Full Title of the Project : **Formation of Road from Kannamoochi pirivu to Kemmampatty Village in Salem District**

File No. : **FP/TN/ ROAD/21076/2016**

Date of Proposal:

SCHEME FOR COMPENSATORY AFFORESTATION

Detailed scheme for Compensatory Afforestation to be carried out in lieu of 4.2_Ha. of forest area to be diverted for Formation of road from Kannamoochi pirivu to Kemmampatty Village in Salem District

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

District ;	Salem
Village	Kurichi
Tehsil : _	Vazhapadi
Name of Forest Division _	**Salem**
Range_	Vazhapadi
Block/Compartment/Survey No. __	SFNO72/1
Area to be afforested	8.40 Ha

2. Description of Area

I) Whether the site selected for Compensatory Afforestation is a land bank or not : 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 this Salem district. Hence the area identified by the User agency in consultation and consent of the District Administration has been identified for the Compensatory afforestation area.

III) In case of non forest area identified for CA, then what is the distance of CA site from the adjoining forest boundary: Abutting the Kurichi Reserved Forests on Northern side of the block

IV) Soil type : _ Red loamy soil

V) Topography :

(a) Hilly/Undulating/Plain: Undulating

(b) Slope: Steep/Medium/Gen Gentle

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

YEARWISE COMPONENTWISE ABSTRACT DETAILS OF COMPENSATORY AFFORESTATION						
SLNO	**Year**	**Type of Activity**	**Qty**	**Unit**	**Rate per unit**	**Amount**
1	1st year	**During – 1st year**				
		Advance Nursery Works	8.4	ha	115000	966000
2	2nd year	**During – 2nd year**				
i		Maintenance of Nursery during next year till Planting	8.4	ha	40000	336000
ii		Planting	8.4		325000	2730000
iii		Protection of Plantation with "L" angle with barbed wire. 1500 Rm @1250per RM	8.4	ha	195313	1640625

		MAINTENENCE				
3	3rd year	During– 3rd year (1st year maintenance)	8.4	ha	215000	1806000
4	4th year	During – 4th year (2nd year maintenance)	8.4	ha	14000	117600
5	5th year	During 5th year (3rd year maintenance)	8.4	ha	15400	129360
6	6th year	During 6th year (4th year maintenance)	8.4	ha	16940	142296
7	7th year	During 7th year (5th year maintenance)	8.4	ha	18634	156526
8	8th year	During 8th year (6th year maintenance)	8.4	ha	20497	172178
9	9th year	During 9th year (7th year maintenance)	8.4	ha	22547	189396
10		Documentation & Publicity and Monitoring		LS		16019
		TOTAL				**8402000**

3. Technical details:-

Technical details of Compensatory Afforestation Scheme are as follows:-

Sl.No	Details required		Details furnished
a	General details		As the CA area is adjacent to Kurchi Reserved Forest it is easy for protection etc..
b	Spacing		Gap planting
c	Species		Misc. such as Pungan, Neem, Naval 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 ponds etc..

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 wire with "L" angle poles
g	Proposed Monitoring Mechanism		The 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 balanced 500 Nos. per ha will be planted in the degraded forest in Kuruchi Reserved Forest which is abutting the CA land.

30/7/18

District Forest Officer
Salem Forest Division

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		TOTAL				**8402000**

30/7/18

District Forest Officer
Salem Division

30.07.18

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 13X25CM BAGS					
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	784.69	200M2	687
2	2	Cost of seeds @ 2Kg. Per 1000 Nos.	LR	150	KG	300
3	1/4m3	Formation of germination bed by breaking dods 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./bed.- 3m3 FOR one bed	PWDSSR	57.86	m3	231
4	1	Watering the germination beds twice daily with rose cane - 15days	4.5.1	265.89	1000	399
5	1	Watering the germination beds once daily with rose cane - 15days	4.5.2	132.94	1000	199
6	1100	Cost of polythene bags of size 13x25cm - 200G	Tender Rate	656	1000	722
7	1.1814	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	MTP ME	750.00	M3	886

8	0.297	Collection and supply of Farmyard Manure for filling - 1/5th of the total volume.	MTP ME	750.00	M3	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	1452.64	1000	1598
10	1100	Watering the container seedlings with rose can twice daily - 13x25cm (15 days)	4.10.4	74.58	1000	1231
11	1100	Watering the container seedlings once daily with rose can - 13x25cm (30 days)	4.11.4	37.29	1000	1231
12	1100	Watering the container seedlings once in alternate days with rose can - 13x25cm bags (15 days)	4.11.4	37.29	1000	615
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	165.37	1000	364
		Part -II (Bigger size bags (35x50cm x 600g)				
15	1100	Cost of 35x50cmx600g poly bags	Tender Rate	10080	1000	11088

16	10.153	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	MTP ME	750.00	M3	7615
17	2.541	Collection and supply of Farmyard Manure for filling 35x50cm bags - 1/5th of the total volume (2.31m^3/1000nos).	MTP ME	750.00	M3	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	11997.25	1000	13197
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	324.25	day	1248
24	1100	Cost of Vertical sticks of size 2.5m Ht.	MTP ME	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	MTP ME	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	278.86	1000	18405
B	1100	Once daily - 139 days	4.11.8	139.43	1000	21319
	1100	Shifting the container once in 21 days. First shift after 45 days from the date of transplanting - 6 time.	4.15.8	1222.42	1000	8068
32	1100	Cost of water for watering the container seedlings from private wells 199 days	MTP ME	1.60	1000	350
33	175	Land rent for keeping nursery in private land	MTP ME	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	FSR	324.25	maz	8755
35	LS	Contingencies for application of pesticides and panchagavya etc.,	LS			1081
		grandtotal			Rs.	**115000**

30/7/18

District Forest Officer
Salem Division

30.7.2018

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	MTPME	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	138.96	1000	18343
4	1100	Shifting the container once in 21 days. First shift after 45 days from the date of transplanting - 4 time.	4.15.8	1222.42	1000	5379
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	40m2	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	324.25	maz	7782
8	LS	provision for application of fungicides&n fertilizers				2500
9	LS	Contingencies for application of pesticides and panchagavya etc.,	LS			320
		grandtotal			Rs.	40000

District Forest Officer
Salem Division

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

Espacement			GAP PLANTING @ 1000 seedlings per Ha				
Size of Pits		:60 cm3					
SI.No	Qty	Description of Works	FSR No.	Rate	Per / Qty		Amount
1	1000	Aligning and Marking	5.2.1	447.47	1000	Nos	447
2	785	clearing the spot for planting by removal of weeds and grass etc..to a dia of m-1000x3.14x0.5x0.5=785m2	PWDSSR	3.804	1	m2	2986
3	1000	Digging of 60cm3 pits in all type of soil during season 9.60 MD	5.8.2	2503.21	100	nOS	25032
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	324.25	1	No	6485
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	1144.6	1000	Nos	1259
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	17509.50	1000	Nos	19260
10	1100	Distribution of saplings from where seedlings are stocked to the planting spot upto 500 mts	5.16.3	21724.75	1000	Nos	23897
11	1000	Planting the container seedlings by filling the pits of size 60 cm3	5.22	554.47	100	Nos	5545
12	1000	Forming catchwater drains for each plant of 90 x 45 x 30cm size in hillocks and hard gravelly soil.	5.26	2217.87	100	Nos	22179

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	398.83	100	Nos	3988
14	100	Replacement of casualities by reopening failed pits and planting the seedlings (1/2 pitting rate - full planting rate)	5.23	1806.07	100	Nos	1806
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	12.93	1	RM	32325
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
21	Ls	Contingencies and unforeseen expenditure to be restricted to as per actuals					1261
		TOTAL					**325000**

30/7/18

District Forest Officer
Salem Division

30.07.2018

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

NO of plants planted			1000			
No of seedlings proposed for casuality replacement			100			
Sl. No	**Qty**	**Description of works**	**FSR item no.**	**Rate**	**Per**	**Amount**
1		Raising cost of 35x50cm size container seedlings				
a	100	advance nursery	asper ME	115	each	11500
b	100	maintenance till planting	asper ME	40	each	4000
2	5.4	Collection and supply of Farmyard manure 1/4 of the pit (0.6x0.60x0.60/4x100) = 5.4M^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	324.25	No	649
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	No	700
6	100	Loading and Unloading the container seedlings (35x50 cm) in private / department vehicles (excluding hire charges)	5.11.8	1144.6	Nos	114
7	100	Distribution of saplings from where seedlings are stocked to the planting spot upto 100 mts	5.13.2	17509.50	Nos	1751
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	1806.07	Nos	1806
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	398.83	Nos	3988
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	12.93	Rm	3233

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	FSLwage rate	324.25	day	9728
15	LS	Contingencies and unforseen expenditure including documentation etc....	LS			3164
		Total				**215000**

30/7/18

District Forest Officer
Salem Division

30.7.2018

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	398.83	100	Nos	3988
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	324.25	each	day	9728
3	LS	Contingencies and unforseen expenditure including documentation etc....	LS				284
		Total					**14000**

30/2/18

District Forest Officer
Salem Division

30.02.2018