

COMPENSATORY AFFORESTATION SCHEME PROPOSALS FOR RAISING OF 24.00 Ha. CA PLANTATION IN GANGARAM RANGE IN LIEU OF DIVERSION OF 124.00 Ha. FOREST LAND GK OC PROJECT PHASE-II AT KOTHAGUDEM DIVISION IN BHADRADRI KOTHAGUDEM DISTRICT IN FAVOUR OF M/s. SINGARENI COLLIERIES COMPANY LIMITED IN GUDURU (W.L.M.) DIVISION.

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I. INTRODUCTION:

The Principal Chief Conservator of Forests (HoFF), Telangana State, Hyderabad has forwarded the proposals for submission of Compensatory Afforestation Scheme in lieu of diversion of 124.00 Ha. Forest land GK OC Project Phase-II at Kothagudem Division in Bhadradri Kothagudem District in favour of M/s. Singareni Collieries Company Limited, General Manager, Kothagudem Area, Bhadradri Kothagudem District in Guduru (WLM) Division and the following degraded forest areas and certified the suitability. The details are as follows.

Sl. No.	Range	Bit No.	Beat	Section	Block	Compt. No.	Net area available
1	Gangaram	1	Jangalapally (N) & Jangalapally (E)	Komatlaguda	Chinthaguda	895 & 913	30.60
						Total :	30.60

In lieu of diversion of Forest land over an extent 124.00 Ha. Forest land GK OC Project Phase-II at Kothagudem Division in Bhadradri Kothagudem District, an extent of 24.00 Ha. is proposed for treatment and improvement in Gangaram Range of Guduru (W.L.M.) Division.

The degraded forest area where the growth is less than 0.4 density is proposed for treatment under Afforestation Scheme including Raising of plantations, Soil and Moisture Conservation works and Reserve Forest Boundary Demarcation.

Certain degraded areas, comprise of Barren Hillocks are proposed for Raising of Barren Hill Afforestation plantations. Digging of Continuous Peripheral Trench all along the boundary of the degraded forest block area and other protective operations are proposed to be taken up with a twin objective of moisture conservation, improvement of existing growth and boundary demarcation. Scheme is prepared with an outlay of **Rs.324.778 Lakhs** for development of Degraded Forest area.

Accordingly, an Action Plan for raising of Compensatory Afforestation plantations in degraded forest areas of Compartment Nos.895 & 913 of Chintaguda Reserve Forest, Gangaram Range of Guduru (W.L.M.) Division is Prepared with an outlay of **Rs. 324.778 Lakhs** for raising miscellaneous Plantations and related activities.

PROJECT COST :

The total financial out lay of the project is as follows:

S.No	Scheme Proposals	Cost in Lakhs
1	Afforestation Works	126.208
2	Soil and Moisture Conservation Plan	35.580
3	Protection Measures	64.683
4	Publicity and Awareness	44.972
5	Nursery Infrastructure	20.000
6	Out Sourcing of Technical Expert / Computer Operator	24.300
7	Administrative Cost @ 5%	9.035
Total:		324.778

LOCATION OF THE AREA PROPOSED FOR COMPENSATORY AFFORESTATION IN DEGRADED FOREST AREA:

A: The Compensatory Afforestation Scheme is aimed at improvement of the density and ultimately quality of Forests. With this in mind, degraded Forest area of Compartment Nos. 895 & 913 of Chintaguda Reserve Forest, Gangaram Range of Guduru (W.L.M.) Division is proposed for treatment. In general the above Compartment is having good degraded and coppice natural growth of Billudu, Nalla Maddi, Vepa, Tuniki, Chennangi, Kodisa, Tirumanu, etc., Natural regeneration is taking place but due to continuous biotic pressure on the land and fire it is not getting established.

It is proposed to stabilize such growth. Suitable areas were identified for treatment with appropriate interventions as the area has become degraded due to excessive biotic interference. The excess biotic interference has disturbed the ecological cycle as all the Bio-diversity including fauna and flora have been damaged to a great extent. There is every need to rehabilitate and protect the environment for the sake of Bio-diversity. Number of cattle enters into the Forests from nearby villages for grazing and uncontrolled removal of fuel wood and poles for household purposes.

LEGAL STATUS OF THE PROPOSED CA AREA:

The proposed CA areas in Compartment Nos. 895 & 913 of Chintaguda Reserve Forest, Gangaram Range of Guduru (W.L.M.) Division is notified Under Section 15 of Andhra Pradesh Forest Act, 1967 vide G.O.Ms. No.668, dt:08.07.1355F of Chintaguda Reserve Forest, Under Section 15 of Andhra Pradesh Forest Act, 1967 vide G.O.Ms.No.1711, dt:18.09.1969 and Under Section 4 of Andhra Pradesh Forest Act, 1967 vide G.O.Ms.No.84, dt:08.09.1354F respectively.

The compartment wise areas are as follows:

Sl. No.	Bit No.	Compt. No.	Reserved Forest Block	Total Area of the Block (In Ha.)	Net area proposed for treatment available (In Ha.)	Species in the area
1	1	895 & 913	Chintaguda Reserve Forest	18363.12	30.60	The area is covered with degraded coppice growth of misc. species like Billudu, Nalla Maddi, Vepa, Tuniki, Chennangi, Kodisa
				G-Total:	30.60	

Further, it is submitted that, the net area proposed for treatment is 30.60 Ha., out of that only 24.00 Ha., is feasible for planting, accordingly LIM Planting is proposed in the above areas.

The selected areas consists of gentle slopes, some are degraded plain areas with accessibility to roads and are degraded mainly due to biotic interference and are found suitable for Compensatory Afforestation. Most of these areas were retrieved from illegal

encroachers and if not immediately brought under afforestation, there is possibility of encroachment.

SOIL DESCRIPTION AND TERRAIN:

In the proposed area, the soils are eroded and are ranging from Black Soil, Sandy loam with some hillocks here and there. There are several streams and streamlets running downwards from the hillocks causing soil erosion.

FLORA AND FAUNA:

In the proposed degraded Forest area the species available are mainly degraded coppice growth of Billudu, Nalla Maddi, Vepa, Tuniki, Chennangi, Kodisa, Tirumanu, etc., The Wild animals found in the selected area (Bison), Spotted Deer, Chousingha etc.,. Thus steps such as restoration of the vegetation, provision of sufficient water sources to the wild animals, provision of fodder and legume and overall protection is proposed..

TREATMENT MODELS:

It is proposed to treat the Degraded Forest areas under the following Treatment models. It is proposed to treat the Degraded Forest areas under the following Treatment models.

- a) Model-I : Protection of Reserve Forests by Protection from Fire.
- b) Model-II: Artificial Regeneration

(i) Raising of plantations in degraded forest areas

175.00 Ha of degraded area identified in Kothaguda Gangaram Ranges of Guduru (W.L.M.) Division was proposed for taking up afforestation works.

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

I. Model I: Demarcation of Permanent Forest Boundaries in the form of Cattle Proof Trench (CPT) and Improvement of Soil Moisture by way of SMC works:

- a) Most of these areas identified for Compensatory Afforestation area are having good viable root stock. Offering absolute protection to these degraded areas from biotic pressure is the best course of action for developing the area into productive forests. Continuous peripheral Trench all along the boundary of the Compensatory Afforestation area is proposed to be taken up with a twin objective of moisture conservation and boundary demarcation. Wherever it is not possible to dig a trench due to striking of hard stratum of rock, it is proposed to take up stone wall with rubble masonry or Erection of chain link fence as per filed conditions and local availability of materials.
- b) Fire management will also form an important part of the forest management and stand improvement strategy. Protection of these areas from fire, grazing and illicit felling is absolutely essential to improve the stand and it is proposed to be ensured either through Vana Samrakshana Samithies (VSS) or Departmental execution. Therefore, 5mtr wide fire lines are proposed in the above identified area.
- c) Digging of Percolation Tanks wherever required in the identified degraded forest area where the existing 2nd order nallahs are there.

RAISING OF PLANTATIONS – PLANTING ON PLAINS/DEGRADED FOREST AREAS

To compensate the loss of Valuable forest growth in the Diverted Reserved forest areas, it is proposed to raise certain plantations in the degraded forest areas.

a. NON TEAK SECONDARY HARDWOOD SPECIES (NTSH) PLANTATIONS:

It is proposed to raise the above model of plantation under **Labour Intensive Method (LIM)** through intensive site preparation practices. The operations to be carried out are Survey and demarcation, clearing the miscellaneous jungle growth, Digging of Staggered contour Trenches and planting at 3 X 3 m espacement in 45 centimeter cube pits. All other cultural operations like Weeding's, Soil workings, manuring etc., will be provided for Seven years excluding raising year duly following the PCCF instructions.

II. Soil and Moisture Conservation Plan:

- (i) Construction of percolation tanks depending upon the terrain
- (ii) Provision for solar bore wells with pump facility and over head tank for providing water to the wild animals.
- (iii) Construction of Check Dams
- (iv) Construction of Rock Fill Dams
- (v) Erection of Solar Bore Well with construction of Percolation Tank

III. Protection Measures:

- (i) Purchase of Vehicles and maintenance of vehicles for patrolling in Reserve Forest areas
- (ii) Establishment of Base Camps for monitoring the DFL areas.

IV. Publicity and Awareness

- (i) Conducting of Pre-fire season workshops and awareness meetings.
- (ii) Construction of Watch Towers and Supervisory Huts
- (iii) Erection of Hoardings for awareness to public on wildlife habitats.

Administrative Costs (Over Heads)

As the work involved is a massive one and involves lot of record maintenance, book keeping and intensive mobility of the field officers, it is required to provide 10% of treatment cost towards over heads.

PROJECT COST:

The total financial out lay of the project is **Rs. 324.778 Lakhs**

The annual requirement of funds have been worked out on the base cost of 2022-23 FSR with 10% annual escalation for the remaining project period up to 2032-33.

The component wise details in brief are as follows.

S.No	Scheme Proposals	Cost in Lakhs
1	Afforestation Works	126.208
2	Soil and Moisture Conservation Plan	35.580
3	Protection Measures	64.683
4	Publicity and Awareness	44.972
5	Nursery Infrastructure	20.000
6	Out Sourcing of Technical Expert / Computer Operator	24.300
7	Administrative Cost @ 5%	9.035
	Total:	324.778


MODE OF EXECUTION:

It is proposed to implement the above proposals through VSS on Joint Forest Management concept or by Departmental execution method wherever possible. 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.

Digging of Peripheral trench work, SMC works and other Afforestation works are being carried out in the above said proposed degraded forest area through ongoing Schemes. Hence, left over works if any as per this scheme will be carried out in the adjoining Forest Blocks of Gangaram and Kothaguda Ranges.

Annexure:

Annexure	I	Abstract of Compensatory Afforestation Scheme in Degraded Forest Area.
Annexure	II	Year wise Estimated cost Compensatory Afforestation in Degraded Forest Area.
Annexure	III	Unit cost Data sheets


(FAC) District Forest Officer,
Mahabubabad.

Abstract of CA Scheme to restock and rejuvenate the 24.00 ha of degraded open forest land in lieu of diversion of 124.00 of forest land for diversion of GK OC Ph-II in Kothagudem Division Bhadradi Kothagudem District in favour of M/s. Singareni Collieries Company Limited

Sl. No	Scheme Proposals	Cost in Lakhs	
		Phy	Fin (Rs.in Lakhs)
1	2	51	52
I	I.Afforestation Works		
1	Rasing of nursery works	39990	25.353
2	Raising of Plantations under LIM	200	100.855
			126.207
II	II.Soil & Moisture Conservation Works		
1	Construction of Percolation Tanks	1	5.500
2	Construction of Check Dams	1	10.500
3	Construction of RFDs	10	1.100
4	Digging of borewell with solar panels	2	18.480
			35.580
III	III. Protection Measures		
1	Purchase of petrolling Vehicle for monitoring around the plantation areas along with maintenance of vehicle and wages for drivers	1	32.000
2	Establishment of two base camps to monitor the DFL area and adjoining RF areas to curb the encrochments and smugglings of forest produces etc.	1	32.683
	Sub Total:		64.683
IV	IV.Publicity And Awareness		
1	Pre-Fire Season Workshops and awareness meetings	2	0.486
2	Publicity and awarness on forest and wild life	2	0.486
3	Erection of hoardings	1	5.500
3	Construction of Watch Towers	1	22.000
4	Construction of Supervisory Huts	1	16.500
			44.972
V	V.Nursery Infrastructure		
1	Establishment of two Cetral Nursery at Kothaguda and Gangaram ranges including construction of seed stores and nursery infrastructure	1	10.000
2	Erection of solar power system at nursery site	1	10.000
			20.000
VI	VI.Out sourcing of Technical Expert / Computer Operator		
1	Engaging computer operators Division / Range Level for online programming of Project	1	24.300
		1	24.300
VII	Administrative Cost - 5%		9.035
			9.035
	Total year wise outlay of the project		324.778

(FAC) District Forest Officer
Mahabubabad

Abstract of CA Scheme to restock and rejuvenate the 24.00 ha of degraded open forest land in lieu of diversion of 124.00 of forest land for diversion of GK OC Ph-II in Kothagudem Division Bhadradi Kothagudem District in favour of M/s. Singareni Collieries Company Limited

Abstract of CA Scheme to restock and rejuvenate the 24.00 ha degraded open forest lands under the 2009-10 budget																											
Collieries Company Limited																											
Sl. No	Item of Work	Unit	Unit Cost 2022-23 (Rs.)	2022-23			2023-24			2024-25			2025-26			2026-27			2027-28			2028-29			2029-30		
				Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost	Fin (Rs.in Lakhs)	Phy	Unit Cost	Fin (Rs.in Lakhs)	Phy	Unit Cost	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	30	31	32
1	2																										
I	I.Afforestation Works																										
1	Rasing of nursery works																										
a	Purchase of 6X8 seedlings minimum 30 cm height seedlings	Plant	10.000	31992	11.000	3.519	7998	12.100	0.968																		
c	Conversion of bag plants from 6"x8" to 9"x11"	Plant	26.852	31992	29.538	9.450	7998	32.491	2.599																		
d	Maintenance of Bag Plants of 9"x11"	Plant	12.07				31992	14.609	4.674	7998	16.070	1.28526															
						12.969			8.240			4.144			0.000			0.000			0.000			0.000			
2	Raising of Plantations under LIM																										
a	Advance Operations	Ha	78923	24.00	79002	18.9604	0.00	86902																			
b	Raising of Plantation	Ha	73569		73643		24.00	81007	19.4417																		
c	1st Year Maintenance	Ha	39387		39426			43369		24.00	47706	11.4494															
d	2nd Year Maintenance	Ha	25101		25126			27638			30402		24.00	33442	8.0261												
e	3rd Year Maintenance	Ha	25101		25126			27638			30402			33442		24.00	36786	8.8288									
f	4th Year Maintenance	Ha	21083		21104			23215			25536			28090			30899		24.00	33989	8.1573	0.00	37388				
g	5th Year Maintenance	Ha	7915		7923			8715			9587			10545			11600			12760		24.00	14036	3.3686			
h	6th Year Maintenance	Ha	7915		7923			8715			9587			10545			11600			12760			14036			15440	
i	7th Year Maintenance	Ha	7915		7923			8715			9587			10545			11600			12760			14036			15440	
j	8th Year Maintenance	Ha	7915		7923			8715			9587			10545			11600			12760			14036			15440	
k	9th Year Maintenance	Ha	7915		7923			8715			9587			10545			11600			12760			14036			15440	
l	10th Year Maintenance	Ha	7915		7923			8715			9587			10545			11600			12760			14036			15440	
Sub Total:						18.960			19.442			11.449			8.026			8.829			8.157			3.369		3.705	
						31.929			27.682			15.593			8.026			8.829			8.157			3.369		3.705	
II	II.Soil & Moisture Conservation Works																										
1	Construction of Percolation Tanks	No	5.000	1	5.500	5.500	0	6.050	0.000	0	6.655	0.00000															
2	Construction of Check Dams	No	10.000	1	10.500	10.500	0	10.500	0.000		11.550	0.00000		12.705	0.000												
3	Construction of RFDs	Nos	0.100	10	0.110	1.100		0.121	0.000		0.133	0.00000															
4	Digging of borewell with solar panels	No	8.000	1	8.800	8.800	1	9.680	9.680		10.648	0.00000															
Sub Total						25.900			9.680			0.000			0.000			0.000			0.000			0.000		0.000	
III	III. Protection Measures																										
1	Purchase of petrolling Vehicle for monitoring around the plantation areas along with maintenance of vehicle and wages for drivers	Nos	A/a	Ls	A/a	15.000	Ls	A/a	4.000	Ls	A/a	4.000	Ls	A/a	4.500	Ls	A/a	4.500									
2	Establishment of one base camps to monitor the DFL area and adjoining RF areas to curb the encrochments and smugglings of forest produces	Nos	9.874	1	9.874	9.874	1	10.861	10.861	1	11.948	11.948															

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1587847/2022/O/o PRINCIPAL CHIEF CONSERVATOR OF FORESTS TELANGANA

Sl. No	Item of Work	Unit	Unit Cost 2022-23 (Rs.)	2022-23			2023-24			2024-25			2025-26			2026-27			2027-28			2028-29			2029-30		
				Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost	Fin (Rs.in Lakhs)	Phy	Unit Cost	Fin (Rs.in Lakhs)	Phy	Unit Cost	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)
	Sub Total					24.874			14.861			15.948			4.500			4.500			0.000			0.000			0.000
IV	IV.Publicity And Awareness																										
1	Pre-Fire Season Workshops and awareness meetings	LS	0.20	1	0.220	0.220				1	0.266	0.266															
2	Publicity and awarness on forest and wild life	LS	0.20	1	0.220	0.220				1	0.266	0.266															
3	Erection of hoardings	LS	3.00	1	5.500	5.500		6.050	0.000		6.655	0.000		7.321	0.000												
4	Construction of Watch Towers	LS	15.00	1	22.000	22.000		24.200	0.000		26.620	0.000															
5	Construction of Supervisory Huts	LS	10.00	1	16.500	16.500		18.150	0.000																		
						44.440			0.000			0.532			0.000			0.000			0.000			0.000			0.000
V	V.Nursery Infrastructure																										
1	Establishment of one Cetral Nursery at Kothaguda/ Gangaram ranges including construction of seed stores and nursery infrastructure	LS	10	1	10.000	10.000																					
2	Erection of solar power system at nursery site	LS	10	1	10.000	10.000																					
						20.000			0.000			0.000			0.000			0.000			0.000			0.000			0.000
VI	VI.Out sourcing of Technical Expert / Computer Operator																										
1	Engaging computer operators Division / Range Level for online programming of Project	Nos	2.7	1	3.000	3.000	1	3.000	3.000	1	3.000	3.000	1	3.300	3.300	1	4.000	4.000	1	4.000	4.000	1	4.000	4.000		4.400	0.000
						3.000			3.000			3.000			3.300			4.000			4.000			4.000			0.000
VII	VIII.Administrative Cost - 5%					3.8915			1.8681			0.7797			0.4013			0.4414			0.4079			0.1684			0.1853
	Total year wise outlay of the project					154.035			57.091			35.853			16.227			17.770			12.565			7.537			3.891

1587847/2022/O/o PRINCIPAL CHIEF CONSERVATOR OF FORESTS TELANGANA

Item of Work	2030-31			2031-32			2032-33			2033-34			2034-35			2035-36			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)
Sub Total			0.000			0.000			0.000											64.683
IV.Publicity And Awareness																				
Pre-Fire Season Workshops and awareness meetings																			2	0.486
Publicity and awarness on forest and wild life																			2	0.486
Erection of hoardings																			1	5.500
Construction of Watch Towers																			1	22.000
Construction of Supervisory Huts																			1	16.500
			0.000			0.000			0.000											44.972
V.Nursery Infrastructure																				
Establishment of one Cetral Nursery at Kothaguda/ Gangaram ranges including construction of seed stores and nursery infrastructure																			1	10.000
Erection of solar power system at nursery site																			1	10.000
			0.000			0.000			0.000											20.000
VI.Out sourcing of Technical Expert / Computer Operator																				
Engaging computer operators Division / Range Level for online programming of Project		4.840	0.000		5.324	0.000		5.802	0.000										1	24.300
			0.000			0.000			0.000											24.300
VIII.Administrative Cost - 5%			0.2038			0.2242			0.2466			0.2168			0.0000			0.0000		9.035
Total year wise outlay of the project			4.280			4.708			5.179			5.642			0.000			0.000		324.778

(FAC) District Forest Officer
Mahabubabad

Chief Conservator of Forests
Conservator of Forests
KOTHAGUDEM CIRCLE