

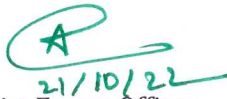
Compensatory Afforestation Scheme for the diversion of 0.9896 ha of Forest land in Alagiyamanavalapuram RL for Construction of Check dam by Public work Department, Tamirabarani River Basin Tirunelveli.

No of seedlings **250**
10% Casualty **25**
 275

Sl.no	Name of Work	Year	Total Amount (Rupees)	Rate Per Seedlings @Rs.
1	Nursery		26,400.00	96.00
3	Planting	1st	4,67,401.00	1,869.60
4	1 st year Maintenance	2nd	2,20,501.00	882.00
5	2 nd year maintenance	3rd	95,352.00	381.41
6	3 rd year maintenance	4th	1,02,687.00	410.75
7	4th Year maintenance	5th	2,089.00	8.36
8	5th Year maintenance	6th	2,298.00	9.19
9	6th Year maintenance	7th	2,528.00	10.11
10	7th Year maintenance	8th	2,781.00	11.12
11	8th Year maintenance	9th	3,059.00	12.24
12	9th Year maintenance	10th	3,364.00	13.46
13	10th Year maintenance	11th	3,701.00	14.80
			9,32,161.00	

Specification

1. Estimates for the above has been prepared as per the Model Estimate for camp received in the Principal Chief Conservator of Forests (HOFF), Chennai ref.no.TS4/22483/2022 dated.13.10.2022
2. The area of the plantation to be taken up is located adjacent to the villages. Hence, fixing the Iron tree guard is included in the planting estimate to avoid grazing for cattle.


 21/10/22
 District Forest Officer,
 Thoothukudi Division,
 Thoothukudi.

Model Estimate for Raising Preparatory Nursery(Taller Seedlings 30X45 CM)works in Compensation Afforestation Scheme.

Size of Bags - 13X25 cm and 30X45 cm

Species: Naval, Thani, vengai , Neem ,etc.,

No.of Seedlings 250 Nos

Casualty 10% - 25 Nos

Total 275 Nos


SI. No	Name of the work	FSR/ SSR	Quantity	Rate	Per	Amount
1	PART - I Small size bags 13x25 cm Preparation of nursery site by clearing and levelling the site for forming standard bed of size 10m x 1m (150 M2 for 10 Standard Bed)	4.1/ 2021-23	37.5 m ²	1151.32	m ² 200	215.87
2	Cost of 13 x 25cm x 250G Poly bags(Including GST)	2021-23 Tender Rate	275 Nos	961.7	1000 Nos	264.47
3	Cost of seeds (2kg/1000)	CAMPA M.E	0.5 Kg	250	1 Kg	125.00
4	Formation of germination beds of size 10m x 1m x 0.3by heaping the soil	PWD SSR 62	0.75 m ³	73.1	1 m ³	54.83
5	Watering the germination beds twice daily with rose cans for 15days.	4.5.1/ 2022-23	0.25 bed	390.12	10 bed/ days	146.30
6	Watering the germination beds once daily with rose cans for 30 days.	4.5.2/ 2022-23	0.25 bed	195.06	10 bed / days	146.30
7	Collection & Supply of sand silt and red soil according to the requirement for preparation of soil mixture 4/5 th of the total volume.	SIPCOT M.E.	0.231 cu.m	750	1 cu.m	173.25
8	Cost and Transport of farmyard manure for filling bags -1/5 th of the total volume.	SIPCOT M.E.	0.077 cu.m	750	1 cu.m	57.75

Sl. No	Name of the work	FSR/ SSR	Quantity	Rate	Per	Amount
9	Preparation of soil mixture by breaking clods, sieving, mixing red soil, silt, sand according to requirement and farmyard manure in the ratio 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	275 nos	2131.36	1000 nos	586.12
10	Watering the container Plants with rose cans watering regime as per the NHAI ME approved by pccf					
11	Twice daily – 15 days	4.10.4	275 nos	109.42	1000 nos/ days	451.36
12	Once daily – 30 days	4.11.4/ 2021-22	275 nos / days	54.71	1000 nos / days	451.36
13	Alternate days- 30 days (15 watering days)	4.11.4/ 2021-22	275 nos	54.71	1000 nos/ days	225.7
14	Shifting the container plants, weeding and grading and replacement of casualties in the bags 2 shifts.	4.15.4 / 2021-22	275 / 2 shift	242.63	1000 /shift	133.4
	PART -A -Total					3032
	<u>PART -2 Bigger size bags : 30x45 cm x 600G</u>					
15	Cost of 30x45cm x 600G poly bags. (Including GST)	Tender Rate	275 nos	6584.4	1000 nos	1810.71
16	Collection and Supply of sand, silt and red soil according to the requirement for preparation of soil mixture – 4/5 of the total Volume (excluding the volume of earth in 13x25cm container)	MTP M.E	2.308 m3	750	1 m3	1730.63
17	Cost and Transport of farmyard manure for filling bags – 1/5 th of the total volume.	MTP ME	0.578 m3	750	1 m3	433.13

Sl. No	Name of the work	FSR/ SSR	Quantity	Rate	Per	Amount
31	Twice in a week spread over 105 days (Effective days-30days)	4.11.7	275 nos	133.21	1000 nos/ days	1098.98
32	Shifting the container 21 days. First shift after 45 days from the date of transplanting – 7 times.	4.15.7	275 nos /2shift	1279.77	1000 nos/ shift	703.8735
33	Nursery Protection mazdoors 1 no / 100000nos of 30x45 bags – 300 days	2021 wages rate	275 nos / 120 days	475.75	100000 nos/ days	392.5
34	Photo and Documentation	Ls				565.9
35	Contingencies for Purchase of pesticides Neem cake etc., for Nursery, Transport of fertilizer documentation works.	LS	--	--	--	569
						23368
Grand Total (part -A + Part B)						26400

Rate per seedlings

96.00


 21/10/22
 District Forest Officer,
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 Thoothukudi.

Sl. No	Name of the work	FSR/ SSR	Quantity	Rate	Per	Amount
18	Preparation of soil mixture by breaking clods, sieving, mixing red soil, silt, sand according to requirement and farmyard manure in the ratio of 4:1 heaping at the filling site and filling poly bags, arranging bags in beds and pricking out the seedlings (excluding cost of soil mixture and FYM)	4.6.7/ 21-22	275 nos	13592.2	1000 nos	3737.85
19	Cost of Vermicasting @35 gm per seedlings.	Research wing rate	9.625 kg	10	1 kg	96.25
20	Cost of Azospirillum@ 6gm per seedlings	Research wing rate	1.65 kg	27	1 kg	44.55
21	Cost of Phospo bacteria at 6 grm per seedlings	Research wing rate	1.65 kg	18	1 kg	29.70
22	Cost of VAM at 15grm per seedlings	Research wing rate	4.125 kg	27	1 kg	111.38
23	Labour cost for Transplanting seedlings from 13x25 cm bags into 30X45 cm containers 10Maz/1000 nos	PCCF M.E for NHAI/ FSR 2018-19 Rate	2.75 maz	475.75	10 maz /1000 nos	1308.3125
24	Cost of vertical stick of size 2.5 mht (casurina poles 5cm-8cm girth and 2.50 m height for each plants	PWD SSR and CAMPA ME	275 nos	17.5	1 no	4812.50
25	Tying plants to the vertical stick once in a month – 2 times	MTP ME	275 nos/2 times	0.4	1 nos/2 times	220.00
26	Cost of horizondal sticks(casurina poles 5cm-8cm girth and 1 m height for each plants)	MTP ME	137.5 nos	17.5	1 no	2406.25
27	Watering the container plants					
28	Twice daily – 15 days	4.10.7	275 nos	266.42	1000 nos/ days	1098.98
29	Once daily – 30 days	4.11.7	275 nos	133.21	1000 nos/ days	1098.98
30	Alternate days- 60 days (30 watering days)	4.11.7	275 nos	133.21	1000 nos/ days	1098.98

Estimate for Planting of Miscellaneous Tree seedlings in Tamirabarani river bed area in Thoothukudi Division.

Size of bag : 30x 45cm X 400 g

Wages Rate: Rs.460.25


No of Seedlings: 250

25

275

Sl. No.	Name of work	FSR / SSR item No.	Quantity	Unit	Rate	Per	Amount
1	2	3	4	5	6	7	8
1	PLANTING						
1	Tree guard (5 feet high, 4 feet circumference and 3 legs with name board- Iron wire)	LR/LQ	250	nos	1080	1	270000
2	Aligning and Marking strip plantation including avenue	5.2.4 FSR	250	Nos	656.54	1000	164
3	Digging of 60Cm ³ pits in all types of soil for avenue plantations in Non-rainy season	5.8.1 FSR	250	Nos	4405.45	100	11014
4	Collection and supply of farmyard manure 1/3 of the pit (0.60X0.60X0.20X2000) = 144m ³	NHAI ME	18	m ³	750.00	1	13500
5	Application charges for farmyard manure for 60cm ³ @ 1Maz/200 nos	FSR 22-23 wages rate	1.25	m ³	475.75	1	595
6	Cost of Vermicompost 1Kg/Plant	NHAI ME	250	kgs	10.00	1	2500
7	Cost of VAM 100gm/Plant	NHAI ME	25	kgs	18.00	1	450
8	Cost of Azospirillum 12.5gm/Plant	NHAI ME	3.13	Kg	27.00	1	84
9	Cost of Phospobacteria 12.5gm/Plant	NHAI ME	3.13	Kg	27.00	1	84
10	Transporting saplings(Transported to the radius of 5 kms) Excluding loading and unloading	MTP ME	275	nos	1.50	1	413
11	Loading and unloading the polythene container seedlings in Private/departmental vehicles (Excluding hire charges)	5.11.7 FSR	275	Nos	1565.22	1000	430
12	Distribution of saplings from where seedlings are stocked to the planting spot upto 100 mtrs	5.15.1 FSR	275	Nos	4757.50	1000	1308
13	Planting the container seedlings by refilling the pits of size 60cm in avenue.	5.22 FSR	250	Nos	813.53	100	2034
14	Replacement of casualties(10% of the totla plants)by re-opening the failed pits and planting the container plants and refilling 1/2 rate full rate of planting.	5.23 FSR	25	Nos	2649.93	100	662

Sl. No.	Name of work	FSR / SSR item No.	Quantity	Unit	Rate	Per	Amount
15	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 FSR	250	Nos	585.17	100	1463
16	Provision of vertical casuarina poles to the planted seedlings 2.50mtr ht per plant. (8x5cm)	PWD SSR	625	mtr	17.50	1	10938
17	Watering the plants 6 time per month one mazdoor for 200 plants in non rainy period for 3 months (15 watering days)	FSR 2022-23 wages rate	250	maz	475.75	200	8920
18	Cost of water @20 liter per seedlings for 30 watering days. (20x275x15=75000)	NHAI ME	75000	ltr	1200.00	12000	7500
19	Plantation protection mazdoors october to march 180 days	Wage rate	250	nos	475.75	250	85635
20	Provision for cost of pesticides and fungasides and labour charges for application of pesticides - 2 times/ month	CAMPA ME	Ls	months	625.00	1	625
21	Photo and documentation etc.,	CAMPA ME	Ls				100
22	Contigencies for application of pesticides,etc, and unforeseen items	L.s					6491
	Total						424910
Add 10% Escalation Charges for 1st year							42491
							467401
Cost Per seedlings.							1869.60


 District Forest Officer
 Thoothukudi division,
 Thoothukudi

**Model Estimate for Ist year maintenance of Planted Taller seedlings(30X45 cm) in
Thoothukudi Division for Road side avenue plantation.**

Size of bag : 30 x 45 cm X 300g

No of Seedlings : 250

Wages Rate: Rs.475.75

Casualty 25

(10% Casualty)

Sl. No.	Name of work	FSR / SSR item No.	Quantity	Unit	Rate	Per	Amount
1	2	3	4	5	7	8	0
1	Cost of Seedlings(30X45cm)	As nursery estimate	25	Nos	96.00	1	2400
2	Cost of transport of farmyard manure	lowest	0.9	cum	750.00	1	675
3	Application of farm yard manure by mixing in the pit before planting - 1 mazdoor for 200 nos	CAMPA ME	25	nos	475.75	200	59
4	Cost of Bio Fertilizers including cost of application vermi-compose 1 kg, Bio fertililzer 100gms Vam 100gms)	NHAI and CAMPA ME	250	nos	7.70	1	1925
5	Transport of container seedlings in private vehicles upto a lead of 5 kms excluding loading and Unloading charges	MTP ME	25	Nos	1.50	1	38
6	Loading & Unloading the container seedlings in private/department vehicles(excluding hire charges for the vehicles)	5.11.7(FSR 22-23)	25	Nos	1565.22	1000	39
7	Distribution of seedlings from where seedlings are stocked to the planting spot upto 100 mtrs.	5.15.1 -(FSR 2022-23)	25	Nos	4757.50	1000	119
8	Replacement of casualites by reopening failed pits and planting the seedlings	5.23-(FSR 2022-23)	25	Nos	2649.93	100	662
9	Watering the plants to six days once for 6 months, one mazdoor for 200 plants in non rainy period (30 days) (April to June and January to March)	FSR 2022-23 wages rate	250	maz	475.75	200	17841
10	Cost of water @20 liter per seedlins for 30 watering days. (20x250x30=150000)	CAMPA ME	150000	ltr	1200.00	12000	15000
11	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-(FSR 2022-23)	250	Nos	585.17	100	1463

Sl. No.	Name of work	FSR / SSR item No.	Quantity	Unit	Rate	Per	Amount
12	Engaging protection mazdoor at mazdoor from april to march - 12 months (25day per month)- 300days	Wage rate 22-23	1	Nos	475.75	1	142725
13	Unforseen expenditure if any						804
							183750

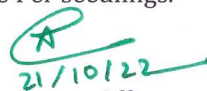
20% FSR Escalation for 2nd year

36750

220501

Rate Per seedlings.

882.00


21/10/22
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Thoothukudi division,
Thoothukudi.

**Model Estimate for IInd year maintenance of Planted Taller seedlings(30X45 cm) in
Thoothukudi Division for Road side avenue plantation.**

Size of bag : 30 x 45 cm X 300g

No of Seedlings : 250

Wages Rate: Rs.475.75

Sl. No.	Name of work	FSR / SSR item No.	Quantity	Unit	Rate	Per	Amount
1	2	3	4	5	7	8	0
1	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- (FSR 2022-23)	250	Nos	585.17	100	1463
2	Cost of Bio Fertilizers including cost of application vermi-compose 1 kg, Bio fertililzer 100gms Vam 100gms)	NHAI and CAMP ME	250	nos	7.70	1	1925
2	Watering the plants to six days once for 6 months, one mazdoor for 500 plants in non rainy period (30 days) (April to June and January to March)	FSR 2022-23 wages rate	250	maz	475.75	200	17841
3	Cost of water @20 liter per seedlins for 30 watering days. (20x275x30=165000)	CAMP ME	150000	ltr	1200.00	12000	15000
5	Engaging protection mazdoor at mazdoor for 3 months (25day per month)- 75 days	Wage rate 22-23	1	Nos	475.75	1	35681
6	Unforseen expenditure if any						1438
							73348

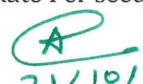
30% FSR Escalation for 3rd year

22004

95352

Rate Per seedlings.

381.41


 21/10/22
 District Forest Officer,
 Thoothukudi division,
 Thoothukudi.

**Model Estimate for IIIrd year maintenance of Planted Taller seedlings(30X45 cm) in
Thoothukudi Division for Road side avenue plantation.**

Size of bag : 30 x 45 cm X 300g

No of Seedlings : 250

Wages Rate: Rs.475.75

Sl. No.	Name of work	FSR / SSR item No.	Quantity	Unit	Rate	Per	Amount
1	2	3	4	5	7	8	0
1	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- (FSR 2022-23)	250	Nos	585.17	100	1463
2	Cost of Bio Fertilizers including cost of application vermi-compose 1 kg, Bio fertililzer 100gms Vam 100gms)	NHAI and CAMP A ME	250	nos	7.70	1	1925
2	Watering the plants to six days once for 6 months, one mazdoor for 500 plants in non rainy period (30 days) (April to June and January to March)	FSR 2022-23 wages rate	250	maz	475.75	200	17841
3	Cost of water @20 liter per seedlins for 30 watering days. (20x275x30=165000)	CAMP A ME	150000	ltr	1200.00	12000	15000
5	Engaging protection mazdoor at mazdoor for 3 months (25day per month)- 75days	Wage rate 22- 23	1	Nos	475.75	1	35681
6	Unforeseen expenditure if any						1438
							73348

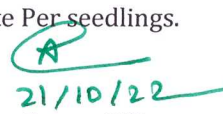
40% FSR Escalation for 2nd year

29339

102687

Rate Per seedlings.

410.75


 21/10/22
 District Forest Officer,
 Thoothukudi division,
 Thoothukudi.

**Model Estimate for IV th year maintenance of Planted Taller seedlings(30X45 cm) in
Thoothukudi Division for Road side avenue plantation.**

Size of bag : 30 x 45 cm X 300g

No of Seedlings : 250

Wages Rate: Rs.475.75

Sl. No.	Name of work	FSR / SSR item No.	Quantity	Unit	Rate	Per	Amount
1	2	3	4	5	7	8	0
1	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- (FSR 2022-23)	250	Nos	585.17	100	1463
2	Unforeseen expenditure if any						29
	Total						1492

50% FSR Escalation for 4th year 597

Total amount for 4th year maintenance 2089

Add 10% FSR Escalation for 5th year 208.91

Total amount for 5th year maintenance 2298

Add 10% FSR Escalation for 6th year 230

Total amount for 6th year maintenance 2528

Add 10% FSR Escalation for 7th year 253

Total amount for 7th year maintenance 2781

Add 10% FSR Escalation for 8th year 278


Total amount for 8th year maintenance 3059

Add 10% FSR Escalation for 9th year 306

Total amount for 9th year maintenance 3364

Add 10% FSR Escalation for 10th year 336

Total amount for 10th year maintenanc 3701


 21/10/22
 District Forest Officer,
 Thoothukudi division,
 Thoothukudi.

