost of soil mixture and FYM)	4.6.4	4.48	1978.59	1000	Nos	15235
10	270	Kgs.	Cost of Vermicasting @ 35 gm per seedlings	As per Research Wing Rate	-	10.00	1	Kg	2700
11	116	Kgs.	Cost of VAM @ 15 gm per seedlings		-	27.00	1	Kg	3132
12	46	Kg	Cost of Azospirillum @ 6 gm per seedlings	As per Research Wing Rate	-	27.00	1	Kg	1242
13	46	Kg	Cost of Phosphobacteria @ 6 gm per seedling		-	18.00	1	Kg	828
14			Watering the container plants with rose cans - watering regime as per the NHAI ME approved in PCCF's Ref. No. J1/57395/2003 dt. 12.12.03.)						
	7700	Nos.	Twice daily - 15 days	4.10.4	0.23	101.58	1000	Day	11732
	7700	Nos.	Once daily - 30 days	4.11.4	0.115	50.79			11732
	7700	Nos.	Alternate days - 15 days		0.115	50.79			5866
15	7700	Nos.	cost of water for watering the container seedlings - 60 days	4.18 - FSR 1998-99		0.85	1000	day	295
16	7700	Nos.	Shifting the container plants, weeding, grading and replacement of casualties in the bags - shifting to done once in 21 days, 1 shifting not before 45 days after pricking out 2 shifts	4.15.4	0.51	225.24	1000	Shift	3469
SUB - TOTAL (A)									325955
PART II - Bigger size bags: 30x45cmx600g.									
17	7700	Nos.	Cost of 30 X 45cm X 600 G jute bags	Tender rate 2016-17	--	76000.00	1000	No	585200
18	71.07	M3	Collection & 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).	LR	-	750.00	1	M3	53303

19	17.79	M3	Cost and transport of Farm yard manure for filling bags - 1/5th of the total volume.		-	750.00	1	M3	13343
20	7700	Nos.	Preparation of soil mixture by breaking clods, sieving, mixing red soil, silt, and sand according to requirement and farm yard manure in the ratio of 4:1, heaping at the fillingsite and filling in poly bags, arranging bags in beds and pricking out the seedlings (excluding cost of soil mixture and FYM)	4.6.7	28.57	12617.94	1000	Nos	97158
21	270	Kgs.	Cost of Vermicasting @ 35 grm per seedlings	As per Research Wing Rate	-	10.00	1	Kg	2700
22	116	Kgs.	Cost of VAM @ 15 grm per seedlings		-	27.00	1	Kg	3132
23	46	Kg	Cost of Azospirillum @ 6 gm per seedlings	As per Research Wing Rate	-	27.00	1	Kg	1242
24	1	Kg	Cost of Phosphobacteria @ 6 gm per seedling		-	18.00	1	Kg	18
25	77	Mazdoors	Labour cost for transplanting seedlings from 13 X 25 cm containers bags in to 30 X 45 cm containers - 10 Maz. / 1000	As per ME of MTP	--	441.65	1	Nos	34007
26	7700	Nos.	Cost of vertical stick of size 2.5m ht	NHAI ME	--	13.00	1	Nos	100100
27	3850	Mts.	Cost of horizontal stick		--	3.00	1	M	11550
28	7700	Nos.	Tying plants to the vertical stick once in a month - 2 times		--	0.40	1	Each/ time	6160
29	7700	Nos.	Pruning side branches once in 2 months - 2 times		--	1.00			15400
30			Watering the container plants with rose cans - watering regime as per the NHAI ME approved in PCCF's Ref. No. J1/57395/2003 dt. 12.12.03.)						
	7700	Nos.	Twice daily - 60 days	4.10.7	0.56	247.32	1000	Day	114262
	7700	Nos.	Once daily - 60 days	4.11.7	0.28	123.66	1000	Shift	57131
31	7700	Nos.	Shifting the container plants, weeding, grading and replacement of casualties in the bags - shifting to done once in 21 days- 6 shift	4.15.7	2.69	1188.04	1000	Shift	54887
32	7700	Nos.	cost of water for watering the container seedlings - 120 days	4.18 - FSR 1998-99		1.60	1000	day	1478

33	1	Nos.	Nursery protection mazdoors 1 No / 100000 Nos of 30 x45cm bags - 210 days.	As per ME of MTP	1	441.65	1	10000/M	92747
34			GST 18% (Item No.3, 13)						97944
35		L.S	Provision for cost of pesticides and fungasides and Labour charges for application of pesticides			L.S			3500
36		L.S	Photo & Documentation etc.,			L.S			1500
37		L.S	Contingencies unforeseen items			L.S			5000
SUB - TOTAL (B)									1351762
TOTAL (A + B)									1677717

Raising cost for 1000 seedlings = 1677717

cost for 1 seedlings = **Rs.168/- per seedling**



Specifications :

The No. of seedlings has been proposed for planting based on as per the Government of India Letter F.No.11-423/2011-FC dated 08.11.2017, compensatory afforestation has to be carried out at 1000 seedlings per ha. Hence 7000 nos of seedlings has been proposed for 7.00 ha @ 1000/ha. with 10% of casualty 770 Nos. Totally 7700 Nos of seedlings has been proposed.

The estimate has been prepared based on as per MTP model estimate, FSR, PWD SSR for the year 2020-21 and and the local rate as per model estimate and research wing rate.

COUNTER SIGNED

District Forest Officer,
Forest Division.

 4/8/2020
 19/8/2020


FOREST RANGE OFFICER,
AMBUR RANGE, AMBUR.

Model Estimate for Planting nursery over an area of 7.00 Ha in in S.F.No. 416/1 Vinnamangalam CA Land (Now notified as Reserved Forests) for Diversion of 3.439 ha of forest land for formation of road from Muniranvattam to Neckanamalai to a length 5.525 km and a width of 6 mts through Necknamalai Reserved Forests in Alangayam Range of Tirupattur division during 2020-2021 under CAMPA scheme

No of seedlings = 7000
 10% Casualty = 700
 Total = 7700

Size of Polybags = 30 x 45 x 600g
 Wage rate (From 1.4.2020) = 441.65
 Rs.

Sl. No	Qty		Description of work	F.S.R. No.	FSL (Man days)	Rate Rs.	Per		Amount
1	7000	Nos	Alingning and Marking strip plantation including avenue	5.2.4	1.38	609.48	100	Nos	42664
2	7000	Nos	Digging of 60 CM3 pits in all types of soil during non rainy season	5.8.2	9.26	4089.68	100	Nos	286278
3	3500	Kgs	Cost & transport of Poultry mannure each plants 500 gm	Lowest quotation	-	1500.00	1000	Kg	5250
4	7000	Nos	Application of Poultry manure @ 500 gms per plant by mixing in the pit before planting - 1 mazdoor for 250 Nos	FSL Wage rate	1.00	441.65	200	No	15458
5	7000	Nos	Cost of Bio fertilizer including cost of application - Vermicompost - 1 Kg, Bio Fertilizers - 100 gms, VAM- 100 gms	NHAI ME	-	7.70	1	No	53900
6	7700		Transporting saplings (transported to the radius of 40 kms) excluding loading and unloading	NHAI ME	-	7.00	1	No	53900
7	7700	Nos	Loading & unloading the container seedlings (30x45cm) in private lorry upto a lead of 2kms excluding hire charges for the vehicles.)	5.11.7	3.29	1453.03	1000	Nos	11188
8			Distribution of saplings from where seedlings are stocked to the planting spot upto 200 mts						
	4000	Nos	Upto 100 mts	5.15.1	10.00	4416.50	1000	Nos	17666
	3700	Nos	Upto 200 mts	5.15.2	17.50	7728.88	1000	Nos	28597
9	7000	Nos	Application of DAP mixture @ 20g per plant by mixing in the pit before planting including cost & transport	LR		0.40	1	Nos	2800

10	7000	Nos	Planting the container plants by refilling pits of size 60cm.	5.22	1.71	755.22	100	Nos	52865
11	17500	RM	Provision of vertical casurina poles 5cm to 8cm 2.50mtr ht. per plant	PWD SSR		15.72	1	RM	275100
12	700	Nos	Replacement of casualties by reopening failed pits and planting the seedlings (1/2 pitting rate + full planting rate)	5.23	6.34	2800.06	100	Nos	19600
13	7000	Nos	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	543.23	100	Nos	38026
14	7000	Nos	Forming catch water drains for each plant of 90x45x 30 cm size in hillocks and hard gravelly soil	5.26	6.84	3020.89	100	Nos	211462
15	7000	Nos	Providing each plant protection by nylon green shade net 1.5m x 3m	LS		80.00	1	No	560000
16	5250	Nos	Watering the plants once in 6 days during summer/non-rainy period from January to March @ one mazdoor for 200 plants/watering day (15 watering days)	NHAI ME		441.65	200	Nos	173900
17	2100000	Ltrs	Cost of water @ 20 liter per seedlings 15 watering days (20x7000x15=1575000Ltrs)	NHAI ME		1200.00	12000	Lts	210000
16	1	Nos.	Plantation Protection mazdoors from October to March - 180 m.days	Wage rate	1	441.65	1	M. Days	79497
17	7000	Nos	Removing/scrapping vizal monsoon or bothai grass for one meter dia around the plants	5.27	0.21	92.75	100	Nos	6493
18	LS		Contingencies and unforeseen expenditure to be restricted to as per actuals.	LS					710
TOTAL									2102690
Add 10% of escalation									210269
Total prorata									2312959

Specifications :

The No. of seedlings has been proposed for planting based on as per the Government of India Letter F.No.11-423/2011-FC dated 08.11.2017, compensatory afforestation has to be carried out at 1000 seedlings per ha. Hence 7000 nos of seedlings has been proposed for 7.00 ha @ 1000/ha. with 10% of casualty 770 Nos. Totally 7700 Nos of seedlings has been proposed.

The estimate has been prepared based on as per MTP model estimate, FSR, PWD SSR for the year 2020-21 and the local rate as per model estimate and research wing rate.

COUNTER SIGNED

District Forest Officer,
Virupattur Division


FOREST RANGE OFFICER,
AMBUR RANGE, AMBUR.

Model Estimate for 1st year maintenance of nursery planated over an area of 7.00 Ha in in S.F.No. 416/1 Vinnamangalam CA Land (Now notified as Reserved Forests) for Diversion of 3.439 ha of forest land for formation of road from Muniranvattam to Necknamalai to a length 5.525 km and a widht of 6 mts through Necknamalai Reserved Forests in Alangayam Range of Tirupattur division during 2020-2021 under CAMPA scheme

No of Seedlings = 700

Size of Polybags = 30 x 45 x 400g


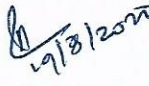

Wage rate = Rs. 441.65

Sl. No	Qty		Description of work	F.S.R. No.	FSL (Man days)	Rate Rs.	Per		Amount
<u>A. NURSERY OPERATION</u>									
1	700	M²	Raising cost of seedlings (As per nursery estimate)	As per nursery estimate	-	168.00	1	No	117600
TOTAL (A)									117600
<u>B. PLANTING OPERATION</u>									
1	3325	Kgs	Cost and transport of Poultry Manure 500 gms each plants	Lowest	-	1500.00	1000	Kgs	4988
2	700	Nos.	Application of poultry manure @250g per plant by mixing in the pit before planting including cost & transport	FSL Wages Rate	-	441.65	200	Nos.	1546
3	700	Nos	Cost of Bio Fertilizers including cost of application Vermi-campose,Bio fertilizer 100 gms VAM 100 Gms	NHAI ME	-	7.70	1	No.	5390
4	700	Nos.	Transporting saplings (transported in the radius of 40 Kms) excluding loading and unloading	NHAI ME	--	7.00	1	No.	4900
5	700	Nos	Loading & unloading the container seedlings (30x45cm) in private lorry upto a lead of 2kms excluding hire charges for the vehicles.)	5.11.7	3.29	1453.03	1000	Nos	1017
6			Distribution of seedlings in the site C.plants upto 500mtrs - in plains		-				
	700	Nos	Up to 100 m.	5.15.1	10.00	4416.50	1000	Nos	3092
7	700	Nos	Replacement of casualties by reopening failed pits and planting the seedlings	5.23	5.57	2459.99	100	Nos	17220

8	7000	Nos	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	543.23	100	Nos	38026
9	1	No	Engaging protection Mazdoor @ 1 Mazdoor from April to March months (25 days/ Month)	FSR wage rate	-	441.65	1	No	132495
10	LS		Contingencies and unforeseen expenditure to be restricted to as per actuals.	LS					194
TOTAL (B)									208868
TOTAL (A+B) prorata for 1st year maitenance									326468
Add 20% of escalation for 2nd year									65294
Total prorata									391761

COUNTER SIGNED

District Forest Officer,
Tirupattur Division.

 19/8/2020
 19/8/2020
 19/8/2020


FOREST RANGE OFFICER,
AMBUR RANGE, AMBUR.

Model Estimate for 2nd year maintenance of nursery planated over an area of 7.00 Ha in in S.F.No. 416/1 Vinnamangalam CA Land (Now notified as Reserved Forests) for Diversion of 3.439 ha of forest land for formation of road from Muniranvattam to Necknamalai to a length 5.525 km and a widht of 6 mts through Necknamalai Reserved Forests in Alangayam Range of Tirupattur division during 2020-2021 under CAMPA scheme

No of Seedlings = 7000
Survival 95%
= 6650

Size of Polybags = 30 x 45 x 400g
Wage rate = Rs. 441.65

Sl. No	Qty		Description of work	F.S.R. No.	FSL (Man days)	Rate Rs.	Per		Amount
1	6650	Nos	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	543.23	100	Nos	36125
2	6650	Kgs	Cost of Vermicompost 1 Kg/ plant	NHAI ME	-	10.00	1	Kg	66500
3	1	No	Engaging protection Mazdoor @ 1 Mazdoor (2 months) (25 days/ Month)	FSR wage rate	-	441.65	1	No	22083
4	LS		Contingencies and unforeseen expenditure to be restricted to as per actuals.			LS			292
Total prorata									125000
Add 30% of escalation									37500
Total prorata 2nd year maintenance									162499

Specifications :

The estimate has been prepared based on as per MTP model estimate, FSR, PWD SSR for the year 2020-21 and the local rate as per model estimate and research wing rate.

COUNTER SIGNED
[Signature]
District Forest Officer,
Tirupattur Division.

[Signature] 19/8/2020
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FOREST RANGE OFFICER,
AMBUR RANGE, AMBUR.

Model Estimate for 3rd year maintenance of nursery planated over an area of 7.00 Ha in in S.F.No. 416/1 Vinnamangalam CA Land (Now notified as Reserved Forests) for Diversion of 3.439 ha of forest land for formation of road from Muniranvattam to Neckanamalai to a length 5.525 km and a widht of 6 mts through Necknamalai Reserved Forests in Alangayam Range of Tirupattur division during 2020-2021 under CAMPA scheme

No of Seedlings = 7000

Survival 90% = 6300

Size of Polybags = 30 x 45 x 400g

Wage rate = Rs. 441.65

Sl. No	Qty		Description of work	F.S.R. No.	FSL (Man days)	Rate Rs.	Per		Amount
1	6300	Nos	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	543.23	100	Nos	34223
2	6300	Kgs	Cost of Vermicompost 1 Kg/ plant	NHAI ME	-	10.00	1	Kg	63000
3	1	No	Engaging protection Mazdoor @ 1 Mazdoor (2 months) (25 days/ Month)	FSR wage rate	-	441.65	1	No	22083
4	LS		Contingencies and unforeseen expenditure to be restricted to as per actuals.	LS					694
Total prorata									120000
Add 30% of escalation									48000
Total prorata 3rd year maintenance									167999
Add 10% of escalation for 4th year									16800
Total prorata for 4th year maintenance									184799
Add 10% of escalation for 5th year									18480
Total prorata for 5th year maintenance									203279
Add 10% of escalation for 6th year									20328
Total prorata for 6th year maintenance									223607
Add 10% of escalation for 7th year									22361
Total prorata for 7th year maintenance									245968
Add 10% of escalation for 8th year									24597
Total prorata for 8th year maintenance									270565
Add 10% of escalation for 9th year									27056
Total prorata for 9th year maintenance									297621
Add 10% of escalation for 10th year									29762
Total prorata for 10th year maintenance									327383

Specifications :

The estimate has been prepared based on as per MTP model estimate, FSR, PWD SSR for the year 2020-21 and the local rate as per model estimate and research wing rate.

COUNTER SIGNED

District Forest Officer.

Tirupattur Division

FOREST RANGE OFFICER,
AMBUR RANGE, AMBUR.