

-447-

## **CA SCHEME**

**PROJECT:** Diversion of 2.7099 Ha of forest land in Chennur Division for widening and strengthening of NH-63 TI TWO LANE with paved shoulder –Chennur section- in the state of Telangana in Chennur forest division

**CA LOCATION:** Compt No. 272 of Chennur beat of Chennur Section of Chennur Range of **Chennur Division** of RF Block Chennur

**CA AREA:** Double Degraded Forest Land to an extent of 5.4198 Ha

**USER AGENCY:** CHIEF ENGINEER REGIONAL OFFICER,  
HYDERABAD MINISTRY OF ROAD TRANSPORT &  
HIGHWAYS GOVERNMENT OF INDIA

**Division : Chennur Division**

**District : MANCHERIAL**

**CA Scheme For Double Degraded Forest Land to an extent of 5.4198 Ha identified in Compt No.272 of Chennur beat of Chennur Section of Chennur Range of Chennur Division of RF Block Chennur in lieu of Diversion of 2.7099 Ha of Forest Land in Chennur Division for for widening and strengthening of NH-63 TI TWO LANE with paved shoulder in favour of Chief Engineer Regional officer, Hyderabad Ministry of Road Transport & Highways Government of India.**

**1.0 INTRODUCTION :**

The Chief Engineer, Regional Officer, Government of India, Ministry of Road Transport & Highways, Hyderabad has submitted proposals for diversion of forest land in Chennur division (2.7099 Ha ) for widening and strengthening of NH-63 TI TWO LANE with paved shoulder –Chennur section-in the state of Telangana in Chenur forest division in lieu of the Reserve Forest area to be diverted in Chennur Forest Division.

**1.1** The Principal Chief Conservator of Forests (HoFF) Telangana, Hyderabad vide Rc.No. 5137/2019/FCA, Dt, 22.05.2019 has requested to submit the CA scheme with 7-10 years maintenance along with coordinates in Topo Map.

**1). Compensatory Afforestation :** The double degraded forest land to an extent of **5.4198** Ha is identified for raising plantations @ **1100 plants per Ha under Semi Mechanical Method** in and the details of Compensatory Afforestation scheme proposals are as follows:

**Double Degraded Forest Land Area:**

Sl. No.	Compt. No.	Beat	Section	Range	Total Area Ha.	Name of the RF
1	272	Chennur	Chennur	Chennur	5.4198	Chennur

The proposals have been prepared with a cost of **Rs. 80.524 Lakhs.**  
The year wise scheme proposals are annexed.

This scheme will be implemented and monitored by the Forest Department at various levels.

The Compensatory Afforestation is prepared over an area of **5.4198** Ha of Double Degraded Forest Land basing on the Forest Schedule of Rates for the year 2020-21 of Zone-II with an escalation of 10% for the subsequent years, provided the funds are to be deposited and released during the year 2020-21

## **2.0 AIMS AND OBJECTIVES**

The objectives of the scheme are as follows:

- 2.1 For regeneration of Forest which is lost due to the above said project.
- 2.2 To compensatory loss of forest and for ecological balance.
- 2.3 To fulfil broader objective of sustainable environmental conservation for the general good of the people.

## **3.0 ELEMENTS OF THE PROJECT**

- 3.1 Details of the Degraded Forest Land is identified for raising compensatory afforestation is as follows:

### **3.2 LOCATION**

The proposed Compensatory Afforestation area for double degraded forest land to an extent of **5.4198** Ha is identified in Compt No. 272 of Chennur beat of Chennur Section of Chennur Range of Chennur Division of RF Block Chennur.

### **3.4 GEOLOGY**

The geology of the area proposed for Compensatory Afforestation is mixed forests.

### **3.5 SOIL**

The soil of the area proposed for Compensatory Afforestation is sandy loam soil.

### **3.6 CLIMATE**

The climate is fairly dry with very hot summer and cool winters. During summer, the temperature rises upto 47 centigrade. Summer

and winter are separated by prolonged rainy season. The area is served by South-West Monsoon. However Cyclonic rains are common during October-December.

### **3.7 METHOD OF RAISING PLANTATION:**

**a) Tehcnique:** Semi Mechanical Method and Maintenance for (10) years is proposed.

**b) ESPACEMENT:** 3 m x 3 m i.e., 1111 plants per Ha.

**c) CHOICE OF SPECIES:** Only local forestry species and miscellaneous are proposed to be planted.

**d) PROTECTION OF THE PLANTATION:** Since there is lot of biotic pressure in the area proposed for CA, Barbed wire fencing is proposed along with the protection watchers for successfully raising the plantation. Unless barbed wire fencing is provided the plantation cannot be protected and the survival will be difficult.

### **3.8 DETAILS OF WORK SCHEDULE PROPOSED FOR COMPENSATORY AFFORESTATION**

The details of work schedule proposed for compensatory afforestation year wise is as follows:

Sl. No.	Year	Proposed Works
1.	2021-22	Raising of Nurseries
2.	2022-23	Advance operations for raising plantation through Semi Mechanical method. SMC works
3.	2023-24	Raising operations under Semi Mechanical Method. SMC works
4.	2024-25	1 <sup>st</sup> Year Maintenance operations.
5.	2025-26	2 <sup>nd</sup> Year Maintenance operations.
6.	2026-27	3 <sup>rd</sup> Year Maintenance.
7.	2027-28	4 <sup>th</sup> Year Maintenance.
8.	2028-29	5 <sup>th</sup> Year Maintenance.
9.	2029-30	6 <sup>th</sup> Year Maintenance.
10.	2030-31	7 <sup>th</sup> Year Maintenance.
11.	2031-32	8 <sup>th</sup> Year Maintenance.
12.	2032-33	9 <sup>th</sup> Year Maintenance.
13.	2034-35	10 <sup>th</sup> Year Maintenance.

### **3.9 COST STRUCTURE**

A Compensatory Afforestation Scheme for **Rs. 80.524 Lakhs** is prepared. The year wise expenditure will be as hereunder:

Sl. No.	Year	Financial (Rs.in Lakhs)
1	2021-22	18.870
2	2022-23	9.180
3	2023-24	13.972
4	2024-25	7.774
5	2025-26	6.161
6	2026-27	4.145
7	2027-28	2.703
8	2028-29	2.974
9	2029-30	2.051
10	2030-31	3.261
11	2031-32	2.482
12	2032-33	3.946
13	2033-34	3.00
	<b>Total</b>	<b>80.524</b>

#### **4.0 COST STRUCTURE OF PLANTATIONS**

The cost structure of Compensatory Afforestation including the cost structure for various components of raising and maintenance of plantation for Improvement of Degraded Natural Forests is appended.

#### **4.1 PROVISION OF FUNDS**

The funds for the Compensatory Afforestation have to be deposited by the user agency in favour of Telangana Forest Department by following due procedure through e-payment method by generating the Challan form the Ministry's web portal ([parivesh.nic.in](http://parivesh.nic.in)). These funds will be utilized by the Forest Divisional Officer, Chennur for Nurseries, Plantations and their maintenance as per the detailed annual plan after obtaining the approval and funds from the competent authority.



**4.2 OFFICE EXPENSES AND CONTINGENCIES RECURRING**

The amount proposed towards Administrative cost are appended.

**4.3 CAPITAL EXPENDITURE NON-RECURRING**

No amount is proposed towards non-recurring expenditure.

**4.4 SCHEME PERIOD**

This scheme will be implemented over a period of (12) years commencing from 2021-22. The details of cash flow required for the entire project period is furnished in annexure.

**4.5 DETAILS OF PROPOSED MONITORING MECHANISM**

The FRO, Chennur, FDO, Chennur and District Forest Officer, Mancherial & Conservator of Forests/FDPT, Nirmal Circle shall monitor the implementation of the conditions of Compensatory Afforestation and the survival of the plants planted.

  
Forest Divisional Officer,  
Chennur

**Year-wise detailed Abstract of CA scheme for Double the Degraded Forest Land to an extent 5.4198 Ha in Chennai Division in lieu of Diversion of 2.7099 Ha for widening and strengthening of NH-63 to TWO LANE with paved shoulder in favour of Chief Engineer Regional Officer, Hyderabad Ministry of Road Transport & Highways**

**Government of India- Chennai Forest Division**

Sl. No	Item of Work	Phy	Unit Cost 2020-21 (Rs.)	2021-22			2022-23			2023 - 24			2024 - 25			2025 - 26			2026 - 27			2027 - 28		
				Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)
1	2			12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
	<b>Double Degraded Forest Land to an extent 5.4198 Ha</b>																							
<b>A</b>	<b>Nursery Activities</b>																							
1	Raising of Primary beds	Plant	0.3381	9032	0.40909	0.03695		0.450000	0.00000															
2	Raising of Bag Plants of 6"x8"	Plant	5.7881	9032	7.00363	0.63257		7.703997	0.00000															
3	Maintenance of Bag Plants of 6"x8"	Plant	2.1678		2.62299		9032	2.88529	0.26060		3.1738	0.00000												
4	Conversion of bag plants from 6"x8" to 12"x13"	Plant	33.9169		41.03945		9032	45.14339	4.07739		49.6577	0.00000												
5	Maintenance of Bag Plants of 12"x13" (April to Aug)	Plant	9.0255		10.92088			12.01297		9032	13.2143	1.19353	1505	14.5357	0.21881									
6	Maintenance of Bag Plants of 12"x13" (Sept. till-disposal)	Plant	4.7140		5.70395			6.27435		1505	6.9018	0.10390												
7	Collection of grass seed for sowing in planting site during raising and 1st year maintenance to prevent weed growth.	Kg	2000		2000.000	0.00000	20	2200.00	0.44000	20	2420.00	0.48400	20	2662.00	0.53240									
8	Digging of Borewell & Motor	No	2.0000	1	2.200	2.20000																		
9	Running charges & Electricity charges for nurseries	Ls	0.5000	1	0.550	0.55000	1	0.605	0.60500	1	0.666	0.66550	0	0.732	0.00000									
	<b>Sub Total:</b>					<b>3.41952</b>			<b>5.38300</b>			<b>2.44692</b>			<b>0.75121</b>			<b>0.00000</b>			<b>0.00000</b>			<b>0.00000</b>
<b>B</b>	<b>Planting activities -SMM -5.4198 Ha</b>																							
10	Advance Operations	Ha	20750	0.00	25107.5	0.00000	5.4198	27618.25	1.49685		30380.08	0.00000		33418.08			36759.89			40435.88			44479.47	
11	Raising of Plantation	Ha	117962		142733.9		0.00	157007.30	0.00000	5.4198	172708.03	9.36043		189978.84	0.00000		208976.72			229874.39			252861.83	
12	1st Year Maintenance	Ha	61086		73914.3			81305.70		0.00	89436.27	0.00000	5.4198	98379.90	5.33199		108217.89	0.00000		119039.67			130943.64	
13	2nd Year Maintenance	Ha	47060		56942.8			62637.09			68900.80		0.00	75790.88	0.00000	5.4198	83369.97	4.51849		91706.97	0.00000		100877.66	
14	3rd Year Maintenance	Ha	24409		29534.6			32488.01			35736.81			39310.49	0.00	43241.54	0.00000	5.4198	47565.69	2.57797		52322.26	0.00000	
15	4th Year Maintenance	Ha	9880		11955.1			13150.63			14465.70			15912.27		17503.49		0.00	19253.84	0.00000	5.4198	21179.23	1.14787	
16	5th Year Maintenance	Ha	9880		11955.1			13150.63			14465.70			15912.27		17503.49			19253.84		0.00	21179.23	0.00000	
17	6th Year Maintenance	Ha	1989		2407.0			2647.71			2912.48			3203.73		3524.10			3876.51			4264.17		
18	7th Year Maintenance	Ha	7899		9558.1			10513.92			11565.31			12721.85		13994.03			15393.43			16932.78		
19	8th Year Maintenance	Ha	1989		2407.0			2647.71			2912.48			3203.73		3524.10			3876.51			4264.17		
20	9th Year Maintenance	Ha	7899		9558.1			10513.92			11565.31			12721.85		13994.03			15393.43			16932.78		
21	10th Year Maintenance	Ha	1989		2407.0			2647.71			2912.48			3203.73		3524.10			3876.51			4264.17		
	<b>Sub Total:</b>					<b>0.00000</b>			<b>1.49685</b>			<b>9.36043</b>			<b>5.33199</b>			<b>4.51849</b>			<b>2.57797</b>			<b>1.14787</b>
<b>C</b>	<b>Forest Protection</b>																							
22	Barbed wire fencing	KM	550000	1.355	665500	9.01753																		
	<b>Sub Total:</b>					<b>9.01753</b>			<b>0.00000</b>			<b>0.00000</b>			<b>0.00000</b>			<b>0.00000</b>			<b>0.00000</b>			<b>0.00000</b>

453-1

Sl. No	Item of Work	Phy	Unit Cost 2020-21(Rs.)	2021-22			2022-23			2023 - 24			2024 - 25			2025 - 26			2026 - 27			2027 - 28		
				Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)
D	Soil & Water Conservation including Water Haresting Structure and CCT																							
23	Percolation Tanks	No	50000	1.00	60500	0.6050	1	66550.00	0.66550															
24	Saucer pits	No	10000	2.00	12100	0.2420																		
25	Filling of water in saucer pits	No	10000	2.00	12100	0.2420	2.00	13310	0.26620	2.00	14641	0.29282	2.00	16105	0.32210	2.00	17716	0.35431	2.00	19487	0.38974	2.00	21436	
26	Gully plugging with RFDs	No	10000	22.00	12100	2.6620																		
27	Staggered Contour trenches (SCTs) Manual: Size 3x length 0.45m top width, 0.30 m bottom width and 0.45m depth, earthwork volume per trench 0.506 cum (5.4196 Ha x 50 Nos per ha =270 Nos x 0.506 cum per trench = 136.620 cum) 02.01.08b	cum	291.95	137	353	0.48262	0	388.59	0.00000	0	427.44	0.00000												
	Sub Total:					4.23362			0.93170			0.29282			0.32210			0.35431			0.38974		0.42872	
E	OTHER ITEMS																							
	Signages and publicity	Nos	20000	2	24200	0.48400	2	26620.00	0.53240															
	formation of firelines including along periphery as it is degraded forest	Km	8223		9950			10944.81		5.00	12039.29	0.60196	5.00	13243	0.66216	5.00	14568	0.72838	5.00	16024	0.80122	5.00	17627	
	Sub Total:					0.48400			0.53240			0.60196			0.66216			0.72838			0.80122		0.88134	
	Total:					17.155			8.344			12.702			7.067			5.601			3.769		2.458	
F	Adminstrative cost 10%					1.715			0.834			1.27021			0.70675			0.56012			0.37689		0.24579	
	Grand Total					18.870			9.18			13.97235			7.77422			6.16129			4.14582		2.70372	



Sl. No		Item of Work	2028 - 29			2029 - 30			2030 - 31			2031-32			2032-33			2033-34			Grand Total	
			Phy	Unit	Fin	Phy	Unit	Fin	Phy	Unit	Fin	Phy	Unit	Fin	Phy	Unit	Fin	Phy	Unit	Fin	Phy	Fin
1		Double Degraded Forest Land to an extent 5.4198 Ha	33	34	35	36	37	38	39	40	41	39	40	41	40	41	39	40	41	51	52	
A		Nursery Activities																				
1		Raising of Primary beds																		9032	0.03695	
2		Raising of Bag Plants of 6"x8"																		9032	0.63257	
3		Maintenance of Bag Plants of 6"x8"																		9032	0.26060	
4		Conversion of bag plants from 6"x8" to 12"x13"																		9032	4.07739	
5		Maintenance of Bag Plants of 12"x13" (April to Aug)																		1505	1.41234	
6		Maintenance of Bag Plants of 12"x13" (Sept. till-disposal)																		1505	0.10390	
7		Collection of grass seed for sowing in planting site during raising and 1st year maintenance to prevent weed growth.																		60	1.45640	
8		Digging of Borewell & Motor																			2.20000	
9		Running charges & Electricity charges for nurseries																			1.82050	
Sub Total:					0.00000			0.00000			0.00000			0.00000			0.00000			0.00000	12.00066	
B		Planting activities -SMM -5.4198 Ha																				
10		Advance Operations		48927.41			53820.16			59202.17			65122.39			71634.63			78798.09	5	1.49685	
11		Raising of Plantation		278148.02			305962.82			336559.10			370215.01			407236.51			447960.16	5	9.36043	
12		1st Year Maintenance		144038.01			158441.81			174285.99			191714.59			210886.04			231974.65	5	5.33199	
13		2nd Year Maintenance		110965.43			122061.97			134268.17			147694.99			162364.49			178710.94	5	4.51849	
14		3rd Year Maintenance		57554.48			63309.93			69640.93			76605.02			84265.52			92692.07	5	2.57797	
15		4th Year Maintenance			0.00000		25626.86			28189.55			31008.50			34109.35			37520.29	5	1.14781	
16		5th Year Maintenance		5.4198	23297.15	1.26266	25626.86	0.00000		28189.55			31008.50			34109.35			37520.29	5	1.26266	
17		6th Year Maintenance	0.00	4690.58	0.00000	5.4198	5159.64	0.27964	5675.61	0.00000		6243.17	0.00000		6867.48	0.00000		7554.23	5	0.27964		
18		7th Year Maintenance		18626.05		0.00	20488.66	0.00000	5.4198	22537.52	1.22149	24791.28	0.00000	0.33837	27270.41	0.00000		29997.45	5	1.22149		
19		8th Year Maintenance		4690.58			5159.64		0.00	5675.61	0.00000	6243.17	0.33837		6867.48	0.00000		7554.23	5	0.33837		
20		9th Year Maintenance		18626.05			20488.66			22537.52		0.00	24791.28	0.00000	5.4198	27270.41	1.47800	29997.45	0.00000	5	1.47800	
21		10th Year Maintenance		4690.58			5159.64			5675.61		6243.17	0.00	6867.48	0.00000	5.4198	7554.23	0.40942	5	0.40942		
Sub Total:					1.26266																	

Sl. No	Item of Work	2028 - 29			2029 - 30			2030 - 31			2031 - 32			2032 - 33			2033 - 34			Grand Total	
		Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Fin
D	Soil & Water Conservation including Water Har																				
23	Percolation Tanks																			2	1.27050
24	Saucer pits																			2	0.24200
25	Filling of water in saucer pits	2.00	23579	0.47159	2.00	25937	0.51875	2.00	28531	0.57062	2.00	31384	0.62769	2.00	34523	0.69045	2.00	37975	0.75950	26	5.93450
26	Gully plugging with RFDs																			22	2.66200
27	Staggered Contour trenches (SCTs) Manual: Size 3x length 0.45m top width, 0.30 m bottom width and 0.45m depth, earthenwork volume per trench 0.506 cum (5.4196 Ha x 50 Nos per ha =270 Nos x 0.506 cum per trench = 136.620 cum) 02.01.08b																			137	0.48262
	Sub Total:			0.47159			0.51875			0.57062			0.62769			0.69045			0.75950		10.59162
E	OTHER ITEMS																				
	Signages and publicity																				1.01640
	formation of firelines including along periphery as it is degraded forest	5.00	19389	0.96947	5.00	21328	1.06642	5.00	23461	1.17306	5.00	25807	1.29036	5.00	28388	1.41940	5.00	31227	1.56134		11.15511
	Sub Total:			0.96947			1.06642			1.17306			1.29036			1.41940			1.56134		12.17151
	Total:	0.000	0.000	2.704	0.000	0.000	1.865	0.000	0.000	2.965	0.000	0.000	2.256	0.000	0.000	3.588	0.000	0.000	2.730		73.204
F	Administrative cost 10%			0.27037			0.18648			0.29652			0.22564			0.35879			0.27303		7.32045
	Grand Total			2.97409			2.05129			3.26169			2.48206			3.94664			3.00329		80.52494

*lmm*  
Forest Range Officer  
CHENNAI.

Forest Divisional Officer,  
Chennai



-457-

**UNIT COST FOR RAISING OF PRIMARY BEDS**

Sl. No.	FSR-2020-21 Code	Item of work	Unit	Rate (Rs.)	Amount (Rs.)
1	2	3	4	5	7
1	01.00.00	<b>PRIMARY BEDS</b> of 1x1x0.3 m size for Miscellaneous species including bamboo - 50 primary beds for 1 lakh nursery is permitted. Primary beds should start from Jan - May depending on availability of fresh seeds. Once primary beds are formed, they can be used upto 5 years without changing the medium - what is required each time is solarization, burning a layer of grass on it and adding the below recommended fungicides and insecticides to the medium.			
2	01.01.01	Preparation of New Site by clearing jungle growth, uprootal of stumps and removal of surface stones, pebbles etc.	Bed	5.20	5.20
3	01.01.03	Digging soil of the demarcated beds of 1x1x0.30 m size	Bed	40.06	40.06
4	01.01.04	Cost of sandy soil and transportation with 5 kms lead including loading and unloading charges (sandy soil and FYM in 5:1 ratio, i.e., 0.125 cum sandy soil and 0.025 cum FYM per primary bed	Bed	30.2925	30.29
5	01.01.05	For every extra km beyond 5 km upto 25 km	Bed	1.15	1.15
6	01.01.06	Cost and transport of 0.025 cum FYM	Bed	26.04	26.04
7	01.01.07	Mixing of sandy soil and FYM in 5:1 proportion (50 % of volume of bed) with excavated soil and refilling the bed and levelling.	Bed	11.39	11.39
8	01.01.08	Covering the beds with dried grass and leaf litter and burning them to ash which can form the upper layer	Bed	13.02	13.02
10	01.01.10	Cost of seed - seed weight, germination percentage and target of planting stock of individual species are to be taken into consideration while estimating the requirement of seeds	Bed	350.00	350.00
11	01.01.12	Sowing of seed (finer seeds like Adina, Mitragyna, Anthocephalus etc. to be mixed with sand and broadcasted - Bigger seeds to be dibbled in lines 1-2 cm apart) and covering the bed to a thickness of 2.5 cm with paddy hay including cost and conveyance	Bed	12.97	12.97
12	01.01.13	Watering the primary nursery beds with rose water cans twice daily for a maximum period of 2 months.	45 Days	14.60	14.60
13	01.01.14	Kerbing the primary beds all around with Cement Bricks (in permanent nurseries only), if required. In all such permanent primary beds, no incurring of expenditure for making the primary beds every year is permitted except for cost of fungicides.	Bed	39.00	39.00
14	01.01.15	Cost of chemicals, fungicide and insecticide	Bed	39.00	39.00
16		Electrical Charges		32.00	32.00
		<b>Total</b>			<b>614.71</b>
		<b>Rasing of seedlings 110% for abtaining 100%</b>		10%	<b>61.47</b>
		<b>Total</b>			<b>676.18</b>
		<b>cost of each plant (2000 plants per bed)</b>			<b>0.34</b>
		10% escalation every year			

  
Forest Range Officer  
CHENNAI.

  
Forest Divisional Officer,  
Chennai

-459-

UNIT COST FOR BAG PLANT NURSERY

Sl. No.	FSR-2020-21 Code	Item of work	Unit	Quantity	As per FSR		Amount (Rs.)
					Rate (Rs)	Per	
	01.03.	<b>BAG PLANT NURSERY:</b> Seedlings need to be raised in 4"x7" (200 gauge) or 5"x9" (250 gauge) bags which are to be converted into 6"x12" (400 gauge) or 8"x12" (400 gauge) or 10"x16" (400 gauge) polybags. The seedlings are to be transplanted from primary beds in February - March. Hence the bags are to be filled during January - February when the soil is dry.					
		<b>Raising of Nursery in Polythene bags in sizes of 4"x7" (200 gauge) or 6"x8" (250 gauge) bags and arranging in secondary beds (Bed size: 10.00 m X 1.00 m).</b>					
1	01.03.01	Site preparation for New Sites - Clearing of growth, uprootal of stumps and removal of surface stones, rubbish of all sorts etc.	Bed	1	52.08	1	52.08
		Cost of Polybags (including the cost of certification by): To ensure quality control, the quality of bags have to be certified by CIPET (Central Institute of Plastic Engineering & Technology), Hyderabad at the cost of tenderer by taking samples from various lots of polybags.					
2	01.03.03	(b) 15.00 cm x 20.00cm(6" x 8") size bags: 250 g: 275 Nos / kg ( 1100 + 15% = 1265) (1265/275 = 209.09 Kgs)	Kg	4.60	180.00	1	828.00
	01.03.04	Cost and Transport of ingredients for Potting Mixture: (As per CSSR) Red Soil, tank-silt, FYM in 2:1:1 ratio. To this soil mixture, 220 gm of Indophyll M-45, 4.5 kg of single super phosphate (SSP) and 250 gm of phorate granules per 1 cum of potting mixture will be added. Cost of chemicals is as per actuals.					
	<b>01.03.05</b>	<b>Distance upto 5 km</b>					
3	01.03.05	(c) 15.00 Cm X 20.00 cm( 6" X 8") size Gusseted Polybags of 250 gauge : 1.433 Cu.m Volume for 1000 bags	No's	1100	529.99	1000	582.99
	<b>01.03.06</b>	<b>For every extra km beyond 5 km upto 25 km</b>					
4	01.03.06	12.5 cm x 22.5 cm (5" x 9") = 1.12 cum vol. for 1000 bags ( 20 Kms x 13.18 = 206.00)	No's	1100	263.60	1000	289.96
	<b>01.03.08</b>	<b>Preparation of Potting Mixture by powdering of various ingredients, sieving and mixing them in prescribed proportion; opening of bags and filling with potting mixture and gently pressing the same with finger tips and arranging in beds.</b>					
5	01.03.08	(c) 15.00 Cm X 20.00 cm( 6" X 8") 1100 bags per bed	No's	1100	1048.37	1000	1153.21
6	01.03.09	Allignment of beds including allignment of inspection paths etc	Bed	1	7.98	1	7.98
7	01.03.10	Pricking out seedlings from primary beds and transplanting into polybags	No's	1100	147.74	1000	162.51



8	01.03.11	Sowing / dibbling of pretreated seeds (e.g. Yegisa, Nalamadi, Yerumaddi etc.) directly into bags including cost of treatment	No's	1100	83.70	1000	92.07
9	01.03.12	<b>Watering the plants (2 Months) twice a day from Feb-March</b> - a) Manually with rose cans or finely perforated nozzle attached to a hose pipe	Bed	4	286.76	1	1147.04
10	01.03.13	Weeding to be done for every 2 months from the date of transplantation up to March	Bed	4	52.66	1	210.64
11	01.03.14	1st shifting and grading after three months and consecutive shifting and grading after every two months till the nursery stock is lifted	Bed	1	245.96	1	245.96
12	01.03.15	Replacement of casualties after sorting out the empty bags and keeping at one end of the bed (maximum 10% of total stock is permissible)	Bed	1	69.83	1	69.83
13	01.03.16	Cost of foliar nutrient formulations like multiplex or NPK-19:19:19; fungicides and insecticides from July to Oct.	Bed	1	34.00	1	34.00
14	01.03.18	Weeding in the space between the beds, inspection path and surroundings of Nursery	Bed	2	35.91	1	71.82
15	01.05.04	Cost of Protection: One Nursery Watcher is allowed up to 1 lakh RT nursery or 100 secondary beds of polybags / 100 Teak beds of 10 x 1 m size or combination of both. One additional Nursery Watcher is permitted for nurseries having more than 1 lakh upto 3 lakh RT seedlings or more than 100 upto 300 secondary beds or Teak beds of 10 x 1 m size or combination of both. For more than 3 lakh RT or 300 secondary beds of Teak beds or combination of both another additional Nursery Watcher is allowed. While calculating the number of Nursery Watcher, care shall be taken to include the nursery raising under all Schemes at a particular site. No extra Nursery Watcher is allowed for primary beds of 1x1 m size. However, the above narrative is subject to the provisions cited under general instructions.	Bed	4	9194	100	367.76
16		Electricity charges					300.00
		<b>Total</b>					<b>5615.85</b>
17		Add casualty 10%					751.09
		<b>2020-21 Grand Total</b>					<b>6366.94</b>
		<b>cost of each plant (1100 plants per bed)</b>					<b>5.7881</b>

10% escalation every year

  
**Forest Range Officer**  
**CHENNAUR.**

  
**Forest Divisional Officer,**  
**Chennur**

-461-

**UNIT COST FOR MAINTENANCE OF BAG PLANTS (6"x8")**

Sl. No.	FSR-2020-21 Code	Item of work	Unit	Quantity	As per FSR		Amount (Rs.)
					Rate (Rs)	Per	
		<b>MAINTENANCE OF BAG PLANTS NURSERY UPTO PLANTING SEASON (APRIL TO AUGUST) for 10 m X 1 m size secondary beds (2600 Nos of 4" X 7" bags; 1700 Nos of 5" X9" bags ; 1100 Nos. of 6"X12" bags; 800 Nos. of 8"X12" bags; 400 Nos. of 10"x16" bags per bed)</b>					
1	01.03.19	(a) Manually with rose cans or finely perforated nozzle attached to a hose pipe	Bed	5	273.10	1	1365.50
2	01.03.20	Weeding the beds during May & July	Bed	2	52.66	1	105.32
3	01.03.21	Shifting, grading and rearrangement in beds	2	1	245.96	1	245.96
4		Electricity charges					300.00
5	01.05.04	<b>Cost of Protection:</b> One Nursery Watcher is allowed up to 1 lakh RT nursery or 100 secondary beds of polybags / 100 Teak beds of 10 x 1 m size or combination of both. One additional Nursery Watcher is permitted for nurseries having more than 1 lakh upto 3 lakh RT seedlings or more than 100 upto 300 secondary beds or Teak beds of 10 x 1 m size or combination of both. For more than 3 lakh RT or 300 secondary beds of Teak beds or combination of both another additional Nursery Watcher is allowed. While calculating the number of Nursery Watcher, care shall be taken to include the nursery raising under all Schemes at a particular site. No extra Nursery Watcher is allowed for primary beds of 1x1 m size. However, the above narrative is subject to the provisions cited under general instructions.	Bed	4	9194	100	367.76
		<b>2020-21 Total</b>					<b>2384.54</b>
		<b>cost of each plant (1100 plants per bed)</b>					<b>2.1678</b>

10% escalation every year

  
Forest Range Officer  
CHENNAI.

  
Forest Divisional Officer,  
Chennai

-463-

**UNIT COST FOR CONVERSION FROM 6"x8" to 12"x13"**

Sl. No.	FSR-2020-21 Code	Item of work	Unit	Quantity	As per FSR		Amount (Rs.)
					Rate (Rs)	Per	
		<b>CONVERSION of Root Trainer plants or 6"x8" or 12"x13" bag-plants into higher size bags</b> - to be done during September - October. At the time of conversion, the height of the plants should be at least above 0.45m in height (excluding the height of polybag).					
		<b>Cost and Transport of ingredients for Potting Mixture:</b> Red Soil, tank-silt / clayey soil, FYM in 2:1:1 ratio. To this soil mixture, 220 gm of Indophyll M-45, 4.5 kg of single super phosphate (SSP) and 250 gm of phorate granules per 1 cum of potting mixture will be added. Cost of chemicals is as per actuals.					
	01.03.03	<b>Cost of Gusseted Polybags</b> (including the cost of certification by ): To ensure quality control, the quality of bags have to be certified by CIPET (Central Institute of Plastic Engineering & Technology), Hyderabad at the cost of tenderer by taking samples from various lots of polybags.					
		g) 30 cm x 32.50 cm (12" x 13") size Gusseted Polybags: 400g, 52 bags/ kg ( 300 + 15% = 345) (345/52 = 6.63 Kgs)	Kgs	6.635	180.00	1	1194.23
	<b>01.03.24</b>	<b>Transportation of soil mixture ingredients</b>					
		<b>Distance up to 5 km</b>					
1	c	(k) 6" x 8" to 12" x 13" bags ( 9.315 - 1.433 = 7.882 cum) ( 20 Km x 72.40 = 1448.00 )	No	300	1448.00	1000	434.40
	<b>01.03.25</b>	<b>Transportation of soil mixture ingredients more than 5 km distance and upto 25 km distance</b>					
2	c	(f) 6" x 8" to 12" x 13" bags ( 9.315 - 1.433 = 7.882 cum)	No	300	4112.55	1000	1233.77
	<b>01.03.27</b>	<b>Preparation of Potting Mixture</b> by powdering of various ingredients, sieving and mixing them in prescribed proportion; opening of bags and filling with potting mixture partially, tearing the polybag plants and repotting them inside bigger bags and filling the rest of bags; gently pressing the same with finger tips and arranging in beds of 10x1 m size (6"x12" size: 1100 bag plants / bed and 8"x12" size": 800 bag plants per bed)					
3	c	6" x 8" to 12" x 13" bags ( 9.315 - 1.433 = 7.882 cum)	No	300	5196.99	1000	1559.10
	<b>01.03.33</b>	<b>Weeding the plants</b> (1100 no. of 6"x12"bags; 800 no. of 8"x12" bags; and 400 no. of 10"x16" bags) from November - March: 2 weedings					
4		<b>Weeding the plants (2 weedings)</b>	Bed	2	52.66	1	105.32
5	<b>01.03.34</b>	<b>Shifting, Grading and rearranging in secondary beds</b> - One Grading in February	Bed	2	245.96	1	491.92
	<b>01.03.35</b>	<b>Watering the plants manually twice a day</b> (from Novemebr - March) with rose spray or finely perforated nozzle attached to a hose pipe.					



6	a	Manually with rose spray or finely perforated nozzle attached to a hose pipe	Bed	5	286.81	1	1434.05
	01.03.37	Cost of foliar nutrient formulations like multiplex or NPK-19:19:19; fungicides and insecticides from July to Oct.					30.00
7	01.05.04	<b>Cost of Protection:</b> One Nursery Watcher is allowed up to 1 lakh RT nursery or 100 secondary beds of polybags / 100 Teak beds of 10 x 1 m size or combination of both. One additional Nursery Watcher is permitted for nurseries having more than 1 lakh upto 3 lakh RT seedlings or more than 100 upto 300 secondary beds or Teak beds of 10 x 1 m size or combination of both. For more than 3 lakh RT or 300 secondary beds of Teak beds or combination of both another additional Nursery Watcher is allowed. While calculating the number of Nursery Watcher, care shall be taken to include the nursery raising under all Schemes at a particular site. No extra Nursery Watcher is allowed for primary beds of 1x1 m size. However, the above narrative is subject to the provisions cited under general instructions.	Bed	4	9194	100	367.76
8		Cost of the ploythene bags					2340.00
9	01.03.39	Electricity charges					500.00
		<b>Total</b>					<b>9690.54</b>
10	01.03.38	Contingencies @ 5%					484.527
		<b>2020-21 Total for 300 plants</b>					<b>10175.07</b>
		<b>cost of each plant</b>					<b>33.9169</b>

10% escalation every year

  
**Forest Range Officer**  
**CHENNUR.**

  
**Forest Divisional Officer,**  
**Chennur**



-465-

UNIT COST FOR MAINTENANCE OF BAG PLANTS (April to August)

Sl. No.	FSR-2020-21 Code	Item of work	Unit	Quantity	As per FSR		Amount (Rs.)
					Rate (Rs.)	Per	
	01.04.00	MAINTENANCE OF BAG PLANTS NURSERY UPTO PLANTING SEASON (APRIL TO AUGUST) for 10 m X 1 m size secondary beds (2600 Nos of 4" X 7" bags; 1700 Nos of 5" X9" bags ; 1100 Nos. of 6"X12" bags; 800 Nos. of 8"X12" bags; 300 Nos. of 12"x13" bags: 400 Nos. of 10"x16" bags per bed)					
	01.04.01	Watering polybag secondary beds twice a day for 4 months					
1	a	Manually with rose spray or finely perforated nozzle attached to a hose pipe	Bed/month	4	273.10	1	1092.40
2	01.04.02	Weeding once during maintenance year	Bed/weeding	1	52.66	1	52.66
3	01.04.03	Shifting, grading and rearrangement in beds	Bed/shifting	2	245.96	1	491.92
4	01.04.05	Cost of foliar nutrient formulations like multiplex or NPK-19:19:19; fungicides and insecticides from April to August	As per actuals	1	20.00	1	20.00
	01.04.06	Cowdung Slurry application (One can apply chemical foliar spray or apply cowdung slurry - not both)					
5	a	Cost and transportation of fresh cowdung	As per actuals	1	25.00	1	25.00
6	01.04.07	Weeding in the space between the beds, inspection path and surroundings of Nursery	Bed	1	28.98	1	28.98
7	01.05.04	<b>Cost of Protection:</b> One Nursery Watcher is allowed up to 1 lakh RT nursery or 100 secondary beds of polybags / 100 Teak beds of 10 x 1 m size or combination of both. One additional Nursery Watcher is permitted for nurseries having more than 1 lakh upto 3 lakh RT seedlings or more than 100 upto 300 secondary beds or Teak beds of 10 x 1 m size or combination of both. For more than 3 lakh RT or 300 secondary beds of Teak beds or combination of both another additional Nursery Watcher is allowed. While calculating the number of Nursery Watcher, care shall be taken to include the nursery raising under all Schemes at a particular site. No extra Nursery Watcher is allowed for primary beds of 1x1 m size. However, the above narrative is subject to the provisions cited under general instructions.	Watcher/ month	4	9194.00	100	367.76
8	01.04.09	Electricity charges			500.00		500.00
		<b>Total</b>					<b>2578.72</b>
9	01.04.08	Contingencies @ 5%					<b>128.94</b>
		<b>2020-21 Total</b>					<b>2707.66</b>
		<b>cost of each plant (300 Plants per bed)</b>					<b>9.0255</b>

10% escalation every year

  
Forest Range Officer  
CHENNUR.

  
Forest Divisional Officer,  
Chennur

- 467 -  
UNIT COST FOR MAINTENANCE OF BAG PLANTS (September to till disposal)

Sl. No.	FSR-2020-21 Code	Item of work	Unit	Quantity	As per FSR		Amount (Rs.)
					Rate (Rs.)	Per	
		<b>MAINTENANCE OF BAG NURSERY FROM SEPTEMBER TO TILL DISPOSAL</b>					
1	01.05.01	Watering plants for 10 m X 1 m size secondary bed	Bed/month	4	177.14	1	708.54
2	01.05.02	Shifting, grading and rearrangement in beds	Bed/weeding	1	245.96	1	245.96
3	01.05.04	<b>Cost of Protection:</b> One Nursery Watcher is allowed up to 1 lakh RT nursery or 100 secondary beds of polybags / 100 Teak beds of 10 x 1 m size or combination of both. One additional Nursery Watcher is permitted for nurseries having more than 1 lakh upto 3 lakh RT seedlings or more than 100 upto 300 secondary beds or Teak beds of 10 x 1 m size or combination of both. For more than 3 lakh RT or 300 secondary beds of Teak beds or combination of both another additional Nursery Watcher is allowed. While calculating the number of Nursery Watcher, care shall be taken to include the nursery raising under all Schemes at a particular site. No extra Nursery Watcher is allowed for primary beds of 1x1 m size. However, the above narrative is subject to the provisions cited under general instructions.	Watcher/month	5	9194.00	100	459.70
		<b>Total</b>					<b>1414.20</b>
		<b>cost of each plant (300 Plants per bed)</b>					<b>4.7140</b>

10% escalation every year

*[Signature]*  
Forest Range Officer  
CHENNUR.

*[Signature]*  
Forest Divisional Officer,  
Chennur

- 469 -  
Advance Operations under Semi Mechanical Method with 3m x 3m espacement

Unit area 1.00 Ha,

FSR Item No.	Description	Quantity	Rate (Rs.)	Per	Amount (Rs.)
02.01.00	ADVANCE OPERATION (PRE-PLANTING OPERATION) - All advance-operation works of plantations to be raised shall be completed before March. Perambulation of site, preparing site inspection report including type of vegetation and density, approval of site suitability and the category of jungle growth clearance, taking the images of the existing vegetation, preparation of treatment plan shall be prepared and approved in writing by DFO before taking up advance operation.				
02.08.01	Survey with hand-held GPS (staff to carry out) and demarcation - one manday is allowed for assistance. The surveyed sketch with exact effective area statement will be uploaded in MIS platform latest by December end.	1	356.65	Plantation	357
02.08.02	Clearing unsalable unwanted jungle growth (leaving all the tree species of good form particularly the hardwood tree species like Teak, Nallamaddi, Yegisa, Narepa, Somi, Jitregi, Billudu, Chenangi etc. and NTFP species like Ippa, Morri, Tani, Karaka, Vepa, Maredu, Tapasi, Tuniki, Chinta, Usuri, Nallajeedi etc.); Spreading the cut material all over the site; and Burning the same twice till completely burnt. The unsuitable area shall be excluded from the clearing operation and the expenditure shall be incurred for effective area only. All the above operations shall be completed before December.				
	(a) Sparse Jungle growth (<10% ground area covered with Jungle growth)	0.40	2081.36	Ha	833
	(b) Very light jungle growth (>10% and upto 20% covered with Jungle growth)	0.40	3128.53	Ha	1251
	(c) Light Jungle Growth (>20% and upto 30% ground area covered with Jungle growth) with prior written approval of DFO based on the field inspection of DFO.	0.20	7350.00	Ha	1470
02.08.03	Uprootal of Stumps (excluding unsuitable patches) to a minimum depth of 45 cm with heavy machinery fitted with 0.90 cum and above capacity bucket, filling the pits caused by uprootal, and levelling. For retrieved encroached area, the approval of Circle Head is required and the approval should indicate clearly the density of stumps or vegetation to be removed through uprootal. The uprootal work can be carried out preferably through tender process.				
	(a) Sparse Jungle Growth (< 10% ground area covered with Jungle growth)	0.40	5184.30	Ha	2074
	(b) Very Light Jungle Growth (>10% and upto 20% ground area covered with Jungle growth)	0.40	10034.10	Ha	4014
	(c) Light Jungle Growth (> 20% and upto 30% ground area covered with Jungle growth) with prior written approval of DFO based on the field inspection of DFO.	0.20	13044.80	Ha	2609
02.08.04	Collection and Removal of Uprooted Stumps of all sizes, other debris etc., to outside the plantation site.				
	(a) Sparse Jungle Growth (< 10% ground area covered with Jungle growth)	0.40	5796.11	Ha	2318
	(b) Very Light Jungle Growth (>10% and upto 20% ground area covered with Jungle growth)	0.40	9197.79	Ha	3679
	(c) Light Jungle Growth (> 20% and upto 30% ground area covered with Jungle growth) with prior written approval of DFO based on the field inspection of DFO.	0.20	10724.65	Ha	2145
			<b>Total</b>		<b>20750</b>
		Unit Rate for 2020-21			<b>20750</b>

  
**Forest Range Officer**  
**CHENNUR.**

  
**Forest Divisional Officer,**  
**Chennur**



-471-

Raising of Plantation under Semi Mechanical Method with 3m x 3m espacement

Unit area 1.00 Ha,

FSR Item No.	Description	Quantity	Rate (Rs.)	Per	Amount (Rs.)
<b>II</b>	<b>RAISING OF BLOCK PLANTATIONS</b>				
<b>02.09.</b>	<b>SEMI-MECHANICAL PLANTATION</b>				
<b>02.09.</b>	<b>PLANTING OPERATIONS DURING RAISING YEAR</b>				
<b>02.09.01</b>	<b>Removing congestion of root suckers and other uprooted material hindering the effective ploughing</b>	1	1066.07	Ha	1066.07
	<b>Deep Ploughing</b> the effective (excluding unsuitable patches) plantation area across the slope to a depth of 30 cm with Heavy-duty Tractor of 55 HP and above with Firm Mould Board (FMB) plough <b>(FOR UNTILLED AREA) - to be completed by 15th of June</b>				
<b>02.09.02</b>	(b) Hard soils like gravel and morum	1	5109.90	Ha	5109.90
	<b>Note:</b> After intensive site preparation including clear-felling, burning, stump uprootal, removal of uprooted material, ploughing with the provision of removal of remnants of root suckers from soil, it is expected that there would not be any coppice growth subsequently at least for next 5-7 years.				
	<b>Alignment &amp; Stacking including demarcation of base line</b>				
<b>02.09.04</b>	(c) 3X3 m espacement = 1111 planting points	1111	89.36	100No.	992.79
<b>02.09.05</b>	ii) Cost of preparation of stakes (2.0 m length) and transportation to site (subject to condition that the seedling height is 1.5m to 2.0m height) which includes cost of stake, coaltar application at the bottom of the stake (30 cm), transportation, fixing and tying.	1111	1200	100No.	13332.00
	<b>Digging of Pits in Ploughed Areas in June - July by adopting 50% of original rate of digging of pits of ordinary soil</b>				
<b>02.15.03</b>	b) 60 cm <sup>3</sup> pits (48.56/2 = 24.2812)	1111	24.28	Pit	26976.47
	<b>PLANTING OPERATIONS DURING RAISING YEAR</b>				
<b>02.09.07</b>	Transportation of planting stock (including loading and unloading upto a distance of 5 Kms)				
	(b) 30 X 32.5 cm (12"X13") bag plants	1111	206.43	100 Nos.,	2293.00
<b>02.09.08</b>	<b>Transportation of Planting Stock</b> (including loading and unloading) more than 5 km distance and upto 25 km distance				
	(b) 30 X 32.5 cm (12"X13") bag plants	1111	153.00	100 Nos.,	1700.00
<b>02.09.09</b>	<b>Transportation of Planting Stock</b> (including loading and unloading) more than 25 km distance and for every extra km (with prior written approval of Circle Head)				
	(b) 30 X 32.5 cm (12"X13") bag plants	1111	77.00	100 Nos.,	855.00
<b>02.09.10</b>	<b>Internal transportation</b> to planting points on head loads				
	(b) 30 X 32.5 cm (12"X13") bag plants	1111	142.01	100 Nos.,	1578



FSR Item No.	Description	Quantity	Rate (Rs.)	Per	Amount (Rs.)
	<b>PLANTING:</b> Seedlings of local species of secondary hardwood along with their associates and NTFP species will have to be chosen for planting. The minimum height of the planting stock to be planted is 0.75 m - 1m height (excluding the height of the bag)				
02.09.11	Application of 50 gm of SSP per pit (1 day before planting) for root growth and early establishment of plant after planting. Similarly, the bag plants to be planted are to be dipped inside Chloropyriphos solution (5 ml of Chloropyriphos in 1 lit water) either at nursery site before transport or at plantation site before planting	1111	39.27	100 Nos.,	436
	Cost of SSP, Chloridine dust (50 gm) or Chloropyriphos (Rs. 2/- per plant)	As per actual	2222	Ha.	2222
02.09.12	Planting in 60 cm <sup>3</sup> Pit	1111	970.88	100 Nos.,	10787
02.09.14	Watering (one time) immediately after planting if the planting takes place on a non-rainy days and during dry spell - 4 waterings	1111	1059.44	100 Nos.,	11770
02.09.15	<b>Replacement of Casualties:</b> 20% during Raising Year & 25% in 1 <sup>st</sup> year The casualty replacement should be done in 3 stages at an interval of 15 days immediately after planting during raising year.	50% of unit rate of original pitting during raising year and 100% during maint. year. Planting, transportation and internal transportation same as			
	Digging of pits	222	48.563	Each	10781
	Transportation of planting stock (including loading and unlaoding upto a distance of 5 Kms)	222	206.43	100 Nos.,	458
	<b>Transportation of Planting Stock</b> (including loading and unloading) more than 5 km distance and upto 25 km distance	222	153.00	100 Nos.,	340
	Transportation of Planting Stock (including loading and unloading) more than 25 km distance and for every extra km (with prior written approval of Circle Head)	222	77.00	100 Nos.,	171
	Internal transportation to planting points on head loads	222	142.01	100 Nos.,	315
	(b) Planting in 60 cm <sup>3</sup> Pit	222	970.88	100 Nos.,	2155
02.09.16	Cost of DAP @ 25 gm / planting point	1111	1.20	Each	1333
02.09.17	Application of fertilizer in August (30 days after planting) by making 3 holes of 10 cm depth with crow bar holes at a distance of 10 cm away from plant and putting fertilizers and closing. Ensure that the soil is really wet at the time of DAP application.	1111	39.27	100 Nos.,	436
02.09.18	Weeding and saucer formation to a radius of 0.5 mts around the plant immediately after planting (i.e) during June.	1111	124.95	100 Nos.,	1388
02.02.19	Circular weeding cum Deep Soil working to a redius of 0.5m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (during Nov - Dec)	1111	656.25	100 Nos.,	7291

473-

FSR Item No.	Description	Quantity	Rate (Rs.)	Per	Amount (Rs.)
02.09.20	<b>Inter-ploughing</b> (during November) the effective (excluding unsuitable patches) plantation area across the slope to a depth of 30 cm with Heavy-duty Tractor of 55 HP and above with Firm Mould Board (FMB) plough				
	(b) Hard gravelly soil	1	3184.50	1.00	3185
02.09.21	<b>Pruning of lower branch initials</b> of Timber and NTFP species by scicature upto 1/3 rd height (to be done during October)	1111	124.22	100 Nos.,	1380
02.09.22	<b>Uprootal of Mahaveera (<i>Hyptis suaveolens</i>) weed</b> with prior written approval of Circle Head and taking photograph before and after uprootal. The weed removal shall be completed before September-end at any cost before inter-ploughing.	1	3650.90	Ha.	3651
02.09.24	<b>Contingencies provision for Raising of plantaitons:</b>	As per actual			1000
03.01.04	Formation of Sector Lines / Fire Lines to a width of 5 m by giving surface treatment (sector to be in conformity with slope direction ). All stumps to be cut to ground level	100	8.22	Rmt	822
02.09.25	<b>Cost of Protection:</b> (b) For un-fenced area: One Casual labour is allowed for the plantation more than 10.00 ha but less than 20.00 ha. in extent and one more Casual labour allowed for multiples of 20.00 ha.	1	4138	Ha	4138
			<b>Total</b>		<b>117962</b>
Unit Rate for 2020-21					117962

*[Signature]*  
Forest Range Officer  
CHENNUR.

*[Signature]*  
Forest Divisional Officer,  
Chennur

**1st year maintenance of Plantation under Semi Mechanical Method with 3m x 3m espacement**

Formation of Sector Lines / Fire Lines to a width of 5 m by giving surface treatment (sector to be in ~~conifer~~ **chinar** area 1.00 Ha,

FSR Item No.	Description	Quantity	Rate (Rs.)	Per	Amount (Rs.)
	Cost of transportation of soil mixtue for filling the pit and spreading around the pit - 25 % of pit - 0.25 x 0.6 cm x 0.6 cm x 0.6 cm	21.6	352.23	cum	7608
02.10.01	<b>Replacement of Casualties:</b> 25% in 1st year (In case of Eucalyptus: no casualty replacement). The list of all casualty points shall be prepared by concerned FRO by and made a report to DFO latest by end of May. The pitting of all such casualty points shall be over by end of June. The casualty replacement shall be completed by end of July.	Pitting, planting, transportation and internal transportation same as precribed in fresh planting			
	Digging of pits	278	48.563	Each	13500
	Transportation of planting stock (including loading and unlaoding upto a distance of 5 Kms)	278	206.430	100 Nos.,	574
	<b>Transportation of Planting Stock</b> (including loading and unloading) more than 5 km distance and upto 25 km distance	278	153.000	100 Nos.,	425
	Transportation of Planting Stock (including loading and unloading) more than 25 km distance and for every extra km (with prior written approval of Circle Head)	278	77.000	100 Nos.,	214
	Internal transportation to planting points on head loads	278	142.010	100 Nos.,	395
02.15.11	(b) Planting in 60 cm <sup>3</sup> Pit	278	970.883	100 Nos.,	2699
02.02.11	Cost of DAP @ 25 gm / planting point	1111	1.12	Each	1244
02.09.14	Watering (one time) immediately after planting if the planting takes place on a non-rainy days and during dry spell - 4 waterings	1111	1059.44	100 Nos.,	11770
02.10.02	Weeding and saucer formation to a radius of 0.5 mts around the plant immediately after planting (i.e) during June.	1111	124.95	100 Nos.,	1388
02.10.03	Circular weeding cum Deep Soil working to a radius of 0.5m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (during Nov - Dec)	1111	656.25	100 Nos.,	7291
02.10.04	Uprootal of Mahaveera (Hyptis suaveolens) weed with prior written approval of Circle Head and taking photograph before and after uprootal. The weed removal shall be completed before August-end (before flowering) at any cost before inter-ploughing.	1	3650.90	1.00	3651
02.10.05	Inter-ploughing (during September) the effective plantation area (excluding unsuitable patches) across the slope to a depth of 30 cm with Heavy-duty Tractor of 55 HP and above with Firm Mould Board (FMB) plough. This operation shall be carried out after Mahaveera uprootal is completed. Inter-ploughing should not be used as a means of Mahaveera uprootal.	1	2321.40	1.00	2321
02.10.06	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be done during July-Aug)	1111	124.27	100.00	1381
02.10.07	Enumeration of row-wise survival and average growth twice a year - Number of plants planted and Number surviving (to be undertaken during May & Dec.) and entered in Plantation Journal. Minimum stocking of 90% and average minimum height of 2.5 m at the end of raising year				0
02.10.08	Contingencies provision for maintenance of plantaitons:				500
03.05.01	Maintenance of fire lines (5.00 mtr width) including cutting back of rank growth and burning - propotionate cost - 0.60 times	100	608.27	100 Rmt	608

02.10.09	<b>Cost of Protection:</b> (b) For un-fenced area: One Casual labour is allowed for the plantation more than 10.00 ha but less than 20.00 ha. in extent and one more Casual labour allowed for multiples of 20.00 ha.	1	5517	Ha	5517
			<b>Total</b>		<b>61086</b>
Unit Rate for 2020-21					<b>61086</b>

  
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Forest Divisional Officer,  
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-477-

**2nd year maintenance Plantation under Semi Mechanical Method with 3m x 3m espacement**

Unit area 1.00 Ha,

FSR/Item No.	Description	Quantity	Rate (Rs.)	Per	Amount (Rs.)
02.10.01	<b>Replacement of Casualties:</b> 25% in 1st year (In case of Eucalyptus: no casualty replacement). The list of all casualty points shall be prepared by concerned FRO by and made a report to DFO latest by end of May. The pitting of all such casualty points shall be over by end of June. The casualty replacement shall be completed by end of July.		Pitting, planting, transportation and internal transportation same as prescribed in fresh planting		
	Digging of pits	278	48.563	Each	13501
	Transportation of planting stock (including loading and unloading upto a distance of 5 Kms)	278	206.430	100 Nos.,	574
	<b>Transportation of Planting Stock</b> (including loading and unloading) more than 5 km distance and upto 25 km distance	278	153.000	100 Nos.,	425
	Transportation of Planting Stock (including loading and unloading) more than 25 km distance and for every extra km	278	77.000	100 Nos.,	214
	Internal transportation to planting points on head loads	278	142.010	100 Nos.,	395
02.15.11	(b) Planting in 60 cm <sup>3</sup> Pit	278	970.883	100 Nos.,	2699
02.11.01	Broadcasting of grass seeds in the interplanting rows of the plantations raised under semimechanical plantations by ploughing with a tractor mounted cultivator after receipt of good rains in the month of June-July in place of existing provision of interploughing in the month of September given for the 1st and 2nd year MAINTENANCE years of semi-mechanical plantations				
	(b) Inter ploughing using tractors with cultivator in 1st year maintenance and old plantations	1	1996.21	1	1996
	(c) Broadcasting of Grass seeds followed by dragging / sweeping with a bunch of thorny branches to ensure a thin cover of soil over the broadcasted seeds.	1	88.83	1	89
02.09.14	Watering (one time) immediately after planting if the planting takes place on a non-rainy days and during dry spell - 4 waterings	1111	1059.44	100 Nos.,	11770
02.11.02	Circular weeding cum Deep soil working to a radius of 0.5 m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (July-Aug)	1111	656.25	100 Nos.,	7291
02.11.03	Pruning of lower branch initials of Timber and NTFP species by sciculture upto 1/3 rd height (to be done during July-Aug)	1111	124.27	100 Nos.,	1381
02.11.05	Contingencies provision for maintenance of plantations:				
	i) Maintenance of Plantation Boards and Corner Stones				300
	ii) Contingencies and Miscellaneous				300
03.05.01	Maintenance of fire lines (5.00 mtr width) including cutting back of rank growth and burning - proportionate cost - 0.60 times	100	608.27	100 Rmt	608
02.02.20	<b>Cost of Protection:</b> (b) For un-fenced area: One Casual labour is allowed for the plantation more than 10.00 ha but less than 20.00 ha. in extent and one more Casual labour allowed for multiples of 20.00 ha.	1	5517	Ha	5517
			<b>Total</b>		<b>47060</b>
			Unit Rate for 2020-21		47060

  
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**Chennur**

-479-

3rd year maintenance Plantation under Semi Mechanical Method with 3m x 3m espacement

Unit area 1.00 Ha,

FSR Item No.	Description	Quantity	Rate (Rs.)	Per	Amount (Rs.)
02.11.02	Circular weeding cum Deep soil working to a radius of 0.5 m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (July-Aug)	1111	656.25	100 Nos.,	7291
02.11.03	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be done during July-Aug)	1111	124.27	100 Nos.,	1381
02.09.14	Watering (one time) immediately after planting if the planting takes place on a non-rainy days and during dry spell - 4 waterings	1111	1059.44	100 Nos.,	11770
02.11.05	Contingencies provision for maintenance of plantaitons:				
	i) Maintenance of Plantation Boards and Corner Stones				300
	ii) Contingencies and Miscellaneous				300
03.05.01	Maintenance of fire lines (5.00 mtr width) including cutting back of rank growth and burning - propotionate cost - 0.60 times	100	608.27	100 Rmt	608
02.02.20	<b>Cost of Protection:</b> (b) For un-fenced area: One Casual labour is allowed for the plantation more than 10.00 ha but less than 20.00 ha. in extent and one more Casual labour allowed for multiples of 20.00 ha.	1	2758	Ha	2758
			<b>Total</b>		<b>24409</b>
			Unit Rate for 2020-21		24409

  
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- 481 -  
4th year maintenance Plantatation under Semi Mechanical Method with 3m x 3m espacement

Unit area 1.00 Ha,

FSR Item No.	Description	Quantity	Rate (Rs.)	Per	Amount (Rs.)
02.11.02	Circular weeding cum Deep soil working to a radius of 0.5 m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (July-Aug)	1111	656.25	100 Nos.,	7291
03.05.01	Maintenance of fire lines (5.00 mtr width) including cutting back of rank growth and burning - propotionate cost - 0.60 times	100	608.27	100 Rmt	608
02.11.03	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be done during July-Aug)	1111	124.27	100 Nos.,	1381
02.11.05	Contingencies provision for maintenance of plantaitons:				
	i) Maintenance of Plantation Boards and Corner Stones				300
	ii) Contingencies and Miscellaneous				300
			<b>Total</b>		<b>9880</b>
			Unit Rate for 2020-21		9880

  
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483~  
5th year maintenance Plantation under Semi Mechanical Method with 3m x 3m espacement

Unit area 1.00 Ha.

FSR Item No.	Description	Quantity	Rate (Rs.)	Per	Amount (Rs.)
02.11.02	Circular weeding cum Deep soil working to a radius of 0.5 m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (July-Aug)	1111	656.25	100 Nos.,	7291
03.05.01	Maintenance of fire lines (5.00 mtr width) including cutting back of rank growth and burning - proportionate cost - 0.60 times	100	608.27	100 Rmt	608
02.11.03	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be done during July-Aug)	1111	124.27	100 Nos.,	1381
02.11.05	Contingencies provision for maintenance of plantaitons:				
	i) Maintenance of Plantation Boards and Corner Stones				300
	ii) Contingencies and Miscellaneous				300
			Total		9880
Unit Rate for 2020-21					9880

  
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- 485 -

6th year maintenance Plantation under Semi Mechanical Method with 3m x 3m espacement

Unit area 1.00 Ha,

FSE Item No.	Description	Quantity	Rate (Rs.)	Per	Amount (Rs.)
03.05.01	Maintenance of fire lines (5.00 mtr width) including cutting back of rank growth and burning - propotionate cost - 0.60 times	100	608.27	100 Rmt	608
02.11.03	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be done during July-Aug)	1111	124.27	100 Nos.,	1381
			Total		1989
		Unit Rate for 2020-21			1989

  
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-487-

7th year maintenance Plantation under Semi Mechanical Method with 3m x 3m espacement

Unit area 1.00 Ha,

FSR Item No.	Description	Quantity	Rate (Rs.)	Per	Amount (Rs.)
02.11.02	Circular weeding cum Deep soil working to a radius of 0.5 m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (July-Aug)	1111	656.25	100 Nos.,	7291
03.05.01	Maintenance of fire lines (5.00 mtr width) including cutting back of rank growth and burning - propotionate cost - 0.60 times	100	608.27	100 Rmt	608
			Total		7899
Unit Rate for 2020-21					7899

  
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-489-

8th year maintenance Plantatation under Semi Mechanical Method with 3m x 3m espacement

Unit area 1.00 Ha,

FSR Item No.	Description	Quantity	Rate (Rs.)	Per	Amount (Rs.)
03.05.01	Maintenance of fire lines (5.00 mtr width) including cutting back of rank growth and burning - propotionate cost - 0.60 times	100	608.27	100 Rmt	608
02.11.03	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be done during July-Aug)	1111	124.27	100 Nos.,	1381
			Total		1989
			Unit Rate for 2020-21		1989

  
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-291-

9th year maintenance Plantatation under Semi Mechanical Method with 3m x 3m espacement

Unit area 1.00 Ha,

FSR Item No.	Description	Quantity	Rate (Rs.)	Per	Amount (Rs.)
02.11.02	Circular weeding cum Deep soil working to a radius of 0.5 m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (July-Aug)	1111	656.25	100 Nos.,	7291
03.05.01	Maintenance of fire lines (5.00 mtr width) including cutting back of rank growth and burning - propotionate cost - 0.60 times	100	608.27	100 Rmt	608
			Total		7899
			Unit Rate for 2020-21		7899

  
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-493-

10th year maintenance Plantatation under Semi Mechanical Method with 3m x 3m espacement

Unit area 1.00 Ha,

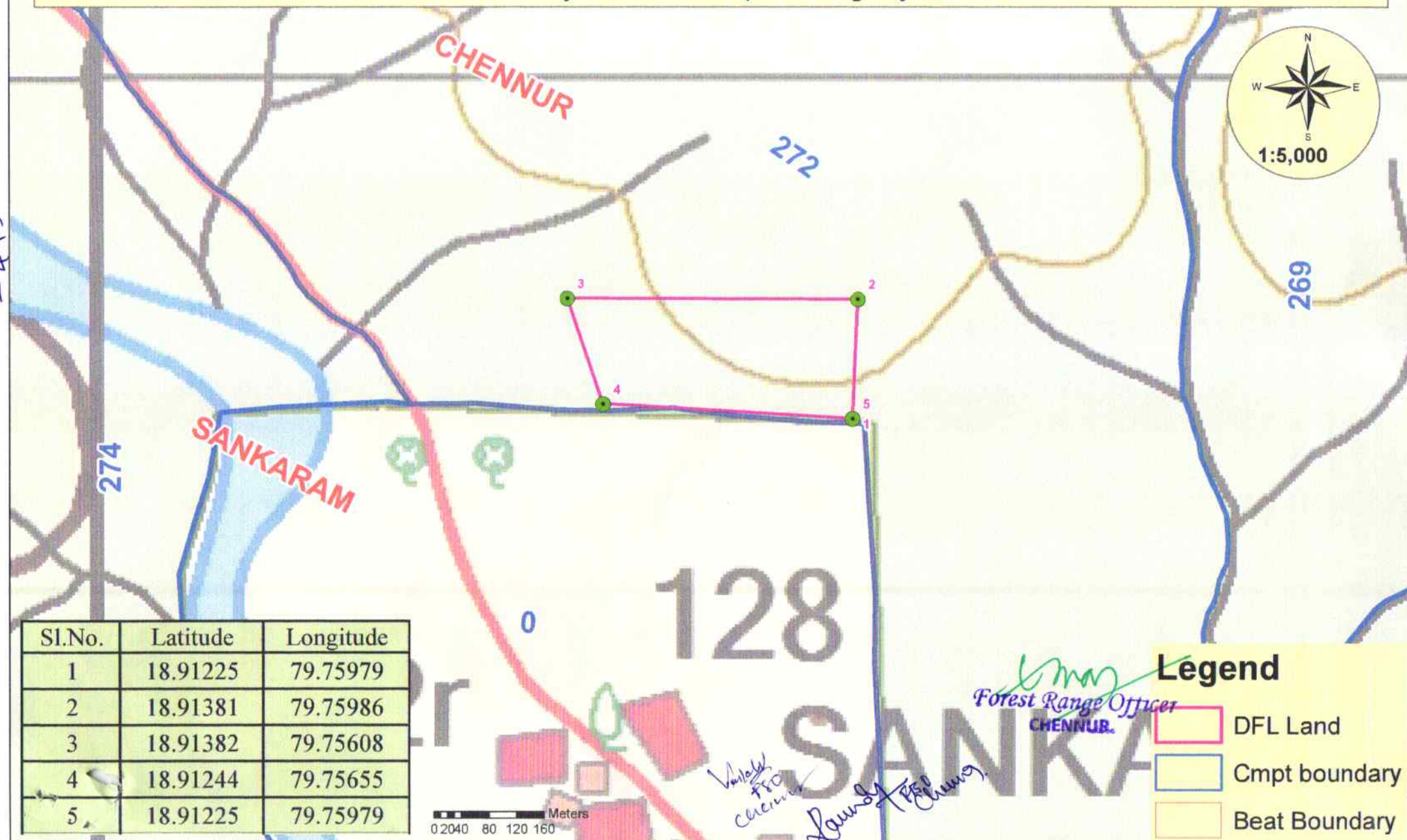
FSR Item No.	Description	Quantity	Rate (Rs.)	Per	Amount (Rs.)
03.05.01	Maintenance of fire lines (5.00 mtr width) including cutting back of rank growth and burning - propotionate cost - 0.60 times	100	608.27	100 Rmt	608
02.11.03	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be done during July-Aug)	1111	124.27	100 Nos.,	1381
			Total		1989
Unit Rate for 2020-21					1989

  
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The DFL (5.4198 Ha) identified in Compt. No. 272, Chennur Beat for diversion of 2.7099 Ha.(1354.94 m X 20 m) Forest Land for widening and strengthening of NH-63 to two lane with paved shoulder in Chennur Range in favour of Cheif Engineer, Regional officer, Hyderabad - Ministry of Road transport & Highwyas



Sl.No.	Latitude	Longitude
1	18.91225	79.75979
2	18.91381	79.75986
3	18.91382	79.75608
4	18.91244	79.75655
5	18.91225	79.75979

### Legend

- DFL Land
- Cmpt boundary
- Beat Boundary

0 20 40 80 120 160 Meters