

Compensatory Afforestation Scheme for diversion of 12.03 Ha for laying of Railway Track from Bethampudi RS to Koyagudem OC-III at Tekulapalli Range in favour of M/s. S.C.Co.Ltd., Yellandu

**I. Introduction :**

1. The Prl. Chief Conservator of Forests, T.S., Hyderabad in reference No.7872/2016/FCA-3, dt: 16.08.2016 while enclosing the proposals received from the M/s. S.C.Co.Ltd., Yellandu for Diversion of 12.03 Ha for laying of railway track from Bethampudi railway station to Koyagudem OC-III in Reserve Forest of then Karepalli Range present Tekulapalli Range of Kothagudem Forest Division, and issued instructions to process the proposals as per Forest (Conservation) Act, 1980. Further, the Prl. Chief Conservator of Forests, T.S., Hyderabad has instructed to prepare CA Scheme in double degraded forest area/ (less than 0.4 density) with 7-10 years maintenance. Hence proposals. The User Agency requested the Department to identify double the extent of forest land diverted for CA purpose.

- |                                   |                |
|-----------------------------------|----------------|
| (a) Total Area diverted is        | ..... 12.03 Ha |
| (b) Double the area identified is | ..... 24.06 Ha |

**II. Identification of degraded area:**

The Forest Range Officer, Tekulapalli, to whom the matter was referred for identification of double the extent of degraded area in lieu of diversion of forest land of 12.03 Ha for the above project. The Forest Range Officer, Tekulapalli identified degraded forest land of 24.06 Ha in Compartment No. 30 of Koppurai Beat, Muralipadu Section of Tekulapalli Range which is a retrieved area. The surveyed sketch of the double the degraded area and location on Toposheet 1:50000 is enclosed to the scheme proposals.

**III. Planting Techniques**

It is proposed to raise Miscellaneous Plantation by adopting artificial regeneration under Semi-Mechanical Method. The said area with sandy loam soil and red loam soil which are suitable for planting for raising Miscellaneous plantation as per the guidelines issued by Prl. Chief Conservator of Forests in Rc.No.43246/2012/CAMPA, dt.29.11.2012. It is noticed that the afforestation will prevent the attempt of encroachment besides cover the forest land with good tree growth.

**III.A. Activities proposed in Artificial Regeneration under Semi-Mechanical Method in Degraded forest of 24.06 Ha**

1. Raising of misc. nursery: The seedlings suitable such as for soil with two years old are to be raised in the nursery for planting during 2019-20.
2. Taking up advance operations: The advance works under Semi-Mechanical Method in Tekulapalli Range includes clearance of misc. growth, uprootal of stumps, heaping and burning and Tilling.

3. **Raising of plantations:** The esplacement proposed is 3 M x 3 M - 1111 plants/ Ha. The activities includes ploughing, alignment, Scoping and Planting in 60 Cms. Cub pits, with misc. species under the direct supervision of Forest Range Office concerned. One circular weeding, Circular weeding, deep soil working, Application of fertilizers, inter-ploughing, protection watcher, digging of cattle proof trench top width 1.5M, bottom width 1 M and height 1M @ 125 Cmt. per Ha.
4. Maintenance of plantations up to 10 years as per calendar operations.
5. Planting targets proposed.
  - 2019-20 - Raising of 5x9 Bag Nurseries
  - 2020-21 - Advance Operations & Maint & Conversion of Nurseries
  - 2021-22 - Raising of Plantation
  - 2022-23 to 2031-32 - Maintenance of Plantation

#### IV. **Project period**

It is proposed to implement the scheme from 2019-20 to 2031-32 for a period of (13) years.

#### V. **Project Implementation Agency**

The Forest Divisional Officer, Kothagudem will be the Project Implementation Agency and work will be taken through the Forest Range Officer, Tekulapalli in Koppurai Beat. The raising of Compensatory Afforestation Plantation requires additional manpower and mobility. Hence, it is proposed to hire services of one forester in Tekulapalli Range, one Data Entry Operator for initial (3) years in Division office. Similarly one hired vehicle will be engaged for initial (2) years. Accordingly, necessary provisions are made in the Scheme proposals.

#### VI. **Cost structure**

Basic rates proposed as per FSR 2018-19 and 10% price escalation is proposed every year on the basic rate of FSR 2018-19. Nursery for all required seedlings will be raised at one central place and accordingly required infrastructure is proposed in the scheme. The details of year-wise physical and financial target are enclosed in Annexure No. I. Unit cost of different planting techniques and plantation operations are shown in Unit Costs.


#### VII. **Cost of the (Scheme) Project**

Total cost of the project is Rs. 162.38084 lakhs. The details are shown in Annexure-II.

#### VIII. **Employment Generation**

The degraded forest land proposed for Compensator Afforestation is located in Kothagudem and Chandrugonda Mandal in Agency Area. The local labour mostly Tribals along with Scheduled Castes will be benefitted by implementation of this project for their daily livelihood, generation expected to be created is 43361 man days during the project period from 2019-20 to 2031-32 (60% manual component 19722 wage rate during 2015-16 on Rs. 494/- per day.

Further, it is mentioned that in case the selected location and the area are unavailable for taking up planting anticipating the delay of approval of the proposal, suitable degraded areas will be selected and planting will be taken up and accordingly the deviation, in any in implementing the scheme will be borne by the User Agency in the jurisdiction of Kothagudem Division. Similarly, it is also mentioned that the User Agency will be remitting the equal amount into CAMPA Account, in case the degraded forest lands were taken up for re-afforestation with any funding agency since Kothagudem Forest Division has been taking up re-afforestation in the retrieved areas of forest lands, where encroachment problem is severe. To curb the encroachment problem and re-afforestation the gap areas this modification is proposed.

  
Forest Divisional Officer,  
Kothagudem



**ANNEXURE-I**

**COMPENSATORY AFFORESTATION SCHEME IN DEGRADED FOREST AREA OF 24.06 Ha AT Compt., No. 30, Koppurai Beat of Tekulapalli Range IN LIEU OF DIVERSION OF 12.03 HA FOR RAILWAY TRACK FROM BETHAMPUDI RS to KOYAGUDEM OC-III, TEKULAPALLI RANGE**

Sl. No	Item of Work	Phy	Unit Cost 2018-19 (Rs.)	2019 - 20			2020 - 21			2021 - 22			2022 - 23			2023 - 24			2024 - 25			2025 - 26		
				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	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
I	<b>Raising of Plants in Nurseries &amp; their Maintanance, Procurement of Plants</b>																							
1	Raising of Primary beds - Unit cost for 100000 plants	Plant	0.2551	60000	0.28065	0.16839	0	0.30872	0.00000															
2	Raising of Bag Plants of 5"x9" - Unit Cost 100000 plants	Plant	4.7014	60000	5.17155	3.10293	0	5.68871	0.00000															
3	Maintenance of Bag Plants of 5"x9" - Unit Cost for 100000 plants	Plant	1.7175				60000	2.07814	1.24688	0	2.28595	0	0	2.5145	0									
4	Conversion of bag plants from 5"x9" to 8"x12" - Unit Cost 100000 plants	Plant	14.8575				60000	17.97757	10.78654	0	19.77533	0	0	21.75286	0									
5	Maintenance of Bag Plants of 8"x12" - Unit Cost for 100000 plants	Plant	3.5605							60000	4.73900	2.84340	0	5.21291	0	0	5.73420	0						
						3.271			12.033			2.843			0.000			0.000			0.000			0.000
II	<b>Planting activities (SMM)</b>																							
6	Advance Operations	Ha	37531				24.06	45412.03	10.92613	0	49953.23	0.00000												
7	Raising of Plantation	Ha	180459							24.06	240191.37	57.79004	0	264210.51	0.00000									
8	1st Year Maintenance	Ha	47802										24.06	69987.39	16.83897	0	76986.13	0.00000						
9	2nd Year Maintenance	Ha	25328													24.06	40791.00	9.81431	0	44870.10	0.00000			
10	3rd Year Maintenance	Ha	16917																24.06	29969.10	7.21057	0	32966.01	0.00000
11	4th Year Maintenance	Ha	16917																		24.06	32966.01	7.93162	
12	5th Year Maintenance	Ha	2481																					
13	6th Year Maintenance	Ha	1979																					
14	7th Year Maintenance	Ha	2481																					
15	8th Year Maintenance	Ha	1979																					
16	9th Year Maintenance	Ha	2481																					
17	10th Year Maintenance	Ha	1979																					
	Sub Total:					0.00000			10.92613			57.79004			16.83897			9.81431			7.21057			7.93162
III	<b>SMC Works</b>																							
18	Digging of CPT in km	km	140000		154000.00		5.00	169400.00	8.47000	0	186340.00	0.00000												
19	Bund plantation in km	km	25000		27500.00		0	30250.00	0.00000	5	33275.00	1.66375												
20	Construction of Percolation Tanks	No	350000		385000.00		0	423500.00	0.00000	0	465850.00	0.00000												
21	Construction of Mini Percolation Tanks	No	100000		110000.00		0	121000.00	0.00000	0	133100.00	0.00000												
25	Digging of borewell with solar panels	No	700000		770000.00		0	847000.00	0.00000	0	931700.00	0.00000	0	1024870.00	0.00000									
	Sub Total					0.00000			8.47000			1.66375			0.00000			0.00000			0.00000			0.00000
									3.1430			6.2297			1.6839			0.9814			0.7211			0.7932
V	<b>Administrative Cost - 10%</b>																							
	Total year wise outlay of the project					3.5985			34.5725			68.5269			18.5229			10.7957			7.9316			8.7248



# COMPENSATORY AFFORESTATI

Sl. No	Item of Work	Phy	Unit Cost 2018-19 (Rs.)	2026 - 27			2027 - 28			2028 - 29			2029 - 30			2030 - 31			2031 - 32			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 (Rs.in Lakhs)
1	2	3	4	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	47	48
I	<b>Raising of Plants in Nurseries &amp; their</b>																						
1	Raising of Primary beds - Unit cost for 100000 plants	Plant	0.2551																			60000	0.16839
2	Raising of Bag Plants of 5"x9" - Unit Cost 100000 plants	Plant	4.7014																			60000	3.10293
3	Maintenance of Bag Plants of 5"x9" - Unit Cost for 100000 plants	Plant	1.7175																			60000	1.24688
4	Conversion of bag plants from 5"x9" to 8"x12" - Unit Cost 100000 plants	Plant	14.8575																			60000	10.78654
5	Maintenance of Bag Plants of 8"x12" - Unit Cost for 100000 plants	Plant	3.5605																			60000	2.84340
						0.000			0.000			0.000			0.000			0.000			0.000		18.14815
II	<b>Planting activities (SMM)</b>																						
6	Advance Operations	Ha	37531																			24.06	10.92613
7	Raising of Plantation	Ha	180459																			24.06	57.79004
8	1st Year Maintenance	Ha	47802																			24.06	16.83897
9	2nd Year Maintenance	Ha	25328																			24.06	9.81431
10	3rd Year Maintenance	Ha	16917																			24.06	7.21057
11	4th Year Maintenance	Ha	16917	0	36262.61	0.00000																24.06	7.93162
12	5th Year Maintenance	Ha	2481	24.06	5317.76	1.27945	0	5849.54	0.00000													24.06	1.27945
13	6th Year Maintenance	Ha	1979				24.06	4665.85	1.12260	0	5132.43	0.00000										24.06	1.12260
14	7th Year Maintenance	Ha	2481							24.06	6434.49	1.54814	0	7077.94	0.00000							24.06	1.54814
15	8th Year Maintenance	Ha	1979										24.06	5645.68	1.35835	0	6210.24	0.00000				24.06	1.35835
16	9th Year Maintenance	Ha	2481													24.06	7785.73	1.87325	0	8564.31	0.00000	24.06	1.87325
17	10th Year Maintenance	Ha	1979																24.06	6831.27	1.64360	24.06	1.64360
	Sub Total:					1.27945			1.12260			1.54814			1.35835			1.87325			1.64360		119.33704
III	<b>SMC Works</b>																						
18	Digging of CPT in km	km	140000																			0	0.00000
19	Bund plantation in km	km	25000																			5	8.47000
20	Construction of Percolation Tanks	No	350000																			5	1.66375
21	Construction of Mini Percolation Tanks	No	100000																			0	0.00000
25	Digging of borewell with solar panels	No	700000																			0	0.00000
	Sub Total					0.00000			0.00000			0.00000			0.00000			0.00000			0.00000		10.13375
V	Administrative Cost - 10%					0.1279			0.1123			0.1548			0.1358			0.1873			0.1644		14.76189
	Total year wise outlay of the project					1.4074			1.2349			1.7030			1.4942			2.0606			1.8080		162.38084

Forest Divisional Officer,  
Kothagudem