

**Proposals for raising of 281.50 ha Compensatory Afforestation in non forest lands in lieu of diversion of forest land for excavation of GNSS Main Canal under GNSS Phase - II scheme (Package No. 05/06) in Proddatur WL Division**

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1. Object : To raise compensatory afforestation plantation with the funds of Irrigation Department, Andhra Pradesh in 281.50 Ha in lieu of diversion of 281.50 forest land for excavation of GNSS Main Canal under GNSS Phase - II Scheme for Package No 05/06 in Proddatur (WL) Division in favour of Executive Engineer, GNSS Division No. 7, Pulivendula, YSR Kadapa District.
2. Project Period : 12 years from the year of starting of the Project (2019 - 20 to 2031 - 32 )
3. Location of C.A. land : The compensatory afforestation area (Non Forest land) proposed for raising plantations in Proddatur (WL) Division is as follows.

Sl No.	Range	Name of the Village	Sy. No.	Area proposed for CA in Ha
1	Muddanur	Santhakovvur	1	95.00
2	Muddanur	Udavagandla	1	186.50
			<b>Total</b>	<b>281.50</b>

4. Type of the CA land : Most of the proposed compensatory afforestation area is hillock with gradient more than 30 degrees at foot hills and more than 45 degrees in the hill tops. Soil is mixed with rock with fair sized boulders in Sy. No.1 of Santhakovvur Village and it is gravelly mixed with disintegrated shale rock in Sy. No. 1 of Udavagandla Village. The depth of the soil is hardly 30 cm on the top of hill. The area is degraded, impoverished and requires effective supplementation like imported soil etc.

5. Vegetation : The compensatory afforestation area falls under Southern Tropical Dry Deciduous Forests consists of the following species like *Zyzyphus xylopyrus* (Gotti), *Cassia tora* (Pedda kasindi), *Acacia nilotica* (Nalla thumma), *Carissa carandas* (Kalivi), *Dodonaea viscosa* (Bandedu) *Prosopis* (Thumma) and sporadically *Azadirachta indica* (Neem).

6. Treatment Proposed : **Trench cum Pit Method Planting**

An area of 281.50 ha is proposed for raising compensatory afforestation area under Trench cum pit method of Plantation by digging of staggered trenches with central pit in the hillocks. Tall plants of size 8"x 12" are proposed for planting in 0.45 mt cube pits to facilitate quick establishment and growth. Provision for imported soil is made to make up the fertile soil. Water provision is also made during raising and 1<sup>st</sup> year maintenance of plantations.


The plantations so raised will be maintained for 11 years including year of raising.


7. Proposed species : Considering the terrain and condition of soil in the proposed area, the following species are proposed, keeping in view of the instructions issued by the Prl. Chief Conservator of Forests, AP. Hyderabad in Rc. No. 4775 / 2003 - F5, Dt : 21-02-2005.

Sl. No.	Species	Type	Species
1	NTFP	Large canopy plants	1) <i>Ficus benghalensis</i> 2) <i>Ficus religiosa</i> 3) <i>Hardwickia binata</i> 4) <i>Azadirachta indica</i> 5) <i>Madhuca latifolia</i> 6) <i>Terminalia tomentosa</i> 7) <i>Dalbergia latifolia</i> 8) <i>Pterocarpus marsupium</i> 9) <i>Soymida febrifuga</i> 10) <i>Emblica officinalis</i> etc

Planting tall plants of suitable species with a height not less than 2.00 Mts are proposed for planting.

8. Agency for funding : Irrigation Department, Andhra Pradesh.  
( Executive Engineer, GNSS Division No. 7  
Pulivendula, YSR Kadapa District)
9. Agency for implemen- : A. P. Forest Department  
tation of compensatory  
afforestation.
10. Cost of the scheme : Rs. 2394.920 Lakhs.

  
Divisional Forest Officer  
Proddatur WL Division

  
22/9/18

**Action Plan Proposals for Raising of 281.50 ha Compensatory Afforestation in non forest lands in lieu of proposed diversion of forest lands for Drinking Water, Irrigation Reservoirs and Canals under GNS Phase - II scheme (Package No. 05/06) in favour of Executive Engineer, GNS Division No. 7, Pulivendula Kadapa from 2019 - 20 to 2031-32 - Productur Forest Division**

[illegible]

SI No.	Description	2024-25			2025-26			2026-27			2027-28			2028-29		
1		18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
		Unit rate	Phy	Fin	Unit rate	Phy	Fin	Unit rate	Phy	Fin	Unit rate	Phy	Fin	Unit rate	Phy	Fin
	Trench Cum Pit Method of Plantation															
1	Raising of Nurseries			0			0			0			0			0
2	Maintenance of Nurseries			0			0			0			0			0
3	Advance operations			0			0			0			0			0
4	Raising of Plantations			0			0			0			0			0
5	1st year maintenance			0			0			0			0			0
6	2nd year maintenance			0			0			0			0			0
7	3rd year maintenance			0			0			0			0			0
8	4th year maintenance	24900	95.00	23.655			0			0			0			0
9	5th year maintenance			0	13600	95.00	12.920			0			0			0
10	6th year maintenance			0			0	15000	95.00	14.250			0			0
11	7th year maintenance			0			0			0	16500	95.00	15.675			0
12	8th year maintenance			0			0			0			0	18200	95.00	17.290
13	9th year maintenance			0			0			0			0			0
14	10th year maintenance			0			0			0			0			0
	Total		0	23.655		0	12.920		0	14.250		0	15.675		0	17.290

Sl No.	Description	2029-30			2030-31			2031-32			Total	
		Unit rate	Phy	Fin	Unit rate	Phy	Fin	Unit rate	Phy	Fin	Phy	Fin
1	2	33	34	35	36	37	38	39	40	41	42	43
	<b>Trench Cum Pit Method of Plantation</b>											
1	Raising of Nurseries			0			0			0	185800	27.731
2	Maintenance of Nurseries			0			0			0	185800	9.314
3	Advance operations			0			0			0	95.00	246.620
4	Raising of Plantations			0			0			0	95.00	93.100
5	1st year maintenance			0			0			0	95.00	64.505
6	2nd year maintenance			0			0			0	95.00	32.015
7	3rd year maintenance			0			0			0	95.00	22.990
8	4th year maintenance			0			0			0	95.00	23.655
9	5th year maintenance			0			0			0	95.00	12.920
10	6th year maintenance			0			0			0	95.00	14.250
11	7th year maintenance			0			0			0	95.00	15.675
12	8th year maintenance			0			0			0	95.00	17.290
13	9th year maintenance	20000	95.00	19.000			0			0	95.00	19.000
14	10th year maintenance			0	22000	95.00	20.900		0	0	95.00	20.900
	<b>Total</b>			<b>19.000</b>			<b>20.900</b>			<b>0</b>	<b>95.00</b>	<b>619.965</b>

Sl No.	Description	2019-20			2020-21			2021-22			2022-23			2023-24		
		Unit rate	Phy	Fin	Unit rate	Phy	Fin	Unit rate	Phy	Fin	Unit rate	Phy	Fin	Unit rate	Phy	Fin
1	Raising of Nurseries	14300	133500	19,091	15700	138000	21,666	17300	51000	8,823	19000	23000	4,370			0
2	Maintenance of Nurseries			0	4800	133500	6,408	5300	138000	7,314	5800	51000	2,958	6400	23000	1,472
3	Advance operations	259600	100,00	259,600	285600	86,50	247,044			0		0				0
4	Raising of Plantations			0	98000	100,00	98,000	107800	86,50	93,247	74700	86,50	64,616			0
5	1st year maintenance			0			0	67900	100,00	67,900	74700	86,50	64,616			0
6	2nd year maintenance			0			0			0	33700	100,00	33,700	37100	86,50	32,092
7	3rd year maintenance			0			0			0			0	24200	100,00	24,200
8	4th year maintenance			0			0			0			0			0
9	5th year maintenance			0			0			0			0			0
10	6th year maintenance			0			0			0			0			0
11	7th year maintenance			0			0			0			0			0
12	8th year maintenance			0			0			0			0			0
13	9th year maintenance			0			0			0			0			0
14	10th year maintenance			0			0			0			0			0
	Total		0	278,691		100,00	373,118		86,50	177,284		0	105,644		0	57,764
	Total (Plantation cost)		0	544,330		195,00	476,747		86,50	247,755		0	139,190		0	80,754
<b>II Action Plan for 186.50 Ha in Sy. No. 1 of Udavagandla Village, Muddanur Range</b>																
<b>Trench Cum Pit Method of Plantation</b>																
1	Raising of Nurseries	14300	133500	19,091	15700	138000	21,666	17300	51000	8,823	19000	23000	4,370			0
2	Maintenance of Nurseries			0	4800	133500	6,408	5300	138000	7,314	5800	51000	2,958	6400	23000	1,472
3	Advance operations	259600	100,00	259,600	285600	86,50	247,044			0		0				0
4	Raising of Plantations			0	98000	100,00	98,000	107800	86,50	93,247	74700	86,50	64,616			0
5	1st year maintenance			0			0	67900	100,00	67,900	74700	86,50	64,616			0
6	2nd year maintenance			0			0			0	33700	100,00	33,700	37100	86,50	32,092
7	3rd year maintenance			0			0			0			0	24200	100,00	24,200
8	4th year maintenance			0			0			0			0			0
9	5th year maintenance			0			0			0			0			0
10	6th year maintenance			0			0			0			0			0
11	7th year maintenance			0			0			0			0			0
12	8th year maintenance			0			0			0			0			0
13	9th year maintenance			0			0			0			0			0
14	10th year maintenance			0			0			0			0			0
	Total		0	278,691		100,00	373,118		86,50	177,284		0	105,644		0	57,764
	Total (Plantation cost)		0	544,330		195,00	476,747		86,50	247,755		0	139,190		0	80,754

Sl No.	Description	2024-25			2025-26			2026-27			2027-28			2028-29		
		Unit rate	Phy	Fin	Unit rate	Phy	Fin	Unit rate	Phy	Fin	Unit rate	Phy	Fin	Unit rate	Phy	Fin
1	2	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
	<b>Trench Cum Pit Method of Plantation</b>															
1	Raising of Nurseries			0			0			0			0			0
2	Maintenance of Nurseries			0			0			0			0			0
3	Advance operations			0			0			0			0			0
4	Raising of Plantations			0			0			0			0			0
5	1st year maintenance			0			0			0			0			0
6	2nd year maintenance			0			0			0			0			0
7	3rd year maintenance	26600	86.50	23.009			0			0			0			0
8	4th year maintenance	24900	100.00	24.900	27400	86.50	23.701			0			0			0
9	5th year maintenance			0	13600	100.00	13.600	15000	86.50	12.975			0			0
10	6th year maintenance			0			0	15000	100.00	15.000	16500	86.50	14.273			0
11	7th year maintenance			0			0			0	16500	100.00	16.500	18200	86.50	15.743
12	8th year maintenance			0			0			0			0	18200	100.00	18.200
13	9th year maintenance			0			0			0			0			0
14	10th year maintenance			0			0			0			0			0
	<b>Total</b>		<b>0</b>	<b>47.909</b>		<b>0</b>	<b>37.301</b>		<b>0</b>	<b>27.975</b>		<b>0</b>	<b>30.773</b>		<b>0</b>	<b>33.943</b>
	<b>Total (Plantation cost)</b>		<b>0</b>	<b>71.564</b>		<b>0</b>	<b>50.221</b>		<b>0</b>	<b>42.225</b>		<b>0</b>	<b>46.448</b>		<b>0</b>	<b>51.233</b>




Sl No.	Description	2029-30			2030-31			2031-32			Total				
		Unit rate	Phy	Fin	Unit rate	Phy	Fin	Unit rate	Phy	Fin					
1		2		33	34	35	36	37	38	39	40	41	42	43	
1	Raising of Nurses			0					0				0	345500	53.950
2	Maintenance of Nurses			0					0				0	345500	18.152
3	Advance operations			0					0				0	186.50	506.644
4	Raising of Plantations			0					0				0	186.50	191.247
5	1st year maintenance			0					0				0	186.50	132.516
6	2nd year maintenance			0					0				0	186.50	65.792
7	3rd year maintenance			0					0				0	186.50	47.209
8	4th year maintenance			0					0				0	186.50	48.601
9	5th year maintenance			0					0				0	186.50	26.575
10	6th year maintenance			0					0				0	186.50	29.273
11	7th year maintenance			0					0				0	186.50	32.243
12	8th year maintenance	20000	86.50	17.300					0				0	186.50	35.500
13	9th year maintenance	20000	100.00	20.000	22000	86.50	19.030						0	186.50	39.030
14	10th year maintenance			0	22000	100.00	22.000	24200	86.50	20.933			186.50	42.933	
	Total			37.300					41.030			20.933	186.50	1269.663	
	Total (Plantation cost)		0	56.300		0	61.930		0	20.933	281.50	1889.628			

[illegible]

Sl No.	Description	2024-25			2025-26			2026-27			2027-28			2028-29		
		Unit rate	Phy	Fin	Unit rate	Phy	Fin	Unit rate	Phy	Fin	Unit rate	Phy	Fin	Unit rate	Phy	Fin
1	2	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
III	Fencing the plantation area with chain link fence (Rmt)															
	a) Sy. No. 1 of Santha Kovvur Village			0			0			0			0			0
	b) Sy. No. 1 of Udavagandla Village			0			0			0			0			0
	<b>Total</b>		<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>
IV	Construction of 4" height Cement Concrete boundary pillars along the block boundary															
	a) Sy. No. 1 of Santha Kovvur Village			0			0			0			0			0
	b) Sy. No. 1 of Udavagandla Village			0			0			0			0			0
	<b>Total</b>		<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>
V	Digging of trench of 3mt x 2 mt x 3mt along the boundary of the CA Areas (Km) @ Rs. 40.10 / Cum for 7500 Cum per Km (Rate as per G.O.Ms No.61 Dt. 06-07-2015)															
	a) Sy. No. 1 of Santha Kovvur Village			0			0			0			0			0
	b) Sy. No. 1 of Udavagandla Village			0			0			0			0			0
	<b>Total</b>		<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>
VI	Engaging of retired Forest Personal	5.798	1	5.798	6.378	1	6.378	7.015	1	7.015	7.717	1	7.717	8.489	1	8.489
VII	Engaging of Data Entry Operator	3.865	1	3.865	4.252	1	4.252	4.677	1	4.677	5.145	1	5.145	5.659	1	5.659
VIII	Overheads (Administrative Cost, Stationery, Electrical bills, POL etc. (10% of plantation cost)			7.156			5.022			4.223			4.645			5.123
	<b>Total (VI to VIII)</b>			<b>16.819</b>			<b>15.651</b>			<b>15.915</b>			<b>17.506</b>			<b>19.271</b>
	<b>GRAND TOTAL</b>			<b>88.383</b>			<b>65.872</b>			<b>58.140</b>			<b>63.954</b>			<b>70.504</b>

Sl No.	Description	2029-30			2030-31			2031-32			Total	
		Unit rate	Phy	Fin	Unit rate	Phy	Fin	Unit rate	Phy	Fin	Phy	Fin
1	2	33	34	35	36	37	38	39	40	41	42	43
III	Fencing the plantation area with chain link fence (Rmt)											
	a) Sy. No. 1 of Santhakovvur Village			0			0			0	4000	40.660
	b) Sy. No. 1 of Udavagandla Village			0			0			0	6000	60.990
	<b>Total</b>		<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>	<b>10000</b>	<b>101.650</b>
IV	Construction of 4" height Cement Concrete boundary pillars along the block boundary											
	a) Sy. No. 1 of Santhakovvur Village			0			0			0	200	21.000
	b) Sy. No. 1 of Udavagandla Village			0			0			0	300	31.500
	<b>Total</b>		<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>	<b>500</b>	<b>52.500</b>
IV	Digging of trench of 3mt x 2 mt x 3mt along the boundary of the CA Areas (Km) @ Rs. 40.10 / Cum for 7500 Cum per Km (Rate as per G.O.Ms No.61 Dt. 06-07-2015)											
	a) Sy. No. 1 of Santhakovvur Village			0			0			0	2	6.016
	b) Sy. No. 1 of Udavagandla Village			0			0			0	3	9.024
	<b>Total</b>		<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>	<b>5</b>	<b>15.040</b>
VI	Engaging of retired Forest Personal	9.337	1	9.337	10.271	1	10.271	11.298	1	11.298	1	88.282
VII	Engaging of Data Entry Operator	6.225	1	6.225	6.847	1	6.847	7.532	1	7.532	1	58.855
VIII	Overheads (Administrative Cost, Stationery, Electrical bills, PCL etc. (10% of plantation cost)			5.630			6.194			2.094		188.966
	<b>Total (VI to VIII)</b>			<b>21.192</b>			<b>23.313</b>			<b>20.925</b>		<b>336.102</b>
	<b>GRAND TOTAL</b>			<b>77.492</b>			<b>85.243</b>			<b>41.858</b>	<b>281.50</b>	<b>2394.920</b>

  
 22/9/18  
 Divisional Forest Officer  
 Proddatur (WL) Division  
 22/9/18

# DATA SHEET FOR PRIMARY BED SIZE 1.00 Mt X 1.00 Mt X 0.30 Mt

Unit - 1 Bed @ 250 Nos.

Qty.	Details of works	2018 - 19 FSR Item No.	Rate	Unit	Amount
1	2	3	4	5	6
1 No.	Preparation of New site - by clearing miscellaneous unvaible Jungle growth, uprootal of stumps and removal of surface stones, pebbles etc.,	01-02-001	5.37	Bed	5.37
1 No.	Digging soil to a depth of 30 cm. (as per CSSR)	01-02-003	39.78	Bed	39.78
1 No.	Cost of <b>sandy soil 50% of dugged quantity</b> and transportation taken from private lands, with 5 kms lead loading and unloading charges by mannual means (Sandy soil and FYM. in 5:1 proprtion) 0.125 cum per bed. (as per CSSR)	01-02-004	32.61	Bed	32.61
1 No.	Cost and transport of <b>Farm yard manure</b> (Sandy soil and FYM. in 5:1 proprtion) 0.025 cum per bed.	01-02-005	100.00	Bed	100.00
1 No.	Preparation of soil mixture of red earth/sand and farm yard manure in 5:1 proportion and formation of bed by refilling the excavated portion of the bed and filling of bed.	01-02-006	11.11	Bed	11.11
1 No.	Cost of seed	01-02-007	134.09	Bed	134.09
1 No.	Sowing of seed and covering the bed with hay including cost and conveyance to a thickness of 2.5 cm.	01-02-008	12.63	Bed	12.63
1 No. / 2 months	Watering the primary nursery beds with rose water cans for a maximum period of 2 months.	01-02-009	14.17	Bed/ month	28.34
1 No. / 2 times	Weeding the primary beds. Maximum of 2 times	01-02-010	2.10	Bed/ month	4.20
	Contingencies				31.87
	<b>TOTAL</b>				<b>400.00</b>
					<b>Per Bed</b>

22/9/18  
Divisional Forest Officer  
Proddatur (WL) Division

# DATA SHEET FOR RAISING OF 4"x7"x200 guage Nursery

Unit - 1000 Nos

Qty.	Details of works	2018-19 FSR Item No.	Rate	Unit	Amount
1	2	3	4	5	6
1 Bed	Site preparation for old site- Clearing of growth, weeds, grass etc.	01.03.002	13.60	Bed	13.6
	<b>Cost and transport of ingradient for Potting mixture Red Soil and Clayey Soil in 2:1 ratio. (as per CSSR 2011-12)</b>				
1100	10 cm X 17.5 cm (4" X 7") - 0.56 cum.	01-03-003	146.33	1000.00	160.96
	Preparation of potting mixture <b>Red Soil and Clayey Soil in 2:1 ratio</b> by powdering of various ingradient, sieving and mixing them in the prescribed proporation, Opening the bags and filling with potting mixture and gently pressing the same with finger tip and arranging in beds.				
1100	10 cm X 17.5 cm (4" X 7") - 0.56 cum.	01-03-008	444.68	1000.00	489.15
2 Kgs	Cost of polythene bags	01-03-013	159.00	Kg	318.00
4 Beds	Cost of Primary Bed	As per data	400.00	Per Bed	1600.00
1100	Picking out seedlings from primary beds and transplanting in bags.	01-03-014	144.12	1000.00	158.53
1000	Cost of Cow dung slurry	01.03.023	250.00	1000.00	250.00
1000	Application of Cow dung slurry once in Raising year	01.03.024	213.32	1000.00 per time	213.32
0.4	Watering the plants twice a day for 10 m X 1 m size bed (2600 4" X 7" bags; 1700 5" X9" bags ; 1100 6"X12" bags and 800 8"X12" bags) (For 2 Months)	01-03-016	266.41	Per bed/ month	213.13
0.4	Weeding <b>only two times</b> for 10 m X 1 m size bed (2600 4" X 7" bags; 1700 5" X9" bags ; 1100 6"X12" bags and 800 8"X12" bags) (For 2 Months)	01-03-017	51.36	Per bed / weeding	41.09
0.4	Shifting and grading and re-arranging in beds for 10 m X 1 m size bed (2600 4" X 7" bags; 1700 5" X9" bags ; 1100 6"X12" bags and 800 8"X12" bags) <b>Only once.</b>	01-03-018	235.44	Per bed/ shifting	94.18
1000	Cost of chemicals, insecticides, pesticides etc.,	01-03-019	250.00	LS	250.00
14	<u>Brush wood fencing around the Nursery Site:</u> Thorny fencing with sturdy thorn material of 10 cm. girth (at the butt end) and fixing in crow bar holes and strengthening with stone packing. The average height of fence should be 1.5m and fenceing material should be fixed in 2 rows (staggered) at 30 cms apart. The fence should be tightened horizontally by tying with thorny reepers on both sides.	01-03-028	27.12	Rmt	379.68
	Cost of Protection (One watcher is allowed upto 100 beds nursery under all the schemes and more than 100 beds one more watcher is allowed.) (as per proceedings of Dist. Collector, Kadapa Rc. No. A / 1098 / 2016, Dt. 07-12-2016)	01-03-030	68.00	Bed / PM	306.00
	Contingencies / Cost of Pipes / Nursery Board / Nursery implements / Electricity Bill/ Running and Maintenance Charges of Oil Engine etc.	01-03-027		LS	112.36
				<b>TOTAL</b>	<b>4600.00</b>

Divisional Forest Officer  
Proddatur (WL) Division

# DATA SHEET FOR RAISING OF 8" x 12" X 400G PPS

Unit - 1000 Nos

Qty.	Details of works	2018-19 FSR Item No.	Rate	Unit	Amount
1	2	3	4	5	6
13.00	Cost of Polythene Bags	01.03.013	159.00	Kg	2067.00
	<b>Cost and transport of ingredients for Potting mixture Red Soil and Clayey Soil in 2:1 ratio. (as per CSSR 2011-12)</b>				
1100	20 cm X 30 cm (8" X 12") - (3.82-0.56) cum. Conversion from 4"x7 to 8"x12" bag	01-03-007	852.43	1000.00	937.67
	Preparation of potting mixture <b>Red Soil and Clayey Soil in 2:1 ratio</b> by powdering of various ingredients, sieving and mixing them in the prescribed proportion, Opening the bags and filling with potting mixture and gently pressing the same with finger tip and arranging in beds.				
1100	20 cm X 30 cm (8" X 12") - (3.82-0.56) cum. Conversion from 4"x7 to 8"x12" bag	01-03-012	2451.59	1000.00	2696.75
1100 Nos	Cost of 4" x 7" size bag plants	As per Data	4600.00	1000 Nos	5060.00
1.3	Watering the plants twice a day for 10 m X 1 m size bed (2600 4" X 7" bags; 1700 5" X9" bags ; 1100 6"x12" bags and 800 8"x12" bags) (for 3 months)	01-03-016	266.41	Per bed/ month	1039.00
1.3	Weeding <b>only two times</b> for 10 m X 1 m size bed (2600 4" X 7" bags; 1700 5" X9" bags ; 1100 6"x12" bags and 800 8"x12" bags) (For 3 Months)	01-03-017	51.36	Per bed / weeding	200.30
1.3	Shifting and grading and re-arranging in beds for 10 m X 1 m size bed (2600 4" X 7" bags; 1700 5" X9" bags ; 1100 6"x12" bags and 800 8"x12" bags) <b>Only once.</b>	01-03-018	235.44	Per bed/ shifting	306.07
1000	Cost of chemicals, insecticides, pesticides etc.,	01-03-019	300.00	LS	300.00
	Cost of Protection (One watcher is allowed upto 100 beds nursery under all the schemes and more than 100 beds one more watcher is allowed.) (as per proceedings of Dist. Collector, Kadapa Rc. No. A / 1098 / 2016, Dt. 07-12-2016)	01-03-030	68.00	Bed / PM	306.00
	Contingencies / Cost of Pipes / Nursery Board / Nursery implements / Electricity Bil l/ Running and Maintenance Charges of Oil Engine etc.	01-03-027		LS	87.20
				<b>TOTAL</b>	<b>13000.00</b>
					<b>/ 1000 Nos.</b>

Add 10% escalation on unit rate of every year

Unit rate per 2019-20	14300
Unit rate per 2020-21	15700
Unit rate per 2021-22	17300
Unit rate per 2022-23	19000
Unit rate per 2023-24	20900

*NO*  
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22/5/18

# **Data sheet for Maintenance of Nursery of 8"x12"X400G PPS**

**Unit - 1000 Nos**

Qty.	Details of works	2018-19 FSR Item No.	Rate	Unit	Amount
1	2	3	4	5	6
1.3	Watering the plants twice a day for 10 m X 1 m size bed (2600 4" X 7" bags; 1700 5" X9" bags ; 1100 6"X12" bags and 800 8"X12" bags) (for 5 months)	01-03-020	266.41	Per bed / month	1731.67
1.3	Weeding <b>only two times</b> for 10 m X 1 m size bed (2600 4" X 7" bags; 1700 5" X9" bags ; 1100 6"X12" bags and 800 8"X12" bags) (For 5 Months)	01-03-021	51.36	Per bed / weeding	333.84
1.3	Shifting and grading and re-arranging in beds for 10 m X 1 m size bed (2600 4" X 7" bags; 1700 5" X9" bags ; 1100 6"X12" bags and 800 8"X12" bags) - 2 times	01-03-022	235.44	Per bed/ shifting	612.14
1000	Cost of Cow dung slurry for 2 times	01-03-023	250.00	1000 Nos per time	500.00
1000	Application of cow dung slurry at the rate of 100 MI to 200 MI per plant - 2 times	01.03.024	213.32	1000.00 per time	426.64
	Cost of Protection (One watcher is allowed upto 100 beds nursery under all the schemes and more than 100 beds one more watcher is allowed.) (as per proceedings of Dist. Collector, Kadapa Rc. No. A / 1098 / 2016, Dt. 07-12-2016)	01-03-030	68.00	Bed / PM	306.00
	Contingencies / Cost of Pipes / Nursery Board / Nursery implements / Electricity Bil l/ Running and Maintenance Charges of Oil Engine etc.	01-03-027		LS	89.71
				<b>TOTAL</b>	<b>4000.00</b>
					<b>/ 1000 Nos.</b>

**Add 10% escalation on unit rate of every year**

Unit rate per 2019-20  
Unit rate per 2020-21  
Unit rate per 2021-22  
Unit rate per 2022-23  
Unit rate per 2023-24

4400  
4800  
5300  
5800  
6400

22/9/18  
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Proddatur (WL) Division

22/9/18



### Data sheet for Laying of Chain Link Mesh

Sr No.	Description of work	Nos	Measurements in Mts			Quantity	Rate / Per	Amount
			Length	Breadth	Height			
1	Earth work excavation for structures as per drawing and technical specifications clause 305.1 in Hard soils including setting out construction of shoring and bracing removal of stumps and other deleterious material and disposal up to a lead of 50m includ!	1 x 2000	0.45	0.45	0.45	182.25		
	For CC Poles Pillars	1 x 2	0.45	0.90	0.36			
	For Gate Pillars	1 x 2	0.45	0.45	0.36			
	Cement Concret (1 : 2 : 4) by using 20 mm HBG Metal including cost and conveyance of all materials and labour charas etc.	1x 2000	0.45	0.45	0.45	182.25		
	CC Poles	1 x 2	0.45	0.45	0.36			
	Gate pillars	1 x 2	0.45	0.90	0.36			
	Deduct CC Pole	1 x 2002	0.45	0.15	0.1	13.51		
						169.10		
						6989.70		1012864.26
						Cum	/ Cum	
3	Cost of concrete fencing poles over a size of 2x1.5x0.10	1 x 2000	0	0	0	2000.00		
						2000.00		
						NoS	/ No	
						Actuals		250000.00
4	Transportation of concrete fencing poles over a size of 2X1.5X0.10	1 x 2000						
						6900.00		
5	Hot dipped galvanized iron chain link mesh 8 guage (4.0 MM) 4"x 4"	1 x 1	4600.00	0	1.50			
						6900.00		
						Sq. Mt	/ Sq. Mt	
						6900.00		1649100.00
6	Fixing of 16 guage chain link mesh dully pulling bightening welding the chain link to the "L" Angle frame dully welding Horizontaly allround the angles with 1"x3"mm size 21/2 small clips, and chain link at the middle over the "L" angular frame and wel							
						6000.00		
						68.00		408000.00
						Sq. mts	/ Sq. Mt	
7	Cost of GI Wire for fixing of chain link mesh					8.00		1440.00
						Sgmt	per Sq. Mt	
						1.00		25000.00
						No	Each	
8	Cost of Iron Gate							25000.00
9	Contingenicies for unforeseen items and Labour charges							1001.22
	TOTAL							4772000.00

For 1 Rmt =  $4772000 / 6000 = 795$  per Rmt or 800 per Rmt

Add 10% escalation on unit rate of every year

880	per Rmt
968	per Rmt
1065	per Rmt

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# Detailed Estimate

## Data Sheet for Construction of RCC Boundary Pillar

Sl No.	Description of work	Nos	Measurements in Mts			Quantity	Rate / Per	Amount
			Length	Breadth	Height			
1	2	3	4	5	6	7	8	9
1	Clearing of juliflora (Prosopis) Jungle including uprooting and removing of Juliflora stumps	1 x 1	3.00	3.00	--	6.000	5.60	33.60
						Sqmt	per Sqmt	
2	Earth work excavation in Hard gravelly soils	1 x 1	1.20	1.20	0.45	0.648	134.58	87.21
						Cum	Cum	
3	CC (1:2:4) using 20 mm metal							
	a) Below GL	1 x 1	1.20	1.20	0.45	0.648		
	b) Above GL	1 x 1	(0.45 + 0.3)/2	(0.45 + 0.3)/2	1.20	0.169		
						0.817	5989.70	4893.58
						Cum	Cum	
4	Plastering with CM (1:4)	1 x 4	1.20	(0.45 + 0.3)/2	--	1.800	3884.50	699.21
						Sqmt	10 Sqmt	
5	White Washing	1 x 4	1.20	(0.45 + 0.3)/2	--	1.800	196.63	35.39
						Sqmt	10 Sqmt	
6	Cost of Steel and its fabrication charges etc. complete	1 x 1	--	--	--	2.900	76.00	220.40
						KGs	Per KG	
7	Contingencies							3030.60
						TOTAL		9000.00

Per No

Add 10% escalation on unit rate of every year

Unit Rate for 2018-19	9900
Unit Rate for 2019-20	10500
Unit Rate for 2021-22	11550

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22/9/18


## Data sheet for Advance Operation under Trench cum Pit Method

Unit : 1 Ha

Quantity	Unit	Description of work	2018-19 FSR Item No.	Rate Rs./Ps.	Per / Unit	Amount
1	1	2	3	4	5	6
		<b>Alignment &amp; Staking</b>				
1	Plantation	Survey with GPS (Only staff to carry out. One manday is allowed for assistance)	02-02-001	207.85	Plantation	207.85
1	Ha	Preparation of site for planting by clearing thorny unsalable, unusable jungle growth, creepers, bushes etc. spreading the cut material all over the site and burning the same Light Jungle growth (> 20% and upto 30% ground area covered with Jungle growth)	02-02-004	6114.59	Ha.	6114.59
1111	Nos	Alignment and staking including laying base line for Misc species (1111 Nos)	02.03.003	81.59	100 Nos.	906.46
1111	Nos	Cost of 0.45M Stake preparation and transportation to site.	02.03.005	53.13	100 Nos.	590.27
2497.50	Cum	Staggered trench of size 10m x (1.5m + 1.20) / 2 x 0.5m = 6.75 cum per each for 1111 Nos. @ 3 Nos. in a trench = 6.75 x 370 = 2497.5 Cum - By Machine	As per RSSR (Data)	85.04	Cum	212387.40
101.25	Cum	Digging of 45 cm cube pits by machine (0.45 x 0.45 x 0.45 = 0.091 cum per pit) for 1111 Nos. (0.091 x 1111 = 101.25 cum)	As per RSSR (Data)	85.04	Cum	8610.30
30	Cmt	Soil and moisture Conservation works	Actuals	205.00	per Cum	6150.00
7	LS	Contingencies for fixing 10th line stones, cost of numbering with paint, plantation boards, journals etc.				1033.12
		<b>GRAND TOTAL:-</b>				<b>236000.00</b>

Add 10% escalation on unit rate of every year


Unit rate per 2019-20	259600
Unit rate per 2020-21	285600
Unit rate per 2021-22	314200
Unit rate per 2022-23	345600
Unit rate per 2023-24	380200

  
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## Data for Earth Work Excavation by Machine

Quantity	Unit	Item of Work	SSR Item	Rate	Per	Amount
1	2	3	4	5	6	7
		a) Labour				
8.32	Days	Mazdoor (Unskilled)	SSR	370.00	Day	3078.40
		b) Machinery				
6	hours	Hydraulic Excavator 1 cum bucket capacity	SSR	2888.60	Hour	17331.60
			TOTAL (Output for 240 cum)			20410.00

For 1 cum      85.04

  
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 22/5/18

## Data sheet for Creation or Raising of plantation under Trench cum Pit Method

Unit : 1 Ha

Quantity	Unit	Description of work	2018-19 FSR Item No.	Rate Rs./Ps.	Per / Unit	Amount
1	2	3	4	5	6	7
1111	Nos	Transport of 8"x 12" size bag plants from nursery site to plantation site including loading and unloading over a lead of 25 Km	02-03-010 & 02-03-015	445.62	100 Nos.	4950.84
1111	Nos	Internal Transport of seedlings to planting points	02.03.020	138.48	100 Nos.	1538.51
50.62	Cum	Cost of tank silt @ 50% on volume of 45 cm cube pit ( 0.45 x 0.45 x 0.45 =0.091 /2 x 1111 = 50.62 Cum) including transportation and all other labour charges etc. Complete	Actuals	418.04	Cum	21161.18
55	KG	Cost of chemical fertilizers (50 gram SSP for basal dressing, 20 gram DAP after planting a) Cost of SSP @ 50 gms / Pit - 10 Kg / Ha	02.03.031 Actuals	20.00	Per Kg	1100.00
22	KG	b) Cost of DAP @ 20 gms / Pit - 8 Kg / Ha	Actuals	30.00	Per Kg	660.00
1111	Nos	Application of fertilizers after planting by making 3 holes of 10 cmts depth with crow bar. 10 cmts away from plant and putting fertilizer and closing	02.03.032	38.31	100 Nos.	425.62
1111	Nos	Planting of bag plants in 45 cm cube pit including refilling of pits	02.03.034	426.62	100 Nos.	4739.75
		Replacement of casualties @ 20%				
222	Nos	Reopening of 45 Cum pits (50% of original rate)	02.03.025	10.15	Each	2253.30
222	Nos	Transport of 8"x 12" bag plants from Nursery to plantation site over a lead of 25Km	02-03-010 & 02-03-015	445.62	100 Nos.	989.28
222	Nos	Internal Transport of 8"x12" bag plants to planting points on head loads	02.03.020	138.48	100 Nos.	307.43
222	Nos	Planting and refilling in 45 cm cube pit	02.03.034	426.62	100 Nos.	947.10
1111	Nos	Provision for watering during planting year as per PCCF, Circle No. 6 B / 2006 - G1 (Rc. No. 17309 / 2000 - G1, Dt. 16-08-2005) prior instructions of Chief Conservator of Forests) - 3 Waterings / Month (From January to March - 9 waterings)	02-03-055	2.83	Plant	28297.17
1111	Nos	Circular Weeding cum deep soil working to a radius of 0.5 m. and to a depth of 15 cm around the plant to be done with pick axes for the plants planted in pits without disturbing the soil around the plant to 10cm wide but weeding that part of area by hand and formation of saucer in Hard Gravelly Soils	02-03-039	639.93	100 Nos.	7109.62
100	Rmt	Creation of Fire lines 3 mts wide	02-03-049	5.95	RMT	595.00

Quantity	Unit	Description of work	2018-19 FSR Item No.	Rate Rs./Ps.	Per / Unit	Amount
1	2	3	4	5	6	7
1	Ha	Cutting of coppice growth flush to the ground over the entire area including retaining useful species just after planting and placing the cut material in between the planting rows. Low Rainfall zone < 800 mm	02-03-047	951.30	Ha	951.30
1111	Nos	Enumeration of survivals 10% to survivals and 5% height once in November after growing season and once in March in dry season	02-03-054	22.85	100 Nos.	253.86
1 No	10 Months	Cost of protection (one watcher is allowed for 20 ha plantation, if the area is less prior approval of Chief Conservator of Forests is required) @ Rs. 263/- per day for 30 days	02-03-053	263.00	Each / per day	3945.00
LS	LS	Contingencies for fixing 10th line stones, cost of numbering with paint, plantation boards, journals etc.				775.04
		<b>GRAND TOTAL:-</b>				<b>81000.00</b>

Add 10% escalation on unit rate of every year

Unit rate per 2019-20	89100
Unit rate per 2020-21	98000
Unit rate per 2021-22	107800
Unit rate per 2022-23	118600
Unit rate per 2023-24	130500

*10/11/18*  
22/11/18  
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*22/11/18*


## Data sheet for 1st year maintenance of Plantation under Trench cum Pit Method

Unit : 1 Ha

Quantity	Unit	Description of work	2018-19 FSR Item No.	Rate Rs./Ps.	Per / Unit	Amount
1	2	3	4	5	6	7
		<b>Replacement of casualties @ 25%</b>				
278	Nos	Digging of 45 cm cube pits in unploughed areas	02.03.025	20.30	Each	5643.40
278	Nos	Transport of 8"x 12" bag plants from Nursery to plantation site over a lead of 25Km	02-03-010 & 02-03-015	445.62	100 Nos.	1238.82
278	Nos	Internal Transport of 8"x12" bag plants to planting points on head loads	02.03.020	138.48	100 Nos.	384.97
278	Nos	Planting of bag plants in 45 cm cube pit including refilling of pits	02.03.034	426.62	100 Nos.	1186.00
1111	Nos	Provision for watering during planting year as per PCCF, Circle No. 6 B / 2006 - G1 (Rc. No. 17309 / 2000 - G1, Dt. 16-08-2005) prior instructions of Chief Conservator of Forests) - 3 Waterings / Month (From April to June - 9 waterings)	02-03-055	2.83	Plant	28297.17
1111	Nos	Circular Weeding cum deep soil working to a radius of 0.5 m. and to a depth of 15 cm around the plant to be done with pick axes for the plants planted in pits without disturbing the soil around the plant to 10cm wide but weeding that part of area by hand and formation of saucer in Hard Gravelly Soils	02-04-007	639.93	100 Nos.	7109.62
1111	Nos	Pruning of lower foliage / branches of species like Kanuga, Neem, Usiri, Seethaphal etc. plants upto 1/3 rd height	02.04.010	121.12	100 Nos.	1345.64
100	Rmt	Creation of Fire lines 3 mts wide	02-04-008	5.95	RMT	595.00
1111	Nos	Enumeration of survivals, pest control, labour amenities, sharpening of tools etc.	02-04-011	22.85	100 Nos.	253.86
1 Nos	12 Months	Cost of protection (one watcher is allowed for 20 ha plantation, if the area is less prior approval of Chief Conservator of Forests is required) @ Rs. 263/- per day for 30 days	02-04-009	263.00	Each / per day	4734.00
LS	LS	Contingencies for fixing 10th line stones, cost of numbering with paint, plantation boards, journals etc.	LS	LS	LS	211.50
<b>GRAND TOTAL:-</b>						<b>51000.00</b>

**Add 10% escalation on unit rate of every year**

Unit rate per 2019-20	56100
Unit rate per 2020-21	61700
Unit rate per 2021-22	67900
Unit rate per 2022-23	74700
Unit rate per 2023-24	82200
Unit rate per 2024-25	90400
Unit rate per 2025-26	99400

  
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 22/11/18


## Data sheet for 2nd year maintenance of Plantation under Trench cum Pit Method

Unit : 1 Ha

Quantity	Unit	Description of work	2018-19 FSR Item No.	Rate Rs./Ps.	Per / Unit	Amount
1	2	3	4	5	6	7
		Replacement of casualties @ 25% (With approval of CCF)				
278	Nos	Digging of 45 cm cube pits in unploughed areas	02.03.025	20.30	Each	5643.40
278	Nos	Transport of 8"x 12" bag plants from Nursery to plantation site over a lead of 25Km	02-03-010 & 02-03-015	445.62	100 Nos.	1238.82
278	Nos	Internal Transport of 8"x12" bag plants to planting points on head loads	02.03.020	138.48	100 Nos.	384.97
278	Nos	Planting of bag plants in 45 cm cube pit including refilling of pits	02.03.034	426.62	100 Nos.	1186.00
1111	Nos	Circular Weeding cum deep soil working to a radius of 0.5 m. and to a depth of 15 cm around the plant to be done with pick axes for the plants planted in pits without disturbing the soil around the plant to 10cm wide but weeding that part of area by hand and formation of saucer in Hard Gravelly Soils	02-05-002	639.93	100 Nos.	7109.62
1111	Nos	Pruning of lower foliage / branches of species like Kanuga, Neem, Usiri, Seethaphal etc. plants upto 1/3 rd height	02-04-010	121.12	100 Nos.	1345.64
100	Rmt	Creation of Fire lines 3 mts wide	02-05-010	5.95	RMT	595.00
1	Ha	Enumeration of survivals, pest control, labour amenities, sharpening of tools etc.	02-04-011	124.41	Ha	124.41
1 No.	12 Months	Cost of protection (one watcher is allowed for 20 ha plantation, if the area is less prior approval of Chief Conservator of Forests is required) @ Rs. 263/- per day for 30 days	02-05-011	263.00	Each / per day	4734.00
LS	LS	Contingencies for fixing 10th line stones, cost of numbering with paint, plantation boards, journals etc.		LS	LS	638.12
		<b>GRAND TOTAL:-</b>				<b>23000.00</b>

Add 10% escalation on unit rate of every year

Unit rate per 2019-20	25300
Unit rate per 2020-21	27800
Unit rate per 2021-22	30600
Unit rate per 2022-23	33700
Unit rate per 2023-24	37100
Unit rate per 2024-25	40800
Unit rate per 2025-26	44900
Unit rate per 2026-27	49400

  
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## Data sheet for 3rd year maintenance of Plantation under Trench cum Pit Method

Unit : 1 Ha

Quantity	Nos	Description of work	2018-19 FSR Item No.	Rate Rs./Ps.	Per / Unit	Amount
1	1	2	3	4	5	6
1111	Nos	Circular Weeding cum deep soil working to a radius of 0.5 m. and to a depth of 15 cm around the plant to be done with pick axes for the plants planted in pits without disturbing the soil around the plant to 10cm wide but weeding that part of area by hand and formation of saucer in Hard Gravelly Soils	02 06 001	639.93	100 Nos.	7109.62
1111	Nos	Pruning of lower foliage / branches of species like Kanuga, Neem, Usiri, Seethaphal etc. plants upto 1/3 rd height	02-06-007	121.12	100 Nos.	1345.64
100	Rmt	Creation of Fire lines 3 mts wide	02-06-005	5.95	RMT	595.00
1	Ha	Enumeration of survivals, pest control, labour amenities, sharpening of tools etc.	02-06-008	124.41	Ha	124.41
1	Ha	Cutting of coppice growth flush to the ground over the entire area including retaining useful species just after planting and placing the cut material in between the planting rows. Low Rainfall zone < 800 mm	02-06-002	951.30	Ha	951.30
1 No	12 Months	Cost of protection (one watcher is allowed for 20 ha plantation, if the area is less prior approval of Chief Conservator of Forests is required) @ Rs. 263/- per day for 30 days	02-06-006	263.00	Each / per day	4734.00
LS	LS	Contingencies for fixing 10th line stones, cost of numbering with paint, plantation boards, journals etc.	LS	LS	LS	140.02
GRAND TOTAL:-						15000.00

Add 10% escalation on unit rate of every year

Unit rate per 2019-20	16500
Unit rate per 2020-21	18200
Unit rate per 2021-22	20000
Unit rate per 2022-23	22000
Unit rate per 2023-24	24200
Unit rate per 2024-25	26600
Unit rate per 2025-26	29300
Unit rate per 2026-27	32200
Unit rate per 2027-28	35400
Unit rate per 2028-29	38900
Unit rate per 2029-30	42800
Unit rate per 2030-31	47100
Unit rate per 2031-32	51800

  
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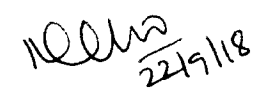
## Data sheet for 4th year maintenance of Plantation under Trench cum Pit Method

Unit : 1 Ha

Quantity	Unit	Description of work	2018-19 FSR Item No.	Rate Rs./Ps.	Per / Unit	Amount
1	2	3	4	5	6	7
1111	Nos	Circular Weeding cum deep soil working to a radius of 0.5 m. and to a depth of 15 cm around the plant to be done with pick axes for the plants planted in pits without disturbing the soil around the plant to 10cm wide but weeding that part of area by hand and formation of saucer in Hard Gravelly Soils	02-07-002	639.93	100 Nos.	7109.62
1111	Nos	Pruning of lower foliage / branches of species like Kanuga, Neem, Usiri, Seethaphal etc. plants upto 1/3 rd height	02-07-004	121.12	100 Nos.	1345.64
100	Rmt	Creation of Fire lines 3 mts wide	02-07-001	5.95	RMT	595.00
1	Ha	Enumeration of survivals, pest control, labour amenities, sharpening of tools etc.	02-07-005	124.41	Ha	124.41
1 No	12 Months	Cost of protection (one watcher is allowed for 20 ha plantation, if the area is less prior approval of Chief Conservator of Forests is required) @ Rs. 263/- per day for 30 days	02-07-003	263.00	Each / per day	4734.00
LS	LS	Contingencies for fixing 10th line stones, cost of numbering with paint, plantation boards, journals etc.			LS	91.32
		<b>GRAND TOTAL:-</b>				<b>14000.00</b>

Add 10% escalation on unit rate of every year

Unit rate per 2019-20	15400
Unit rate per 2020-21	16900
Unit rate per 2021-22	18600
Unit rate per 2022-23	20500
Unit rate per 2023-24	22600
Unit rate per 2024-25	24900
Unit rate per 2025-26	27400
Unit rate per 2026-27	30100
Unit rate per 2027-28	33100
Unit rate per 2028-29	36400
Unit rate per 2029-30	40000
Unit rate per 2030-31	44000
Unit rate per 2031-32	48400

  
 22/9/18  
 Divisional Forest Officer  
 Proddatur (WL) Division

  
 22/9/18

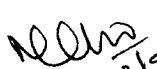
**Data sheet for 5th to 10th year maintenance of Plantation  
under Trench cum Pit Method**


Unit : 1 Ha

Quantity	Unit	Description of work	2018-19 FSR Item No.	Rate Rs./Ps.	Per / Unit	Amount
1	2	3	4	5	6	7
1111	Nos	Pruning of lower foliage / branches of species like Kanuga, Neem, Usiri, Seethaphal etc. plants upto 1/3 rd height	02-08-004	121.12	100 Nos.	1345.64
100	Rmt	Creation of Fire lines 3 mts wide	02-08-001	5.95	RMT	595.00
1	Ha	Enumeration of survivals, pest control, labour amenities, sharpening of tools etc.	02-08-005	124.41	Ha	124.41
1 No	12 Months	Cost of protection (one watcher is allowed for 20 ha plantation, if the area is less prior approval of Chief Conservator of Forests is required) @ Rs. 263/- per day for 30 days	02-08-003	263.00	Each / per day	4734.00
LS	LS	Contingencies for fixing 10th line stones, cost of numbering with paint, plantation boards, journals etc.			LS	200.95
		<b>GRAND TOTAL:-</b>				<b>7000.00</b>

Add 10% escalation on unit rate of every year

Unit rate per 2019-20	7700
Unit rate per 2020-21	8500
Unit rate per 2021-22	9400
Unit rate per 2022-23	10300
Unit rate per 2023-24	11300
Unit rate per 2024-25	12400
Unit rate per 2025-26	13600
Unit rate per 2026-27	15000
Unit rate per 2027-28	16500
Unit rate per 2028-29	18200
Unit rate per 2029-30	20000
Unit rate per 2030-31	22000
Unit rate per 2031-32	24200
Unit rate per 2032-33	26600
Unit rate per 2033-34	29300
Unit rate per 2034-35	32200

  
 22/9/18  
 Divisional Forest Officer  
 Proddatur (WL) Division

  
 22/9/18

**GOVERNMENT OF ANDHR PRADESH**

**FOREST DEPARTMENT**

From

Sri M. Guru Prabhakar, SFS,  
Divisional Forest Officer  
Proddatur (WL) Division.

To

The Divisional Forest Officer,  
Kadapa.

**Rc. No. 3341 / 2015 - P8, Dt : 22 / 09 / 2018**

Sir,

Sub :- APFD - GNSS Phase - II, Package No 05/06 - Diversion of 281.50 ha of Forest land in different RFs of Kadapa and Rajampet Divisions for drinking water, irrigation Reservoir & Canals under GNSS Phase - II scheme in favour of Executive Engineer, GNSS Division No. 7, Pulivendula, YSR Kadapa District - Proposals u/s 2 of FC Act 1980 - CA Scheme proposals pertains to Proddatur (WL) Division - Regarding

Ref :- Divisional Forest Officer, Kadapa Rc. No. 659 / 2018 / GNSS (Package - 5) / A8, Dt. 19-09-2018


\* \* \* \* \*

In response to the reference cited, I submit herewith the compensatory afforestation scheme proposals for raising of 281.50 Ha in non forest land identified in Sy. No. 1, Santhakovuur Village and Sy. No. 1 Udavagandla Village, Thondur Mandal, Muddanur Range, Proddatur (WL) Division in lieu of diversion of forest land to an extent of 281.50 ha in different RFs of Kadapa and Rajampet Divisions for drinking water, irrigation Reservoir & Canals under GNSS Phase - II scheme in favour of Executive Engineer, GNSS Division No. 7, Pulivendula, YSR Kadapa District.

The Compensatory Afforestation Scheme is prepared for a period of 12 years (including starting year) from 2019-20 to 2031-32 with an outlay of Rs. 2394.920 lakhs for the implementation of CA scheme in an extent of 281.50 ha. The compensatory afforestation scheme proposals along with site inspection report, site suitability certificate are enclosed herewith for further process.

Yours faithfully

**Encl. :-** As above.

  
Divisional Forest Officer  
Proddatur (WL) Division

Copy to the Executive Engineer, GNSS Division No. 7, D. No. 1-4-146/2, Pulivendula, YSR Kadapa District for information and necessary action.

**Site inspection notes of proposed Compensatory  
Afforestation area of 281.50 Ha in lieu of diversion of forest  
land for Drinking Water, Irrigation Reservoirs and Canals  
under GNSS Phase - II scheme (Package No. 05 /06 ) in  
Proddatur WL Division of YSR Kadapa District**

\*\*\*\*\*

The compensatory afforestation area of 281.50 Ha is identified in Sy. No. 1 of Santhakovvur Village to an extent of 99.69 Ha and Sy. No. 1 of Udavagandla Village, Thondur Mandal, YSR Kadapa District in two Bits to an extent 206.54 ha (Bit - I ) and 21.63 ha (Bit-2) in lieu of diversion of forest land in Kadapa and Rajampet Divisions in different RFs for Drinking Water, Irrigation Reservoir and Canals under GNSS Phase - II Scheme for Package No. 05/06 in favour of Executive Engineer, GNSS Division No. 7, Pulivendula. Total Area allotted for compensatory afforestation in the said two villages is 327.86 Ha and authenticated diversion area for the said project is 281.50 ha. Hence 281.50 ha is considered for raising Compensatory Afforestation in Proddatur (WL) Division for the Package No. 05/06 under GNSS Phase - II Scheme.

The Range wise details of CA areas are as follows.

<b>Sl No.</b>	<b>Range</b>	<b>Name of the Village</b>	<b>Sy. No.</b>	<b>Area allotted and DGPS Authenticated in Ha</b>	<b>Area proposed for raising of CA in Ha</b>
1	Muddanur	Santhakovvuru	1	99.69	95.00
2	Muddanur	Udavagandla (Bit-1)	1	206.54	186.50
3	Muddanur	Udavagandla (Bit-2)	1	21.63	
		<b>TOTAL</b>		<b>327.86</b>	<b>281.50</b>

**1) Sy. No. 1 of Santhakovvur Village, Thondur Mandal**

The proposed compensatory afforestation area of 95.00 ha in Survey No. 1, Santhakovvur Village, Thondur Mandal, Muddanur Range in Proddatur Forest Division was inspected on 13/08/2018.

The proposed area is abutting the compartment No. 52 of Mallela South RF in Mallela Beat, Pulivendula Section of Muddanur Range.

The proposed area is hillock and having gentle to steep slopes. Gradient is more than 30° at foot hills and more than 45° in the hill tops. The depth of the soil is hardly 30 cm on the top of hill.

The soil is mixed with unweathered rock and with fair sized boulders. At the foot of the hill, trench was dug up with dimensions of 5 mt top width, 2 mts bottom width and 1.5 mt depth. The trench was dug up all along the hillock at the bottom. The trench so dug up was formed as supply channel from Pydipalem Tank to Ganganapalli Tank. As on today there is no water supply through the supply channel.

Total area is fit for taking up Barren Hill Afforestation (BHA) with suitable species by taking trench cum pits with tall seedlings of Neem and other etc.

The existing vegetation is less than 0.1 density with thorny scrub jungle. The proposed compensatory afforestation area falls under Southern Tropical Dry Deciduous Forests with the following species like *Zyzyphus xylopyrus* (Gotti), *Cassia tora* (Pedda kasindi), *Acacia nilotica* (Nalla thumma), *Carissa carandas* (Kalivi), *Prosopis* (Thumma) and sporadically *Azadirachta indica* (Neem).

### **Method of Treatment**

Total area of 95.00 ha is suitable for raising CA under trench cum pit method of plantation. Tall plants of size 8"x 12" are proposed for planting in 0.45 mt cube pits in the central pit of trench cum pit to facilitate quick establishment and growth. Provision for imported soil is made to make up the fertile soil. Water provision is also made during raising and 1<sup>st</sup> year maintenance of plantations.

Foot hills can be planted with Neredu, Usiri, Seethaphal etc. Soil & Moisture Conservation works like Check dams, Rock fill dams and other

Water Harvesting Structures need to be taken up to retain the existing soil and to arrest soil erosion. Seed dibbling is also proposed in the scheme to establish rejuvenation of the growth in the CA area. Construction of 4" height Cement Concrete Boundary pillars are also proposed in the scheme for clear demarcation of the compensatory afforestation area. Fencing is proposed for protection from the biotic interference.

## **2) Sy. No. 1, Udavagandla Village, Thondur Mandal**

Out of 228.17 ha area in Sy. No. 1, Udavagandla Village only 186.50 ha is proposed for raising compensatory afforestation.

The proposed area for raising compensatory afforestation in Sy. No. 1 of Udavagandla Village, Thondur Mandal, Muddanur Range in Proddatur (WL) Division was inspected on 08/07/2018.

Most of the proposed area is hillock (more than 80%), only 10% to 20% of the area is plain land. On the top of hill four (4) wind mills were already sanctioned by the Revenue Authorities. There is an approach road with a width of 6.00 mt. was formed from the bottom of the hill to the wind mills situated on the top of hill. This area is excluded in the Compensatory afforestation area proposed. Soil is gravelly and mixed with disintegrated shale rock. The depth of the soil is hardly 30 cm on the top of hill. The gradient of the hill is more than 30°.

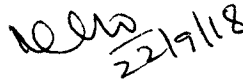

The vegetation existing in the proposed compensatory afforestation area is like *Carissa carandas* (Kalivi), *Zyzyphus xylopyrus* (Gotti), *Cassia tora* (Pedda kasindi), *Dodonaea viscosa* (Bandedu), *Azadirachta indica* (Neem) etc.

### **Method of Treatment**

The treatment proposed for raising Compensatory Afforestation is trench cum pit method depending upon the depth of soil and terrain. The plantation is proposed by digging of staggered trenches with central pit in the hillocks. Tall plants of size 8"x 12" are proposed for planting in 0.45 mt cube pits in the central pit of trench cum pit to facilitate quick

establishment and growth. Provision for imported soil is made to make up the fertile soil. Water provision is also made during raising and 1<sup>st</sup> year maintenance of plantations.

Soil & Moisture Conservation works like Check dams, Rock fill dams and other Water Harvesting Structures need to be taken to retain the existing soil and arrest soil erosion. Seed dibbling is also proposed in the scheme to establish rejuvenation of the growth in the CA area. Construction of 4" height Cement Concrete Boundary pillars are also proposed in the scheme for clear demarcation of the compensatory afforestation area. Fencing is proposed for protection from the biotic interference.

  
22/9/18  
Divisional Forest Officer  
Proddatur (WL) Division  
  
22/9/18