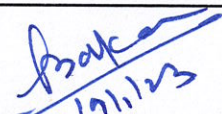



Abstract Estimate for Raising Compensatory afforestation over an area of 57.50 Ha of degraded forest area during 2022-2023 under State CAMPA scheme

No. of seedlings	57500 Nos.	@ 1000 Nos per Ha
For 10% casualty replacement	5750 Nos.	
TOTAL	63250 Nos	

Sl. No.	Description Of Work	Proposed estimate cost in Rupees	Remarks
1	2	3	4
1	Raising nursery - 63250 Nos	8300000	1000 Nos of seedlings per ha has been proposed
2	Planting operation - 57500 seedlings	27900000	10% Weightage towards escalation of labour wage rate during 2023-24
3	1 st year Maintenance	11800000	20% Weightage towards escalation of labour wage rate during 2024-25
4	2nd year Maintenance	10900000	30% Weightage towards escalation of labour wage rate during 2025-26
3	3rd year Maintenance	11730000	40% Weightage towards escalation of labour wage rate during 2026-27
6	4th year Maintenance	510000	50% Weightage towards escalation of labour wage rate during 2027-28
7	5th year Maintenance	561000	60% Weightage towards escalation of labour wage rate during 2028-29
8	6th year Maintenance	617100	70% Weightage towards escalation of labour wage rate during 2029-30
9	7th year Maintenance	678810	80% Weightage towards escalation of labour wage rate during 2030-31
10	8th year Maintenance	746691	90% Weightage towards escalation of labour wage rate during 2031-32
11	9th year Maintenance	821360	100% Weightage towards escalation of labour wage rate during 2032-33
12	10th year Maintenance	903496	110% Weightage towards escalation of labour wage rate during 2033-34
TOTAL		75468457	
Prorata for 1 ha area		1312494.9	(OR) Rs. 13.13 Lakhs


 District Forest Officer
 Ramanathapuram


 19/1/23

Estimate for Raising nursery for native tree species for Compensatory afforestation over an area of 57.50 Ha of degraded forest area during 2022-2023 under State CAMPA scheme

Total Area : 5.00 Ha
 Seedlings per ha : 1000 Nos/Ha
 No of Seedlings : 57500
 10% Casualty : 5750
 Total : 63250 seedlings

Size Of Polybags = 13 x 25 x 250g
 Transplanting Size of Polybags = 30 x 45 x 600g
 Proposed Espacement = Gap planting

Species proposed for planting - Native species like Vembu, Velvel,
 Wage rate 2022-2023 = Rs. 475.75

S. No	Qty	Unit	Name of Work	FSR/SSR	FSL	Rate	per	Amount	
PART - small size bags.. 13X25 cm.									
1	6958	M2	Preparation of Nursery site by clearing and levelling the site for forming standard bed of size 10m X 1m (110 M2/1000 Nos)	4.1	2.42	1151.32	200	No	40054
2	127	Kg	Cost of seeds (2kgs/ 1000 Nos)	LR	-	250	1	No	31750
3	63250	Nos.	Cost of 13x25cmx250G Polythene bags (With 18% GST)	Tender rate	-	967.6	1000	No	61201
4	196	Cu.m	Forming germination beds of size 10mx1mx 0.3m by heaping the soil 2500 No per bed	PWD SSR item 62	-	73.1	1	cu.m	14328
5	23	Bed	Watering the germination beds twice daily with rose cans for 15 days	4.5.1	0.82	390.12	10	Beds /day	13459
6	23	Bed	Watering the germination beds once daily with rose cans for 15 days	4.5.2	0.41	195.06	10	Beds /day	6730
7	53	Cu.m	Collection & supply of sand,silt and red soil according to the requirement for preparation of soil mixture -3/4th of the total volume (0.84 M3/1000 Nos)	LR	-	750	1	Cu.m	39750
8	18	Cu.m	Cost and transport of Farm yard manure for filling bags - 1/ 4th of the total volume. (0.28 M3/1000 Nos)	LR	-	750	1	cu.m	13500
9	63250	Nos.	Preparation of soil mixture by breaking clods,seiving, mixing red soil,silt,sand according to requirement and farm yard manure in the ratio of 3:1, 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	2131.36	1000	Nos	134809

S. No	Qty	Unit	Name of Work	FSR/SSR	FSL	Rate	per		Amount
10	1587	Kgs.	Cost of Vermicasting @ 25 gram per seedlings	As per Research Wing Rate	-	10	1	Kg	15870
11	633	Kgs.	Cost of VAM @ 10 gram per seedlings		-	18	1	Kg	11394
12	322	Kg	Cost of Azospirillum @ 5 gram per seedlings	As per Research Wing Rate	-	27	1	Kg	8694
13	322	Kg	Cost of Phosphobacteria @ 5 gram per seedling		-	27	1	Kg	8694
14	Watering the container plants with rose cans								
a	63250	Nos.	Twice daily - 15 days	4.10.4	0.23	109.42	1000	Day	103812
b	63250	Nos.	Once daily - 30 days	4.11.4	0.115	54.71	1000	Day	103812
c	63250	Nos	Alternate days spread over 30 days (Effective days-15)	4.11.4	0.115	54.71	1000	Day	51906
15	63250	Nos.	cost of water for watering the container seedlings - 60 watering days	4.18-FSR 1998-99		0.85	1000	Day	3226
16	63250	Nos.	Land rent@ 3000 bags/40 sq.m) - 3 Months	4.17	LR	86	40	sq.m/month	5437
	843	M2/ 3 months							
17	63250	Nos.	Shifting the container plants, weeding, grading and replacement of casualties in the bags (-shifting to done once in 21 days, first shifting not before 45 days after pricking out) 2 shifts	4.15.4	0.51	242.63	1000	Shift	30693
	SUB - TOTAL (A)								699118

S. No	Qty	Unit	Name of Work	FSR/SSR	FSL	Rate	per	Amount	
PART II - Bigger size bags: 30x45cmx600g.									
18	63250	Nos.	Cost of 30 X 45cm X 600 G Polythene bags (With 18% GST)	Tender rate	-	6584.4	1000	No	416463
19	584	M3	Collection & supply of sand,silt and red soil according to the requirement for preparation of soil mixure - 4/5th of the total volume (excluding the volume of earth in 13X25cm containers). (@ 9.23 Cu.m/1000 Nos)	LR	-	750	1	M3	438000
20	146	M3	Cost and transport of Farm yard manure for filling bags - 1/5th of the total volume. (@ 2.31 Cu.m/1000 Nos)	LR	-	750	1	M3	109500
21	63250	Nos.	Preparation of soil mixture by breaking clods,seiving, 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 seedings (excluding cost of soil mixure and FYM)	4.6.7	28.57	13592.18	1000	Nos	859705
22	2220	Kgs.	Cost of Vermicasting @35 gram per seedlings	As per Research Wing Rate	-	10	1	Kg	22200
23	955	Kgs.	Cost of VAM@ 15 gram per seedlings	As per Research Wing Rate	-	18	1	Kg	17190
24	380	Kg	Cost of Azospirilum @6gram per seedlings	As per Research Wing Rate	-	27	1	Kg	10260
25	380	Kg	Cost of Phosphobacteria @6gram per seedling	As per Research Wing Rate	-	27	1	Kg	10260
26	633	Mazdoo rs	Labour cost for transplanting seedlings from 13 X 25 cm containers bags in to 30 X 45 cm containers - 10 Maz/ 1000	FSR 2022-23	1	475.75	1	Nos	301150
27	63250	Nos.	Cost of vertical strick (Casurina poles 5 cm -8 cm girth and 2.50 m height for each plants)	PWD SSR	-	17.5	1	Rm	2767188
28	31625	Nos.	Cost of horizondal strick (Casurina poles 5 cm -8 cm girth and 1.00 m height for each plants)	PWDSSR	-	17.5	1	Rm	553438
29	63250	Nos.	Tying plants to the vertical stick once in a month - 2 times	ME	-	0.4	1	Each/ti me	50600

S. No	Qty	Unit	Name of Work	FSR/SSR	FSL	Rate	per		Amount
30	63250	Nos.	Pruning side branches once in 2 months 2 times	ME	-	1	1	Each/time	126500
31	Watering the container plants with rose cans								
a	63250	Nos.	Twice daily - 15 days	4.10.7	0.56	266.42	1000	Day	252766
b	63250	Nos.	Once daily - 30 days	4.11.7	0.28	133.21	1000	Shift	252766
c	63250	Nos.	Once in alternate days -spread over 60 days (Effective days-30 days)	4.11.7	0.28	133.21	1000	Shift	252766
d	63250	Nos.	Twice in a week spread over 105 days (Effective days-30 days)	4.11.7	0.28	133.21	1000	Shift	252766
32	63250	Nos.	Land rent@500 bags/40 sq.m)	4.17	LR	86	40	sq.m/m onth	76153
	5060	M2/7 months							
33	63250	Nos.	Shifting the container plants, weeding, grading and replacement of casualties in the bags - shifting to done once in 21 days- 7 shift	4.15.7	2.69	1279.77	1000	Shift	566618
34	63250	Nos.	cost of water for watering the container seedlings - 105 watering days	4.18- FSR 1998-99	-	1.6	1000	day	10626
35	57500	Nos.	Nursery protection mazdoors 1 No/ 100000 Nos of 30 x45cm bags - 300 days. (90d+210d)	FSR 2022-23	1	475.75	100000	times	82067
36	5	Months	Provision for cost of pesticides and fungicides and Labour charges for application of pesticides - 2 times / month	L.R	-	2300	1	times	23000
37	L.S		Photo & Documentation etc.,			L.S			10000
38	L.S		Contingencies unforeseen items			L.S			138900
			SUB - TOTAL (B)						7600881
			TOTAL (A + B)						8300000

Raising cost for 63250 seedlings = 8300000

Cost for 1 seedlings = Rs. 131.23

Specification:

The estimate has been prepared based on NHAI/MTP ME, FSR, PWD SSR for the year 2022-2023.

[Signature]
District Forest Officer
Ramanathapuram

[Signature]
19/1/23

**Estimate for planting of native tree species for Compensatory Afforestation an area of
57.50 Ha degraded forest area during 2022-2023 under State CAMPA scheme**

No of seedlings = 57500					Size of Polybags = 30 x 45 x 600g				
10% Casualty = 5750					Wage rate '= Rs. 475.75				
Total = 63250					2022-2023				
Sl. No	Qty		Description of work	F.S.R. No.	FSL (Man days)	Rate Rs.	Per		Amount
1	57.5	Ha	Removal of invasive species of medium growth	NABARD Rate 2022-23	-	46825	1	Ha	2692438
2	57500	Nos	Aligning and Marking in plantation area	5.2.4	1.38	585.17	100	Nos	336473
3	57500	Nos	Digging Of 60 CM3 pits in all types of soil during non rainy season	5.8.1	9.26	4405.45	100	Nos	2533134
4	57500	No.	Cost & transport of Farmyard manure each plants 0.60 x 0.60 x 0.20 = 0.072 m3 / pit	Lowest quotation	-	750	1	M3	3105000
	4140	M3							
5	57500	Nos	Application of Farm yard manure by mixing in the pit before planting - 1 mazdoor for 200 Nos	FSR 2022-23	1	475.75	200	No	136778
6	57500	Nos	Cost of Bio fertilizer including cost of application - Vermicompost- 1 Kg, Bio Fertilizers - 100 gms, VAM- 100 gms	NHAI ME	-	7.7	1	No	442750
7	63250		Transporting saplings (transported to the radius of 40 kms) excluding loading and unloading by Private Vehicle	NHAI ME		7	1	No	442750
8	63250	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	1565.22	1000	Nos	99000
9			Distribution of saplings from where seedlings are stocked to the planting spot in plains upto 500 mts						
a	25300	Nos	Upto 100 mts	5.15.1	10	4757.5	1000	Nos	120365
b	25300	Nos	Upto 200 mts	5.15.2	17.5	8325.63	1000	Nos	210638
c	12650	Nos	Upto 500 mts	5.15.3	41	19505.8	1000	Nos	246748
10	57500	Nos	Planting the container plants by refilling pits of size 60cm.	5.22	1.71	813.53	100	Nos	467780
11	143750	RM	Provision of vertical casurina poles 5cm to 8cm 2.50mtr ht. per pant	PWD SSR		17.5	1	RM	2515625
12	5750	Nos	Replacement of casualties by reopening failed pits and planting the seedlings (112 pitting rate on rainy days + full planting rate)	5.23	6.34	2649.93	100	Nos	152371
13	57500	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	585.17	100	Nos	336473

Sl. No	Qty		Description of work	F.S.R. No.	FSL (Man days)	Rate Rs.	Per		Amount
14	57500	Nos	Providing Brush wood fencing around each plants	-	0.25	119	1	No	6842500
15	57500	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)	FSR 2022-23	-	475.75	200	Nos	2051671.9
16	17250000	Lts	Cost of water@20 liter per seedlings 15 watering days (57500x20x15=17250000 Lts)	NHAI ME	-	1200	12000	Lts	1725000
17	1	Nos.	Plantation Protection mazdoors from October to March - 180 m.days	FSR 2022-23	1	475.75		M. Days	85635
18	57500	Nos	Removing/scrapping vizal monsoon or bothai grass for one meter dia around the plants	5.27	0.21	99.91	100	Nos	57448
19	5	Mon ths	Provision for cost of pesticides and fungicides and Labour charges for application of pesticides - 2 times / month	LR	-	2300	1	times	23000
20	LS		Photo & Documentation etc..			LS			250000
21	LS		Contingencies and unforeseen expenditure to be restricted to as per actuals.			LS			490060
TOTAL									25363637
Add 10% of escalation									2536364
Total prorata									27900000

Specification:

The estimate has been prepared based on NHAI/MTP ME, FSR, PWD SSR for the year 2022-2023.

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19/1/23
District Forest Officer
Ramanathapuram

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19/1/23

**Estimate for 1st year maintenance of CA plantation over an area of 57.50 Ha during 2022-2023 under CAMPA
echeme**

No. of Seedlings planted = 57500

Size of Polybags = 30x45x600g

No. of Seedlings for casulty replacement = 5750

Wage rate Rs. 475.75

(10% replacement)

Sl. No	Qty		Description of work	F.S.R. No.	FSL (Man days)	Rate Rs.	per		Amount
A. NURSERY OPERATION									
1	5750	No	Raising cost of seedlings in 30x45 size polythene bags (As per nursery estimate)	As per nursery estimate	-	131.23	1	No	754573
				TOTAL (A)					754573
B. PLANTING OPERATION									
1	5750	No	Cost & transport of Farm yard manure each plants 0.60x0.60x0.20=0.072m3/pit	Lowest	-	750	1	M3	310500
	414	M3							
2	2875	Nos.	Application of Farm yard manure by mixing in the pit before planting - 1 mazdoor for 200 Nos	FSL Wages Rate	-	475.75	200	Nos.	6839
3	5750	Nos.	Transporting saplings (transported in the radius of 40 Kms) excluding loading and unloading in Private vehicle	NHAI ME		7	1	No.	40250
4	5750	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	1565.22	1000	Nos	9000
5			Distribution of seedlings in the site C.plants upto 500mtrs - in pains						
a	2300	Nos	Up to 100 m.	5.15.1	10	4757.50	1000	Nos	10942
b	2300	Nos	Up to 200 m.	5.15.2	17.5	8325.63	1000	Nos	19149
c	1150	Nos	Up to 500 m.	5.15.2	41	19505.75	1000	Nos	22432
6	5750	Nos	Replacement of casualties by reopening failed pits and planting the seedlings	5.23	5.57	2649.93	100	Nos	152371
7	57500	Nos	Scraping for 1m dia and soil working 15cm depth around each plants and removing the grass roots away from the site of uptuming the soil	5.24	1.23	585.17	100	Nos	336474
8	57500	Nos	Cost of Bio Fertilizers including cost of application Vermi-campose 1 kg,Bio fertilizer 100 gms VAM 100 Gms	NHAI ME	-	7.7	1	No.	442750
9	34500000	Ltrs	Cost of water@ 20 liter per seedlings 30 watering days (57500x20x30=34500000 Its)	NHAI ME	-	1200	12000	Its	3450000

Sl. No	Qty		Description of work	F.S.R. No.	FSL (Man days)	Rate Rs.	per		Amount
10	57500	Nos	Watering the plants once in 6 days (excluding rainy days) from April to June & January to March @ one mazdoor for 200 plants/watering day - (15+15 = 30 watering days)	411.7	-	475.75	200	Shift	4103344
11	1	No	Engaging protection Mazdoor@ 1 Mazdoor from April to March - 12 months (25 days/ Month)	FSR wage rate	-	475.75	1	No	142725
12	LS		Contingencies and unforeseen expenditure to be restricted to as per actuals.			LS			31984
TOTAL (B)									9078760
TOTAL (A+B) prorata for 1st year maintenance									9833333
Add 20% of escalation for 2nd year									1966667
Total prorata									11800000

Specification:

The estimate has been prepared based on NHAI/MTP ME, FSR, PWD SSR for the year 2022-2023.

[Signature]
19/1/23
District Forest Officer
Ramanathapuram

[Signature]
19/1/23

Estimate for 2nd year maintenance of CA plantation over an area of 57.50 Ha during 2022-2023 under CAMPA scheme

No of Seedlings = 57500

Survival 100% = 57500

Wage rate - Rs. 475.75
2022-2023

Sl. No	Qty		Description of work	F.S.R. No.	FSL (Man days)	Rate RS.	Per		Amount .
1	57500	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	585.173	100	Nos	336474
2	57500	Kgs	Cost of Bio Fertilizers including cost of application Vermi-campose 1 kg,Bio fedilizer 100 gms VAM 100 Gms	NHAI ME	-	7.7	1	Kg	442750
3	34500000	Ltrs	Cost of water@ 20 liter per seedlings 30 watering days (57500x20x30=34500000 lts)	NHAI ME	-	1200	12000	Its	3450000
4	57500	Nos	Watering the plants once in 6 days (excluding rainy days) from April to June & January to March @ one mazdoor for 200 plants/watering day - (15+15 = 30 watering days)	4.11.7	-	475.75	200	Shift	4103344
5	1	No	Engaging protection Mazdoor@ 1 Mazdoor (3 months) (25 days/Month)	FSR wage rate	-	475.75	1	No	35681
6	LS		Contingencies and unforeseen expenditure to be restricted to as per actuals.		-	LS			16366.5
Total prorata									8384615
Add 30% of escalation									2515384.6
Total prorata 2nd year maintenance									10900000

Specification:

The estimate has been prepared based on NHAI/MTP ME, FSR, PWD SSR for the year 2022-2023.

[Signature]
District Forest Officer
Ramanathapuram

[Signature]
19/11/23

Estimate for 3rd year maintenance of CA plantation over an area of 57.50 Ha during 2022-2023 under CAMPA Scheme

No of Seedlings = 57500

Survival 100% = 57500

Wage rate - Rs. 475.75
2022-2023

Sl. No	Qty		Description of work	F.S.R. No.	FSL (Man days)	Rate RS.	Per		Amount
1	57500	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	585.173	100	Nos	336474
2	57500	Kgs	Cost of Bio Fertilizers including cost of application Vermi-campose 1 kg,Bio fedilizer 100 gms VAM 100 Gms	NHAI ME	-	7.7	1	Kg	442750
3	34500000	Ltrs	Cost of water@ 20 liter per seedlings 30 watering days (57500x20x30=34500000 lts)	NHAI ME	-	1200	12000	Its	3450000
4	57500	Nos	Watering the plants once in 6 days (excluding rainy days) from April to June & January to March @ one mazdoor for 200 plants/watering day - (15+15 = 30 watering days)	4.11.7	-	475.75	200	Shift	4103344
5	1	No	Engaging protection Mazdoor@ 1 Mazdoor (3 months) (25 days/Month)	FSR wage rate	-	475.75	1	No	35681
6	LS		Contingencies and unforeseen expenditure to be restricted to as per actuals.		-	LS			10322.5
Total prorata									8378571
Add 40% of escalation									3351428.6
Total prorata 3rd year maintenance									11730000

Specification:

The estimate has been prepared based on NHAI/MTP ME, FSR, PWD SSR for the year 2022-2023.

[Signature]
District Forest Officer
Ramanathapuram

[Signature]
19/1/23

Estimate for 4th to 10th years maintenance of CA plantation over an area of 57.50 Ha during 2022-2023 under CAMPA scheme

No of Seedlings = 57500

survival 100% = 57500

Wage rate = Rs. 475.75

2022-2023

Sl. No	Qty		Description of work	F.S.R. No.	FSL (Man days)	Rate Rs.	Per		Amount
1	57500	Nos	Scraping for 1 m 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	336474
2	LS		Contingencies and unforeseen expenditure to be restricted to as per actuals.	LS					3526
Total prorata									340000
Add 50% of escalation									170000
Total prorata 4th year maintenance									510000
Add 10% of escalation for 5th year									51000
Total prorata for 5th year maintenance									561000
Add 10% of escalation for 6th year									56100
Total prorata for 6th year maintenance									617100
Add 10% of escalation for 7th year									61710
Total prorata for 7th year maintenance									678810
Add 10% of escalation for 8th year									67881
Total prorata for 8th year maintenance									746691
Add 10% of escalation for 9th year									74669
Total prorata for 9th year maintenance									821360
Add 10% of escalation for 10th year									82136
Total prorata for 10th year maintenance									903496

Specification:

The estimate has been prepared based on NHAI/MTP ME, FSR, PWD SSR for the year 2022-2023.

District Forest Officer
Ramanathapuram

19/4/23