

**COMPREHENSIVE SCHEME FOR COMPENSATORY AFFORESTATION SCHEME
INYADADRI-BHUVANAGIRI: DIVERSION OF 409.53ha OF FOREST LAND IN MEDCHAL
DIVISION FOR CONSTRUCTION OF 10 TMC RESERVOIR AT KHE SAVAPURAM WITH
ASSOCIATED COMPONENTS UNDER GODAVARI RIVER SOURCE FOR DRINKING
WATER REQUIREMENTS TO THE HYDERABAD CITY OF TELANGANA STATE**

1) INTRODUCTION OF THE SCHEME:-

The General Manager (Engg) Project Division HMWS&SB Hyderabad has submitted the proposals for diversion of 409.53ha forest land in Medchal-Malkajgiri Division for construction of 10TMC Reservoir at Keshvapuram with associated components under Godavari river source for drinking water requirements to the Hyderabad Metropolitan Area. Accordingly, the following Non-forest lands identified for compensatory in YADADRI-BHUVANAGIRI District:

Name of the District	Name of the Mandal	Name of the Village	Survey No	Area in ha (as per DGPS survey)
Yadadri Bhuvanagiri	Narayanpur	Mahammadabad	266	12.8919

2). SUITABILITY OF THE AREA:

Inspected the above identified for raising of compensatory afforestation on 09.06.2020 along with field staff. During the inspection, it is noticed that most of the area is covered with hard soils and boulders with little gaps here and there. The terrain is undulated and looks like small type of hillock. The soils are red in nature. The existing vegetation is dominated by Albizia amara (Narlinga), Acacia chundra (Sanda), Chloroxylon swietenia (Billudu), (Jaana), (Neelamarri). On an average, there is a scope to plant 200 plants per hectares in gaps wherever soil depth is noticed for taking up planting. The area is demarcated on the ground. SMC works like Staggered Control Trenches, Rock fill dams, Mini percolation tanks are proposed, besides boundary protection structure with chainlink mesh also can be taken up.

3). SCHEME IMPLEMENTATION AGENCY:

The District Forest Officer, Yadadri-Bhuvanagiri will be the project implementation and Monitoring agency and works will be taken up through concerned Forest Range Officers. For the successful execution of the above mentioned works it requires frequent inspections and close monitoring by the Forest Range Officers and District Forest Officer.

4). **MONITORING MECHANISM:**The District Forest Officer, Yadadri-Bhuvanagiri and Addl.Principal Chief Conservator of Forests, Hyderabad Circle, Hyderabad will be closely monitoring the implementation of CA scheme by regular inspection for ensuring proper execution of the work and maintenance of connected records like Plantation and Nursery journals, plantation journal, cash books, Work register, measurement Books, Monthly progress of planting and maintenance, etc., and also submitting the regular work monitoring reports to the Principal Chief Conservator of Forests, TS, Hyderabad and other concerned Senior officers in the Forest Department in Telangana.

5). **PERIOD OF THE SCHEME:**Period of the scheme is for (12 years) which includes advance works and raising of plantations and 10 years maintenance commencing from 2022-23 to 2032-33 and nursery raising during 2021-22.

6) **Financial Outlay:**The cost of the scheme is worked out adopting present FSR of 2019-20, with 10% escalation every year. The unit costs and total year wise cost structure of the project is shown in Annexures. **The following is the financial outlay:**

Sl. No.	Item of works	Total outlay	
		Phy.	Fin. In lakhs
I	RAISING OF PLANTATION - NFL		
1	Raising and maintenance of Nurseries	5000 Nos	0.89300
2	Advance Operations	12.8919 ha	2.76200
3	Raising of Plantation	12.8919 ha	3.59300
4	1 st year Maintenance of Plantation	12.8919 ha	4.40900
5	2 nd year Maintenance of Plantation	12.8919 ha	2.41500
6	3 rd year Maintenance of Plantation	12.8919 ha	1.39300
7	4 th year Maintenance of Plantation	12.8919 ha	1.22400
8	5 th year Maintenance of Plantation	12.8919 ha	0.60000
9	6th year Maintenance of Plantation	12.8919 ha	0.26100
10	7th year Maintenance of Plantation	12.8919 ha	0.64200
11	8th year Maintenance of Plantation	12.8919 ha	0.31500
12	9 th year maintenance of plantation	12.8919 ha	0.77700
13	10 th year maintenance of plantation	12.8919 ha	0.38200
II	SMC WORKS		11.55100
III	Chainlink fencing	2 Km	42.90000
IV	Construction of boundary pillars	390 Nos	4.29000
V	Administrative Cost (10%)	Ls	7.84070
	GRAND TOTAL		86.24770

District Forest Officer,
Yadadri-Bhuvanagiri

Compensatory afforestation scheme for 12.8919 ha of non-forest CA in Yadadri-Bhuvanagiri in lieu of diversion of 409.53 ha under F©Act,1980 for construction of 10 TMC in Medchal-Malkajgiri

Sl. No	Item of Work	Phy	2020-21(Rs.)			2021-22			2022-23			2023 - 24			2024 - 25		
			Unit Cost	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.)
1	2			12	13	14	15	16	17	18	19	20	21	22	23		
I	Nursery activities (LIM)																
1	Raising of Primary beds	Plant	0.3400	4000	0.37	0.01500	1000	0.41	0.00400								
2	Raising of Bag Plants of 4"x7"	Plant	2.5200	4000	2.77	0.11100	1000	3.05	0.03100								
3	Maintenance of Bag Plants of 4"x7"	Plant	0.9400		1.03	0.00000	4000	1.13	0.04500	1000	1.24	0.01200					
4	Conversion of bag plants from 4"x7" to 6"x12"	Plant	6.7600		7.44	0.00000	4000	8.18	0.32700	1000	9	0.09000					
5	Maintenance of Bag Plants of 6"x12"	Plant	3.8000		4.18	0.00000		4.6	0.00000	4000	5.06	0.20200	1000	5.57	0.05600		
	Sub Total:					0.126			0.407			0.304					
II	Planting activities (LIM)																
6	Advance Operations	Ha	17705		19476			21424	2.762								
7	Raising of Plantation	Ha	20940	0.00		0	12.89										
8	1st Year Maintenance	Ha	23359				0.00		0	12.89	27871	3.593					
9	2nd Year Maintenance	Ha	11631							0.00			0	12.89	34201	4.409	
10	3rd Year Maintenance	Ha	6098											0.00	17028	0	
11	4th Year Maintenance	Ha	4872														
12	5th Year Maintenance	Ha	2170														
13	6th Year Maintenance	Ha	857														
14	7th Year Maintenance	Ha	1921														
15	8th Year Maintenance	Ha	857														
16	9th Year Maintenance	Ha	1921														
17	10th Year Maintenance	Ha	857														
	Sub Total:					0.00000			2.76200			3.59300					4.40900
III	SMC Works																
18	Digging of CPT in km	km	140000	1.80	169400	3.049											
19	Bund plantation in km	km	30000		36300		1.80	39930	0.719								
20	Construction of Percolation Tanks	No	200000		242000		1	266200	2.662								
21	Construction of Mini Percolation Tanks	No	50000		60500		2	66550	1.331								
22	Staggered trenches	cum	328.34	500	361	1.805	500	397	1.985								
	Sub Total:					4.85400			6.69700			0.00000					0.00000
IV	Protection																
23	Construction of boundary pillars @20 m interval	No's	10000	39	11000	4.29000											
24	Erection of Chain Link Fencing	km	2000000	1.95	2200000	42.90000											
	Sub Total:					47.19000			0.00000			0.00000					0.00000
	Total:					52.17000			9.86600			3.89700					4.46500
III	Administrative cost 10%					5.21700			0.98660			0.38970					0.44650
	Total					57.38700			10.85260			4.28670					4.91150

Compensatory afforestation scheme for 12.8919: reservoir at Keshavapuram in favour of HMWS&SB

Sl. No	Item of Work	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 (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)
1	2	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
I	Nursery activities (LIM)															
1	Raising of Primary beds															
2	Raising of Bag Plants of 4"x7"															
3	Maintenance of Bag Plants of 4"x7"															
4	Conversion of bag plants from 4"x7" to 6"x12"															
5	Maintenance of Bag Plants of 6"x12"															
	Sub Total:			0.000			0.000			0.000			0.000			0.000
II	Planting activities (LIM)															
6	Advance Operations															
7	Raising of Plantation															
8	1st Year Maintenance															
9	2nd Year Maintenance	12.89	18731	2.415												
10	3rd Year Maintenance	0.00	9822	0	12.89	10804	1.393									
11	4th Year Maintenance				0.00	8632	0	12.89	9495	1.224						
12	5th Year Maintenance							0.00	4231	0	12.89	4654	0.6			
13	6th Year Maintenance										0.00	1838	0	12.89	2022	0.261
14	7th Year Maintenance													0.00	4528	0
15	8th Year Maintenance															
16	9th Year Maintenance															
17	10th Year Maintenance															
	Sub Total:			2.41500			1.39300			1.22400			0.60000			0.26100
III	SMC Works															
18	Digging of CPT in km															
19	Bund plantation in km															
20	Construction of Percolation Tanks															
21	Construction of Mini Percolation Tanks															
22	Staggered trenches															
	Sub Total:			0.00000			0.00000			0.00000			0.00000			0.00000
IV	Protection															
23	Construction of boundary pillars @20 m interval															
24	Erection of Chain Link Fencing															
	Sub Total:			0.00000			0.00000									
	Total:			2.41500			1.39300			1.22400			0.60000			0.00000
	Administrative cost 10%			0.24150			0.13930			0.12240			0.06000			0.02610
	Total			2.65650			1.53230			1.34640			0.66000			0.28710

Compensatory afforestation scheme for 12.8919

Sl. No	Item of Work	2030 - 31			2031 - 32			2032-33			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	Fin
1	2	39	40	41	39	40	41	39	40	41	51	52
I	Nursery activities (LIM)											
1	Raising of Primary beds										5000	0.01900
2	Raising of Bag Plants of 4"x7"										5000	0.14200
3	Maintenance of Bag Plants of 4"x7"										5000	0.05700
4	Conversion of bag plants from 4"x7" to 6"x12"										5000	0.41700
5	Maintenance of Bag Plants of 6"x12"										5000	0.25800
	Sub Total:			0.000			0.000			0.000		0.89300
II	Planting activities (LIM)											
6	Advance Operations										12.89	2.76200
7	Raising of Plantation										12.89	3.59300
8	1st Year Maintenance										12.89	4.40900
9	2nd Year Maintenance										12.89	2.41500
10	3rd Year Maintenance										12.89	1.39300
11	4th Year Maintenance										12.89	1.22400
12	5th Year Maintenance										12.89	0.60000
13	6th Year Maintenance										12.89	0.26100
14	7th Year Maintenance	12.89	4981	0.642							12.89	0.64200
15	8th Year Maintenance	0.00	2224	0	12.89	2446	0.315				12.89	0.31500
16	9th Year Maintenance				0.00	5479	0				12.89	0.77700
17	10th Year Maintenance											
	Sub Total:			0.64200			0.31500			0.77700	12.89	0.38200
III	SMC Works											18.77300
18	Digging of CPT in km											
19	Bund plantation in km										2	3.04900
20	Construction of Percolation Tanks										2	0.71900
21	Construction of Mini Percolation Tanks										1	2.66200
22	Staggered trenches										2	1.33100
	Sub Total:			0.00000			0.00000				1000	3.79000
IV	Protection											11.55100
23	Construction of boundary pillars @20 m interval											
24	Erection of Chain Link Fencing										39	4.29000
	Sub Total:			0.00000			0.00000				2	42.90000
	Total:			0.64200			0.31500			0.00000		47.19000
III	Administrative cost 10%			0.06420			0.03150			0.07770		78.40700
	Total			0.70620			0.34650			0.85470		86.24770

GOVERNMENT OF TELANGANA
FOREST DEPARTMENT

From:
Sri. G. Mukund Reddy, Dy.C.F.,
District Forest Officer,
Suryapet.

To:
The Prl Chief Conservator of Forests,
(Head of Forest Force)
Telangana State, Aranya Bhavan,
Saifabad, Hyderabad.

Rc.No.1936/2018/S4, Dt.30.07.2020

Sir/ Madam,

Sub : TSFD - FCA - Non- Forest land identified in Different villages of Suryapet District - for Compensatory Afforestation (CA) in lieu of Forest Land for construction of Keshavapuram Reservoir - Instructions issued for collection of NPV and other compensatory levies - report called for - Submission of CA Scheme proposals for identified CA lands - req - Reg.

* * *

It is to submit that, the Prl. Chief Conservator of Forests, TS, Hyderabad had called for the demand notice for collection of Net Present Value (NPV) & Compensatory Levies for diversion of Keshavapuram Reservoir, on report of deposition of NPV and other compensatory levies.

In view of the above, it is submitted that, the demand is prepared as follows:

Sl. No.	Description of Item	Amount to be deposited by the User Agency in Rs.
1	Compensatory Afforestation Levies for raising of CA lands	20,18,19,561.00
Scheme Total		20,18,19,561.00

Around the CA Area Construction of Check Dams, Mini Percolation Tanks, CPT, SCTs, Boundary Pillars and Chain Link Fencing were proposed for protection.

This is submitted for favour of kind perusal and necessary instructions.

- Encl: 1. CA Schemes proposals (4 Sets)
2. DGPS Surveyed Maps (4 Sets)
3. Soil Suitability Certificates (4 sets)

Yours faithfully


District Forest Officer,
Suryapet.

- Copy submitted to Addl. Prl. Chief Conservator of Forests, FCA, T.S, Hyderabad for favour of kind information.
Copy submitted to Conservator of Forests, Khammam Circle, Khammam for favour of kind information.
Copy submitted to DCF, FCA for favour of kind information.

"Counter Sign"


Conservator of Forests
Khammam Circle

**COMPREHENSIVE SCHEME FOR COMPENSATORY AFFORESTATION SCHEME
INSURYAPET DISTRICT OF Khammam CIRCLE: DIVERSION OF 409.53ha OF
FOREST LAND IN MEDCHAL DIVISION FOR CONSTRUCTION OF 10 TMC
RESERVOIR AT KHESAVAPURAM WITH ASSOCIATED COMPONENTS UNDER
GODAVARI RIVER SOURCE FOR DRINKING WATER REQUIREMENTS TO THE
HYDERABAD CITY OF TELANGANA STATE**

1) INTRODUCTION OF THE SCHEME:-

The General Manager (Engg) Project Division HMWS&SB Hyderabad has submitted the proposals for diversion of 409.53ha forest land in Medchal-Malkajgiri Division for construction of 5.04 TMC Reservoir at Keshvapuram with associated components under Godavari river source for drinking water requirements to the Hyderabad Metropolitan Area. Accordingly, the following Non-forest lands identified for compensatory in Suryapet District:

Name of the District	Name of the Mandal	Name of the Village	Survey No	Area in ha (as per DGPS survey)	Plants can be planted @200/Ha	Plants can be planted @1666/Ha	Total Plants can be planted	Average plants / Ha
Suryapet	Jajireddy gudem	Adivemula	505	120.4766	24,095		24,095	
		Thimmapuram	418	44.3023	8,860		8,860	
		Kasarlpad	312	23.0564	4,611		4,611	
	Suryapet	Ramavaram	78	63.7908	12,758		12,758	
	Chilkur	Chilkur	1151 /2	28.0456	3,209	19,992	23,201	
	Palakeedu	Ravipadu	31	12.1053	2,421		2,421	
		Total		291.7770	55,954	19,992	75,946	260

2). SUITABILITY OF THE AREA:-

An area of 291.7770ha of Non-forest land is identified for CA purpose. The areas are partially hilly and rocky, but having stunted forest growth, with soil patches which are eroded and the top soil is lost. The growth consists mainly of Narlinga (Albizia amara), Moduga (Butea monosperma), Seethaphal (Anona squamosa), Vepa (Azadirachta indica), Pala Kodisa (Wrightia tinctoria), Manga (Randia dumetorum), Teak (Tectona grandis), Tangedu (Cassia auriculata), etc. Hence additional 200 Plants per ha can be planted under BHA/LI method to take up planting activities, except in one Chilkur CA land where in 12 ha planting @1666 plants/ha can be done, and also SMC works like Staggered Contour Trenches, Mini percolation tanks are proposed, besides

boundary protection structure with Boundary Pillars and Chain Link mesh Fencing. The average number of plants that can be planted are 260 plants/ha.

3). SCHEME IMPLEMENTATION AGENCY:

The District Forest Officer, Suryapet will be the project implementation and Monitoring agency and works will be taken up through concerned Forest Range Officers.

For the successful execution of the above mentioned works it requires frequent inspections and close monitoring by the Forest Range Officers and District Forest Officer.

4). MONITORING MECHANISM:

The District Forest Officer, Suryapet and Chief Conservator of Forests, Khammam Circle, Khammam will be closely monitoring the implementation of CA scheme by regular inspection for ensuring proper execution of the work and maintenance of connected records like Plantation and Nursery journals, cash books, Work register, measurement Books, Monthly progress of planting and maintenance, etc., and also submitting the regular work monitoring reports to the Principal Chief Conservator of Forests, TS, Hyderabad and other concerned Senior officers in the Forest Department in Telangana.

5). PERIOD OF THE SCHEME:

Period of the scheme is for (12 years) which includes advance works and raising of plantations and 10 years maintenance commencing from 2022-23 to 2032-33 and nursery raising during 2021-22.

The details of proposed works are given below:

6). BOUNDARY DEMARCATION:

Chain Link Mesh fencing around the periphery is required as the proposed CA lands are isolated blocks surrounded by agriculture lands and hence proposed, with boundary pillars construction.

7). REJUVENATION OF ADDITIONAL CA AREA EQUIVALENT TO FOREST AREA DIVERTED:-

The Government non-forest land 291.7770ha is identified for CA by the User Agency in Suryapet District in lieu of forest land proposed for diversion in Medchal-Malkajgiri Division for construction of 5.04TMC Reservoir at

Keshvapuram with associated components under Godavari river source for drinking water requirements to the Hyderabad Metropolitan Area. The land is partially hilly, Rocky areas, hence planting of 200 Plants per ha is proposed under BHA/LI method for taking up planting activities and also SMC works like Staggered Control Trenches, Rock Fill Dams, Mini percolation tanks, etc., are proposed for the benefit of natural vegetation which is stunted. The cost of the scheme is worked out adopting present FSR of 2019-20. The unit costs and total year wise cost structure of the project is shown in Annexures.

The following is the financial outlay:

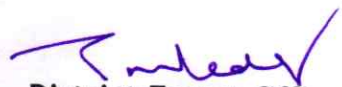
Sl. No.	Item of works	Total outlay	
		Phy.	Fin. In lakhs
I	RAISING OF PLANTATION		
1	Raising and maintenance of Nurseries	130000 Nos	32.06834
2	Advance Operations	291.777 ha	113.46161
3	Raising of Plantation	291.777 ha	98.86693
4	1 st year Maintenance of Plantation	291.777 ha	122.92335
5	2 nd year Maintenance of Plantation	291.777 ha	63.43416
6	3 rd year Maintenance of Plantation	291.777 ha	35.97629
7	4 th year Maintenance of Plantation	291.777 ha	32.26866
8	5 th year Maintenance of Plantation	291.777 ha	17.29967
9	6th year Maintenance of Plantation	291.777 ha	6.71773
10	7th year Maintenance of Plantation	291.777 ha	18.36562
11	8th year Maintenance of Plantation	291.777 ha	8.12845
12	9 TH year maintenance of plantation	291.777 ha	22.22240
13	10 th year maintenance of plantation	291.777 ha	9.83543
II	SMC WORKS		164.15465
III	Chain Link Fencing	24 Km	907.5
IV	Construction of Boundary Pillars	1500 Nos	181.5
V	Administrative Cost (10%) over core activities	Ls	183.47233
	GRAND TOTAL		2018.19561


District Forest Officer,
Suryapet.

Keshvapuram with associated components under Godavari river source for drinking water requirements to the Hyderabad Metropolitan Area. The land is partially hilly, Rocky areas, hence planting of 200 Plants per ha is proposed under BHA/LI method for taking up planting activities and also SMC works like Staggered Control Trenches, Rock Fill Dams, Mini percolation tanks, etc., are proposed for the benefit of natural vegetation which is stunted. The cost of the scheme is worked out adopting present FSR of 2019-20. The unit costs and total year wise cost structure of the project is shown in Annexures.

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7	4 th year Maintenance of Plantation	291.777 ha	32.26866
8	5 th year Maintenance of Plantation	291.777 ha	17.29967
9	6 th year Maintenance of Plantation	291.777 ha	6.71773
10	7 th year Maintenance of Plantation	291.777 ha	18.36562
11	8 th year Maintenance of Plantation	291.777 ha	8.12845
12	9 TH year maintenance of plantation	291.777 ha	22.22240
13	10 th year maintenance of plantation	291.777 ha	9.83543
II	SMC WORKS		164.15465
III	Chain Link Fencing	24 Km	907.5
IV	Construction of Boundary Pillars	1500 Nos	181.5
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	GRAND TOTAL		2018.19561


District Forest Officer,
Suryapet.

Compensatory afforestation scheme for 291.777 ha of non-forest CA in Suryapet in lieu of diversion of 409.53 ha under F&A, 1980 for construction of 10 TMC reservoir at Keshavapuram in favour of HMWS&SB in Medchal-Malkajgiri

Sl. No	Item of Work	Phy	Unit Cost 2019- 20(Rs.)	2021-22		2022-23		2023 - 24		2024 - 25		2025 - 26		2026 - 27							
				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			12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
I	Nursery activities (LIM)																				
1	Raising of Primary beds	Plant	0.3341	110000	0.40422	0.44465	20000	0.444647	0.08893												
2	Raising of Bag Plants of 4"x7"	Plant	3.8060	110000	4.60531	5.06584	20000	5.065844	1.01317												
3	Maintenance of Bag Plants of 4"x7"	Plant	0.9039		1.09376		110000	1.20314	1.32345	20000	1.3235	0.26469									
4	Conversion of bag plants from 4"x7" to 6"x12"	Plant	6.5721		7.95228		110000	8.74751	9.62226	20000	9.6223	1.92445									
5	Maintenance of Bag Plants of 6"x12"	Plant	3.6430		4.40804			4.84884		110000	5.33372	5.86710	20000	5.86710	6.45381						
	Sub Total:					5.510			12.048			8.056			6.454			0.000			0.000
II	Planting activities (LIM)																				
6	Advance Operations	Ha	23451	0.00	28375.7	0.00000	279.78	31211.28	87.32758												
7	Raising of Plantation	Ha	20136				0.00	26800.48	0.00000	279.78	29480.53	82.47975									
8	1st Year Maintenance	Ha	23833							0.00	34894.33	0.00000	279.78	38383.77	107.38895						
9	2nd Year Maintenance	Ha	11402										0.00	18363.52	0.00000	279.78	20199.87	56.51459			
10	3rd Year Maintenance	Ha	5807													0.00	10287.99	0.00000	279.78	11316.78	31.66176
11	4th Year Maintenance	Ha	4639																0.00	9040.68	0.00000
12	5th Year Maintenance	Ha	2066																		
13	6th Year Maintenance	Ha	816																		
14	7th Year Maintenance	Ha	1829																		
15	8th Year Maintenance	Ha	816																		
16	9th Year Maintenance	Ha	1829																		
17	10th Year Maintenance	Ha	816																		
	Sub Total:					0.00000			87.32758			82.47975			107.38895			56.51459			31.66176
III	Planting activities (LIM) - 12 ha @ 1666 plants/ha																				
18	Advance Operations	Ha	163624	0.00	197985.0	0.00000	12.00	217783.54	26.13403												
19	Raising of Plantation	Ha	93272				0.00	124145.30	0.00000	12.00	136559.83	16.38718									
20	1st Year Maintenance	Ha	80380							0.00	117684.80	0.00000	12.00	129453.28	15.53439						
21	2nd Year Maintenance	Ha	32549										0.00	52420.97	0.00000	12.00	57663.07	6.91957			
22	3rd Year Maintenance	Ha	18450													0.00	32685.83	0.00000	12.00	35954.42	4.31453
23	4th Year Maintenance	Ha	17282																0.00	33678.31	0.00000
24	5th Year Maintenance	Ha	12964																		
25	6th Year Maintenance	Ha	2551																		
26	7th Year Maintenance	Ha	10992																		
27	8th Year Maintenance	Ha	2551																		
28	9th Year Maintenance	Ha	10992																		
29	10th Year Maintenance	Ha	2551																		
	Sub Total:					0.00000			26.13403			16.38718			15.53439			6.91957			4.31453

Sl. No	Item of Work	Phy	Unit Cost 2019- 20(Rs.)	2021-22		2022-23		2023 - 24		2024 - 25		2025 - 26		2026 - 27	
				Phy	Unit Cost (Rs.)	Phy	Unit Cost (Rs.)	Phy	Unit Cost (Rs.)	Phy	Unit Cost (Rs.)	Phy	Unit Cost (Rs.)	Phy	Unit Cost (Rs.)
III	SMC Works														
30	Digging of CPT in km	km	140000	15.00	169400	25.4100									
31	Bund plantation in km	km	30000		36300	15.00	39930	5.9895							
32	Construction of Percolation Tanks	No	200000		242000		7 266200.00	18.63400							
33	Construction of Mini Percolation Tanks	No	50000		60500		12 66550.00	7.98600							
34	Staggered trenches	cum	265	10000	321	32,06500	10000 352.72	38,79865							
	Sub Total:				57,47500		67,88100	0.00000						0.00000	0.00000
IV	Protection														
35	Construction of boundary pillars @20 m interval	Nos	10000	1500	12100.00	181,50000									
36	Erection of Chain Link Fencing	km	3000000	25.00	3630000.00	907,50000									
	Sub Total:					1089,00000		0.00000						0.00000	0.00000
V	Total:					1151,98549		193,39041						63,43416	35,97629
	Administrative cost 10%					115,19855		19,33904						12,93772	3,59763
	Grand Total					1267,18404		212,72946						142,31487	39,57392

Compensatory afforestation scheme for :

Sl. No	Item of Work	2027 - 28			2028 - 29			2029 - 30			2030 - 31			2031 - 32			2032 - 33			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)
1	2	30	31	32	33	34	35	36	37	38	39	40	41	39	40	41	39	40	41	51		52
I	Nursery activities (LIM)																					
1	Raising of Primary beds																					
2	Raising of Bag Plants of 4"x7"																					
3	Maintenance of Bag Plants of 4"x7"																					
4	Conversion of bag plants from 4"x7" to 6"x12"																					
5	Maintenance of Bag Plants of 6"x12"																					
	Sub Total:			0.000			0.000			0.000			0.000			0.000			0.000			32.06834
II	Planting activities (LIM)																					
6	Advance Operations																					
7	Raising of Plantation																					
8	1st Year Maintenance																					
9	2nd Year Maintenance																					
10	3rd Year Maintenance																					
11	4th Year Maintenance	279.78	9944.75	27.8213																		
12	5th Year Maintenance	0.00	4429.30	0.00000		4872.23	13.63137	279.78		5.92364												
13	6th Year Maintenance					1924.79	0.00000	0.00														
14	7th Year Maintenance							0.00														
15	8th Year Maintenance																					
16	9th Year Maintenance																					
17	10th Year Maintenance																					
	Sub Total:			27.8213			13.63137			5.92364			14.60214			17.66859			8.67280			460.86191
III	Planting activities (LIM) - 12 ha @ 1666 plants/ha																					
18	Advance Operations																					
19	Raising of Plantation																					
20	1st Year Maintenance																					
21	2nd Year Maintenance																					
22	3rd Year Maintenance																					
23	4th Year Maintenance	12.00	37046.14	4.44554																		
24	5th Year Maintenance	0.00	27790.13	0.00000		30569.14	3.66830															
25	6th Year Maintenance					6015.83	0.00000	12.00		0.79409												
26	7th Year Maintenance							0.00														
27	8th Year Maintenance																					
28	9th Year Maintenance																					
29	10th Year Maintenance																					
	Sub Total:			4.44554			3.66830			0.79409			3.76348			0.96085			1.16263			88.53818

Sl. No	Item of Work	2027 - 28		2028 - 29		2029 - 30		2030 - 31		2031 - 32		2032-33		Grand Total		
		Phy	Fin (Rs.in Lakhs)	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
III	SMC Works															
30	Digging of CPT in km														15	25.41000
31	Bund plantation in km														15	5.98950
32	Construction of Percolation Tanks														7	18.63400
33	Construction of Mini Percolation Tanks														12	7.98600
34	Staggered trenches														30000	106.13515
	Sub Total:		0.00000		0.00000		0.00000		0.00000		0.00000		0.00000			164.15465
IV	Protection															
35	Construction of boundary pillars @20 m interval														1500	181.50000
36	Erection of Chain Link Fencing														25	907.50000
	Sub Total:		0.00000		0.00000		0.00000		0.00000		0.00000		0.00000			1089.00000
	Total:		32.26866		17.29967		6.71773		18.36562		27.22240		9.83543			1834.72328
V	Administrative cost 10%		3.22687		1.72997		0.67177		1.83656		2.22224		0.98354			183.47233
	Grand Total		35.49553		19.02964		7.38950		20.20218		24.44464		10.81897			2018.19561

**GOVERNMENT OF TELANGANA
FOREST DEPARTMENT**

From:

Sri, C. Sridhar Rao, S.F.S.,
District Forest Officer,
Siddipet.

To

The Prl.Chief Conservator of Forests,
(Head of Forest Force),
Telangana. Aranya Bhavan, Hyderabad.

Rc.No.360/S6/2018, Dt.31.07.2020.

Sir,

Sub:- Forest (Conservation) Act,1980- Proposal for diversion of forest land to an extent of 409.53 Ha (387.13 Ha horizontal area as per DGPS) Medchal Forest Division under Medchal District – for construction of 10 TMC reservoir at Keshavapuram with associated components under Godavari river source for drinking water requirements to the Hyderabad City in favour of HMWSSB - CA scheme proposals submitted - Regarding.

Ref: - 1. General Manager (Engg) project Division No.IX, HMWS & SB, Hyderabad
Lr.No.GM (E)/DB/P.Dn.IX/Keshavapuram/2018-19/155 Dt.10.10.2018.
2. PCCF's Rc.NO.6564/2017/FCA1,Dt.18.07.2017.
3. PCCF's Rc.NO.6564/2017/FCA1,Dt.06.11.2018.
4. General Manager (Engg) project Division No.IX, HMWS & SB, Hyderabad
Lr.No.GM(E)/DB/P.Dn.IX/Keshavapuram/2019-20/232 Dt.17.08.2019.
5. PCCF's Rc.NO.6564/2017/FCA1,Dt.21.08.2019.
6. General Manager (Engg) project Division No.IX, HMWS & SB, Hyderabad
Lr.No.GM(E)/DB/PD.IX/Keshavapuram/2020-21/293 Dt.20.05.2020.
7. PCCF's Rc.NO.6564/2017/FCA1,Dt.21.05.2020.

In compliance to the instructions issued in the reference 7th cited, It is submitted that the CA Scheme proposal for an area of 119.8006 Ha in Siddipet District is prepared as per the FSR 2019-20 for Ten years starting from 2021-22 to 2032-33 is submitted herewith for Rs.**891.01353** Lakhs. (Abstract of list of works for Rs. **891.01353** Lakhs is enclosed herewith along with detailed estimate)

The following works are proposed

1. Raising of plantation 100 plants per Ha under BHA / LIM method and 10 years maintenance.
2. SMC works like staggered contour trenches, mini PTs and PTs.
3. Chainlink fencing.
4. Construction of Boundary pillars.
5. Construction of Fire watch towers.
6. Formation of Gravel Path for inspection and protection.

The scheme proposal along with year wise Physical and Financial statement, DGPS surveyed maps soil suitability certificate (6 sets) is enclosed herewith.

This submitted for favour information and necessary action.

Your's faithfully

District Forest Officer,
Siddipet.

Encl : (6 sets CA scheme)

Counter Signed

Chief Conservator of Forests,
Medak Circle, MEDAK.
Medak

**COMPREHENSIVE SCHEME FOR COMPENSATORY AFFORESTATION SCHEME IN SIDDIPET
DISTRICT OF MEDAK CIRCLE: DIVERSION OF 409.53 Ha OF FOREST LAND IN MEDCHAL
DIVISION FOR CONSTRUCTION OF 10 TMC RESERVOIR AT KESHAVAPURAM WITH
ASSOCIATED COMPONENTS UNDER GODAVARI RIVER SOURCE FOR DRINKING WATER
REQUIREMENTS TO THE HYDERABAD CITY OF TELANGANA STATE**

1) INTRODUCTION OF THE SCHEME:-

The General Manager (Engg) Project Division HMWS&SB Hyderabad has submitted the proposals for diversion of 409.53 Ha forest land in Medchal-Malkajgiri Division for construction of 5.04 TMC Reservoir at Keshvapuram with associated components under Godavari river source for drinking water requirements to the Hyderabad Metropolitan Area. Accordingly, the following alternate Non-forest lands identified for compensatory in Siddipet District:

Name of the District	Name of the Mandal	Name of the Village	Survey No	Area in ha (as per DGPS survey)
Siddipet	Akkannapet	Regonda	533	23.2816
		Ramavaram	225	24.9237
	Husnabad	Ummapur	265	41.6121
		Mirzapur	145	2.1406
				11.9462
			100	15.8964
		Total		119.8006

The area is partially hilly and rocky, but having stunted forest growth. The growth consists mainly of Narlinga(*Albizia amara*), Moduga(*Bautia monosperma*), Seethaphal (*Anona squamoza*), Vepa(*Azadirachta indica*), Danthe(*Gymnospora Montana*), Chennangi(*Lagarstonia parviflora*), Pala Kodisa(*Writia tingtoria*), Teak(*Tectona grandis*), Pedda manu(*Ailantha exselosa*), Tangedu(*Acacia ariculata*), Soppera(*Dolbergia panipulata*), Rela(*Casia fistula*), etc.

2). SUITABILITY OF THE AREA:-

An area of 119.8006 ha of Non-forest land is identified for CA purpose. The land is partially hilly, Rocky areas, hence additional 100 Plants per ha can be planted under BHA/LI method to take up planting activities and also SMC works like Staggered Control Trenches, Rock fill dams, Mini percolation tanks are proposed, besides boundary protection structure with chain link mesh.

3). SCHEME IMPLEMENTATION AGENCY:

The District Forest Officer, Siddipet will be the project implementation and Monitoring agency and works will be taken up through concerned Forest Range Officers.

For the successful execution of the above mentioned works it requires frequent inspections and close monitoring by the Forest Range Officers and District Forest Officer.

4). MONITORING MECHANISM:

The District Forest Officer, Siddipet and Conservator of Forests, Medak Circle, Medak will be closely monitoring the implementation of CA scheme by regular inspection for ensuring proper execution of the work and maintenance of connected records like Plantation and Nursery journals, plantation journal, cash books, Work register, measurement Books, Monthly progress of planting and maintenance, etc., and also submitting the regular work monitoring reports to the Principal Chief Conservator of Forests, TS, Hyderabad and other concerned Senior officers in the Forest Department in Telangana.

5). PERIOD OF THE SCHEME:

Period of the scheme is for (12 years) which includes advance works and rising of plantations and 10 years maintenance commencing from 2022-23 to 2032-33 and nursery raising during 2021-22.

The details of proposed works are given below:

6). BOUNDARY DEMARCATION:

Chain-link fencing around the periphery are required as the proposed CA lands are isolated blocks surrounded by agriculture lands and hence proposed, with boundary pillars construction.

7). REJUVENATION OF ADDITIONAL CA AREA EQUIVALENT TO FOREST AREA DIVERTED:-

The Government non-forest land 119.8006 Ha is identified for CA by the User Agency in Siddipet District in lieu of forest land proposed for diversion in Medchal-Malkajgiri Division for construction of 5.04 TMC Reservoir at Keshvapuram with associated components under Godavari river source for drinking water requirements to the Hyderabad Metropolitan Area. The land is partially hilly, Rocky areas, hence planting of 100 Plants per ha is proposed under BHA/LI method for

taking up planting activities and also SMC works like Staggered Control Trenches, Rock Fill Dams, Mini percolation tanks, etc., are proposed for the benefit of natural vegetation which is stunted.

8). **CONSTRUCTION OF FIRE WATCH TOWERS FOR MONITORING PROTECTION ASPECTS AND TO SERVE ECO-TOURISM IN ADJOINING AREAS OF KESHAVAPURAM RESERVOIR:**

It is proposed to construct (04) Nos Fire Watch towers at the cost of Rs.15.00 Lakhs each towards monitoring of protection issues in the CA block areas and to serve as vantage view point for Eco-tourism activities in the future adjoining reservoir areas of this Drinking water project. The location proposed are Ramavaram, Ummapur, Mirzapur of Regonda Regonda CA block.

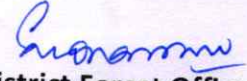
In order to reach the Watch tower through the dense vegetation from foot hill, it is required to form gravel path upwards in all these 4 locations where the construction of Fire watch towers are proposed.

The cost of the scheme is worked out adopting present FSR of 2019-20. The unit costs and total year wise cost structure of the project is shown in Annexures.

The following is the financial outlay:

Description of the work	Amount in Rs.Lakhs
Nursery raising and maintenance	7.36306
Advance Operations	22.14505
Raising of Plantation	26.56364
Maintenance of plantation for 10 years	99.08705
SMC Works including CPT and bund planting, staggered contour trenches, percolation tanks etc.	112.95350
Protection of CA lands – fencing and boundary pillars	471.90000
Construction of Fire Watch Towers (04 No.s) at the cost of 15 Lakhs each.	60.00
Laying of Gravel path for protection and inspection (04 Kms) at the cost of 2.5 Lakhs each Km.	10.00
Administrative Cost (10%) over core activities	81.00123
Grand Total	891.01353


Chief Conservator of Forests
Medak Circle, MEDAK.


District Forest Officer,
Siddipet

ABSTRACT

**COMPREHENSIVE SCHEME FOR COMPENSATORY AFFORESTATION SCHEME IN
SIDDIPET DISTRICT OF MEDAK CIRCLE: DIVERSION OF 409.53 Ha OF FOREST LAND IN
MEDCHAL DIVISION FOR CONSTRUCTION OF 10 TMC RESERVOIR AT
KHESAVAPURAM WITH ASSOCIATED COMPONENTS UNDER GODAVARI RIVER
SOURCE FOR DRINKING WATER REQUIREMENTS TO THE HYDERABAD CITY OF
TELANGANA STATE**

Sl. No.	Item of works	Total outlay	
		Phy.	Fin. In lakhs
I	RAISING OF PLANTATIONS		
1	Raising and maintenance of Nurseries	30000 plants	7.36306
2	Advance Operations	119.8006 ha	22.14505
3	Raising of Plantation	119.8006 ha	26.56364
4	1 st year Maintenance of Plantation	119.8006 ha	38.54229
5	2 nd year Maintenance of Plantation	119.8006 ha	21.13278
6	3 rd year Maintenance of Plantation	119.8006 ha	11.54284
7	4 th year Maintenance of Plantation	119.8006 ha	9.69766
8	5 th year Maintenance of Plantation	119.8006 ha	3.73528
9	6th year Maintenance of Plantation	119.8006 ha	2.16673
10	7th year Maintenance of Plantation	119.8006 ha	4.11636
11	8th year Maintenance of Plantation	119.8006 ha	0.00000
12	9 th year maintenance of plantation	119.8006 ha	4.98079
13	10 th year maintenance of plantation	119.8006 ha	3.17231
II	SMC WORKS		112.95350
III	Chain-link fencing	15.000 Km	363.00000
IV	Construction of boundary pillars	900 Nos	108.90000
V	Administrative Cost (10%)	Ls	74.00123
	GRAND TOTAL		814.01353


District Forest Officer,
Siddipet

Compensatory afforestation scheme for 119.8006 ha of non-forest CA in Sildipet in lieu of diversion of 409.53 ha under F&A, 1980 for construction of 10 TMC reservoir at Keshavapuram in favour of HMWS&SB in Medchal-Malkajgiri

Sl. No	Item of Work	Qty	Unit Cost	2021-22		2022-23		2023-24		2024-25		2025-26		2026-27	
			2019-20 (Rs.)	Phy	Fin (Rs. in Lakhs)	Phy	Fin (Rs. in Lakhs)	Phy	Fin (Rs. in Lakhs)	Phy	Fin (Rs. in Lakhs)	Phy	Fin (Rs. in Lakhs)	Phy	Fin (Rs. in Lakhs)
1															
2	Nursery activities (L/M)														
1	Raising of Primary beds	Plant	0.341	25000	0.40422	5000	0.44647	0.02223							
2	Raising of Bag Plants of 4'x7'	Plant	3.8040	25000	4.60531	5000	5.065844	0.25329							
3	Maintenance of Bag Plants of 4'x7'	Plant	0.3039		1.09376	25000	1.20314	0.30078	5000	1.3235	0.06617				
4	Conversion of bag plants from 4'x7' to 6'x12'	Plant	6.5721		7.95228	25000	8.74751	2.18688	5000	9.6223	0.48111				
5	Maintenance of Bag Plants of 6'x12'	Plant	3.6430		4.40804		4.84884		25000	5.33372	1.33343	5000	5.86710	1.46677	
	Sub Total:				1.252		2.763		1.881		1.467		0.000		0.000
II	Planting activities (L/M)														
6	Advance Operations	Ha	13888	0.00	16804.5	0.00000									
7	Raising of Plantation	Ha	15145			119.80	18484.93	22.14505	119.80	22173.21	26.56364				
8	1st Year Maintenance	Ha	19976			0.00	20157.46	0.00000	0.00	29247.30	0.00000	119.80	32172.03	38.54229	
9	2nd Year Maintenance	Ha	9957									0.00	16036.33	0.00000	
10	3rd Year Maintenance	Ha	4944									0.00	8791.13	0.00000	
11	4th Year Maintenance	Ha	3776									0.00	7358.94	0.00000	
12	5th Year Maintenance	Ha	1322												
13	6th Year Maintenance	Ha	697												
14	7th Year Maintenance	Ha	1204												
15	8th Year Maintenance	Ha	697												
16	9th Year Maintenance	Ha	1204												
17	10th Year Maintenance	Ha	697												
	Sub Total:				0.00000		22.14505		26.56364		38.54229		21.13278		11.54284
III	SMC Works														
18	Digging of CRT in km	km	140000	10.00	169400		16.9400								
19	Bund plantation in km	km	30000		36300	10.00	39930	3.9930							
20	Construction of Percolation Tanks	No	200000		242000	2	266200.00	5.32400							
21	Construction of Mini Percolation Tanks	No	50000		60500	5	66550.00	3.32750							
22	Staggered trenches	cum	245	15000	321		352.72	35.27150							
	Sub Total:				65.03750		47.91600		0.00000		0.00000		0.00000		0.00000
IV	Protection														
23	Construction of boundary pillars @20 m interval	Nos	10000	900	12100.00		108.90000								
24	Construction of Fire Watch Towers (04 Nos.) at the cost of 15 Lakhs each.			4	15.00		60.00000								
25	Laying of Gravel Path for protection and inspection (04 Km) at the cost of 2.5 lakhs each km.			4	25.00		10.00000								
26	Erection of Chain Link Fencing	km	2000000	15.00	2420000.00		363.00000								
	Sub Total:				541.90000		0.00000		0.00000		0.00000		0.00000		0.00000
	Total:				608.18988		72.92424		28.44435		40.00906		21.13278		11.54284
	Administrative cost 10%				60.81899		7.28242		2.84444		4.00091		2.11328		1.15428
	Total				669.00887		80.10666		31.28879		44.00997		23.24606		12.69712

Compensatory affores														Grand Total	
Sl. No	Item of Work	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
1	2	30	31	32	33	34	35	36	37	38	39	40	41	42	52
Nursery activities (LIM)															
1	Raising of Primary beds														
2	Raising of Bag Plants of 4'x7'														
3	Maintenance of Bag Plants of 4'x7'														
4	Conversion of bag plants from 4'x7' to 6'x12'														
5	Maintenance of Bag Plants of 6'x12'														
Sub Total:				0.000			0.000			0.000					
Planting activities (LIM)															
6	Advance Operations														
7	Raising of Plantation														
8	1st Year Maintenance														
9	2nd Year Maintenance														
10	3rd Year Maintenance	119.80	8094.83	9.69766											
11	4th Year Maintenance	0.00	2834.47	0.00000	119.80	3117.91	3.73528	119.80	1808.62	2.16673					
12	5th Year Maintenance				0.00	1644.20	0.00000	0.00	3123.64	0.00000	119.80	3436.01	4.11636		
13	6th Year Maintenance								0.00	1989.48	0.00000	0.00	119.80	2188.43	
14	7th Year Maintenance										0.00	4151.57	4.98079		
15	8th Year Maintenance										0.00	2407.27	0.00000		
16	9th Year Maintenance														
17	10th Year Maintenance														
Sub Total:				9.69766			3.73528			2.16673			4.11636		
SMC Works															
18	Digging of CRT in km														
19	Bund plantation in km														
20	Construction of Percolation Tanks														
21	Construction of Mini Percolation Tanks														
22	Staggered trenches														
Sub Total:				0.00000			0.00000			0.00000			0.00000		
Protection															
23	Construction of boundary pillars @20 m interval														
24	Construction of Fire Watch Towers (04 Nos.) at the cost of 15 Lakhs each.														
25	Laying of Gravel Path for protection and inspection (04 kms) at the cost of 2.5 Lakhs each km.														
26	Erection of Chain Link Fencing														
Sub Total:				0.00000			0.00000			0.00000			0.00000		
Total:				9.69766			3.73528			2.16673			4.11636		
Administrative cost 10%				0.96977			0.37353			0.21667			0.41164		
Total				10.66743			4.10881			2.38341			4.52799		

Siddipet

District Forest Officer


 Sudarman
 District Forest Officer
 Sidaiipet