

**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 KESAVAPURAM 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.Pr.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-Maikajgiri

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												
7	Raising of Plantation	Ha	20940	0.00		0	12.89	21424	2.762								
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			0.00000			0.00000			0.00000
	Total:			2.41500			1.39300			1.22400			0.60000			0.26100
III	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			0.77700		47.19000
III	Administrative cost 10%			0.06420			0.03150			0.07770		78.40700
	Total			0.70620			0.34650			0.85470		86.24770