

SCHEME FOR COMPENSATORY AFFORESTATION

Detailed scheme for compensatory afforestation to be carried out in lieu of diversion of 5.42 ha of forest land in Mahimandalam Reserved Forest in Arcot Range of Vellore Forest Division in Vellore District.

1. Details of degraded forest land:

District : Vellore
Tehsil : Walajah
Name of the Forest Division : Vellore Forest Division
Name of R.F : Ammoor South Beat. Ammoor
Reserved Forest in Arcot Range of
Vellore Forest Division

Area to be afforested: 10.84 ha

The area identified by the District Forest Officer, Vellore Division in lieu of diversion of 5.42 ha in Mahimandalam Reserved Forest in Arcot Range of Vellore Division. Afforestation will be carried out in 10.84 ha. which is double in extent of diverted 5.42 ha.

2. Description of the area:

- i. **Whether the site selected for compensatory afforestation is a land bank or not:**

The site selected for compensatory afforestation is not a land bank.

- ii. **If the CA site is other than the land bank, reasons be given:**

The CA site identified in degraded forest land of Ammoor south beat in Ammoor Reserved Forest in Arcot Range of Vellore Division.

- iii. **In case of non-forest area identified for CA, then what is the distance of CA site from the adjoining forest boundary:**

NA

iv. **Soil type:**

Hard red gravelly soil

v. **Topography:**

Nature: Hilly in Nature

Slope : Gentle slope 15-20%

vi. **Whether the area is bearing any root stock of vegetation: NA**

3. Plantation Model:

Copy of the approved compensatory afforestation scheme / model showing component wise physical and financial break up uploaded (enclosed)

4. Scheme of Plantation Programme:

Details of the plantation programme furnished in detailed estimate and uploaded.

5. Technical Details:

Technical details of Compensatory Afforestation Scheme as follows;

a. General details:

The compensatory afforestation scheme is proposed against diversion of project area.

b. Spacement: 5 x 5 m

c. Species: Vembu, Kodaivel, Parambai, Velvelan, Karuvelan, Elandhai, Pungan

d. Plantation Method: Block method of planting through pit system

e. Soil and Moisture Conservation works: Catch water pit and Mulching to be done

f. Protection: Brushwood fencing to individual plant

g. Proposed monitoring mechanism: Internal


h. Any other Information:

The CA site identified in degraded forest land of Ammoor south beat, Ammoor Reserved Forest in Arcot Range of Vellore Division and it was found to be suitable for afforestation activities based on the past experience.


12.6.18

District Forest Officer (I/C),
Vellore Division, Vellore - 09.


12/6/18


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MODEL ESTIMATE FOR RAISING NURSERY FOR COMPENSATORY AFFORESTATION OVER AN AREA OF 10.84 HA FOR MAHIMANDALAM RF COMPENSATORY LAND IN AMOOR RESERVED FOREST OF ARCOT RANGE DURING 2018 - 19 CAMPA SCHEME

Total area 10.84 ha
 No. of seedlings Ha = 1000 Ha
 Total No of 10840
 10% of Casualty 1084
 Total 11924

Size of Polybags = 16 x 30 x 300g
 Wage rate (From 4.5.18) = Rs.326.50

Species proposed for planting
 Vembu, kodaivel, parambai,
 Velvelan, Karuvelan, Elandhai.
 Total Prorata = Rs.265000/-


S. No	Quantity	Unit	Name of Work	FSR/SSR	FSL	Rate	Per	Amount
1	118	M ²	Preparation of Nursery site by clearing and levelling the site for forming standard bed of size 10mX1m (10 M ² /1000 Nos)	4.1	2.42	790.13	200 No	466
2	30	Kg	Cost of seeds (2kgs/ 1000 Nos)	LR	-	250.00	1 kg	7500
3	11924	Nos.	Cost of 16 x 30 cm x 300 G Poly Bags	LR	-	1670.00	1000 No	19913
4	12	Cu.m	Forming Germination beds of size 10mx1mx 0.3m by heaping the soil	PWD SSR item 62	-	50.60	1 M ³	607
5	12	Bed	Watering the germination beds twice daily with rose cans for 15 days	4.5.1	0.82	267.73	10 Beds/day	4819
6	12	Bed	Watering the germination beds once daily with rose cans for 15 days	4.5.2	0.41	133.87	10 Beds/day	2410
7	37	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 (1.96 M ³ 1000 Nos)	LR	-	800.00	1 Cu.m	29440
8	9	Cu.m	Cost and transport of Farm yard manure for filling bags - 1/5th of the total volume.	LR	-	800.00	1 Cu.m	7200
9	11924	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 4:1, heaping at the filling site and filling in poly bags, arranging bags in beds and pricking out the seedlings (exeluding cost of soil mixture and FYM)	4.6.5	5.95	1942.68	1000 Nos	23165
10	418	Kg	Cost of Vermicasting @ 35gm per seedlings		-	10.00	1 Kg	4180
11	179	Kg	Cost of VAM @ 15 gm per seedlings	LR	-	18.00	1 Kg	3222

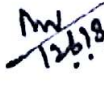
S. No	Quantity	Unit	Name of Work	FSR / SSR	FSL	Rate	Per	Amount
12	72	KG	Cost of Azospirillum @ 6 gm		-	27.00	1 Kg	1944
13	72	Kg	Cost of Phosphobacteria @ 6 gm per seedlings		-	27.00	1 kg	1944
14			Watering the container plants with rose cans - watering regime as per the NHA1 ME approved in PCCF's Ref. No. J1/57395/2003 dt. 12.12.03.)					
	11924	Nos.	a) Twice daily - 10 days	4.10.5	0.37	120.81		14405
	11924	Nos.	b) Once daily - 30 days	4.11.5	0.19	60.40	1000 Day	21606
	11924	Nos.	c) Alternate days - 70 days		0.19	60.40		50415
15	11924	Nos.	Shifting the container once in 21 days. First shift after 45 days from the date of transplanting - 5 times.	4.15.5	0.79	257.94	1000 Shift	15378
16	0.11924	Nos.	Nursery protection mazdoors 1 No 100000Nos of 16 x 30cm bags - (25d x 7months).	Wage rate	1	326.50	1 10000/M	57138
17		L.S	Contingencies for unforeseen items including photo & Documentation.			L.S		3249
Total Amount Rs.								269000

Specifications :

This estimate has been prepared based on the MTP model estimate, FSR, PWD SSR for the year 2018-19 and the local rate as per model estimate.


 District Forest Officer (I/C),
 Vellore Division, Vellore - 09.


 12/6/18


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**MODEL ESTIMATE FOR PLANTING OF SEEDLINGS FOR COMPENSATORY AFFORESTATION
OVER AN AREA OF 10.84 HA FOR MAHIMANDALAM RF COMPENSATORY LAND IN AMOOR
RESERVED FOREST OF ARCOT RANGE DURING 2018 - 19 CAMPA SCHEME**

No of Seedlings = 10840
10% Casualty = 1084
Total = 11924

Size of Polybags = 16 x 30 x 300g
Wage Rate (From 4.5.18) = Rs.326.50
Proposed for espacement = 5m x 5m
Total Prorata = Rs.265000/-

Sl. No	Qty	Description of work	F.S.R. No.	FSL (Man days)	Rate Rs.	Per	Amount
1	10840.00 Nos	Digging of 45 cm pits in hard gravelly soil & hillocks during non rainy season	5.5.1	4.7	1534.55	100 Nos	166345
2	11924.00 Nos	Loading & unloading the container seedlings (16 x 30cm) in private lorry upto a lead of 2kms excluding hire charges for the vehicles)	5.11.5	1.79	584.44	1000 Nos	6969
3	11924.00 Nos	Transport of container seedlings (16 x 30 cm) in private vehicles up to a lead of 10 kms. Excluding loading and unloading charges @	LR	-	1000.00	1000 Nos	11924
4		Transport of container seedlings (16 x 30 cm) by head load in the places where approach roads are not available to take vehicles to planting site upto 500 mts.					
	11924.00 Nos	In hills	5.13.2 (ii)	8.7	2840.55	1000 Nos	33871
5		Distribution of seedlings in the site C.plants upto 500mtrs - in hills					
a)	3800.00 Nos	Up to 100 m.	5.16.1	6	1959.00	1000 Nos	7444
b)	4000.00 Nos	Up to 500 m.	5.16.3	13.31	4345.72	1000 Nos	17383
c)	4124.00 Nos	Up to 1000 m	5.16.4	17.38	5674.57	1000 Nos	23402
6	10840.00 Nos	Application of poultry manure @ 250g per plant by mixing in the pit before planting including cost & transport.	LR	-	1.50	1 Nos	16260
7	10840.00 Nos	Application of DAP mixture @ 20g per plant by mixing in the pit before planting including cost & transport.	LR	-	0.60	1 Nos	6504

Sl. No	Qty	Description of work	F.S.R. No.	FSL (Man days)	Rate Rs.	Per	Amount
8	10840.00 Nos	Planting the container plants by refilling the pits of size 15cm	5.21	1.15	375.48	100 Nos	40702
9	10840.00 Nos	Replacement of casualties by reopening failed pits and planting the seedlings	5.23	3.11	1015.42	100 Nos	110072
10	10840.00 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	5.21	1.23	401.60	100 Nos	43533
11	10840.00 Nos	Forming catch water pits of size 90 x 45 x 30 in hillock and hard gravelly soil.	5.26	6.84	2233.26	100 Nos	242085
12	10840.00 Nos	Brush wood fencing for planted seedlings.	NIFP rate	-	52.00	1 Nos	563680
13	1.00 No	Providing name board			As per TBGP rate		8000
14	6.72 kms	Fireline creation (around 3m width) work around CA land	2.4	17.46	5700.69	1 Km	38309
15	4.00 Nos	Engaging Fire Protection watcher in CA land - 3 months (75 day)	Wage rate	1	326.50	1 Nos	97950
16	LS	Contingencies for unforeseen expenditure			LS		1567
Total Amount Rs.							1436000

Specifications :

This estimate has been prepared based on the MTP model estimate, FSR, PWD SSR for the year 2018-19 and the local rate as per model estimate and research wing rate.

This estimate may kindly be sanctioned at the earliest


 District Forest Officer (I/C),
 Vellore Division, Vellore - 09.

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**MODEL ESTIMATE FOR 1ST YEAR MAINTNANCE OF COMPENSATORY AFFORESTATION
OVER AN AREA OF 10.84 HA FOR MAHIMANDALAM RF COMPENSATORY LAND IN
AMMOOR RESERVED FOREST OF ARCOT RANGE DURING 2018-19 UNDER CAMPA SCHEME**

No of Casualty = 1084

Size of Polybags = 16 x 30 x 300g


Wage rate (From 4.5.18) = Rs. 326.50

S. No	Quantity	Unit	Name of Work	FSR / SSR	FSL	Rate	Per	Amount
A. Nursery operation								
1	2	M ²	Preparation of Nursery site by clearing and levelling the site for forming standard bed of size 10mX1m (10 M ² /1000 Nos)	4.1	2.42	770.17	200 No	8
2	2.47	Kg	Cost of seeds (2kgs/ 1000 Nos)	LR	--	250.00	1 No	618
3	1084	Nos.	Cost of 16 x 30 cm x 300 G Poly Bags	LR	--	1670.00	1000 No	1810
4	1.084	Cu.m	Forming Germination beds of size 10mX1mX 0.3m by heaping the soil	PWD SSR item 62	--	50.60	1 No	55
5	1.084	Bed	Watering the germination beds twice daily with rose cans for 15 days 01.03.2013 to 15.3.2013	4.5.1	0.82	267.73	10 Beds / day	435
6	1.084	Bed	Watering the germination beds once daily with rose cans for 15 days 16.3.2013 to 30.3.2013	4.5.2	0.41	133.87	10 Beds / day	218
7	3.38	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 (1.96 M ³ /1000 Nos)	LR	--	800.00	1 Cu.m	2704
8	0.81	Cu.m	Cost and transport of Farm yard manure for filling bags - 1/5th of the total volume.	LR		800.00	1 Cu.m	648

S. No	Quantity	Unit	Name of Work	FSR / SSR	FSL	Rate	Per	Amount
9	1084	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)	4.6.5	5.95	1942.68	1000 Nos	2106
10	37.9	Kgs.	Cost of Vermicasting @ 35 gm per seedlings		-	10.00	1 Kg	379
11	16.3	Kgs.	Cost of VAM @ 15 gm per seedlings	As per Research	-	18.00	1 Kg	293
12	6.48	Kg	Cost of Azospirillum @ 6 gm per seedlings	Wing Rate	-	27.00	1 Kg	175
13	6.48	Kg	Cost of Phosphobacteria @ 6 gm per seedling		-	27.00	1 Kg	175
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.)					
	1084	Nos.	a) Twice daily - 10 days	4.10.5	0.37	120.81		1310
	1084	Nos.	b) Once daily - 30 days	4.11.5	0.19	60.40	1000 Day	1964
	1084	Nos.	c) Alternate days - 70 days		0.19	60.40		4583
15	1084	Nos.	Shifting the container once in 21 days - First shift after 45 days from the date of transplanting - 5 times	4.15.5	0.79	257.94	1000 Shift	1398
16	0.01084	Nos.	Nursery protection mazdoors 1 No / 10000 Nos of 16 x 30cm bags - 210 days.	Wage rate	1	326.50	1 1000 0/M	743
17		L.S	Contingencies for unforeseen items including photo & Documentation			L.S		1378
TOTAL (A)								21000

S. No	Quantity	Unit	Name of Work	FSR/SSR	FSL	Rate	Per	Amount
<u>B. PLANTING OPERATION</u>								
1	1084	Nos	Replacement of casualties by reopening failed pits and planting the seedlings	5.23	3.11	1015.42	100 Nos	11007
2	10840	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	401.60	100 Nos	43533
3	1084	Nos	Loading & unloading the container seedlings (16x30cm) in private lorry upto a lead of 2kms excluding hire charges for the vehicles.	5.11.5	1.79	584.44	1000 Nos	634
4	1084	Nos	Transport of container seedlings (16X30 cm) in private vehicles up to a lead of 10 Kms. excluding loading and unloading charges - @ 2000/load	LR		1000.00	1000 Nos	1084
5	1084	Nos	Transport of container seedlings (16X30 cm) by head load in the places where approach roads are not available to take vehicles to planting site upto 500 mts - In hills	5.13.2(ii)	8.70	2840.55	1000 Nos	3079
6			Distribution of seedlings in the site C plants upto 500 mtrs - Hills					
a)	255	Nos	Up to 100 m.	5.16.1	6.00	1959.00	1000 Nos	500
b)	255	Nos	Up to 200 m.	5.16.2	8.51	2778.52	1000 Nos	709
c)	255	Nos	Up to 500 m.	5.16.3	13.3	4345.72	1000 Nos	1108
d)	319	Nos	Up to 1000 m.	5.16.4	17.4	5674.57	1000 Nos	1810
7	10840	Nos	Application of poultry manure @ 250g per plant by mixing in the pit before planting including cost & transport	LR		1.50	1 Nos	16260

S. No	Quantity	Unit	Name of Work	FSR / SSR	FSL	Rate	Per	Amount
8	10840	Nos	Application of DAP mixture @ 20g per plant by mixing in the pit before planting including cost & transport	LR		0.60	1 Nos	6504
9	6.72	kms	Fireline creation (around 3 m width) work around CA land	2.4	17.5	5770.69	1 Km	38779
10	4	Nos.	Engaging Fire Protection watcher in CA land - 3 months	Wage rate	1	326.50	1 Nos	97950
11	LS		Contingencies and unforeseen expenditure to be restricted to as per actuals.			LS		2043
TOTAL (B)								225000
Total amount (A+B) for 1st year maintenance								246000
Add 10% of escalation								24600
Grand Total for 1st year								270600


 District Forest Officer (I/C),
 Vellore Division, Vellore - 09.

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**MODEL ESTIMATE FOR 2nd YEAR MAINTENANCE OF COMPENSATORY
AFFORESTATION OVER AN AREA OF 10.84 HIA FOR MAHIMANDALAM RF
COMPENSATORY LAND IN ANMOOR RESERVED FOREST OF ARCOT RANGE DURING
2019-20 UNDER CAMPA SCHEME**

Total area = 10.84 ha
No. of seedlings/Ha = 1000/Ha
Seedlings planted = 10840
Survival 95% = 10298

Size of Polybags = 16 x 30 x 300g
Wage rate (From 4.5.18) = Rs.326.50

S. No	QTY	Unit	Name of Work	FSR / SSR	FSL	Rate	Per	Amount
1	10298	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	401.60	100 Nos	41357
2	10298	Nos	Application of poultry manure @ 250g per plant by mixing in the pit before planting including cost & transport	LR		1.50	1 Nos	15447
3	10298	Nos	Application of DAP mixture @ 20g per plant by mixing in the pit before planting including cost & transport	LR		0.60	1 Nos	6179
4	6.72	kms	Fireline creation (around 3 m width) work around CA land	2.4	17.5	5700.69	1 Km	38309
5	4	No.	Engaging Fire Protection watcher in CA land - 3 months	Wage rate	1	326.50	1 Nos	97950
6	LS		Contingencies and unforeseen expenditure			LS		1758
TOTAL Prorata for 2nd year maintenance								201000
Add 20% of escalation for next year (2nd year)								40200
Prorata for next year								241200


District Forest Officer (I/C),
Vellore Division, Vellore - 09.


12/6/18


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ESTIMATE FOR 3rd YEAR MAINTENANCE OF COMPENSATORY AFFORESTATION OVER AN AREA OF 10.84 HA FOR MAHMANDALAM RE COMPENSATORY LAND IN AMMOOR RESERVED FOREST OF ARCOT RANGE DURING 2021-22 UNDER CAMPA SCHEME

Total area 10.84 ha
 No. of seedlings Ha 1000/Ha
 Seedlings planted 10840
 Survival 90% 9756

Size of Polybags = 16 x 30 x 300g
 Wage rate (From 1.4.17) = Rs.326.50

S. No	QTY	Unit	Name of Work	FSR / SSR	FSL	Rate	Per	Amount
1	9756	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	401.60	100 Nos	39180
2	9756	Nos	Application of poultry manure @250g per plant by mixing in the pit before planting including cost & transport	LR		1.50	1 No	14634
3	9756	Nos	Application of DAP mixture @ 20g per plant by mixing in the pit before planting including cost & transport	LR		0.60	1 No	5854
4	6.72	kms	Fireline creation (around 3 m width) work around CA land	2.4	17.46	5700.69	1 Km	38309
5	4	No.	Engaging Fire Protection watcher in CA land - 3 months	Wage rate	1	326.50	1 No	97950
6	LS		Contingencies and unforeseen expenditure			LS		2073
TOTAL Prorata for 3 rd year maintenance								198000
Add 30% of escalation for next year								59400
prorata for next year								257400
4 th year maintenance add 10% escalation								25740
4 th year maintenance cost								283140

5 th year maintenance add 10% of escalation	28314
5 th year maintenance cost	311454
6 th year maintenance add 10% escalation	31145
6 th year maintenance cost	342599
7 th year maintenance add 10% of escalation	34260
7 th year maintenance cost	376859
8 th year maintenance add 10% escalation	37686
8 th year maintenance cost	414545
9 th year maintenance add 10% of escalation	41455
9 th year maintenance cost	456000
10 th year maintenance add 10% of escalation	45600
10 th year maintenance cost	501600

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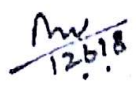
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Vellore Division, Vellore - 09.

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**ABSTRACT PROPOSAL FOR COMPENSATORY AFFORESTATION OVER AN AREA
OF 10.84HA FOR MAHIMANDALAM RF COMPENSATORY LAND IN AMMOOR
RESERVED FOREST OF ARCOT RANGE IN VELLORE FOREST DIVISION**

Sl. No	Description of Work	Proposed estimate cost	Remarks
1	2	3	4
1	Raising Nursery	269000	-
2	Planting operation	1436000	-
3	1 st year Maintenance	270600	10 % weightage towards escalation of labour wage rate during 2019-20
4	2 nd year Maintenance	241200	10 % weightage towards escalation of labour wage rate during 2020-21
5	3 rd year Maintenance	257400	10 % weightage towards escalation of labour wage rate during 2021-22
6	4 th year Maintenance	283140	10 % weightage towards escalation of labour wage rate during 2022-23
7	5 th year Maintenance	311454	10 % weightage towards escalation of labour wage rate during 2023-24
8	6 th year Maintenance	342599	10 % weightage towards escalation of labour wage rate during 2024-25
9	7 th year Maintenance	376859	10 % weightage towards escalation of labour wage rate during 2025-26
10	8 th year Maintenance	414545	10 % weightage towards escalation of labour wage rate during 2026-27
11	9 th year Maintenance	456000	10 % weightage towards escalation of labour wage rate during 2027-28
12	10 th year Maintenance	501600	10 % weightage towards escalation of labour wage rate during 2028-29
Total		5160398	


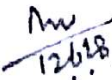

 District Forest Officer (I/C),
 Vellore Division, Vellore - 09.


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**WORK SCHEDULE FOR COMPENSATORY AFFORESTATION OVER AN AREA OF
10.84 HA FOR MAHIMANDALAM RF COMPENSATORY LAND IN AMMOOR
RESERVED FOREST IN ARCOT RANGE OF
VELLORE FOREST DIVISION**

Sl. No	Description of Work	Period of work
1	2	3
1	Raising Nursery	Jun 2018 to Sep 2018
2	Planting operation	October 2018 to December 2018
3	1 st year Maintenance	September 2019 to March 2020
4	2 nd year Maintenance	September 2020 to March 2021
5	3 rd year Maintenance	September 2021 to March 2022
6	4 th year Maintenance	September 2022 to March 2023
7	5 th year Maintenance	September 2023 to March 2024
8	6 th year Maintenance	September 2024 to March 2025
9	7 th year Maintenance	September 2025 to March 2026
10	8 th year Maintenance	September 2026 to March 2027
11	9 th year Maintenance	September 2027 to March 2028
12	10 th year Maintenance	September 2028 to March 2029


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