Full Title of the Project: Formation of road from Pudupatti to Kidamalai Km.0/0 to

11/375 through Pudupatti Reserved Forest of Namakkal Forest

Division.

File No.

: FP/TN/Road/19579/2016.

Date of Proposal

SCHEME FOR COMPENSATORY AFFORESTATION

Detailed scheme for Compensatory Afforestation to be carried out in lieu of 2.71 Ha of forest area to be diverted for Formation of road from Pudupatti to Kidamalai Km.0/0 to 11/375 through Pudupatti Reserved Forest of Namakkal Forest Division in Namakkal District.

1. Details of degraded forest land / non-forest land:

District:

: Namakkal.

Village:

: 73, Mangalapuram.

Village:

: Rasipuram. : Namakkal.

Name of Forest Division:

Range:

: Mullukurichi.

Block / compartment / Survey No.

324/1

Area to be afforested

5.65 Ha.

2. Description of Area

Whether the site selected the for Compensatory Afforestation is a land bank or not:

II) If the CA site is other than the land bank, reasons to be given:

> There is no land bank has been created in Namakkal District. Hence the area identified by the user agency to consultation, and consent of the District Administration.

III)

identified for CA. then what is the distance of CA site from the adjoining forest boundary

In case of non forest area: Identified CA land is located 3 Km from the South West side of Oilpatti Reserved Forest.

IV) Soil type: Hard rock.

V) Topography:

a) Hilly / undulating / Plain

Hilly.

b) Slope: Steep / Medium / Gentle

Steep.

VI) Whether the area is bearing any root stock of vegetation:

Yes.

3) Plantation Model:

Copy of the approved Compensatory Afforestation
Scheme / Model showing component wise physical and
financial break up to be enclosed
Enclosed.

4) Schedule of Plantation Programme:-

Detail of year wise break up of requirements of funds is as under :- Year Area in Ha. Rate / Ha. year.

	YEARW	ISE COMPONENTWISE ABSTRAG AFFORESTA		S OF CO	OMPENSA?	ГОRY
SI. No.	Year	Type of Activity	Qty	Unit	Rate per unit	Amount (Rs.)
1	1 st year	During –Ist year				
2		Advance Nursery Works	5.65	ha	115600	653139
2	2 nd year	During – 2 nd year				
i.		Maintenance of Nursery during next year till planting	5.65	ha	40000	226002
ii.		Planting	5.65		329900	1863934
iii.		Preparation of plantation with "L" angle with turbed wire 1500 Rm @ 1250 per RM	5.65	ha	1760	1179200
iv.		MAINTENENCE				
3	3 rd year	During-3 rd year (1 st year maintenance)	5.65	ha	215000	1214750
4	4 rd year	During-4 th year (2 st year maintenance)	5.65	ha	14000	79100
5	5 th year	During-5 th year (3rd year maintenance)	5.65	ha	15400	87010
6	6 rd year	During-6 th year (4th year maintenance	5.65	ha	16940	95711
7	7 th year	During-7 th year (5 st year maintenance)	5.65	ha	18634	105282
8	8th year	During-8 th year (6th year maintenance)	5.65	ha	20497	115810
9	9th year	During-9 th year (7th year maintenance)	5.65	ha	22547	127391
		Documentation & Publicity and Monitoring M. Demorcal	700	LS		15670
		of CA Long TOTAL				5763000

5. Technical details:-

Technical details to compensatory Afforestation scheme are as follows

Sl. No.	Details required General details	:	Details furnished As the CA areas is adjacent to Oilpatti Reserved Forest, it is easy for protection etc.,
b.	Spacing	:	Gap Planting
c.	Species	:	Miscellanies such as Pungan, Neem, Noval and indigenous species.
d.	Plantation mode	:	Gap Planting
e.	Soil and Moisture Conservation Works	:	Nil. As there is no gullies / Nallas to take up any construction of checkdam / percolation pond.
f.	Protection (Fencing, Watch man, People's participation etc.,)	:	As the area is prone for grazing the plantation area has been proposed to be fenced with chainlink with "L" angel poles.
g.	Proposed Monitoring Mechanism	:	This work will be monitored by District Forest Officer / CCF and also by the FEEMAS wing of the Department. Besides above it is being monitored through External agency.
h.	Any other information		In the identified CA land 1000 plants per ha. is not possible to be planted. Hence, it is proposed to plant at the rate of 500 Nos. per ha. in the CA land and balance 500 Nos. per ha. will be planted in the degraded forest in Oilpatti Reserved Forest which is abutting the CA land.

District Forest Officer, Namakkal.

YEARWISE COMPONENTWISE ABSTRACT DETAILS OF COMPENSATORY AFFORESTATION

Sl. No.	Year	Type of Activity	Qty	Unit	Rate Per Unit	Amount (Rs.)
1	1st year	During -1 st year				
		Advance Nursery Works	5.65	ha	115600	653139
2	2nd year	During – 2 nd year				
i		Maintenance of Nursery during next year till Planting	5.65	ha	40000	226002
ii		Planting	5.65		329900	1863934
iii		Protection of Plantation with L angle with barbed wire 670 Rm @ s.1760per RM For fencing around 5.65 Ha.	5.65	ha	1760	1179200
		MAINTENENCE				
3	3rd year	During–3 rd year (1 st year maintenance)	5.65	ha	215000	1214750
4	4th year	During – 4 th year (2 nd year maintenance)	5.65	ha	14000	79100
5	5th year	During 5 th year (3 rd year maintenance)	5.65	ha	15400	87010
6	6th year	During 6 th year (4th year maintenance)	5.65	ha	16940	95711
7	7th year	During 7 th year (5th year maintenance)	5.65	ha	18634	105282
8	8th year	During 8 th year (6th year maintenance)	5.65	ha	20497	115810
9	9th year	During 9 th year (7th year maintenance)	5.65	ha	22547	127391
10		Documentation & Publicity and Monitoring		LS		15670
		TOTAL				5763000

ESTIMATE FOR RAISING OF SEEDLINGS IN 35X50CM BAGS BY TRANSPLANTING SEEDLINGS RAISED IN 13X25 CM BAGS (ADVANCE NURSERTY OPRATIONS)FOR 1100 NOS(per HA) including casuality replacement

Sl.No	Qty	Description of works	FSR item no.	Rate	Per	Amount
		RAISING IN 13X250				
1	175	Preparation of nursery site by clearing and leveling the site for forming standard bed of size 10mX1m @ 20.80m2 per 1000 Nos.For16x30cm Bags and @53.81m2per 1000 For 30x45cm bags	4.1	790.13	200M ²	691
2	2	Cost of seeds @ 2Kg. Per 1000 Nos.	LR	150	KG	300
3	1/4 M ³	Formation of germination bed by breaking clods with farm yard manure and earth, forming nursery beds of size 10mX1mX30cm. With side support sowing of seeds, watering for the day and covering with straw inculding cost of manure @ 1000 No./bed3M³ for one bed	PWDSSR	63.60	M^3	254
4	1	Watering the germination beds twice daily with rose cane - 15days	4.5.1	267.73	1000	402
5	1	Watering the germination beds once daily with rose cane - 15days	4.5.2	133.87	1000	201
6	1100	Cost of polythene bags of size 13x25cm - 200G	Tender Rate	656	1000	722

7	1.181	requirement for preparation of Soil mixture - 4/5th of the total volume	МТР МЕ	750.00	M^3	886
8	0.297	Collection and supply of Farmyard Manure for filling - 1/5th of the total volume.	MTP ME	750.00	M^3	223
9	1100	Preparation of soil mixture by breaking clods. Siveing and mixing of fertile earth (inculding red soil, silt and sand etc., according to requirements) and farm yard manure at 4:1 ratio heaping at the filling site and filling in polythene bags, arranging bags in beds and pricking out the seedlings (excluding cost of soil mixture and FYM)	4.6.4	1462.72	1000	1609
10	1100	Watering the container seedlings with rose can twice daily - 13x25cm (15 days)	4.10.4	75.10	1000	1239
11	1100	Watering the container seedlings once daily with rose can - 13x25cm (30 days)	4.11.4	37.55	1000	1239
12	1100	Watering the container seedlings once in alternate days with rose can - 13x25cm bags (15 days)	4.11.4	37.55	1000	620
13	1100	Cost of water for watering the container seedlings from private wells 75 days	MTP ME	0.85	1000	70
14	1100	Shifting the container plants weeding, grading and replacement of casualities in the bags (2 time) as per requirements	4.15.4	166.52	1000	366

		Part -II (Bigger size	e bags (35x50	cm x 600g)		
15	1100	Cost of 35x50cmx600g poly bags	Tender Rate	-10080	1000	11088
16	10.15	Collection and supply of RedSoil, sand and silt for filling in Polythene bags according to the requirement for preparation of Soil mixture - 4/5th of the total volume (excluding volume of 13x25cm bags) 35x50cm poly bags volume = 9.23m ³ / 1000 Nos	МТР МЕ	750.00	M^3	7615
17	2.541	Collection and supply of Farmyard Manure for filling 35x50cm bags - 1/5th of the total volume (2.31m ³ /1000nos).	МТР МЕ	750.00	M^3	1906
18	1100	Preparation of soil mixture by breaking clods. Siveing and mixing of fertile earth (inculding red soil, silt and sand etc., according to requirements) and farm yard manure at 4:1 ratio heaping at the filling site and filling in polythene bags, arranging bags in beds and pricking out the seedlings (excluding cost of soil mixture and FYM)	4.6.8	12080.50	1000	13289
19	110	Cost of Vermicasting @ 100 gm / container seedlings	Research wing rate	10	Kg	1100
20	44	Cost of Vam @ 40 gm per seedlings	Research wing rate	18	Kg	792
21	11	Cost of Bio- fertilizers such as Azospirillum at 10gm / container seedlings	Research wing rate	27.00	Kg	297
22	11	Cost of Phaospobacteria @ 10 gm per container seedlings	Research wing rate	27.00	Kg	297

23	3.9	Labour cost for transplanting seedlings from 13x25cm to 35x50cm containers - 3.5 maz/1000	FSR	326.50	day	1257
24	1100	Cost of Vertical sticks of size 2.5m Ht.	МТР МЕ	6.00	each	6600
25	550	Cost of Horizontal stick	MTP ME	1.00	each	550
26	1100	Tying plants to the vertical stick once in a month - 2 times	МТР МЕ	0.20	each	220
27	1100	Pruning side branches once in two months - 2 times	MTP ME	1.00	each	1100
28		Watering the container seedlings with rose can - watering regime as per the NHAI M.E approved in Principal Chief Conservator of Forests's ref. No. J1/57395/2003, dt. 12.12.2003				
A	1100	Twice daily - 60 days	4.10.8	280.79	1000	18532
В	1100	Once daily - 139 days	4.11.8	140.40	1000	21466
	1100	Shifting the container once in 21 days. First shift after 45 days from the date of transplanting - 6 time.	4.15.8	1230.91	1000	8124
32	1100	Cost of water for watering the container seedlings from private wells 199 days	МТР МЕ	1.60	1000	350
33	175	Land rent for keeping nursery in private land	МТР МЕ	86.00	40m2	2258
34	27	Nursery Protection mazdoor to watch and ward the nursery and for application of manure etc.,-1 Mazdoor - 274 days for 100000 seedlings	FSR	326.50	maz	8816

	Grand Total		Rs.	115600
35 LS	Contingencies for application of pesticides and panchagavya etc.,	LS		1122

ESTIMATE FOR MAINTENANCE OF SEEDLINGS IN 35X50CM BAGS FOR 1100 NOS (per Ha)

Sl.No	Qty	Description of works	FSR item no.	Rate	Per	Amount
1	1100	Tying plants to the vertical stick once in a month - 2 times-8 TIMES	MTP ME	0.20	each	1760
2	1100	Pruning side branches once in two months - 2 times		1.00	each	2200
3		Watering the container seedlings with rose can - watering regime as per the NHAI M.E approved in Principal Chief Conservator of Forests's ref. No. J1/57395/2003, dt. 12.12.2003				
	1100	Once daily - 120 days	4.11.8	140.40	1000	18532
4	1100	Shifting the container once in 21 days. First shift after 45 days from the date of transplanting - 4 time.	4.15.8	1230.91	1000	5416
5	1100	Cost of water for watering the container seedlings from private wells 120 days	MTP ME	1.60	1000	211
6	175	Land rent for keeping nursery in private land	MTP ME	86.00	40 M ²	1505
7	24	Nursery Protection mazdoor to watch and ward the nursery and for application of manure etc.,- 1 Mazdoor - 240 days for 100000 seedlings	FSR	326.50	Maz	7836
8	LS	provision for application of fungicides & fertilizers				2500
9	LS	Contingencies for application of pesticides and panchagavya etc.,	LS			40
		Grand Total			Rs.	40000

MODEL ESTIMATE FOR PLANTING TALLER SEEDLINGS RAISED IN 35X50 CM BAGS

		Espacement	GAP P	LANTING @ :	1000 seed	dlings pe	er Ha
Size	Size of Pits :60 cm ³						
SI. No	Qty	Description of Works	FSR No.	Rate	Per /	Qty	Amount
1	1000	Aligning and Marking	5.2.1	450.57	1000	Nos	451
2	785	clearing the spot for planting by removal of weeds and grass etcto a dia of m- 1000x3.14x0.5x0.5=785m2	PWDSSR	3.95	1	M^2	3101
3	1000	Digging of 60cm3 pits in all type of soil during rainy / non rainy season 9.60 MD	5.8.2	2520.58	100	Nos.	25206
4	40.5	Collection and supply of Farmyard manure 1/4 of the pit (0.6x0.60x0.60/4x1000) = 40.5M ³	Local rate	800.00	1	M^3	32400
5	20	Application charges for FYM for 60 cm ³ @ 1 Maz / 50Nos	Wage rate as per FSR	326.50	1	No	6530
6	1000	Cost of Bio fertilizer including cost of application - Vermicompost - 1 Kg Bio fertilizer - 100gm VAM - 100gm	NHAI & MTP ME	7.70	1	Nos	7700
7	1100	Transporting saplings (Transported to the radius of 40 kms) excluding loading and unloading	NHAI & MTP ME	7.00	1	No	7700
8	1100	Loading and Unloading the container seedlings (35x50 cm) in private / department vehicles (excluding hire charges)	5.11.8	1152.55	1000	Nos	1268
9	1100	Transporting of polythene container seedlings by headloads in the places where approach roads are not available to take vehicles to planting site. UP TO 0.5KM	5.13.2	13060.00	1000	Nos	14366

10	1100	Distribution of saplings from where seedlings are stocked to the planting spot upto 500 mts	5.16.3	21875.50	1000	Nos	24063
11	1000	Planting the container seedlings by filling the pits of size 60 cm3	5.22	558.32	100	Nos	5583
12	1000	Forming catchwater drains for each plant of 90 x 45 x 30cm size in hillocks and hard gravelly soil.	5.26	2233.26	100	Nos	22333
13	1000	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	421.60	100	Nos	4216
14	100	Replacement of casualities by reopening failed pits and planting the seedlings (1/2 pitting rate - full planting rate)	5.23	1260.29	100	Nos	1260
15	1000	Mulching the planted seedlings at 500 gms coconut coir pith per pit	Local rate	10.00	1	No.	10000
16	2500	Provision of vertical casurina poles to the planted seedlings 2.50 mts ht. per plant(1000X2.5=2500)	PWD SSR	16.70	1	RM	41750
17	175	Watering the plants in the day of planting (One watering) and once in 7 days during Aug to Sep and Jan to Mar one mazdoor for 200 plants / watering day (35 watering days) 700 Man days	NHAI ME	324.25	Madoor	Nos	56744
18	525000	Cost of Water @ 15 Litres per seedlings (35 watering days) at twice in a week (15x35x1000) = 525000 Litre	NHAI ME	1200	12000	Litre	52500
19	20	Engaging Protection mazdoor @ 1 Mazdoor August to March @ 25 days per month - 200 days (Maz) for 10ha. So for 1Ha 20 mandays	FLS wages rate	324.25	Madoor	days	6485
20	LS	Provision of information board and publicity boards					5000

		TOTAL	329900
21	Ls	Contingencies and unforeseen expenditure to be restricted to as per actuals	1245

District Forest Officer

Namakkal Forest Division

Namakkal

ESTIMATE FOR I st YEAR MAINTENANCE OF PLANTATION-- 1 HA

NO of plants planted No of seedlings proposed for casuality replacement			1000					
1		Raising cost of 35x50cm size container seedlings						
a	100	advance nursery	As per ME	115	each	11500		
b	100	maintenance till planting	As per ME	40	each	4000		
2	5.4	Collection and supply of Farmyard manure $1/4$ of the pit $(0.6\times0.60\times0.60/4\times100) = 5.4\text{M}^3$	Local rate	750.00	M^3	4050		
3	2	Application charges for FYM for 60 cm ³ @ 1 Maz / 50Nos	Wage rate as per FSR	326.50	No	653		
4	100	Cost of Bio fertilizer including cost of application - Vermicompost - 1 Kg Bio fertilizer - 100gm VAM - 100gm	NHAI & MTP ME	7.70	Nos	770		
5	100	Transporting saplings (Transported to the radius of 40 kms) excluding loading and unloading	NHAI & MTP ME	7.00	Nos.	700		
6	100	Loading and Unloading the container seedlings (35x50 cm) in private / department vehicles (excluding hire charges)	5.11.8	1152.55	Nos.	115		
7	100	Distribution of saplings from where seedlings are stocked to the planting spot upto 100 mts	5.13.2	13060.00	Nos	1306		
8	100	Replacement of casuality by reopenoing the failed pits of 60 cm 3 pits and Planting the container plants by refilling pits of size60 cm	5.23	1260.29	Nos	1260		

9	1000	Scraping for 1 m dia and soil working 15 cm depth around each plants and removing the grass roots away from the site of upturning the soil	5.24	401.6	Nos	4016
10	100	Mulching the planted seedlings at 500 gms coconut coir pith per pit	Local rate	10.00	no	1000
11	250	Provision of vertical casurina poles to the planted seedlings 2.50 mts ht. per plant100X2.5=250)	PWD SSR	16.7	Rm	4175
12	270	Watering the plants in the day of planting (One watering) and once in 7 days during April to to Sep 19 and Jan to Mar one mazdoor for 200 plants / watering day (54 watering days)	NHAI ME	324.25	Nos	87548
13	810000	Cost of Water @ 15 Litres per seedlings 54 watering days) at twice in a week (15x54x1000) = 810000 Litre	NHAI ME	1200	12000 Litre	81000
14	30	Engaging Protection mazdoor @ 1 Mazdoor April to March @ 25 days per month - 300 days (Maz) for 10Ha so the mandays for 1 ha is 30mdays	FSL wage rate	326.50	day	9795
15	LS	Contingencies and unforseen expenditure including documentation etc	LS			3112
		Total				215000

ESTIMATE FOR IInd YEAR MAINTENANCE OF PLANTATION-- 1 HA

NO of plants planted			1000					
Sl. No	Qty	Description of works	FSR Item no.	Rate		Per	Amount	
1	1000	Scraping for 1 m dia and soil working 15 cm depth around each plants and removing the grass roots away from the site of upturning the soil	5.24	401.60	100	Nos	4016	
2	30	Engaging Protection mazdoor @ 1 MazdoorApril to March @ 25 days per month - 300 days (Maz) for 10Ha. So for 1 ha 30mandays	FLS wages rate	326.5	each	day	9795	
3	LS	Contingencies and unforseen expenditure including documentation etc	LS				189	
		Total					14000	