DETAILS OF FINANCIAL OUTLAY FOR COMPENSATORY AFFORESTATION

S.No	Contents	Quantity	Rate	Amount	Remarks
1	CA Plantation of 0.50Ha in the degraded forest area in Pulikoardu RF. Proposed by M/s. Optical Fiber Cable (OFC) The Number of seedlings 100per Ha				
1	Raising Nursery (2023-24)	110	163.64	18000.00	110 Seedlings area proposed to be planted in 0.50Ha. Degraded forest area in Pulikoradu RF and it will be maintained for a period of 10years
2	Planting (2024-25)	100	869.00	86900.00	
3	I yr maintenance (2025-26)	100	235.95	23595.00	
4	II yr maintenance (2026-27)	100	248.90	24889.67	
5	III yr maintenance (2027-28)	100	273.79	27378.63	
6	IV yr maintenance (2028-29)	100	13.50	1350.04	
7	V yr maintenance (2029-30)	100	14.85	1485.04	
8	VI yr maintenance (2030-31)	100	16.34	1633.55	
9	VII yr maintenance (2031-32)	100	17.97	1796.90	
10	VIII yr maintenance (2032-33)	100	19.77	1976.59	
11	IX yr maintenance (2033-34)	100	21.74	2174.25	
12	X yr maintenance (2034-35)	100	23.92	2391.68	
			Total	**193571.35**	

Forest Range Officer
Tambaram Range
Tambaram

Counter Signed

DISTRICT FOREST OFFICER
CHENNAI FOREST DIVISION
CHENNAI-600 006.

19/06/2024

Model Estimate for Raising Nursery

Size of Polybags : 30x45 cm
Period of Nursery : 10 Months
Wages Rate: Rs. 666.85

No of Seedlings: 1000 Nos
(+) casualties : 100 Nos
Total : 1100 Nos

Sl. No	Qty		Details of Work	FSR Item No	FSL	Rate	Per	Amount
NURSERY OPERATIONS FOR 13x25cm								
1	1100	Nos	Cost of 13x25cmx250G polybags	Tender rate 2023-2024		1003.00	1000	1103.00
2	22	M2	Preparation of Nursery site by Clearing and levelling the site for forming standard bed of size 10mx1m	4.1	2.42	1613.78	200	178.00
3	2.25	kg	Cost of Seeds	LR		200.00	1	450.00
4	3.3	Cu.m	Formation of germination beds of size 10x1x3 m	PWD SSR item w-0061		112.05	1	370.00
5	1.1	Beds	Watering the Germination Beds twice daily with rose can (15days)	4.5.1	0.82	546.82	10	902.00
6	1.1	Beds	Watering the germination beds once daily with rose can (15days)	4.5.2	0.41	273.41	10	451.00
7	1.12	Cu.m	Collection and supply of sand silt and red soil according the requirement of prepartion of soil mixture 3/4th of total volume	4.6.9		1200.00	1	1344.00
8	0.31	Cu.m	Collection and supply of Farm yard manure filling bags 1/4th of total volume	4.6.11		800.00	1	248.00
9	1100	Nos	Preparation of soil mixture by breaking clods,seiving, mixing fertile earth (including redsoil, silt and sand according to requiements) and farmyard manure in the reation of 3.1.heaping at the filling site and filling in poly bags arranging bags in beds and pricking out the seedlings	4.6.4	4.48	2987.49	1000	3286.00
10	27.5	Kg	Cost of Vermicasting @ 25gm / container	SFRI rate		12.00	each	330.00
11	11	Kg	Cost of Vam@10gm/container	SFRI rate		22.00	each	242.00
12	5.5	Kg	Cost of Azosphirillum @ 5gm/ container	SFRI rate		34.00	each	187.00
13	5.5	Kg	Cost of phosphobacteria @ 5gm/ container	SFRI rate		34.00	each	187.00
14			Watering the container plants					
a	1100	Nos	Twice daily with rose can 13x25 cm (30 days)	4.10.4	0.23	153.38	1000	5061.00
b	1100	Nos	Once in daily with rose can 13x25 cm (30days)	4.11.4	0.12	76.69	1000	2531.00
15	1100	Nos	Cost of water for watering the container seedlings- 90 days	4.18		0.85	1000	84.00
16	1100	Nos	Shifting the container plants weedling grading and replacement of casualities in the bags -shifting to done once in 21days, 1shiting not before 45days after pricking out -2 shifts	4.15.4	0.51	340.09	1000	748.00

PART II - Bigger size bags : 30x45cmx600g								
17	1100	Nos	Cost of 30x45cmx600G polybags	Tender rate 2023-24		9263.00	1000	10189.00
18	9.23	M3	Collection and supply of sand silt and red soil according the requirement of prepartion of soil misture 4/5th of total volume (excluding volume of 13x25bags)	4.6.9		1200.00	M3	11076.00
19	2.6	M3	Collection and supply of Farm yard manure according the requirement of prepartion of soil mixture 1/5th of total volume (excluding volume of 13x25bags)	4.6.11		800.00	1	2080.00
20	1100	Nos	Preparation of soil mixture by breaking clods,seiving, mixing fertile earth (including redsoil, silt and sand according to requiements) and farmyard manure in the reation of 4:1.heaping at the filling site and filling in poly bags 30x45cm arranging bags in beds and pricking out the seedling (excluding cost of soil mixture and FYM)	4.6.7	28.6	19051.90	1000	20957.00
21	11	Maz	Labour cost of transplanting seedlings from 13x25 cm container bags into 30x45 cm containers 10maz/1000	FSR wages rate		666.85	each	7335.00
22	38.5	Kg	Cost of Vermicasting @ 35gm / container	SFRI rate		12.00	each	462.00
23	16.5	Kg	Cost of Vam@15gm/container	SFRI rate		22.00	each	363.00
24	6.6	Kg	Cost of Azosphirillum @ 6gm/ container	SFRI rate		34.00	each	224.00
25	6.6	Kg	Cost of phosphobacteria @ 6gm/ container	SFRI rate		34.00	each	224.00
26	2750	RM	Cost of vertical strick - 2.50 mts height	PWDSSR M-0176		17.50	RM	48125.00
27	550	Mtrs	Cost of Horizontal strick- 1m ht	PWDSSR M-0176		17.50	Mtrs	9625.00
28	1100	Nos	Tying plants to vertical stick one in a month- 2times	LR		0.50	Each/ time	1100.00
29	1100	Nos	Pruning side branches once in 2 months - 2 times	LR		0.50	Each/ time	1100.00
30			Watering the container plants with rose can watering regime approved PCCF's Ref.No.J1/57395/2003, dt:12.12.2003					
a	1100	Nos	Twice daily - 15 days	4.10.7	0.56	373.44	1000	6162.00
b	1100	Nos	Once daily - 30 days	4.11.7	0.28	186.72	1000	6162.00
c	1100	Nos	Alternate days -60 days (30days)	4.11.7	0.28	186.72	1000	6162.00
d	1100	Nos	Twice in a week over 105 days-(effective days- 30 days)	4.11.7	0.28	186.72	1000	6162.00
31	1100	Nos	Shifting the container plants weedling grading and replacement of casualities in the bags -shifting to done once in 21days, 1shiting not before 45days after pricking out -9 shifts	4.15.7	2.69	1793.83	1000	17759.00

32	1100	Nos	Nursery protection mazdoor 1 No/20000 Nos of 30x45 cm bags for 300 days	FSR 2021-22		666.85	100000	2201.00
33	1100	Nos	Cost of water for watering the container seedlings- 105 days	4.18		1.60	1000	185.00
34	1100	Nos	Cost and application of Pesticides and fungicides -2 times	LR		0.50	1	1100.00
36	LS		Contingencies for unforeseen items if any					3545.00
TOTAL								**180000.00**

Rate calculated for 2024-25 Rs. 180000.00

1 seedling Rate for 2024-25 Rs. 163.64 Per seedling

Forest Range Officer
Tambaram Range
Tambaram.

Model Estimate for planting

Size of Polybags : 30x45 cm

No of Seedlings : 1000 Nos.

Wages Rate : Rs. 666.85

SI. No	Qty		Details of Work	FSR Item No	FSL	Rate	Per	Amount
1	1000	Nos	Aligning and marking the plantations in the block	FSR 5.2.1	1.38	920.253	1000	920.00
2	1000	Nos	Digging of 60cm^3 pits in hard gravelly soil / soft rock along the State Highway during non rainy season	FSR 5.8.1	9.26	6175.031	100	61750.00
3	72.00	m3	Cost and transport of Farm yard manure each plant 1/3 of the pit (0.60x0.60x0.20=0.072x1000=72.00 m3)	4.6.11		800.00	1	57600.00
4	1000	Nos	Application of FYM by mixing in the pit before planting- 1 mazdoor for 200 Nos	FSR wages	1	666.85	200	3334.00
5	1100	Nos	Transport of container seedlings in private vehicles upto a lead of 10Kms. Excluding load and unloading charges @ 2000/Load	NHAI & MTP ME		10.00	1 No	11000.00
6	1100	Nos	Loading & Unloading the Container plants charges in private vehicle upto lead of 2 Km	5.11.7	3.29	2193.94	1000 Nos	2413.00
7			Distribution of saplings from where seedlings are stocked to the planting spot upto 100mts.					
a.	350	Nos	Upto 100 m	5.15.1	10	6668.50	1000 Nos	2334.00
b.	350	Nos	Upto 200 m	5.15.2	17.5	11669.88	1000 Nos	4084.00
c.	400	Nos	Upto 500 m	5.15.3	41	27340.85	1000 Nos	10936.00
8			Application and cost of Biiofertilizers					
a.	1000	Kg	Cost of Vermicompost 1kg / plant	SFRI rate		12.00	1	12000.00
b.	100	Kg	Cost of VAM 100g/ Plant	SFRI rate		22.00	1	2200.00
c.	12.5	Kg	Cost of Azospirillum 12.5g/ Plant	SFRI rate		34.00	1	425.00
d.	12.5	Kg	Cost of Phospobacteria 12.5g/ Plant	SFRI rate		34.00	1	425.00
9	1000	Nos	Planting the Container plants by refilling pits of size 60 cm^3	FSR 5.22	1.71	1140.31	100 Nos	11403.00

10	2500	RM	Provision of vertical casurina poles 5cm to 8cm girth and 2.50 m height per plant	PWD SSR M176		17.50	1 RM	109375.00
11	100	Nos	Replacement of casualities by reopening failed pits and planting the saplings (1/2 pitting rate + full planting rate)	5.23	6.34	4227.83	100 Nos	4228.00
12	1000	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	820.23	100 Nos	8202.00
13	1000	Nos	Forming catch water drains for each plant in plains 90 cm x 45 cm x 30 cm size in hard gravelly soil	5.26	6.84	4561.25	100 Nos	45613.00
14	1000	Nos	Providing Brushwood fencing around each plants	LR		360.00	1	360000.00
15	300000	Ltrs	Cost of water @ 20 liter per seedlings 20 watering days (20x1000x15=300000Ltrs)	As per NHAI-ME		1200.00	12000	30000.00
16	1000	Nos	Watering the plants once in 6 days during non rainy period (from Jan to March) 200 Plants per mazdoor - 15 watering days	As per NHAI ME		666.85	200 Nos	50014.00
17			Photo and Documentation etc.,	LS				1000.00
`18	LS		Contingencies for application of pesticides etc. and unforeseen items towards diesel for vehicles and other contigent expenditures					744.00
TOTAL								**790000.00**

Cost per Planting- 2024-25 = 790.00
10% Escalation charges = 79.00
Cost per planting 2025-26= 869.00

Forest Range Officer
Tambaram Range
Tambaram.

Model Estimate for Ist Year Maintenance

Size of Polybags :30x45cm

Raising Target: 1000 Nos

Replacement of Casulaties : 10% 100 Nos

Wages Rate Rs. 666.85

SI. No	Qty		Details of Work	FSR Item No	FSL	Rate	Per	Amount
	A. NUSERY OPERATION							
1	100	Nos	Raising cost of seedlings in 30 x 45 size polythene bags(As per nursery estimate)	As per nursery estimate including 20% escalation of 2023-24 rate	-	196.36	1 No	19636.00
	B.PLANTING OPERATION							
2	100	Nos	Transporting saplings(transported in the radius of 40 kms)excluding loading and unloading in Private vehicle	NHAI ME	-	10.00	1	1000.00
3	100	Nos	Loading and Unloading the container seedlings (30x45cm) in private lorry upto a lead of 2kms (excluding hire charges for the vehicles)	5.11.7	3.29	2193.937	1000 Nos	219.39
4			Distribution of seedlings in the site Container plants upto 500mtrs - in plains					
a	40	Nos	Upto 100mt	5.15.1	10	6668.50	1000 Nos	266.74
b	40	Nos	Upto 200mt	5.15.2	17.5	11669.88	1000 Nos	466.80
c	20	Nos	Upto 500mt	5.15.2	41	27340.85	1000 Nos	546.82
6	100	Nos	Replacement of casualities by reopening failed pits and planting the seedlings	5.23	6.34	4227.83	100 Nos	4227.83
5	1000	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	820.23	100 Nos	8202.26
6	600000	Ltrs	Cost of water @ 20 liter per seedling 30 watering days (1000x20x30=600000Ltrs)	NHAI ME		1200.00	12000 Ltrs	60000.00

7	1000	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)	4.117	0.28	666.85	200	100027.50
8	LS		Contingencies and unforseen expenditure to be restricted to as per actual.					407.00
TOTAL								**195000.00**

Rate calculated for 2024-25 for 1000 nos for Rs	**195000.00**	
Cost of seedlings for 2024-25	**195.00**	**per seedling**
Add 10 % escalation for 2025-26	19.50	
Cost of seedlings for 2025-26	**214.50**	**per seedling**
Add 10 % escalation for 2026-27	21.45	
Cost of seedlings for 2026-27	**235.95**	**per seedling**

Forest Range Officer
Tambaram Range
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Model Estimate for 2nd Year Maintenance

Size of Polybags :30x45cm

Raising Targat 1000 Nos

Replacement of Casulaties : 10% 100 Nos

Wages Rate Rs. 666.85

SI. No	Qty		Details of Work	FSR Item No	FSL	Rate	Per	Amount
1	1000	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	820.23	100 Nos	8202
2	1000	Nos	Cost of Bio Fertililizers including cost of application Vermi-compose 1 kg, Bio fertilizer 100 gms VAM 100 gms	SFRI rate	-	17.60	1kg	17600
3	600000	Ltrs	Cost of water @ 20 liter per seedlings 30 watering days (1000x20x30=600000Ltrs)	NHAI ME	-	1200.00	12000 Ltrs	60000
4	1000	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		666.85	200	100028
5	LS		Contingencies for application of pesticides etc. and unforeseen items if any	LS				1170
TOTAL								**187000**

Rate calculated for 2024-25 for 1000 nos for Rs	187000	
Cost of seedlings for 2024-25	**187.00**	**per seedling**
Add 10 % escalation for 2025-26	18.70	
Cost of seedlings for 2025-26	**205.70**	**per seedling**
Add 10 % escalation for 2026-27	20.57	
Cost of seedlings for 2026-27	**226.27**	**per seedling**
Add 10 % escalation for 2027-28	22.63	
Cost of seedlings for 2027-28	**248.90**	**per seedling**

Forest Range Officer
Tambaram Range
Tambaram

Model Estimate for 3rd Year Maintenance

Size of Polybags :30x45cm

Raising Targat 1000 Nos

Replacement of Casulaties : 10% 100 Nos

Wages Rate Rs. 666.85

SI. No	Qty		Details of Work	FSR Item No	FSL	Rate	Per	Amount
1	1000	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	820.23	100 Nos	8202
2	1000	Nos	Cost of Bio Fertililizers including cost of application Vermi-compose 1 kg, Bio fertilizer 100 gms VAM 100 gms	SFRI rate	-	17.60	1kg	17600
3	600000	Ltrs	Cost of water @ 20 liter per seedlings 30 watering days (1000x20x30=600000Ltrs)	NHAI ME	-	1200.00	12000 Ltrs	60000
4	1000	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		666.85	200 Shift	100028
6	LS		Contingencies for application of pesticides etc. and unforeseen items if any	LS				1170
TOTAL								**187000**

Rate calculated for 2024-25 for 1000 nos for Rs	187000	
Cost of seedlings for 2024-25	**187.00**	**per seedling**
Add 10 % escalation for 2025-26	18.70	
Cost of seedlings for 2025-26	**205.70**	**per seedling**
Add 10 % escalation for 2026-27	20.57	
Cost of seedlings for 2026-27	**226.27**	**per seedling**
Add 10 % escalation for 2027-28	22.63	
Cost of seedlings for 2027-28	**248.90**	**per seedling**
Add 10 % escalation for 2028-29	24.89	
Cost of seedlings for 2028-29	**273.79**	**per seedling**

Forest Range Officer
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Tambaram

Model Estimate for 4th Year Maintenance

Size of Polybags :30x45cm

Raising Targat 1000 Nos

Replacement of Casulaties : 10% 100 Nos

Wages Rate Rs. 666.85

SI. No	Qty		Details of Work	FSR Item No	FSL	Rate	Per	Amount
1	1000	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	820.23	100 Nos	8202
6	LS		Contingencies for application of pesticides etc. and unforeseen items if any	LS				798
TOTAL								**9000**

Rate calculated for 2024-25 for 1000 nos for Rs	9000	
Cost of seedlings for 2024-25	**9.00**	**per seedling**
Add 50 % escalation for 2029-30	4.50	
Total prorate for 4th yr maintenance	**13.50**	**per seedling**
Add 10 % escalation for 2030-31	1.35	
Total prorate for 5th yr maintenance	**14.85**	**per seedling**
Add 10 % escalation for 2031-32	1.49	
Total prorate for 6th yr maintenance	**16.34**	**per seedling**
Add 10 % escalation for 2032-33	1.63	
Total prorate for 7th yr maintenance	**17.97**	**per seedling**
Add 10 % escalation for 2033-34	**1.80**	
Total prorate for 8th yr maintenance	**19.77**	**per seedling**
Add 10 % escalation for 2034-35	**1.98**	
Total prorate for 9th yr maintenance	**21.74**	**per seedling**
Add 10 % escalation for 2035-36	**2.17**	
Total prorate for 10th yr maintenance	**23.92**	**per seedling**

Forest Range Officer
Tambaram Range
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