

**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 | | | | | | | | | | | | | | | |
| 1 | Nursery activities (LIM) | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | |
| 1 | Raising of Primary beds | Plant | 0.3341 | 25000 | 0.40422 | 5000 | 0.44647 | 5000 | 0.02223 | | | | | | |
| 2 | Raising of Bag Plants of 4'x7' | Plant | 3.8060 | 25000 | 4.60531 | 5000 | 5.065844 | 5000 | 0.25329 | | | | | | |
| 3 | Maintenance of Bag Plants of 4'x7' | Plant | 0.3039 | | 1.09376 | 25000 | 1.20314 | 5000 | 0.30078 | 5000 | 1.3235 | 5000 | 0.06617 | | |
| 4 | Conversion of bag plants from 4'x7' to 6'x12' | Plant | 6.5721 | | 7.95228 | 25000 | 8.74751 | 5000 | 9.6223 | 5000 | 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 (LIM) | | | | | | | | | | | | | | |
| 6 | Advance Operations | Ha | 13888 | 0.00 | 16804.5 | 119.80 | 18484.93 | 22173.21 | 26.56364 | 119.80 | 32172.03 | 38.54229 | 119.80 | 17639.96 | 21.13278 |
| 7 | Raising of Plantation | Ha | 15145 | | | 0.00 | 20157.46 | 0.00 | 22173.21 | 0.00000 | 16036.33 | 0.00000 | 8739.13 | 0.00000 | 119.80 |
| 8 | 1st Year Maintenance | Ha | 19976 | | | | | 0.00 | 29247.30 | 0.00000 | 0.00 | 0.00000 | 0.00 | 0.00000 | 9635.04 |
| 9 | 2nd Year Maintenance | Ha | 9957 | | | | | | | | 0.00 | | | | 11.54284 |
| 10 | 3rd Year Maintenance | Ha | 4944 | | | | | | | | | | | | 0.00000 |
| 11 | 4th Year Maintenance | Ha | 3776 | | | | | | | | | | | | |
| 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 | | | | | | | | | | |
| 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 | 265 | 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 | 43 |
| Nursery activities (LM) | | | | | | | | | | | | | | | |
| 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: | | | | 0.0000 | | | 0.0000 | | | 0.0000 | | | | | |
| Planting activities (LM) | | | | | | | | | | | | | | | |
| 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 | | | | | | | | |
| 12 | 5th Year Maintenance | | | | 0.00 | 1644.20 | 0.00000 | 119.80 | 1808.62 | 2.16673 | | | | | |
| 13 | 6th Year Maintenance | | | | | | | 0.00 | 3123.64 | 0.00000 | 119.80 | 2188.43 | | | |
| 14 | 7th Year Maintenance | | | | | | | | | | 0.00 | 1989.48 | 4.11636 | | |
| 15 | 8th Year Maintenance | | | | | | | | | | 0.00000 | 119.80 | 2188.43 | | |
| 16 | 9th Year Maintenance | | | | | | | | | | | 0.00 | 3779.61 | | |
| 17 | 10th Year Maintenance | | | | | | | | | | | | 0.00000 | | |
| 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 | | | 2.38341 | | | 4.52799 | | |
| Total | | | | 10.66743 | | | 4.10881 | | | 4.55014 | | | 8.64435 | | |


 Sudarman
 District Forest Officer
 Sidaiipet