Compensatory Afforestation Scheme in Degraded forest land 200Ha in Ramavaram Range of Kothagudem Division in lieu of diversion of 409.530Ha of Forest land for Construction 10 TMC Reservoir at Keshavapur in Medchal-Malkajgiri In favour of HMWS & SB in Medchal-Malkajgiri.

I. Introduction:

The District Forest Officer, Bhadradri Kothagudem vide reference No.443/2020/D1, Dt:22.06.2020 has issued instructions to identify the degraded forest land to an extant of 200 Ha for preparation of Compensatory Afforestation scheme in lieu of diversion of 409.530 Ha of Forest land for Construction of 10 TMC reservoir at Keshavapuram in Medchal-Malkajgiri in favour of HMWS&SB in Medchal-Malkajgiri.

II. <u>Identification of degraded area:</u>

The Forest Range Officer, Ramavaram, to whom the matter was referred for identification of degraded forest area in lieu of diversion of forest land of 409.53 Ha for the above mentioned projects, has identified degraded forest land of 200.00 Ha are shown below. The surveyed sketch of the degraded forest area and location on Toposheet 1:50000 are enclosed to the scheme proposals. The area details are shown below.

						Total::	200.00
5 I	Kothagudem	Ramavaram	Penagadapa	Musalivarre (E)	9	Ramavara m	100.00
4	Kothagudem	Ramavaram	Penagadapa	Tippanapalli	13	Ramavara m	20.00
3	Kothagudem	Ramavaram	Penagadapa	Tippanapalli	13	Ramavara m	40.00
2	Kothagudem	Ramavaram	Penagadapa	Penagadapa	29 & 30	Penagadap a	20.00
1	Kothagudem	Ramavaram	Penagadapa	Penagadapa	30	Penagadap a	20.00
SI.No	Division	Range	Section	Beat	Compt. No.	RF	Area in Ha

III. Planting Techniques

It is proposed to raise Miscellaneous Plantation by adopting artificial regeneration under Semi-Mechanical Method in the said degraded forest areas. The said areas with red loam soil and sandy 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.

IV. <u>Activities proposed in Artificial Regeneration under Semi-Mechanical Method in Degraded forest of 200.00 Ha</u>

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 2023-24.

2. Taking up advance operations:

The advance works under Semi-Mechanical Method in Ramavaram Range includes clearance of misc. growth, uprootal of stumps, tilling and heaping and burning.

3. Raising of plantations:

The esplacement proposed is 3 M x 3 M - 1111 plants/ Ha. The activities including ploughing, alignment, Scoping and Planting in 45 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

Maintenance of plantations was taken up to 10 years as per calendar operations.

5. Planting targets proposed.

2021-22 - Raising of 4x7 Bag Nurseries and Conversion

2022-23 - Advance Operations & Maintenance of Nurseries

2023-24 - Raising of Plantation

2024-25 to 2034-35 - Maintenance of Plantation

V. Project period

It is proposed to implement the scheme from 2020-21 to 2034-35 for a period of (12) years.

VI. Project Implementation Agency

The Forest Divisional Officer, Kothagudem will be the Project Implementation Agency and work will be taken through the Forest Range Officer, Ramavaram in Penagadapa, Tippnapally and Musalivarre(E) Beats. The raising of Compensatory Afforestation Plantation requires additional manpower and mobility. Hence, it is proposed to hire services of one forester in Ramavaram Range, one Data Entry Operator for initial (3) years in Division office, accordingly, necessary provisions are made in the Scheme proposals under Administrative Cost - 10% of the Scheme Value.

VII. Cost structure

Basic rates proposed as per FSR 2020-21 and 10% price escalation is proposed every year on the basic rate of FSR 2020-21. 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 separate sheets and are enclosed.

VIII. Cost of the (Scheme) Project

Total cost of the project is Rs. **1283.136** lakhs. The details are shown in Annexure 1.

S. No	Scheme Proposals	Cost in Lakhs
1	Raising of Nurseries	83.101
2	Advance operations	119.013
3	Raising of plantations	230.589
4	1 st year maintenance of Plantations	91.214
5	2 nd year maintenance of Plantations	81.342
6	3 rd year maintenance of Plantations	52.286
7	4 th year maintenance of Plantations	46.227
8	5 th year maintenance of Plantations	43.081
9	6 th year maintenance of Plantations	10.805
10	7 th year maintenance of Plantations	52.126
11	8 th year maintenance of Plantations	13.074
12	9 th year maintenance of Plantations	63.073
13	10 th year maintenance of Plantations	15.819
14	SMC Works	257.189
15	Habitat Improvement works	7.549
16	Administrative Cost	116.649
	Total Cost of the Project:	1283.136

IX. Employment Generation

The degraded forest land proposed for Compensatory 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 117181 man days during the project period from 2020-21 to 2034-35 (60% manual component wage rate during 2019-20 on Rs. 657/- per day.

X. <u>Annexures:</u>

Annexure I	Year wise Estimated cost Compensatory Afforestation	
Annexure II	Unit cost Data sheets	

Further, it is mentioned that in case the selected locations and the areas 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.

District Forest Officer Bhadradri Kothagudem District Site Inspection Report of 200.00 Ha of degraded forest areas identified for Compensatory Afforestation Scheme in Penagadapa, Tippanapally and Musalivarre(E) Beats of Ramavaram Range for diversion of 409.530 Ha of Forest land for Construction of 10 TMC reservoir at Keshavapuram in Medchal-Malkajgiri in favour of HMWS&SB in Medchal-Malkajgiri.

I have inspected the degraded forest areas of 200.00 ha in Compt. No.13 of Tippanapally Beat, Compt No.29 and 30 in Penagadapa Beat, Compt. No. 13 in Tippanapally Beat and Compt. No. 9 in Musalivarre (E) Beat along with Forest Range Officer, Ramavaram and concerned filed staff on 26.06.2020. The degraded area is identified for raising Compensatory Afforestation plantation under Semi Mechanical Method. The Compensatory Afforestation area identified is degraded forests (200.00 Ha) against the proposed diversion of 409.530 ha of forest land for Construction of 10 TMC reservoir at Keshavapuram in Medchal-Malkajgiri in favour of HMWS&SB in The forest type in previous years is Southern Tropical dry Medchal. deciduous forest and at present the area is totally degraded due to encroachments. The soils are Red soil and sandy soil. This area is suitable for raising Compensatory Afforestation plantations. It is also proposed to take up plantation with Misc. species as per the Prl. Chief Conservator of Forests, Hyderabad instructions issued in Ref.No.43246/2012/CAMPA dt.29.11.2012. The detailed scheme proposals are enclosed.

> District Forest Officer Bhadradri Kothagudem District

CERTIFICATE

This is to certify that the 200.00 Ha of degraded forest area identified in Compt. No.13 of Tippanapally Beat, Compt No.29 and 30 in Penagadapa Beat, Compt. No. 13 in Tippanapally Beat and Compt. No. 9 in Musalivarre (E) Beat of Ramavaram Range of Kothagudem Division is suitable for raising Misc. Plantations. These areas are not allotted to any V.S.S. of Ramavaram Range. Preference is to be given to raise plantations with local species at the choice of the local villagers but at the technical guidance of the forest staff to avoid encroachment on the said proposed areas once prone for encroachment.

District Förest Officer Bhadradri Kothagudem District

Compensatory afforestation scheme for 200 ha over Degraded Forest Land in Kothagudem Division in lieu of diversion of 409.53 ha under F©Act, 1980 for construction of 10 TMC reservoir at Keshavapuram in favour of HMWS&SB in Medchal-

19	18	=		17	16	12	14	13	12	11	10	9	Ç0	7	on on	=		US.	4	w	2	Т ,	T -		<u>.</u>	No.
Bund plantation in km	Digging of CPT in km	SMC Works	Sub Total:	10th Year Maintenance	9th Year Maintenance	8th Year Maintenance	7th Year Maintenance	6th Year Maintenance	5th Year Maintenance	4th Year Maintenance	3rd Year Maintenance	2nd Year Maintenance	1st Year Maintenance	Raising of Plantation	Advance Operations	Planting activities (SMM) in DFL	Sub-Total:	Maintenance of Bag Plants of 6"x12"	Conversion of bag plants from 4"x7" to 6"x12"		Raising of Bag Plants of 4"x7"	Raising of Primary beds	Raising of Plants in Nurseries & their Maintanance, Procurement of Plants		2	I. Item of Work
Ä	Ŕ'n		#	표	퓹	I a	표	표	H _a	H	Ha	H	표	표	五			Plant	Plant	Plant	Plant	Plant	r Maintana		.	Phy
33000	154000			2182	9570	2182	9570	2182	9570	11296	14054	24051	29667	82498	46837			4.4269	7.6812	1.1150	4.5339	0.4116	nce, Procurer			Unit Cost 20- 21 (Rs.)
																					250000	250000	nent of Plan	,	Phy	
36300	169400																				4.98725	0.45273	Š	۰	(Rs.)	Unit Cost
			0.00000														13.59994				12.46811	1.13183		1	Lakhs)	
	20														100.00				250000	250000	100000	100000		o	Phy	
39930	186340														56673				9.29426	1.34920	5.48597	0.49800		u	Unit Cost (R	20.27.02
	37.2680		56.67277												56.67277		32.59267		6 23.23565					10	Unit Cost (Rs.) Fin (Rs.in Lakhs)	
20	30 20		7											100.00	277 100.00		262	250000	3565 100000	3.37300 100000	5.48597 15000	0.49800 15000		#		+
43923	204974													109804	62340		1	5.89218	10.22369	00 1.48412	6.03457	0.54780		12	(Rs.)	2023 - 24
8.7846	40.9948		172:14446											109.80442	62.34005		27.42561	18 14.73045	69 10.22369	1.48412	0.90518			13	c 3	4
50	Ç0		o l										100.00	100.00	705		161	045 100000	369 15000	412 15000	518	0.08217		14	Phy	
48315													43435	0 120785				6.48140	11.24605	1.63253				15	Unit Cost (Rs.)	2024 - 25
			164:22018										5 43.43532	5 120.78486			8.41318	6.48140	05 1.68691	53 0.24488				16	t Fin (Rs.in Lakhs)	+ "
			00									100.00	32 100.00	88			20	15000	591	488				17	Phy	
												38734	47779					0 7.12954						18	Unit Cost (Rs.)	2025 - 26
			86.51309									38.73423	47.77886				1.06943	1.06943						19	Fin (Rs.in Lakhs)	⊣ რ
-											200	100.00	Ģ.					ù						20	Phy	
48315									1	24898	42608												21	Unit Cost (Rs.)	2026 - 27	
			67.50598							100	24.89832	42.60765					0.00000							22	Fin (Rs.in Lakhs)	
				5 2				1		100.00	100 001													23	Phy	
-				-	1				64031	22013	77399													24	Unit Cost (Rs.)	2027 - 28
			49.40087						1210:22	27,01077	77 2001						0.00000							25	Fin (Rs.in Lakhs)	-

	19 Bund p	18 Diggin	III SMC Works		17 10th Y		- 1								10 00	10 0	10 0	10 0 0	9 8 1 9 5	9 6 1 6 7	0 0 0 0 0 0 0 0 0 0	4 0 7 0 7 0 7 0 9 0	ω 4 0	9 8 7 6 5 4 3 2	9 9 7 9 15 4 11 11	95 88 75 68 53 2 2 1 8	95 85 75 65 53 43 3 2 1 1	99 88 72 61 55 43 2 1 1 7 1
	Bund plantation in km	Digging of CPT in km	Vorks	Sub Total:	10th Year Maintenance	on too Mailtenaire	ar Maintenanno	8th Year Maintenance	7th Year Maintenance	6th Year Maintenance	5th Year Maintenance	4th Year Maintenance	3rd Year Maintenance	2nd Year Maintenance	1st Year Maintenance	Raising of Plantation	Advance Operations	Planting activities (SMM) in DFL	Sub Total:	Maintenance of Bag Plants of 6"x12"	Conversion of bag plants from 4"x7" to 6"x12"	Maintenance of Bag Plants of 4"x7"	Raising of Bag Plants of 4"x7"	Raising of Primary beds	Raising of Plants in Nurserles & their Maintanance, Procurer		•	SECTION OF SECTION
	Î	km		77	Ha	3		5	I	Ha	ᇎ	표	Ŧ	На	Ha	ı,	뀲		朝	Plant	Plant	Plant	Plant	Plant	ir Maintana		w	YIIY
2500	33000	154000			2182	9570	7817) i	9570	2182	9570	11296	14054	24051	29667	82498	46837			4.4269	7.6812	1.1150	4.5339	0.4116	nce, Procure		4	21 (Rs.)
-		-									100,00	100.00								9	N	0	99	_6	THE STATE OF THE S		Phy 26	
				W 15							20515	24214														5	(Rs.)	Unit Cost
				44.72856							20.51458	24.21398							0.00000							8	_ :	
	Ţ			6						Billion	00 00 88	98							000							0	-	
										5145	22566								100							50	(Rs.)	Unit Cost
				27.71108					0.14004		22.56604								0.00000							22	e 3	-
								100.00		10000	4								98							32		_
								24822	2000	n n n																33	(Rs.)	I I'mit Cost
				30.48166				24.82212	3,63955										0.00000							34	_ =	-
							190.00	100.00											ŏ			+	+	+		35		_
							6226	27304																		36	Unit Cost (Rs.)	1 11111
				33.529R3			6.22550	27.30433											0.00000							37	E Fin (Rs.in Lakhs)	
						100.00	100.00				Ī								8					1		38	n Phy	
				US I		30035	6848																			39	Unit Cost (Rs.)	-
			20000	36 00701		30.03476	6.84805												0.00							40	t Fin (Rs.in Lakhs)	
				1	100.00	76 100.00)G				+			+	+		+		0.00000				+			41	in Phy	
					7533	33038																				42	Unit Cost (Rs.)	1
			6012/C'0th		7.53286	33.03824													0.00000				+	+		43	t Fin (Rs.in Lakhs)	7
					6 100.00	24											1		8				+	-		4	in Phy	1
					8285													7								&	Unit Cost (Rs.)	1
			8.28614	0.5003.0	8 28614														0.00000							46	st Fin (Rs.in Lakhs)	
40.00	40.00			, , , , , , , , , ,		200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200,00				365000	365000	365000	355000			47	in Phy	-
			818,649									52.286			230			07.40		2 8		18.859				48	Fin (Rs.in Lakhs)	

7 27 Removal of obnoxious weed within vicinity ha < 24 23 21 20 No. Construction of Mini PTs in DFL CA within vicinity of DFL CA
Staggered trenches in DFL CA within vicinity of DFL CA Administrative Cost - 10% Development of grass plots within vicinity of DFL CA No's Digging of borewell with solar panels 2

Construction of Percolation Tanks in DFL CA and within vicinity of DFL CA Total year wise outlay of the project Item of Work Sub Total Sub Total No's No's No's Phγ Unit Cost 20-21 (Rs.) 440000 770000 220000 82500 8756 231 s Phy Unit Cost (Rs.) 2021 - 22 847000 242000 90750 254 14,95993 Fin (Rs.in Lakhs) 1.35999 0.00000 0.00000 0.0000 0.0000 РҺγ 10 Unit Cost (Rs.) Fin (Rs.In Lakhs) 2022 - 23 532400 931700 99825 266200 10595 280 163.77776 14.88889 6.38348 10 5.3240 1.0595 9.3170 0.0000 3.9930 2.6620 11 Phy 20000 10 Unit Cost [Rs.] 1024870 12 2023 - 24 292820 109808 11654 307 351,26035 31.93276 Fin (Rs.in Lakhs) 118.59210 1.16542 Ħ 61.4922 0.0000 4.3923 2.9282 1.165 14 Phγ 20000 Unit Cost (Rs.) 2024 - 25 322102 120788 338 283.78943 25.79904 Fin (Rs.in Lakhs) 0,00000 85.35703 67.6414 16 4.8315 3.2210 17 Phγ Unit Cost (Rs.) 2025 - 26 96.34077 Fin (Rs.in Lakhs) 0.00000 8.75825 0.00000 19 20 Phγ Unit Cost (Rs.) 21 2026 - 27 Fin (Rs.in Lakhs) 22 6.75060 0.00000 0.00000 23 Phγ Unit Cost (Rs.) 24 2027 - 28 Fin (Rs.in Lakhs) 25 54:34095 4.94009 0.00000 0.00000

₹ 27 Development of grass plots within vicinity No's of DFL CA Removal of obnoxious weed within vicinity ha IV Habitat Improvement works 24 Digging of borewell with solar panels 21 23 20 S S Administrative Cost - 10% Staggered trenches in DFL CA within vicinity of DFL CA Construction of Percolation Tanks in DFL CA and within vicinity of DFL CA Construction of Mini PTs in DFL CA within vicinity of DFL CA Total year wise outlay of the project Item of Work Sub Total Sub Total No's No's Phy Unit Cost 20-21 (Rs.) 440000 770000 220000 8756 82500 231 26 Phy Unit Cost (Rs.) 2028 - 29 27 Fin (Rs.in Lakhs) 4.47286 0.00000 0.00000 28 29 Phy Unit Cost (Rs.) 2029 - 30 Fin (Rs.in Lakhs) 30.48219 2,77111 0.00000 31 Phy 32 Unit Cost (Rs.) 33 2030 - 31 33,52983 Fin (Rs.in Lakhs) 3.04817 0.00000 0.00000 34 Phy 35 Unit Cost (Rs.) 36 Fin (Rs.in Lakhs) 36.88281 3.35298 0.00000 0:00000 37 Phy Unit Cost (Rs.) 39 2032- 33 Fin (Rs.in Lakhs) 40.57109 3.68828 0.00000 0.00000 4 Рħγ Unit Cost Fin (Rs.in (Rs.) Lakhs) 2033- 34 44.62820 4.05711 0.00000 0.00000 Phy Unit Cost (Rs.) 2034-35 Fin (Rs.In Lakhs) 9.11476 0.82861 0.00000 0.00000 6 40000.00 47 Phγ 20.00 1.00 **Grand Total** Fin (Rs.in Lakhs) 1283,136 116.649 257.189 48 129.134 13.217 7.549 2.225 5.324 9.317 8.811

District Forest Officer Bhadradri Kothagudem District