

**Site inspection notes of Compensatory Afforestation area of 101.24 Ha area proposed for diversion for excavation of GNSS Main Canal from Km 87.400 to Km 94.800 under GNSS Phase - II scheme in Proddatur WL Division of YSR Kadapa District**

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The compensatory afforestation area to an extent of 101.24 Ha is proposed in lieu of diversion of 101.24 ha forest land in Ganganapalli RF of Kadapa Division for excavation of Canal from Km 87.400 to Km 94.800 under GNSS Phase - II Scheme in favour of Executive Engineer, GNSS Division No. 7, Pulivendula, YSR Kadapa District. Though the diversion area is 101.24 Ha, the compensatory afforestation area was identified to an extent of 149.78 ha and mutated in favour of Forest Department. The DGPS Map was also authenticated to an extent of 149.78 Ha in Sy. No. 580 of M. Kambaladinne Village, Mylavaram Mandal, YSR Kadapa District.

The proposed area for raising of 101.24 ha compensatory afforestation in Sy. No. 580, M. Kambaladinne Village, Mylavaram Mandal, Muddanur Range in Proddatur (WL) Division was inspected on 27/04/2018.

Most of the proposed area is undulating with gradient less than 30 degrees. 50% of the area is mixed with boulders and 50% of the area is suitable for raising SMM plantation. A nallah is passing in the mid of the area. The depth of the soil is varying between 30 cm to 50 cm in 50% of the area and more than 1.00 mt in the balance area.

The compensatory afforestation area falls under Southern Tropical Dry Deciduous Forests with the following species like Carissa carandas, Zyzyphus xylopyrus Merremia aegyptica, Tarenna asiatica and Prosopis juliflora etc.


**a) Semi Mechanical Method of Plantation**

70.00 ha is proposed to take up under Semi Mechanical Method of plantation. Based on the site specific conditions compensatory afforestation scheme is proposed by planting of 8"x 12" size plants in 0.60 mt cube pits to facilitate quick establishment and growth in SMM plantations. For loosening the top soil and to facilitate water absorption and good growth, ploughing is preferred under SMM plantation.

#### **b) Trench cum Pit Method Plantations**

31.24 ha is proposed under trench cum pit method in the available area considering 1000 No. Plants per ha, 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 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 mainly Continuous Peripheral Trench (CPT), Rock fill dams, Water Harvesting Structures etc., are proposed in the compensatory afforestation scheme. Fencing is proposed for protection from the biotic interference.

  
Divisional Forest Officer  
Proddatur (WL) Division

**"SUITABILITY CERTIFICATE FOR CA"**

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It is certified that the area of 101.24 ha non forest land identified for raising Compensatory Afforestation in Sy. No. 580, M. Kamabaladinne Village, Mylavaram Mandal, Muddanur Range of Proddatur (WL) Division in lieu of forest land proposed for diversion for excavation of GNSS Main Canal from Km 87.400 to Km 94.800 under GNSS Phase – II scheme is found suitable for taking up afforestation as per the site specific treatment included in the CA scheme.

  
Divisional Forest Officer  
Proddatur WL Division

**Proposals for raising of 101.24 ha Compensatory Afforestation in identified Sy. No. 580 (Non Forest land) of M. Kamabaladinne Village, Muddanur Range in lieu of diversion of 101.24 ha forest land for excavation of GNSS Main Canal from Km 87.400 to Km 94.800 under GNSS Phase - II scheme in Proddatur WL Division of YSR Kadapa District.**

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1. Object : To raise compensatory afforestation plantation with the funds of Irrigation Department, Andhra Pradesh in 101.24 Ha in lieu of diversion of 101.24 forest land for excavation of GNSS Main Canal from Km 87.400 to KM 94.800 under GNSS Phase – II Scheme 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 2030 - 31)
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	Compt No.	Area proposed for CA in Ha
1	Muddanur	M. Kambaladinne	580	101.24

4. Type of the CA land : The proposed compensatory afforestation area is undulating with gradient less than 30 degrees. 50% of the area is mixed with boulders and 50% of the area is suitable for raising SMM plantation. A nallah is passing in the mid of the area. The depth of the soil is varying from 50 cm to 1.00 mt. 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 Carissa carandas, Zyzyphus xylopyrus Merremia aegyptica, Tarenna asiatica and Prosopis juliflora etc.

6. Treatment Proposed : **Semi Mechanical Method Planting**

An area of 70.00 ha is proposed for raising compensatory afforestation area under Semi Mechanical Method of Plantation depending upon the type of soil, density of vegetation in plain areas and Slope >30 degrees. Tall plants of size 8"x 12" are proposed for planting in 0.60 mt cube pits to facilitate quick establishment and growth. For loosening the top soil and to facilitate water absorption and good growth ploughing is preferred. Provision for imported soil is made to make up the hard red loamy and sandy loamy soil.

Soil & Moisture Conservation works are to be taken up mainly Continuous Peripheral Trench (CPT), Water Harvesting Structures etc., in the proposed compensatory afforestation areas. Fencing is proposed for protection from the biotic interference.

#### **Trench cum Pit Method Planting**

An area of 31.24 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) Ficus benghalensis 2) Ficus religiosa 3) Hardwickia binata 4) Azadirachta indica 5) Madhuca latifolia 6) Terminalia tomentosa 7) Dalbergia latifolia 8) Pterocarpus marsupium 9) Soyimida febrifuga 10) Emblica officinalis 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. 719.370 Lakhs.

  
Divisional Forest Officer  
Proddatur WL Division

**Action Plan Proposals for Raising of 101.24 ha Compensatory Afforestation in Sy. No. 580 of M. Kamabaladinne Village, Muddanur Range in lieu of diversion of 101.24 ha forest land for excavation of GNSS Main Canal from Km 87.400 to Km 94.800 under GNSS Phase - II scheme in favour of Executive Engineer, GNSS Division No. 7, Pulivendula, YSR Kadapa District from 2019 - 20 to 2030-31 - Proddatur (WL) Division**

[illegible]

[illegible]



SI No.	Description	2019-20			2020-21			2021-22			2022-23			2023-24			2024-25		
		Unit rate	Phy	Fin	Unit rate	Phy	Fin	Unit rate	Phy	Fin	Unit rate	Phy	Fin	Unit rate	Phy	Fin	Unit rate	Phy	Fin
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
10	6th year maintenance			0			0			0			0			0			0
11	7th year maintenance			0			0			0			0			0			0
12	8th year maintenance			0			0			0			0			0			0
13	9th year maintenance			0			0			0			0			0			0
14	10th year maintenance			0			0			0			0			0			0
	<b>Total</b>			<b>85.000</b>		<b>31.24</b>	<b>34.265</b>		<b>0.00</b>	<b>23.585</b>		<b>0</b>	<b>11.137</b>		<b>0</b>	<b>7.560</b>		<b>0</b>	<b>7.779</b>
C	Fencing the plantation area with chain link fence (Rmt)	968	5000	48.400			0			0			0			0			0
D	Overheads (10% of plantation cost)			15.304			13.029			6.012			4.748			2.786			2.920
	<b>Total</b>			<b>63.704</b>			<b>13.029</b>			<b>6.012</b>			<b>4.748</b>			<b>2.786</b>		<b>0</b>	<b>2.920</b>
	<b>Grand Total</b>			<b>216.745</b>		<b>101.24</b>	<b>143.324</b>			<b>66.134</b>			<b>52.226</b>			<b>30.646</b>			<b>32.119</b>

Sl No.	Description	2025-26			2026-27			2027-28			2028-29			2029-30			2030-31			Total	
		Unit rate	Phy	Fin	Unit rate	Phy	Fin	Unit rate	Phy	Fin	Unit rate	Phy	Fin	Unit rate	Phy	Fin	Unit rate	Phy	Fin	Phy	Fin
1	2	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
10	6th year maintenance			0	15000	31.24	4.686			0			0			0			0	31.24	4.686
11	7th year maintenance			0			0	16500	31.24	5.155			0			0			0	31.24	5.155
12	8th year maintenance			0			0			0	18200	31.24	5.686			0			0	31.24	5.686
13	9th year maintenance			0			0			0			0	20000	31.24	6.248			0	31.24	6.248
14	10th year maintenance			0			0			0			0			0	22000	31.24	6.873	31.24	6.873
	<b>Total</b>		<b>0</b>	<b>4.249</b>		<b>0</b>	<b>4.686</b>		<b>0</b>	<b>5.155</b>		<b>0</b>	<b>5.686</b>			<b>6.248</b>			<b>6.873</b>	<b>31.24</b>	<b>202.222</b>
C	Fencing the plantation area with chainlink fence (Rmt)			0			0			0			0			0			0	5000	48.400
D	Overheads (10% of plantation cost)			2.098			2.310			2.538			2.795			3.075			3.385		61.000
	<b>Total</b>		<b>0</b>	<b>2.098</b>		<b>0</b>	<b>2.310</b>		<b>0</b>	<b>2.538</b>			<b>2.795</b>			<b>3.075</b>			<b>3.385</b>		<b>109.400</b>
	<b>Grand Total</b>			<b>23.077</b>			<b>25.406</b>			<b>27.923</b>			<b>30.740</b>			<b>33.823</b>			<b>37.208</b>	<b>101.24</b>	<b>719.370</b>

  
 Divisional Forest Officer  
 Proddatur (WL) Division

### Data sheet for Laying of Chain Link Mesh

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	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 includi							
	For CC Poles Pillars	1 x 2000	0.45	0.45	0.45	182.25		
	For Gate Pillars	1 x 2	0.45	0.45	0.90	0.36		
						182.61	134.68	24594.52
						Cum	/ Cum	
2	Cement Concret ( 1: 2: 4 ) by using 20 mm HBG Metal including cost and conveyance of all materials and labour chares etc.							
	CC Poles	1x 2000	0.45	0.45	0.45	182.25		
	Gate pillars	1 x 2	0.45	0.45	0.90	0.36		
						182.61		
						Cum		
	Deduct CC Pole	1 x 2002	0.45	0.15	0.1	13.51		
						169.10	5989.70	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	700.00	1400000.00
						Nos	/ No	
4	Transportation of concrete fencing poles over a size of 2x1.5x0.10	1 x 2000					Actuals	250000.00
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		
						6900.00	239.00	1649100.00
						Sq. Mt	/ Sq. Mt	
6	Fixing of 16 guage chain link mesh dully pulling tightening welding the chain link to the "L" Angle frame dully welding Horizontally 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	180.00	1440.00
						Sqmt	per Sq. Mt	
8	Cost of Iron Gate					1.00	25000.00	25000.00
						No	Each	
9	Contingencies for unforeseen items and Labour charges							1001.22
						TOTAL		4772000.00

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

for 6000 Rmt

Add 10% escalation on unit rate of every year

Unit Rate for 2018 - 19


Unit Rate for 2019 - 20

Unit Rate for 2020 - 21

880 per Rmt

968 per Rmt

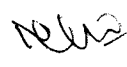
1065 per Rmt

  
 Divisional Forest Officer  
 Proddatur (WL) Division

# 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 misceleneous 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>

  
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 reapers 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 Bill / 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

Divisional Forest Officer  
Proddatur (WL) Division

### 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 I/ Running and Maintenance Charges of Oil Engine etc.	01-03-027		LS	89.71
				<b>TOTAL</b>	<b>4000.00</b>
					/ 1000 Nos.

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

**Unit rate per 2019-20**

4400

**Unit rate per 2020-21**

4800

**Unit rate per 2021-22**

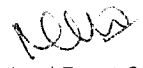
5300

**Unit rate per 2022-23**

5800

**Unit rate per 2023-24**

6400

  
Divisional Forest Officer  
Proddatur (WL) Division


# Data Sheet for Advance operations - SMM

Espacement : 3 Mt x 3 Mt, Unit - 1 Ha

Quantity	Unit	Item of Work	2018-19 FSR Item No.	Rate	Per	Amount
1	2	3	4	5	6	7
1	Ha	Survey with GPS (Only staff to carry out) one manday is allowed for assistance	02-02-001	207.85	Plantation	207.85
		Preparation of site for planting by clearing thorny unsaleable, unusable jungle growth, creepers, bushes etc. spreading the cut material all over the site and burning the same.				
1	Ha	Light Jungle growth (> 20% and upto 30% ground area covered with Jungle growth)	02-02-004	6114.59	Ha.	6114.59
		Uprootal of stumps to a depth of 45 cm (excluding unsuitable patches) with heavy machinery fitted with 0.90 cum and above capacity bucket, filling the pits caused by uprootal and leveling.				
1	Ha	Light Jungle growth (> 20% and upto 30% ground area covered with Jungle growth)	02-02-009	16312.25	Ha.	16312.25
		Collection and removal of uprooted stumps of all sizes, other debris etc to outside the plantation site.				
1	Ha	Light Jungle growth (> 20% and upto 30% ground area covered with Jungle growth)	02-02-013	10024.17	Ha.	10024.17
1	Ha	Deep ploughing the plantation area to a depth of 30 cm with heavy duty tractor of 45 HP and above across the slope with mould board plough. (untilled Areas) - HG soils	02.02.020	5479.28	Ha	5479.28
1	Ha	Removing congestion of root suckers and other uprooted material hindering the effective ploughing (For Non-tilled Areas Only)	02.02.024	1023.56	Ha	1023.56
1111	Nos	Alignment and staking including laying base line for Misc. species with espacement 3mX3m (1111 Nos)	02.03.003	81.59	100 Nos	906.46
240	Cum	Digging of 0.60 mt cube pit in HG Soils (Half of the original rate since ploughing is provided) - $205 / 2 = 102.50$	As per RSSR 7 e	102.50	per Cum	24600.00
30	Cmt	Soil and moisture Conservation works	Actuals	205.00	per Cum	6150.00
LS	Nos	Contingencies for unforeseen items like plantation Boards, stationery etc.				181.84
			TOTAL			71000.00

Add 10% escalation on unit rate of every year

Unit Rate for 2019 - 20	78100
Unit Rate for 2020 - 21	85900
Unit Rate for 2021 - 22	94500
Unit Rate for 2022 - 23	104000
Unit Rate for 2023 - 24	114400
Unit Rate for 2024 - 25	125800

  
 Divisional Forest Officer  
 Proddatur (WL) Division




### Data Sheet for Raising of Plantation - SMM

Quantity	Unit	Item of Work	2018-19 FSR Item No.	Rate	Per	Amount
1	2	3	4	5	6	7
		<b>Raising of Plantations</b>				
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
120	cum	Cost of imported soil (50% on volume of pit = $0.60 \times 0.6 \times 0.6$ = $0.216/2$ Cum x 1111 Nos = 120 Cum)	As per CSSR (M-092)	50.00	cum	6000.00
120	cum	Transport of imported soil (upto 35 Km lead)	As per CSSR	451.50	cum	54180.00
22	Kgs	Cost of Chemical fertilizers / organic fertilizers at 20 gms per plant	02.03.031	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 and Refilling of pits, staking stick in 0.60 mt cube pits	As per RSSR Sl. No. 20 Cat. No. e (iii)	7.63	Each	8476.93
		<b>Replacement of casualties - 20%</b>				
48	Cum	Digging of 0.60 mt cube pit in HG Soils (Half of the original rate ) - $205 / 2 = 102.50$	As per RSSR 7 (e)	102.50	per Cum	4920.00
222	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.	989.28
222	Nos	Internal Transport of seedlings to planting points	02.03.020	138.48	100 Nos.	307.43
222	Nos	Planting and Refilling of pits, staking stick in 0.60 mt cube pits	As per RSSR Sl. No. 20 Cat. No. e (iii)	7.63	Each	1693.86
1	Ha	Inter ploughing with heavy duty tractor of 45 HP to a depth of 30 cm	02-03-045	3652.30	Ha	3652.30

Quantity	Unit	Item of Work	2018-19 FSR Item No.	Rate	Per	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 alround the plant to 10cm wide but weeding that part of area by hand and formation of saucer	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
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
1111	Nos	Pruning of lower foliage/ branches of NTFP species like kanuga, Neem, Usiri, Seethaphal etc., plants upto 1/3 rd height.	02.03.050	121.12	100 Nos.	1345.64
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
1	Nos / 9 Months	Cost of Protection (One watcher is allowed for 20 ha plantation. If the area is less prior approval of CCF / CF is required)	02-03-053	263.00	Each / PM	3077.10
100	Rmt	Brush wood fencing around the planting area: 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 fencing materials	02-03-051	27.12	Rmt	2712.00
LS	Nos	Contingencies for unforeseen items				660.70
TOTAL						104500.00

Unit Rate for 2019 - 20	114900
Unit Rate for 2020 - 21	126400
Unit Rate for 2021 - 22	139000
Unit Rate for 2022 - 23	152900
Unit Rate for 2023 - 24	168200

  
 Divisional Forest Officer  
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### Data Sheet for 1st year maintenance of Plantation - SMM

Quantity	Unit	Item of Work	2018-19 FSR Item No.	Rate	Per	Amount
1	2	3	4	5	6	7
		Replacement of casualties - 25%				
60	Cum	Digging of 0.60 mt cube pit in HG Soils	As per RSSR 7 (e)	205.00	per Cum	12300.00
278	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.	1238.82
278	Nos	Internal Transport of seedlings to planting points	02.03.020	138.48	100 Nos.	384.97
278	Nos	Planting and Refilling of pits, staking stick in 0.60 mt cube pits	As per RSSR Sl. No. 20 Cat. No. e (iii)	7.63	Each	2121.14
1	HA	Inter ploughing with heavy duty tractor of 45 HP to a depth of 30 cm	02-04-004	3652.30	Ha	3652.30
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	02-04-007	639.93	100 Nos.	7109.62
100	Rmt	Creation of Fire lines 3 mts wide	02-04-008	5.95	RMT	595.00
1111	Nos	Enumeration of survivals 10% to survivals and 5% height once in November after growing season and once in March in dry season.	02.04.011	22.85	100 Nos.	253.86
1111	Nos	Pruning of lower foliage/ branches of NTFP species like kanuga, Neem, Usiri, Seethaphal etc., plants upto 1/3 rd height.	02.04.010	121.12	100 Nos.	1345.64

Quantity	Unit	Item of Work	2018-19 FSR Item No.	Rate	Per	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
1	Nos / 12 Months	Watch & ward for 12 months (One watcher is allowed for 20 ha plantation. If the area is less prior approval of CCF / CF is required)	02-04-008	263.00	Each / PM	4102.80
LS	Nos	Contingencies for unforeseen items				444.53
			TOTAL			34500.00

Add 10% escalation on unit rate of every year

Unit Rate for 2019 - 20	37900
Unit Rate for 2020 - 21	41700
Unit Rate for 2021 - 22	45900
Unit Rate for 2022 - 23	50500
Unit Rate for 2023 - 24	55600
Unit Rate for 2024 - 25	61200


  
Divisional Forest Officer  
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**Data Sheet for 2nd year maintenance of Plantation - SMM**

Quantity	Unit	Item of Work	2018-19 FSR Item No.	Rate	Per	Amount
1	2	3	4	5	6	7
		Replacement of casualties - 25%				
60	Cum	Digging of 0.60 mt cube pit by machine	As per RSSR 7 (e)	205.00	per Cum	12300.00
278	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.	1238.82
278	Nos	Internal Transport of seedlings to planting points	02.03.020	138.48	100 Nos.	384.97
278	Nos	Refilling of pits and plantings, staking stick in 0.60 mt cube pits	As per RSSR Sl. No. 20 Cat. No. e (iii)	7.63	Each	2121.14
1	Ha	Inter ploughing with heavy duty tractor of 45 HP to a depth of 30 cm	02.05.006	3652.30	Ha	3652.30
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	02.05.002	639.93	100 Nos.	7109.62
100	Rmt	Creation of Fire lines 3 mts wide	02.05.010	5.95	RMT	595.00
1111	Nos	Enumeration of survivals 10% to survivals and 5% height once in November after growing season and once in March in dry season.	02-04-011	22.85	100 Nos.	253.86
1111	Nos	Pruning of lower foliage/ branches of NTFP species like kanuga, Neem, Usiri, Seethaphal etc., plants upto 1/3 rd height.	02-04-010	121.12	100 Nos.	1345.64

Quantity	Unit	Item of Work	2018-19 FSR Item No.	Rate	Per	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	02.05.008	951.30	Ha	951.30
1	Nos / 12 Months	Watch & ward for 12 months (One watcher is allowed for 20 ha plantation. If the area is less prior approval of CCF / CF is required)	02-05.011	263.00	Each / PM	4102.80
LS	Nos	Contingencies for unforeseen items				244.53
			TOTAL			34300.00


Unit Rate for 2019 - 20	37700
Unit Rate for 2020 - 21	41500
Unit Rate for 2021 - 22	45700
Unit Rate for 2022 - 23	50300
Unit Rate for 2023 - 24	55300
Unit Rate for 2024 - 25	60800

  
 Divisional Forest Officer  
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### Data Sheet for 3rd year maintenance of Plantation - SMM

Quantity	Unit	Item of Work	2018-19 FSR Item No.	Rate	Per	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	02.06.001	639.93	100 Nos.	7109.62
1	Ha	Inter ploughing with heavy duty tractor of 45 HP to a depth of 30 cm	02.06.004	3652.30	Ha	3652.30
1	Ha	Enumeration of survivals, pest control, labour amenities, sharpening of tools, etc.	02.06.009	124.41	Ha	124.41
1111	Nos	Pruning of lower foliage/ branches of NTFP species like kanuga, Neem, Usiri, Seethaphal etc., plants upto 1/3 rd height.	02.06.007	121.12	100 Nos.	1345.64
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
100	Rmt	Creation of Fire lines 3 mts wide	02.06.005	5.95	RMT	595.00
1	Nos / 12 Months	Watch & ward for 12 months (One watcher is allowed for 20 ha plantation. If the area is less prior approval of CCF / CF is required)	02.06.006	263.00	Each / PM	4102.80
LS	Nos	Contingencies for unforeseen items				118.92
			TOTAL			18000.00

Unit Rate for 2019 - 20	19800
Unit Rate for 2020 - 21	21800
Unit Rate for 2021 - 22	24000
Unit Rate for 2022 - 23	26400
Unit Rate for 2023 - 24	29000
Unit Rate for 2024 - 25	31900
Unit Rate for 2025 - 26	35100
Unit Rate for 2026 - 27	38600

  
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### Data Sheet for 4th year maintenance of Plantation - SMM

Quantity	Unit	Item of Work	2018-19 FSR Item No	Rate	Per	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	02.07.002	639.93	100 Nos.	7109.62
1	Ha	Inter ploughing with heavy duty tractor of 45 HP to a depth of 30 cm	02.07.006	3652.30	Ha	3652.30
1	Ha	Enumeration of survivals, pest control, labour amenities, sharpening of tools, etc.	02.07.005	124.41	Ha	124.41
1111	Nos	Pruning of lower foliage/ branches of NTFP 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	Nos / 12 Months	Watch & ward for 12 months (One watcher is allowed for 20 ha plantation. If the area is less prior approval of CCF / CF is required)	02.07.003	263.00	Each / PM	4102.80
LS	Nos	Contingencies for unforeseen items				370.22
			TOTAL			17300.00

Unit Rate for 2019 - 20	19000
Unit Rate for 2020 - 21	20900
Unit Rate for 2021 - 22	23000
Unit Rate for 2022 - 23	25300
Unit Rate for 2023 - 24	27800
Unit Rate for 2024 - 25	30600
Unit Rate for 2025 - 26	33700
Unit Rate for 2026 - 27	37100


  
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**Data Sheet for 5th to 10th year of maintenance of Plantation - SMM**

Quantity	Unit	Item of Work	2018-19 FSR Item No.	Rate	Per	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	02.08.002	639.93	100 Nos.	7109.62
1	Ha	Enumeration of survivals, pest control, labour amenities, sharpening of tools, etc.	02.08.005	124.41	Ha	124.41
1111	Nos	Pruning of lower foliage/ branches of NTFP 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	Nos / 12 Months	Watch & ward for 12 months (One watcher is allowed for 20 ha plantation. If the area is less prior approval of CCF / CF is required)	02.08.003	263.00	Each / PM	4102.80
LS	Nos	Contingencies for unforeseen items				222.52
			<b>TOTAL</b>			<b>13500.00</b>

Unit Rate for 2019 - 20	14800
Unit Rate for 2021 - 22	16300
Unit Rate for 2022 - 23	17900
Unit Rate for 2023 - 24	19700
Unit Rate for 2024 - 25	21700
Unit Rate for 2025 - 26	23900
Unit Rate for 2026 - 27	26300
Unit Rate for 2027 - 28	28900
Unit Rate for 2028 - 29	31800
Unit Rate for 2029 - 30	35000
Unit Rate for 2030 - 31	38500
Unit Rate for 2031 - 32	42400
Unit Rate for 2032 - 33	46600
Unit Rate for 2033 - 34	51300
Unit Rate for 2034 - 35	56400

  
 Divisional Forest Officer  
 Proddatur (WL) Division

## 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
		Alignment & Staking				
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
7	LS	Contingencies for fixing 10th line stones, cost of numbering with paint, plantation boards, journals etc.				1183.12
		<b>GRAND TOTAL:-</b>				<b>230000.00</b>

Add 10% escalation on unit rate of every year

Unit rate per 2019-20	253000
Unit rate per 2020-21	278300
Unit rate per 2021-22	306100
Unit rate per 2022-23	336700
Unit rate per 2023-24	370400




Divisional Forest Officer  
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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

  
 Divisional Forest Officer  
 Proddatur (WL) Division

**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
		Cost of chemical fertilizers (50 gram SSP for basal dressing, 20 gram DAP after planting	02.03.031			
55	KG	a) Cost of SSP @ 50 gms / Pit - 10 Kg / Ha	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
		<b>Replacement of casualties @ 20%</b>				
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

  
Divisional Forest Officer  
Proddatur (WL) Division


**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

  
Divisional Forest Officer  
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**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 refiling 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, Ukiri, 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	4/34.00
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

  
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**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



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