MODEL ESTIMATE FOR RAISING NURSERY FOR COMPENSATORY AFFORESTATION OVER AN AREA OF 1.80 HA. IN PINJUR C-BLOCK RF OF CHENGAM RANGE OF TIRUVANNAMALAI FOREST DIVISION UNDER CAMPA SCHEME DURING 2022-23.

Area in ha

1.80

Size of Jute bags: 13x25x250gms

Seedlings per ha

1000

Size of Jute bags: 30x45x600gms Labour Rate:

475.75

495000

Total Amount Rs. Pro rate /

250.00

No.of seedlings 1800 Casuality 10% 180 Total 1980 ci

SI. No.	Qty	Unit	Description of works	FSR No.	Rate	Pe	Per/Qty	
(1)	(2)	(3)	(4)	(5)	(6)		(7)	(8)
PAR	T-I - SMA	LL SIZE B	AGES: 13X25cmX250gms					100
1	326	m²	Preparation of Nursery site by clearing and levelling the site for forming standard bed of size 10mx1m		1151.32	200	m²	1878
2	4.0	kgs	Cost of seeds	LR	250.00	1	kg	990
3	1980	Nos	Cost of Jute bags of 13x25cmx250gms size bags	As per Tender Rate	30000.00	1000	Nos	59400
4	5.7	m ³	Formation of Germination bed of size 10m x 1m x 0.30m by heeaping the soil	PWD SSR Item No.62 (2021-22)	73.10	1	m³	416
5	5.7	Beds	Watering the GerminationBeds twice daily with rose can for 15 days	4.5.1	390.12	1	10 B/D	2207
6	5.7	Beds	Watering the Germination beds Once daily with rose can for 15 days	4.5.2	195,06	1	10 B/D	1103
7	2.1266	m ³	Collection and supply of Red soil, Sand, Silt for filling in Polythene bags 10 x 20 cm	LR	750,00	_1	m³	1595
8	0.5349	m ³	Collection and supply of Farmyard Manure for filling in Polythene bags	LR	750,00	1	m ³	401
9	1980	Nos	Preparation of Soil Mixture by breaking clods, sieving and mixing of fertile earth (including red soil, sand and silt etc according to requirements) and Farm Yard Manure at 4:1 ratio heaping at the filling site and filling in the polythene bags - 10x20cms.	4.6.4	2131.36	1000	Nos	4220
10	69.30	Kgs	Cost of Vermicasting @ 35gm/ container seedlings		10.00	1	kg	693
11	29.70	kgs	Cost of VAM @ 15gm / Container seedlings	Modern Nursery,	18.00	1	kg	535
12	11.88	kgs	Cost of Bio-fertilizers such as Azosphirillum @ 6gm / container seedlings	Dharma puri Rate	27.00	1	kg	321

SI. No.	_	Unit	Description of works	FSR No.	Rate	Pe	r/Qty	Amount
(1)	(2)	(3)	(4)	(5)	(6)		(7)	(8)
13	11.88	Kgs	Cost of Phospobacteria @ 6gms / container seedlings		27.00	1	kg	32
14			Watering the container plants with rose cane - watering regime as per the NHAI ME approved in PCCF's Ref.No.J1/57395/2003/dt.12.12.2003)					
a)	1980	15 days	Twice daily - 15 days	4.10.4	109.42	1000	Nos	3250
b)	1980	30 days	Once daily - 30 days	4.11.4	54.71	1000	Nos	3250
c)	1980	15 days	Alternate days - 15 days	4.11.4	54,71	1000	Nos	1625
15	1980	60 days	Cost of water for watering the container seedlings from private wells - 60 days	4.18 - FSR 1998-99	0.85	1000	Nos	101
16	1980	2 shifts	Shifting and grading the container plants including weeding and replacement of casualities - 2 shifts	4.15.4	242,63	1000	Nos	961
			SUB TOTAL (A)			- 75		83267
PART	T-II - BIGG	ER SIZE B	AGS - 30X45cmX600gms					
17	1980	Nos.	Cost of Jute bag of size 30x45cm size	Tender Rate	89680	1000	Nos.	177566
18	18.28	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 volume of 13x25cm bags) 30x45cm poly bags volume = 9.23m ³ /1000 Nos		750	1	m³	13706
19	4.57		Cost of Farm Yard Manure for filling 30x45cm bags 1/5 of the total volume (2.31m ³ /1000 Nos.)	LR	750	1	m ³	3431
20	1980	Nos.	Preparation of Soil Mixture by breaking clods, sieving and mixing soil, silt and sand according to requirement and farm year mannure in the ratio of 4:1, heaping at the fillingsite and filing in poly bags, arranging bags in beds and pricking out the seedlings (excluding cost of soil mixure and FYM)	4.6.7	13592.18	1000	Nos.	26913
21	69.30	DOM: 5	Cost of Vermicasting @ 35gm/ container seedlings		10.00	1	kg	693
22	29.70		Cost of VAM @ 15gm / Container seedlings	Modern Nursery,	18.00	1	kg	535
3	11.88	kgs /	Cost of Bio-fertilizers such as Azosphirillum @ 6gm / container seedlings	Dharma puri Rate	27.00	1	kg	321
4	11.88	NRS I	Cost of Phospobacteria @ 6gms / container seedlings		27.00	1	kg	321

SI. No.	Qty	Unit	Description of works	FSR No.	Rate	Pe	er/Qty	Amoun
(1)	(2)	(3)	(4)	(5)	(6)	-	(7)	
25	19.8	Maz	Labour cost for transplanting seedling from 13x25cm containers bags into 30x45cm containers - 10 maz./1000	s	475,75	1	Maz	942
26	1980	Nos.	Cost of vertical supporting stick of size 2.5m Ht.		13.00	1	No.	2574
27	990	Nos.	Cost of horizontal supporting stick of 2.5 m ht.	LR	3.00	1	No.	2970
28	1980	Nos.	Tying plants to the vertical stick once in a month - 2 times		0.40	1	No.	1584
29	1980	Nos.	Pruning side branches once in 2 months - 2 times		1.00	1	No.	3960
30			Watering the container plants with rose cans - watering regime as per the NHAI M.E. approved in PCCF's Ref.No.J1/57395/2003/ dt.12.12.03)					
a)	1980	60 Days		4.10.7	266.42	1000	Nos.	31651
b)	1980	60 Days	Once Daily - 60 days	4.11.7	133.21	1000	Nos.	
31	1980	6 shifts	Shifting the container once in 21 days. First shift after 45 days from the date of transplanting - 6 times.		1279,77	1000	1 shift	15825
32	1980	120 days	Cost of Water for watering the container seedlings from private wells - 120 days	4.18 - FSR 1998-99	1.60	1000	Nos.	380
33	462	5 months	Land Rent for keeping nursery in private land - 1000/60sqm	4.17 FSR 1998-99	86.00	40	m ²	4967
32	1980	210 Days	Nursery Protection mazdoor to watch and ward the nursery and for application of manure etc.,	Wage Rate	475.75	20000	Nos.	9891
13	LS		Provision for cost of festicides and fungasides including labour charges	LS				5000
4	LS		Photograph and Documentation charges					5000
5	LS		Contingencies for application of pesticides and panchagavya etc, and unforeseen items and transporting of Vermic casting from Dharmapuri Modern Division.	LS				11655
-			Total - B					366733
-			Total (A+B)					450000
+	-		10% Escalation Cost					45000
+	-		Grand Total					495000
			Seedlings cost					250.00



MODEL ESTIMATE FOR COMPENSATORY AFFORESTATION PLANTING OVER AN AREA OF 1.80 HA. IN PINJUR C-BLOCK RF OF CHENGAM RANGE OF TIRUVANNAMALAI FOREST DIVISION UNDER CAMPA SCHEME DURING 2022-23.

No.of seedling 1800

Species: Miscellaneous

Size of Pits: 60cm3 (30x45cm size) Total Cost Rs.

341000

Pro-rata/seed 189.44

Labour Rate: 475.75 /day

SI. No.	Qty	Unit	Description of works	FSR No.	Rate	Per/	Qty	Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7	7)	(8)
1	1800	Nos.	Digging of 60 cm ³ pits in all types of soil during Rainy season	5.8.2	3672.79	100	Nos.	66110
2	900	kgs	Cost & Transport of poultry manure each plants 500 gms	Lower quotatio n	7500	1000	kgs	6750
3	1800	Nos.	Application of poultry manure @500 gms per plant by mixing in the pit before planting 1 mazdoor for 200 Nos.	FSL	475.75	200	Nos.	4282
4	1800	Nos.	Cost of Bio fertilizer including cost of application - vermicompot 1kg. Bio fertilizers 100gms, VAM 100gms	Victoria -	10.00	1	Each	18000
5	1980	Nos.	Transporting saplings (Transported to the radius of 40 kms) excluding loading and unloading		10.00	1	Each	19800
6	1980	Nos.	Loading and unloading the polythene container seedlings in private / department vehicles (excluding hire charges)	5 11 7	1565.22	1000	Nos.	3099
7	1980	Nos.	Distribution of saplings from where seedlings are stocked to the planting spot upto 100mts		4757.50	1000	Nos.	9420
8	1980	Nos.	Planting the container seedlings by refilling the pits of size 60cm	5.22	813.53	100	Nos.	16108
9	1800	Nos.	Scrap weeding for 1m dia and soil working 15cm depth around each plant and removing the grass roots away from the site by upturning the soil	5.24	585.17	100	Nos.	10533
10	180	Nos.	Replacement of casualities by re- opening the failed pits and planting the container plants and refilling the pits (1/2 pitting rate + full planting rate)	5.23	2649.93	100	Nos.	4770

SI. No.	Qty	Unit	Description of works	FSR No.	Rate	Por	/Qty	
(1)	(2)	(3)	(4)	100000	-	rei	recy	Amoun
			Watering the plants once in 6 days	(5)	(6)	(7)		(8)
11	900	15 days	during summer / non-rainy season	NHAI ME	475.75	200	1 day	32113
12	270000	Litters	Cost of water @ 20 - liters per seedlings January to March - 3 months 15 watering days) at the rate once in 6 days - 20x900x15 = 270000 litters	NHAI ME	1200.00	12000	Lit.	27000
13	1	maz.	Engaging Protection mazdoor @ 1 mazdoor/500 plants (road avenue alone) from Oct to Mar-14 Nos/175 days	FSL Wages Rate	475.75	1	maz.	83256
14	LS.		Contingencies and unforeseen items if any	-				8759
4			TOTAL					210000
			10% Escalation cost				-	310000
			Grand Total				-	31000
			Cost per seedling					341000
			1					189.44

District Forest Officer,
Tiruvannamalai Division
Tiruvannamalai

MODEL ESTIMATE FOR 1ST YEAR MAINTENANCE OF COMPENSATORY AFFORESTATION PLANTING OVER AN AREA OF 1.80 HA. IN PINJUR C-BLOCK RF OF CHENGAM RANGE OF TIRUVANNAMALAI FOREST DIVISION UNDER CAMPA SCHEME DURING 2023-24.

No.of seedlings : 180

Species : Miscellaneous

Wage

Rate Rs.:

475.75

SI. No.	Qty	Unit	Description of works	FSR No.	Rate	Per	/Qty	Amoun
(1)	(2)	(3)	(4)	(5)	(6)			
			Nursery Operation	(5)	(0)		7)	(8)
1	180	Nos.	Raising cost of seedlings (as per Nursery Estimate)	As per Nurser Estimate	250.00	1	No	45000
			Planting Operations	Lotinate				
2	90.00	Kgs	Cost & Transport of Poultry manure each plants 500 gms 100 plants (10% casuality)	Lower Quotation	2000	1000	kg	180
3	180	Nos.	Application of poultry manure @ 500 gms pr plant by mixing in the pit before planting - 1 mazdoor for 250 Nos.	FSL Wage	475.75	200	Nos.	428
4	180	Nos.	Cost of Bio fertilizer including cost of application - vemicompot - 1 kg, Bio fertilizers - 100 gms, VAM - 100 gms		10.00	1	Nos.	1800
5	180	Nos.	Transporting saplings (transported to the radius of 40 kms) excluding loading and unloading	LS	10.00	1	Nos.	1800
6	180	1405.	Loading and unloading the polythene container seedlings in private / department vehicles (excluding hire charges)	5.11.7	1565.22	1000	Nos.	282
7	180	Nos.	Distribution of saplings from where seedlings are stocked to the planting spot upto 100 mts	5.15.1	4757.50	1000	Nos.	856
8	180	Nos.	Replacement of casualities by re- opening the failed pits and planting the container plants and refiling the pits (1/2 pitting rate + full planting rate)	5.23	2649.93	1000	Nos.	477

SI. No.	Qty	Unit	Description of works	FSR No.	Rate	Per/Qty		A					
(1)	(2)	(3)	(4)	(r)				Amount					
								Scrap weeding for 1m dia and soil	(5)	(6)	(7)		(8)
9	1800	1800 Nos.	working 15cm depth around each		585,17	100	Nos.	10533					
10	1	Nos.	Engaging protection mazdoor @ 1 mazdoor / 500 plants (for Road Avenue) from April to March @ 25 days / month - 300 days	FSL Wage Rate	475.75	1	Nos.	142725					
11	LS.		Contingencies and unforeseen items if any	LS			-	9					
			TOTAL										
			10% Escalation cost					204090					
								20409					
			Grand Total					224499					
							or	224500					

District Forest Officer,
Tiruvannamalai Division

MODEL ESTIMATE FOR 2ND YEAR MAINTENANCE OF COMPENSATORY AFFORESTATION PLANTING OVER AN AREA OF 1.80 HA. IN PINJUR C-BLOCK RF OF CHENGAM RANGE OF TIRUVANNAMALAI FOREST DIVISION UNDER CAMPA SCHEME DURING 2024-25.

Total Area in ha: 1.80

No.of seedings per 1000/ha

Labour Rate per day: 475.75

No.of seedings

planted:

1800

Survival 98% : 1764

SI. No.	0	lty	Name of work	FSR / SSR Item No.	Rate	1	Per	Amoun
1		2	3	4	-			
1	1764	Nos.	Application of poultry manure @ 500 gms per plant by mixing in the pit before planting including cost & transport		3.00	1	No.	5292
2	1764	Nos.	Application of DAP mixture @ 20 gms per plant by mixing in the pit before planting including cost & Transport	LR	1.20	1	No.	2117
3	1764	Nos.	Scraping for 1 m dia and soil working 15cm depth around each paints and removing the grass roots away from the site of upturning the soil	5.24	585.17	100	Nos.	10322
4	6	kms	Fireline creation (around 3 m width) work around CA Land	2.4	8306.60	7	Nos.	49840
5	1	Nos.	Engaging Fire Protection Watcher in CA Land 3 months	Wage Rate	475.75	1	Maz	35681
6			Contingencies	Rate			1102	
-			Cost for 2nd year maintenance					2748
1			Add Escalation cost 20%					106000
			Total Cost for 2nd year maintenance					21200 127200

Truvannamalai Biviaion, Tiruvannamalai.

MODEL ESTIMATE FOR 3RD YEAR MAINTENANCE OF COMPENSATORY AFFORESTATION PLANTING OVER AN AREA OF 1.80 HA. IN PINJUR C-BLOCK RF OF CHENGAM RANGE OF TIRUVANNAMALAI FOREST DIVISION UNDER CAMPA SCHEME DURING 2025-26.

Total Area in ha: 1.80

No.of seedings per 1000/ha

Labour Rate per day:

475.75

No. of seedings

planted:

1800

Survival 95% : 1710

SI. No.	0	It.		FSR / SSR Item No.	Rate	Per		Amount	
1	-	2	3	4	5	-			
1	1710	Nos.	Application of poultry manure @ 250 gms per plant by mixing in the pit before planting including cost & transport		3.00	1	No.	5130	
2	1710	Nos.	Application of DAP mixture @ 20 gms per plant by mixing in the pit before planting including cost & Transport	LR	1.20	1	No.	2052	
3	1710	Nos.	Scraping for 1 m dia and soil working 15cm depth around each paints and removing the grass roots away from the site of upturning the soil	5.24	585.17	100	Nos.	10006	
4	6	kms	Fireline creation (around 3 m width) work around CA Land	2.4	8306.60	1	Nos.	49840	
5	1	Nos.	Engaging Fire Protection Watcher in CA Land 3 months	Wage Rate	475.75	1	Maz	35681	
6			Contingencies	Note			10000	33001	
			Cost for 3rd year maintenance					2291	
			Add Escalation cost 30%					105000	
								31500	
			Total Cost for 3rd year maintenance					136500	

Add 10% escalation Cost for 4th year maintenance	13650 150150
Add 10% escalation Cost for 5th year maintenance	15015 165165
Add 10% escalation Cost for 6th year maintenance	16517 181682
Add 10% escalation Cost for 7th year maintenance	18168 199850

Add 10% escalation

Cost for 8th year maintenance

Add 10% escalation

Cost for 9th year maintenance

Add 10% escalation

Add 10% escalation

Cost for 10th year maintenance

24182
266001

District Parest Officer, Tiruvannamalai Divisooh Tiruvannamalai

1/8/22

ABSTRACT PROPOSAL FOR RAISING SEEDLINGS, PLANTING AND MAINTENANCE FOR 10 YEARS OVER AN AREA OF 1.80 HA. IN PINJUR C-BLOCK RF OF CHENGAM RANGE OF TIRUVANNAMALAI FOREST DIVISION UNDER CAMPA SCHEME

SI. No.	Description of Work	Proposed Estimate	Remarks
1	2	3	
1	Raising Nursery Operation	495000	4
2	Planting Operation	341000	
3	1st Year Maintenance	224500	10% weightage towards esclation of labour wage rate
4	2nd Year Maintenance	127200	20% weightage towards esclation of labour wage sate
5	3rd Year Maintenance	136500	30% weightage towards esclation of labour wage rate
6	4th Year Maintenance	150150	40% weightage towards esclation of labour wage rate
7	5th Year Maintenance	165165	50% weightage towards esclation of labour wage rate
8 I	6th Year Maintenance	181682	60% weightage towards esclation of Jahour wage rate
9	7th Year Maintenance	199850	70% weightage towards esclation of labour wage rate
10 8	Sth Year Maintenance	219835	80% weightage towards esclation of labour wage rate
11 9	Oth Year Maintenance		90% weightage towards esclation of labour wage rate
12 1	Oth Year Maintenance		during 2031-32 from 9th year maintenance 90% weightage towards esclation of labour wage rate
IN	Total	2748702	during 2032-33 from 10th year maintenance

District Forest Oficer,
Tiruvannamalai Forest Division,
Tiruvannamalai

WORK SCHEDULE FOR COMPENSATORY AFFORESTATION PLANTING OVER AN AREA OF 1.80 HA. IN PINJUR C-BLOCK RF OF CHENGAM RANGE OF TIRUVANNAMALAI FOREST DIVISION UNDER CAMPA SCHEME

SI. No.	Description of Work	Period of Work
1	Raising Nursery	June 2022 to November-2022
2	Planting Operation	December-2022 to January-2023
3	1st Year Maintenance	April-2023 to March-2024
4	2nd Year Maintenance	April-2024 to March-2025
5	3rd Year Maintenance	April-2025 to March-2026
6	4th Year Maintenance	April-2026 to March-2027
7	5th Year Maintenance	April-2027 to March-2028
3 6	oth Year Maintenance	April-2028 to March-2029
9 7	th Year Maintenance	April-2030 to March-2031
0 8	th Year Maintenance	April-2031 to March-2032
9	th Year Maintenance	April-2032to March-2033
2 10	Oth Year Maintenance	April-2033 to March-2034

District Porest Officer, Tiruvannamala Division, Tiruvannamalai.

The Compensatory Amount to be collected from the User Agency is furnished below.

SI.	Work Description	Area in ha	Pro-rata per Ha. in Rs.	Amount in Rs
1	(a) Afforestation cost	For raising 1980 saplings (1800 + 180 casualities) @ 1000/ ha. to an extent of		
	Raising Nursery in 13x45 cm poly bags and planting works.	1.80 Ha. (Total extent 1.80		836000
2	1 st year maintenance	1.80	124722.22	224500
3	2 nd year maintenance	1.80	70666.67	127200
4	3 rd year maintenance	1.80	75833.33	136500
5	4 th year maintenance	1.80	83416.67	150150
6	5 th year maintenance	1.80	91758.33	165165
7	6 th year maintenance	1.80	100934.44	181682
8	7 th year maintenance	1.80	111027.78	199850
9	8 th year maintenance	1.80	122130.56	219835
10	9 th year maintenance	1.80	134343.89	241819
11	10 th year maintenance	1.80	147778.33	266001
	Total			2748702

District Forest Officer, Thiruvannamalal Division, Thiruvannamalai.