

**CA SCHEME IN LIEU OF DIVERSION OF FOREST LAND TO AN  
EXTENT OF 18.083 HA. IN BELLAMPALLY FOREST DIVISION FOR  
EXCAVATION OF LEFT FLANK MAIN CANAL AND 8-R DISTRIBUTORY  
FOR NEELWAI MEDIUM IRRIGATION PROJECT IN MANCHERIAL  
DISTRICT (PACKAGE NO. 12) IN FAVOUR OF EXECUTIVE ENGINEER,  
IRRIGATION DEPT. MIP DIVISION, MANCHERIAL**

**1.0 INTRODUCTION:**

The User Agency Executive Engineer, Irrigation Dept. MIP Division, Mancherial has submitted the proposals for diversion of **18.083 Ha.** of Forest Land for non-forestry purpose i.e., excavation of Left Flank main canal and 8-R Distributory for Neelwai Medium Irrigation Project in Mancherial District (Package No. 12) in Bellampally Forest Division.

Accordingly the User Agency has identified the non forest land of **23.2816 Ha** in Sy. No. 57 of Kammargaon village of Penchikalpet Mandal for the purpose of CA. The area proposed for CA has been inspected in the field and found that;

The Non Forest land identified in Sy. No. 57 is adjacent to the already identified 60.1099 Ha. Non-Forest land for Pranahitha Project adjacent to Bejjur R.F. The land is free from encroachments. It is classified as Non-Forest in village records. The land is in a compact block and in close proximity of Reserve Forest area of Bejjur. The land now proposed has not been proposed or recommended to any other assignment or alternate land for any other project of any department. Copies of Pahanies and Sethwar certified by the Tahsildar, Penchikalpet have been obtained. The area is having 0.5 to 0.6 density with good vegetation and is a hillock with rocky terrain, hence not found suitable for raising of CA Plantations in such land.

In view of the guidelines issued by the Govt. of India vide GOI, MoEF New Delhi F.No.11-423/2011-FC, Dt 08.11.2017, since the identified non-forest land is having good vegetation and is a hillock with rocky terrain, could not be taken up for planting activity and hence it is proposed to raise the CA Plantation in the Degraded Forest Land in Compt. No. 153 of Beat Kondapally South, Section Loadpally of Penchikalpet Range falling in Kadamba R.F. However the identified non-forest land to an extent of 23.2816 Ha. is proposed to be protected by erecting boundary pillars, Chain link Fence, Fire Watch Tower and SMC works i.e., Check Dams, Percolation Tanks, SCTs etc., and by taking up cultural operations and fire management works.

1) **Compensatory Afforestation:** It is proposed to raise CA in the Non-Forest area to be taken over **23.2816 Ha.** and Degraded Forest Land over **13.00 Ha.** The details of Compensatory Afforestation scheme proposals are as follows.

**Non-Forest Area:**

SL No	Sy. No	Village	Mandal	Total Area Ha.	Name of the adjacent RF	Distance from RF to land
1	57	Kammargaon	Penchikalpet	23.2816	Bejjur	Adjoining
			<b>Total</b>	<b>23.2816</b>		

**Degraded Forest Area:**

SL No	Compt. No	Beat	Section	Range	Total Area Ha.	Name of the RF
1	153	Kondapally South	Loadpally	Penchikalpet	13.00	Bejjur
				<b>Total</b>	<b>13.00</b>	

The proposals have been prepared with a cost of Rs 2,55,82,400/- (Rupees Two Crores Fifty Five Lakhs Eighty Two Thousands Four Hundred only). The year wise scheme proposals are annexed as (Appendix).

This scheme will be monitored through the machinery of Forest Department at various levels.

The Compensatory Afforestation scheme is prepared over an area of **23.2816 Ha** Non-Forest Land and **13.00 Ha.** of Degraded Forest Land basing on the Forest Schedule of Rates for the year 2017-18 of Zone-II with an escalation of 10% for 2018-19 and with an annual escalation of 10% for the subsequent years, provided the funds are to be deposited and released during the year 2018-19.

Sl No	Year	Forestry Works
1	2018-19	112.203
2	2019-20	47.778
3	2020-21	43.204
4	2021-22	14.485
5	2022-23	6.374
6	2023-24	7.309
7	2024-25	5.986
8	2025-26	5.116
9	2026-27	2.947
10	2027-28	3.812
11	2028-29	0.950
12	2029-30	4.612
13	2030-31	1.048
	<b>Total</b>	<b>255.824</b>

**2.0 AIMS AND OBJECTIVES:**

The objectives of the scheme are as follows.

- 2.1 To create small timber and fuel wood resources to meet the needs of the local public.
- 2.2 To reduce pressure on the already depleted resource requirements of small timber, fuel and fodder of local tribal people.
- 2.3 To fulfill broader objective of sustainable environmental conservation for the general good of the people.

To fulfill the above objectives, it is proposed to take-up the Afforestation over an area which is equivalent to the area proposed for diversion for non-forestry purpose. As against the Forest area to be diverted for 18.083 Ha, non-forest area of 23.2816 Ha and Degraded Forest area of 13.00 Ha. is identified for CA. The plantations in 13.00 DFL will be taken-up with the species like Teak, Gummadi Teak, Nalla Maddi, Somi, Narepa, Rose Wood etc., and with fuel wood, fodder and locally suitable NTFP species.

### **3.0 ELEMENTS OF THE PROJECT**

3.1. Details of the lands identified for raising compensatory afforestation are as follows.

#### **Non-Forest Area:**

Sl. No.	Division	Range	Mandal	Near RF	Nearest Compt No.	Area proposed in Ha.
1	Kaghaznagar	Penchikalpet	Penchikalpet	Bejjur	267	23.2816
			<b>Total</b>			<b>23.2816</b>

#### **Degraded Forest Area:**

SL No	Compt. No	Beat	Section	Range	Total Area Ha.	Name of the RF
1	153	Kondapally South	Loadpally	Penchikalpet	13.00	Bejjur
				<b>Total</b>	<b>13.00</b>	

### **3.2 NAME OF THE SCHEME**

Compensatory Afforestation for "Excavation of Left Flank main canal and 8-R Distributory for Neelwai Medium Irrigation Project in Mancherial District (Package No. 12) in favour of Executive Engineer, Irrigation Dept. MIP Division, Mancherial".

### **3.3 SITUATION**

The proposed Compensatory Afforestation area is situated adjacent to the RF Block Bejjur (Kaghaznagar Division) near Compt. No. 267 of Kammargaon Beat of Penchikalpet Range, Penchikalpet Mandal and not fit for raising of CA Plantations, hence a degraded forest land to an extent of 13.00 Ha. is identified for takingup plantation with 3x2m espacement in Compt. No. 153 of Kondapally South Beat of Penchikalpet Range.

### **3.4 GEOLOGY**

The area predominantly carries black cotton and Red loam soils derived from Deccan trap supporting teak and Archaean granite – gneiss complex giving reddish gravelly loam supporting good teak forests and also the Gondwana soils supporting mixed teak forests being more sandy. Humus is practically absent.

### **3.5 SOIL**

The soils of area proposed for Compensatory Afforestation area is partially Red loam and Black Cotton soils.

### **General distribution of soils in the Division**

1. Black cotton soils: 50 % found mostly in Bejjur, Penchikalpet & Karjelly Ranges.
2. Chalka and Red loams Soils: 27% Found mostly in Bejjur, Penchikalpet, Karjelly, Sirpur and Kaghaznagar Ranges.
3. Sandy loams and other: 8% Mostly in Kaghaznagar and Sirpur Ranges.
4. Saline & Alkaline soils: 2% Scattered and found in small patches in the Division.

### **3.6 CLIMATE :**

The climate is fairly dry with very hot summer and cool winters. During summer, the temperature raises upto 47 degree 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 RAINFALL :**

Rainfall is mostly from the Southwest monsoon, cyclonic rains during October – December are quite common. The normal rainfall in a year ranges from 1000 mm to 1100 mm. The average rainfall for the past (12) years is 1051 mm.

### **3.8 EXISTING VEGETATION:**

The NFL area is having good vegetation of Non-Teak i.e., Nalla Maddi, Thirman, Bojja, Nalla Kodisha, Chennangi etc.,

### **3.9 AGENCY RESPONSIBLE FOR AFFORESTATION:**

The afforestation programme will be implemented by the Telangana Forest Department through the Forest Divisional Officer, Kaghaznagar.

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

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

Year	Proposed works
2018-19	1) Raising of Primary Beds Nursery 2) Nursery infrastructure. 3) Digging of CPT in DFL. 4) Protection works of NFL 5) SMC Works.
2019-20	1) Raising of Primary Beds Nursery 2) Raising and Conversion of Nursery 3) Maintenance of Nursery 4) Advance Operations for Plantation. 5) SMC works. 6) Construction of boundary pillars 7) Cultural Operations.
2020-21	1) Raising of Plantations 2) Maintenance of Nursery 3) Cultural Operations. 4) SMC works.

2021-22	1) Maintenance of Nursery 2) 1st Year maintenance of plantation 3) Cultural Operations.
2022-23	2nd Year maintenance of plantation
2023-24	1) 3rd Year maintenance of plantation 2) Cultural Operations.
2024-25	4th Year maintenance of plantation
2025-26	1) 5th Year maintenance of plantation 2) Cultural Operations.
2026-27	6th Year maintenance of plantation
2027-28	1) 7th Year maintenance of plantation 2) Cultural Operations.
2028-29	8th Year maintenance of plantation
2029-30	1) 9th Year maintenance of plantation 2) Cultural Operations.
2030-31	10th Year maintenance of plantation

### **3.11 COST STRUCTURE:**

A compensatory afforestation scheme for Rs. 2,55,82,400/- is prepared (Appendix). The year wise expenditure will be as hereunder.

Sl No	Year	Forestry Works
1	2018-19	112.203
2	2019-20	47.778
3	2020-21	43.204
4	2021-22	14.485
5	2022-23	6.374
6	2023-24	7.309
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10	2027-28	3.812
11	2028-29	0.950
12	2029-30	4.612
13	2030-31	1.048
	<b>Total</b>	<b>255.824</b>

This scheme will be monitored through the machinery of Forest Department at various levels.

### **4.0 SCHEME COMPONENT:**

The area identified for Compensatory Afforestation is a hillock with rocky terrain having good vegetation. It is proposed to protect the area by erecting boundary pillars, Chainlink Fence, Fire Watch Tower and SMC works i.e., Check Dams, Percolation Tanks, SCTs etc., and by taking up cultural operations and fire management works. It is also proposed to take up afforestation planting over an area of 13.00 Ha. in DFL under Semi Mechanical Method in 3x2m espacement with NTSHW species and with fuel wood, fodder and locally suitable NTFP species. The plantation would be maintained for (10) years after planting.

#### **4.1 COST STRUCTURE OF PLANTATIONS :**

The cost structure of Compensatory Afforestation including the cost structure for various components of raising and maintenance of planting stock and the plantation is appended (Appendix).

#### **4.2 PROVISION OF FUNDS :**

The funds for the Compensatory Afforestation have to be deposited by the user agency i.e., Executive Engineer, Irrigation Dept. MIP Division, Mancheril in favour of Telangana Forest Department by following due procedure through e-payment method by generating the Challan from the Ministry's web portal ([www.forestsclearance.nic.in](http://www.forestsclearance.nic.in)). These funds will be utilized by the Forest Divisional Officer, Kaghaznagar for raising nurseries, plantations and their maintenance as per the detailed annual plan after obtaining the approval and funds from the competent authority.

#### **5.0 PLANTING TARGETS AND STAFF REQUIREMENT :**

The DFL area identified for the Compensatory Afforestation to an extent of 13.00 Ha of Kaghaznagar Division, the details as follows.

Sl. No.	Division	Range	Mandal	RF	Compt. No.	Area proposed in Ha.
1	Kaghaznagar	Penchikalpet	Penchikalpet	Bejjur	153	13.00
			<b>Total</b>			<b>13.00</b>

The above DFL area is proposed to be raised under SMM as per site condition. The details are as follows.

Sl. No.	Range	Beat	Area proposed in Ha.	Seedlings required 3x2m
1	Penchikalpet	Kondapally South,	13.00	
	<b>Requirement of seedlings</b>			
		Raising	13.00	30,000
		Replacements for 1 <sup>st</sup> year	13.00	6,000
			<b>13.00</b>	<b>36,000</b>

Hence it is proposed to raise the following seedlings for raising and for replacement of casualties in maintenance of plantation.

1) For Raising of plantations	13.00 Ha.	30000 Seedlings.
2) For casualties in maintenance	1300 Ha.	6000 Seedlings
		<b>Total 36,000 Seedlings</b>

#### **5.1 OFFICE EXPENSES AND CONTINGENCIES RECURRING:**

The amount proposed towards office expenses, contingent expenses are appended (Appendix).

#### **5.2 CAPITAL EXPENDITURE NON - RECURRING**


No amount is proposed towards non-recurring expenditure.


### **5.3 SCHEME PERIOD :**

This scheme will be implemented over a period of (13) years commencing from 2018-19. The details of cash flow required for the entire project period for recurring and non recurring expenditure is furnished in Appendix.

### **5.4 DETAILS OF PROPOSED MONITORING MECHANISM:**

The Conservator of Forests, Adilabad Circle, Adilabad shall monitor the implementation of the conditions of Compensatory Afforestation and the survival of the plants planted.

  
District Forest Officer  
Komeram Bheem  
(Adilabad)

  
Forest Divisional Officer,  
Kaghaznagar

Year-wise detailed Abstract of CA Scheme

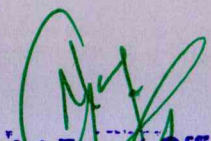
Sl. No	Item of Work	Phy	Unit Cost 2017-18 (Rs.)	2018 - 19			2019 - 20			2020 - 21			2021 - 22			2022 - 23			2023 - 24			2024 - 25		
				Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)
1	2			9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
I	<b>Raising of Plants in Nurseries &amp; their Maintenance</b>																							
1	Raising of Primary beds - cost for 100000 plants	Plant	0.2329	30000	0.25624	0.07687	6000	0.28187	0.01691															
2	Raising of Bag Plants of 5"x9" - Cost 100000 plants	Plant	4.7864	30000	5.26503	1.57951	6000	5.79154	0.34749															
3	Maintenance of Bag Plants of 5"x9" - Cost for 100000 plants	Plant	1.3954				30000	1.68844	0.50653	6000	1.85729	0.11144												
4	Conversion of bag plants from 5"x9" to 8"x12" - Cost 100000 plants	Plant	12.8412				30000	15.53781	4.66134	6000	17.09159	1.02550												
5	Maintenance of Bag Plants of 8"x12" - Cost for 100000 plants	Plant	2.8745							30000	3.82602	1.14781	6000	4.20862	0.25252									
	<b>Sub Total:</b>					1.654			6.532			2.285			0.253			0.000			0.000			0.000
II	<b>Nursery and other Infrastructure</b>																							
6	Borewells	No	250000	1	250000	2.5000																		
7	Construction of sumps	No	250000				1	250000	2.5000															
8	Pumphouse cum shed	No	500000	1	500000	5.0000																		
9	Permanent primary beds (10MX1M)	No	10000	100	10000	10.0000																		
10	Electricity facility (3Phase)	No	300000	1	300000	3.0000																		
11	Construction of Compound wall	No	1000000	1	1000000	10.0000																		
12	Running charges & Electricity charges for nurseries		100000			1.000			1.000			1.000			1.000									
	<b>Nursery and other Infrastructure Total:</b>					31.500			3.500			1.000			1.000			0.000			0.000			0.000
III	<b>Planting activities in DFL (SMM) - 13.00 ha</b>																							
13	Advance Operations	Ha	32214				13.00	38978.94	5.06726															
14	Raising of Plantation	Ha	200959							13.00	267476.62	34.77196												
15	1st Year Maintenance	Ha	55507										13.00	81267.56	10.56478									
16	2nd Year Maintenance	Ha	27473													13.00	44245.54	5.75192						
17	3rd Year Maintenance	Ha	21278																13.00	37695.79	4.90045			
18	4th Year Maintenance	Ha	21278																			13.00	41465.36	5.39050
19	5th Year Maintenance	Ha	9116																					
20	6th Year Maintenance	Ha	8537																					
21	7th Year Maintenance	Ha	2702																					
22	8th Year Maintenance	Ha	2123																					
23	9th Year Maintenance	Ha	2702																					
24	10th Year Maintenance	Ha	2123																					
25	Digging of CPT in km	km	167500	2	184250.00	3.68500																		
26	Bund plantation in km	km	16000				2	19360	0.38720															
	<b>Sub Total:</b>					3.685			5.454			34.772			10.565			5.752			4.900			6.390
IV	<b>Cultural Operations in Non-Forest CA land 23.2816 Ha.</b>																							
27	Singling and Coppicing to existing growth (FSR Code 03.02.04)	Ha.	4115.25				23.28	4979.45	1.15930	23.28	5477.40	1.27523	23.28	6025.14	1.40275		6627.65	0.00000	23.28	7290.42	1.69733		8019.46	0.00000
28	Formation of new firelines of 5.00 m width and cleaning including burning (FSR Code 03.01.04)	Ha	717.140				5.00	867.74	0.04339															
29	Maintenance of fire lines (5.00 mtrs width) including cutting back of rank growth and burning (FSR Code 03.03.07)	Ha	530.481							5.00	706.07	0.03530	5.00	776.68	0.03883	5.00	854.34	0.04272	5.00	939.78	0.04699	5.00	1033.76	0.05169
	<b>Sub Total:</b>					0.00000			1.20269			1.31053			1.44158			0.04272			1.74431			0.05169

wise detailed Abstract of CA Scheme

S.No	Item of Work	2025 - 26			2026 - 27			2027 - 28			2028 - 29			2029 - 30			2030 - 31			2031- 32			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	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy		Fin
2		30	31	32	33	34	35	36	37	38	39	40	41	39	40	41	39	40	41	39	40	41	39	40	41	51		52
Raising of Plants in Nurseries & their Maintenance																												
1	Raising of Primary beds - cost for 100000 plants																									36000		0.094
2	Raising of Bag Plants of 5"x9" - Cost 100000 plants																									36000		1.927
3	Maintenance of Bag Plants of 5"x9" - Cost for 100000 plants																									36000		0.618
4	Conversion of bag plants from 5"x9" to 8"x12" - Cost 100000 plants																									36000		5.687
5	Maintenance of Bag Plants of 8"x12" - Cost for 100000 plants																									36000		1.400
Sub Total:				0.000			0.000			0.000			0.000			0.000			0.000			0.000			0.000			9.726
Nursery and other Insfrastrucure																												
6	Borewells																									1		2.500
7	Construction of sumps																									1		2.500
8	Pumphouse cum shed																									1		5.000
9	Permanent primary beds (10MX1M)																									100		10.000
10	Electricity facility (3Phase)																									1		3.000
11	Contruction of Compound wall																									1		10.000
12	Running charges & Electricity charges for nurseries																									0		4.000
Nursery and other Infrastructure Total:				0.000			0.000			0.000			0.000			0.000			0.000			0.000			0.000			37.000
Planting activities in DFL (SMM) - 13.00 ha																												
Advance Operations																										13		5.067
Raising of Plantation																										13		34.772
1st Year Maintenance																										13		10.565
2nd Year Maintenance																										13		5.752
3rd Year Maintenance																										13		4.900
4th Year Maintenance																										13		5.390
5th Year Maintenance		13.00	19541.57	2.54040																						13		2.540
6th Year Maintenance					13.00	20130.48	2.61696																			13		2.617
7th Year Maintenance								13.00	7009.04	0.91118																13		0.911
8th Year Maintenance											13.00	6057.99	0.78754													13		0.788
9th Year Maintenance														13.00	8480.94	1.10252										13		1.103
10th Year Maintenance																	13.00	7330.17	0.95292							13		0.953
Digging of CPT in km																										2		3.68500
Bund plantation in km																										2		0.38720
Sub Total:				2.540			2.617			0.911			0.788			1.103			0.953			0.000			0.000			79.431
Cultural Operations in Non-Forest CA land 23.2816 Ha.																												
Singling and Coppicing to existing growth (FSR Code 03.02.04)		23.28	8821.40	2.05376		9703.54	0.00000	23.28	10673.90	2.48505		11741.29	0.00000	23.28	12915.42	3.00692										23.282		13.08033
Formation of new firelines of 5.00 m width and cleaning including burning (FSR Code 03.01.04)																										5.000		0.043
Maintenance of fire lines (5.00 mtrs width) including cutting back of rank growth and burning (FSR Code 03.03.07)		5.00	1137.13	0.05688	5.00	1250.85	0.06254	5.00	1375.93	0.06880	5.00	1513.52	0.07568	5.00	1664.88	0.08324										50.000		0.563
Sub Total:				2.11062			0.06254			2.55385			0.07568			3.09016			0.00000			0.00000			0.00000			13.686

[illegible]

No	Item of Work	2025 - 26			2026 - 27			2027 - 28			2028 - 29			2029 - 30			2030 - 31			2031- 32			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	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Fin
	Forest Protection (Non-Forest CA Land) 23.2816 Ha.																										
30	Construction of boundary pillars to CA land @ 20m interval																									135	13.500
31	Construction of Gates																									2	2.310
32	Chainlink Fencing to CA lands - km																									3	51.128
	Protection Total			0.000			0.000			0.000			0.000			0.000			0.000			0.00000			0.00000		66.938
	SMC Works (Non-Forest CA Land) 23.2816 Ha.																										
33	Construction of Percolation Tanks																									1	4.400
34	Construction of Mini Percolation Tanks																									4	3.465
35	Staggered trenches - 3mx0.4mx0.3m																									700	2.035
36	Checkdams																									1	8.250
37	Construction of Fire Watch Tower																										11.000
	Sub Total			0.00000			0.00000			0.00000			0.00000			0.00000			0.00000			0.00000			0.00000		29.150
	Administrative Cost - 10% over core activities			0.4651			0.2680			0.3465			0.0863			0.4193			0.0953			0.0000			0.0000		19.893
	Total year wise outlay of the project			5.116			2.947			3.812			0.950			4.812			1.048			0.000			0.000		255.824

  
**District Forest Officer**  
**Komaram Bheem**  
**(Asifabad)**

  
 Forest Divisional Officer,  
 Kaghaznagar