

Compensatory Afforestation Scheme for Diversion of 27.227 Ha Forest Land in Bhadrachalam Forest Division for formation of road from Seethanagaram to Kurnapalli Road from KM 0/0 to 20/0 in erstwhile Khammam District in favour of SE,R&B Circle, Khammam in Non-forest CA lands and degraded forest lands

A. Non-forest CA lands (NFL):

1. Introduction:

It is submitted that the Principal Chief Conservator of Forests, TS, Hyderabad vide his Rc.No.12376/2016-FCA2, Dt:01-09-2017 has issued instructions to submit the CA Scheme for Formation of Road from Seethanagaram to Kurnapalli Road from KM 0/0 to 20/0. The details are as follows.

Sl. No.	Name of the Work	Area to be diverted in Ha.	Remarks
1	Formation of Road from Seethanagaram to Kurnapalli Road from KM 0/0 to 20/0 erstwhile Khammam District	27.227	The user agency has submitted the proposals for diversion of 27.227 Ha, but the then DFO and CF, Khammam have recommended proposal for diversion of 25.436 Ha duly deleting the admitted RoW.

It is further submitted that the Non-Forest land has been handed over by the User Agency to an extent of 27.156 Ha in Sy.No.227 of Aswaraopeta Mandal of erstwhile Khammam district. After re-organization of the Districts and Divisions, the Non-Forest land which was identified falls under the jurisdiction of Paloncha Division of Bhadrachalam District. The details are as follows.

Sl. No	Name of the Range	Name of the Mandal	Name of the Village	Sy.No.	Non-Forest land handed over by the User Agency	
					Ext. in Acres	Extent in Ha
1.	Aswaraopeta	Aswaraopeta	Asupaka	227	67.077	27.156

The above Non forest land to an extent of 27.156 Ha is hillock and covered with good vegetation and not to take up any plantations in the said area. Keeping in view the nature of the Non- forest land it is proposed to take up operations like singling, coppicing and bush clearance along with SMC works. Hence CA scheme is prepared to an amount of Rs.22.32275 Lakhs to deal these Non-forest CA areas. As the areas are isolated with a small patches, with lot of biotic pressure from adjoining villages and there is every possibility of encroachment of this land for agriculture or for quarry or for any. Hence suitable protection measures are needed from biotic pressure and encroachment. Hence chain link fence is proposed all around the boundary of the CA area.

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Hence chain link fence is proposed all around the boundary of the CA area. The details are as follows.

1. THE SCHEME - TREATMENT MODELS AND OPERATIONS PROPOSED:

Soil and moisture conservation works: It is proposed to carry out SMC works like Digging of SCT, Percolation tank etc in the CA areas.

Protection of CA land: Erection of Chain link fencing around the CA area with gate is proposed. The boundary pillars are also proposed around the CA land to facilitate notification of CA lands as PF/RF.

Administrative Costs (Over Heads): As the work involves lot of record maintenance, book keeping and mobility of the field officers it is required to provide 10% of treatment cost (nursery raising, plantations raising and SMC works) towards over heads and monitoring of implementation of the Scheme.

PROJECT COST: The total financial out lay of the project is **Rs.22.32275 Lakhs**. The annual requirement of funds have been worked out on the base cost of 2017-18 FSR with 10% annual escalation for the remaining project period up to 2030-31.

The component wise details in brief are as follows.

S. No	Scheme Proposals	Cost in Lakhs
1	Singling, Coppicing, Bush cleaning	0.30250
2	Construction of boundary Pillars	1.3600
3	Construction of small pillars at 20 Mtr interval along the periphery	0.8800
4	Erection of gates	1.000
5	Erection of chain link fencing	18.750
7	Administrative cost 10% over Core activities	0.03025
	Total:	22.32275

B. Degraded forest lands (DFL) for CA:

1. Introduction:

In addition to that the equivalent degraded Forest land to an extent of 27.50 Ha has been identified by the Forest Range Officer, Aswaraopeta to meet the requirement of planting 1000 plants/ ha of forest land diverted for the Project.

The details of areas identified for DFL CA with < 0.4 density are as follows.

Sl. No.	Range	Block	Section	Beat	Compt. No.	Area (in Ha)
1	Aswaraopeta	Aswaraopeta Extn-I	Aswaraopeta	Papidigudem	292	27.50

2. THE SCHEME - TREATMENT MODELS AND OPERATIONS PROPOSED:

Plantations: It is proposed to take up compensatory afforestation of **NON TEAK SECONDARY HARDWOOD SPECIES (NTSH)** through Semi-mechanical method, with CPT along the periphery of the DFL CA area.

The above Afforestation and Reforestation works shall be carried out either by involvement of VSS members wherever possible or through Departmental execution.

The operations to be carried out are Survey and demarcation, clearance of existing unwanted growth, uprootal, burning, ploughing, inter-ploughing, scoping of 60 cm cube pits, importing of soil, and planting at 3 x 3 m espacement with 10 years of maintenance etc. Watering of plants is provided for raising year.

Soil and moisture conservation works: It is proposed to carry out SMC works like Digging of CPT, Constructions of Check Dams, Percolation tank etc in the CA areas.

Administrative Costs (Over Heads): As the work involves lot of record maintenance, book keeping and mobility of the field officers it is required to provide 10% of treatment cost (nursery raising, plantations raising and SMC works) towards over heads and monitoring of implementation of the Scheme.

PROJECT COST: The total financial out lay of the project is **Rs.167.34931 Lakhs**. Nursery raising and maintenance is proposed in 2018-19 & 2019-20, Advance operations 2019-20 and raising of plantation starts from 2020-21. The annual requirement of funds have been worked out on the base cost of 2017-18 FSR with 10% annual escalation for the remaining project period up to 2030-31.

The component wise details in brief are as follows.

S. No	Scheme Proposals	Cost in Lakhs
1	Raising of Plants in Nurseries & their Maintenance	13.95344
2	Raising of plantations with 10 years of maintenance	133.11542
3	SMC Works	5.06688
4	Administrative Cost - 10%	15.21357
	Total:	167.34931

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Mode of Execution:

It is proposed to implement the above proposals through VSS on Joint Forest Management concept wherever possible or by Departmental execution method. In addition to the existing staff of Forest Department with required logistic support, necessary manpower required for effective implementation of the project will be hired through outsourcing from the administrative cost.

Annexures:

Annexure IV	Abstract of Compensatory Afforestation Scheme on DFL
Annexure V	Year wise Estimated cost Compensatory Afforestation
Annexure VI	Unit cost Data sheets


DISTRICT FOREST OFFICER
Bhadradi Kothagudem Dist,
Kothagudem. 22.12.17


Forest Divisional Officer
Paloncha


Chief Conservator of Forests /
Conservator of Forests
KOTHAGUDEM CIRCLE

YEAR WISE DETAILED ABSTARCT OF CA SCHEME over 27.227 Ha of Non-Forest Land - formation of road from Seethanagaram to Kurnapalli of Paloncha Division

YEAR WISE DETAILED ABSTRACT OF CA SCHEME OVER 27.227 ha of Non Forest Land FORMATION OF ROAD																																																
Sl. No	Item of Work	Unit	Unit Cost (Rs.) for 2017-18	2018 - 19			2019 - 20			2020 - 21			2021 - 22			2022 - 23			2023 - 24			2024 - 25			2025 - 26			2026 - 27			2027 - 28			2028 - 29			2029 - 30			2030 - 31			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	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	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45				
1	Tending operations in 75 ha																																												0.30250			
1	Singling, Copiecing, Bush cleaning	Ha	5500				5	6050	0.303	0	6655	0.000																																	0.30250			
	TendingTotal					0.000			0.303			0.000			0.000			0		0			0			0.000		0.000			0.000					0			0			0						
1	Forest Protection																																												17	1.360		
1	Construction of boundary pillars	No's	8000	0	8000	0.000	17	8000	1.360	0	8000	0.000																																		110	0.880	
2	Construction of boundary pillars - Intermediate	No's	800	0	800	0.000	110	800	0.880	0	800	0.000																																			1	1.000
3	Construction of Gates	No's	100000	0	100000	0.000	1	100000	1.000	0	100000	0.000																																			1.3	18.750
4	Fencing - km	km	1500000	0	1500000	0.000	1.25	1500000	18.750	0	1500000	0.000																																				21.990
	Protection Total					0.000			21.990			0.000			0		0		0		0			0			0		0		0					0			0			0						
3	SMC Works																																															0.000
	SMCTotal					0			0			0			0		0		0		0			0			0		0			0					0			0			0					0.03025
4	Administrative cost 10% over Core activities					0			0.030			0.000			0.000			0		0			0			0		0			0						0			0			0					22.32275
	Total year wise outlay of the project					0.000			22.3228			0.0000			0.0000			0		0			0			0		0			0						0			0			0					

Chief Conservator of Forests
Conservator of Forests
KOTHAGUDEM CIRCLE

DISTRICT FOREST OFFICER
Chodradri Kothagudem Dist
Kothagudem.
22.12.2017

Forest Divisional Officer
Paloncha

Year-wise detailed Abstract of CA Scheme for 27.50 Ha in Degraded Forest Land for of Paloncha Division

Sl. No	Item of Work	Phy	Unit Cost 2017-18 (Rs.)	2018 - 19			2019 - 20			2020 - 21			2021 - 22			2022 - 23			2023 - 24			2024 - 25		
				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)
				9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
1	2			9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
I	Raising of Plants in Nurseries & their Maintenance, Procurement of Plants																							
1	Raising of Primary beds - Unit cost for 100000 plants	Plant	0.2491	49000	0.27403	0.13427	0	0.30143	0															
2	Raising of Bag Plants of 5"x9" - Unit Cost 100000 plants	Plant	4.7932	49000	5.27253	2.58354	0	5.79978	0															
3	Maintenance of Bag Plants of 5"x9" - Unit Cost for 100000 plants	Plant	1.6559				49000	2.00364	0.98178	0	2.20400	0	0	2.4244	0									
4	Conversion of bag plants from 5"x9" to 8"x12" - Unit Cost 100000 plants	Plant	13.9689				49000	16.90239	8.28217	0	18.59263	0	0	20.45190	0									
5	Maintenance of Bag Plants of 8"x12" - Unit Cost for 100000 plants	Plant	3.0232							49000	4.02383	1.97167	0	4.42621	0	0	4.86883	0						
						2.718			9.264			1.972			0.000			0.000			0.000			0.000
II	Planting activities (SMM)																							
6	Advance Operations	Ha	39865				27.50	48237	13.26508	0.00	53060	0.00000												
7	Raising of Plantation	Ha	177211							27.50	235867	64.86347	0.00	259454	0.00000									
8	1st Year Maintenance	Ha	45647										27.50	66832	18.37876	0.00	73515.03	0.00000						
9	2nd Year Maintenance	Ha	23187													27.50	37342.90	10.26930	0.00	41077.18	0.00000			
10	3rd Year Maintenance	Ha	16265															27.50	28814.19	7.92390	0.00	31695.61	0.00000	
11	4th Year Maintenance	Ha	16265																		27.50	31695.61	8.71629	
12	5th Year Maintenance	Ha	2385																					
13	6th Year Maintenance	Ha	1903																					
14	7th Year Maintenance	Ha	2385																					
15	8th Year Maintenance	Ha	1903																					
16	9th Year Maintenance	Ha	2385																					
17	10th Year Maintenance	Ha	1903																					
Sub Total:						0.00000			13.26508			64.86347			18.37876			10.26930			7.92390			8.71629

Sl. No	Item of Work	Phy	Unit Cost 2017-18 (Rs.)	2018 - 19		2019 - 20			2020 - 21			2021 - 22			2022 - 23			2023 - 24			2024 - 25		
				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.)
III	SMC Works																						
18	Digging of CPT in km	km	140000		154000.00		2.5	169400	4.2350	0	186340.00	0.000											
19	Bund plantation in km	km	25000		27500.00		0	30250	0	2.5	33275.00	0.832											
20	Construction of Percolation Tanks	No	350000		385000.00		0	423500	0	0	465850.00	0											
21	Construction of Mini Percolation Tanks	No	100000		110000.00		0	121000	0	0	133100.00	0											
22	Checkdams	No	750000		825000.00		0	907500	0	0	998250.00	0	0	1098075	0								
23	Desilting of old percolatin tanks	No	300000		330000.00		0	363000	0	0	399300.00	0	0	439230	0								
24	Staggered trenches(0.45*0.45*1500 RMT/Ha	Cmt			200.00		0	220	0	0	242.00	0	0										
25	Digging of borewell with solar panels	No	700000		770000.00		0	847000	0	0	931700.00	0	0	1024870	0								
	Sub Total				0.00000			4.2350			0.832			0.00000			0.00000			0.00000			0.00000
							0.2718		2.6764		6.7667			1.8379			1.0269			0.7924			0.8716
IV	Administrative Cost - 10%																						
	Total year wise outlay of the project				2.9896			29.4404			74.4337			20.2166			11.2962			8.7163			9.5879

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Sl. No	Item of Work	Phy	Unit Cost 2017-18 (Rs.)	2025 - 26			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	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Fin (Rs.in Lakhs)
1	2			30	31	32	33	34	35	36	37	38	39	40	41	39	40	41	39	40	41	39	40	41	51	52
I	Raising of Plants in Nurseries & their Ma																								49000	0.1343
1	Raising of Primary beds - Unit cost for 100000 plants	Plant	0.2491																						49000	2.5835
2	Raising of Bag Plants of 5"x9" - Unit Cost 100000 plants	Plant	4.7932																						49000	0.9818
3	Maintenance of Bag Plants of 5"x9" - Unit Cost for 100000 plants	Plant	1.6559																						49000	8.2822
4	Conversion of bag plants from 5"x9" to 8"x12" - Unit Cost 100000 plants	Plant	13.9689																						49000	1.9717
5	Maintenance of Bag Plants of 8"x12" - Unit Cost for 100000 plants	Plant	3.0232																							13.95344
II	Planting activities (SMM)					0.000			0.000			0.000			0.000			0.000			0.000			0.000		
6	Advance Operations	Ha	39865																						28	13.2651
7	Raising of Plantation	Ha	177211																						28	64.8635
8	1st Year Maintenance	Ha	45647																						28	18.3788
9	2nd Year Maintenance	Ha	23187																						28	10.2693
10	3rd Year Maintenance	Ha	16265																						28	7.9239
11	4th Year Maintenance	Ha	16265																						28	8.7163
12	5th Year Maintenance	Ha	16265	0.00	34865.17	0.00000																			28	1.4058
13	6th Year Maintenance	Ha	2385	27.50	5112.16	1.40584	0.00	5623.38	0.00000																28	1.2339
14	7th Year Maintenance	Ha	1903				27.50	4486.85	1.23388	0.00	4935.53	0.00000													28	1.7011
15	8th Year Maintenance	Ha	2385																						28	1.4930
16	9th Year Maintenance	Ha	1903																						28	2.0583
17	10th Year Maintenance	Ha	2385																						28	1.8065
17	10th Year Maintenance	Ha	1903																						28	1.8065
Sub Total:		Ha	1903			1.40584			1.23388			1.70107			1.49300			2.05830			1.80653			0.00000		133.11542

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Sl. No	Item of Work	Phy	Unit Cost 2017-18 (Rs.)	2025 - 26			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	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Fin (Rs.in Lakhs)
III	SMC Works																								3	4.2350
18	Digging of CPT in km	km	140000																						3	0.8319
19	Bund plantation in km	km	25000																						0	0
20	Construction of Percolation Tanks	No	350000																						0	0
21	Construction of Mini Percolation Tanks	No	100000																						0	0
22	Checkdams	No	750000																						0	0
23	Desilting of old percolatin tanks	No	300000																						0	0
24	Staggered trenches(0.45*0.45*1500 RMT/Ha	Cmt																							0	0
25	Digging of borewell with solar panels	No	700000																						0	0
	Sub Total					0.00000			0.00000			0.00000			0.00000			0.00000			0.00000			0.00000		5.06688
						0.1406			0.1234			0.1701			0.1493			0.2058			0.1807			0.0000		15.21357
IV	Administrative Cost - 10%																								0.0000	167.34931
	Total year wise outlay of the project					1.5464			1.3573			1.8712			1.6423			2.2641			1.9872			0.0000		

Chief Conservator of Forests /
Conservator of Forests
KOTHAGUDEM CIRCLE

DISTRICT FOREST OFFICER
Ghadradri Kothagudem Dist
Kothagudem.

22.12.2017

Forest Divisional Officer,
Paloncha

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