Scheme Proposals for Raising of 0.25 ha Compensatory Afforestation in Degraded Forest area (Compt. No. 76, Chennamukapalli RF, Bayanapalli Beat of Proddatur Range) in lieu of proposed diverted area of 0.02 ha for errection of obstacle light mast for aviation purpose at Kadapa Airport in Favour of Airport Director, Kadapa from 2020 - 21 to 2031-32 - Proddatur (WL) Division

			2020-2	21		2021-2	.2	2	2022-2	3	2	2023-2	4	2024-25		
SI No.	Description	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
I	Semi Mechanical Metho	d of Pl	antat	ion			7) 7)									
1	Advance operations (Ha)	50600	0.25	0.127		0	0	55		0			0			0
2	Raising of Plantations (Ha)			0	275200	0.25	0.688			0			0			0
3	1st year maintenance			0			0	62600	0.25	0.157			0			0
4	2nd year maintenance			0			0			0	60100	0.25	0.150			0
5	3rd year maintenance			0			0			0			0	25100	0.25	0.063
5	4th year maintenance			0			0			0		27	0			0
6	5th year maintenance			0			0			0			0			0
7	6th year maintenance			0			0			0			0			0
8	7th year maintenance			0		DE RO	0			0			0			0
9	8th year maintenance			0			0			0			0			0
10	9th year maintenance			0	1		0			0			0		35	0
11	10th year maintenance			0	1		0			0			0			0
	Total			0.127		0.25	0.688		0	0.157		0	0.150		0	0.063

			2025-2	6	:	2026-2	7		2027-2	8	1:	2028-2	9		2029-3	0
SI No.	Description	Unit rate	Phy	Fin												
1	2	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
I	Semi Mechanical Method of Plantation						4									
1	Advance operations (Ha)			0			0	1		0			0			0
2	Raising of Plantations (Ha)			0			0			0			0			0
3	1st year maintenance			0	-		0			0			0			0
4	2nd year maintenance			0			0			0			0			0
5	3rd year maintenance			0			0			0			0			0
6	4th year maintenance	27600	0.25	0.069			0			0			0			0
7	5th year maintenance	2 17		0	22600	0.25	0.057			0			0			0
8	6th year maintenance		×	0			0	24900	0.25	0.062			0			0
9	7th year maintenance			0			0			0	27400	0.25	0.069			0
10	8th year maintenance			0			0			0			0	30100	0.25	0.075
11	9th year maintenance			0			0			0			0			0
12	10th year maintenance			0			0			0			0			0
	Total		0	0.069		0	0.057		0	0.062		0	0.069		0	0.075

			2030-31			2031-32		To	otal
SI No.	Description	Unit rate	Phy	Fin 35	Unit rate	Phy	Fin	Phy	Fin
1	2	33	34		36	37	38	39	40
I	Semi Mechanical Method of P	lantation							
3	Advance operations (Ha)			0			0	0.25	0.127
4	Raising of Plantations (Ha)			0			0	0.25	0.688
5	1st year maintenance		21	0			0	0.25	0.157
6	2nd year maintenance			0			0	0.25	0.150
7	3rd year maintenance			0			0	0.25	0.063
8	4th year maintenance			0			0	0.25	0.069
9	5th year maintenance			0			0	0.25	0.057
10	6th year maintenance			0			0	0.25	0.062
11	7th year maintenance		100	0			0	0.25	0.069
12	8th year maintenance			0			0	0.25	0.075
13	9th year maintenance	33100	0.25	0.083			0	0.25	0.083
	10th year maintenance			0	36500	0.25	0.091	0.25	0.091
14	Total			0.083			0.091	0.25	1.690



Data Sheet for Advance operations - SMM

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

Quantity	Unit	Item of Work	2019-20 FSR Item No.	Rate	Per	Amount
1	2	3	4	5	6	7
		Advance Operations	Ф ж	2		
1	На	Survey with GPS (Only staff to carry out) one manday is allowed for assistance (as per RSSR)	02-02-001	228.95	Plantation	228.95
	=	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	На	Light Jungle growth (> 20% and upto 30% ground area covered with Jungle growth)	02-02-004	6735.22	Ha.	6735.22
		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.			6.	
1	На	Light Jungle growth (> 20% and upto 30% ground area covered with Jungle growth)	02-02-009	17967.94	Ha.	17967.94
1	На	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) - Hard /Gravelly Soils (50% extra on ordinary soil rate)	02.02.020	6035.43	На	6035.43
1	На	Removing congestion of root suckers and other uprooted material hindering the effective ploughing (For Non-tilled Areas Only)	02.02.024	1127.45	На	1127.45
1111	Nos	Alignment and staking including laying base line for Misc. species with espacement 3mX3m (1111 Nos)	02.03.003	89.87	100 Nos	998.46
1111	Nos	Digging of 0.45 mt cube pit in hard gravelly soils (Ploughed area - 50% of original rate i.e. 22.36 /2 =11.18)	02.03.025	11.18	Per No	12420.98
LS	Nos	Contingencies for unforescene plantation Board, etc.				485.57
				TOTAL		46000.00

 Unit Rate for 2020 - 21
 50600

 Unit Rate for 2021 - 22
 55700

 Unit Rate for 2022 - 23
 61300

 Unit Rate for 2023 - 24
 67400

 Unit Rate for 2024 - 25
 74100

Data Sheet for Raising of Plantation - SMM

Quantity	Unit	Item of Work	2019-20 FSR Item No.	Rate	Per	Amount
1	2	3	4	5	6	7
		Raising of Plantations				
1111	Nos	Cost of Tall plants of size 8" x 12" of height above 2 Mts including Transportation from Private Nurseries to Dept. nursery site	Actuals	75.00	Each	83325.00
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	490.82	100 Nos.	5453.01
1111	Nos	Internal Transport of seedlings to planting points	02.03.020	152.54	100 Nos.	1694.72
333	cum	Cost of imported soil (50% on volume of 0.60 cum pit)	As per CSSR (M-092)	55.00	cum	18315.00
333	cum	Transport of imported soil (50% on volume of 0.60 cum pit)	As per CSSR	215.20	cum	71661.60
22	Kgs	Cost of chemical fertilizers (50 grm SSP for basal dressing, 20 grm DAP after planting)	02.03.031	50.00	Per Kg	1100.00
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	42.20	100 Nos.	468.84
1111	Nos	Planting of bag plants in 0.45 cube pits	02.03.034	469.92	100 Nos.	5220.81
		Replacement of casualities - 20%				
222	No	Re-digging of 0.45 mt cube pit in hard gravelly soils (Ploughed area - 50% of original rate i.e. $22.36/2 = 11.18$)	02.03.025	11.18	No	2481.96
222	Nos	Cost of Tall plants of size 8" x 12" of height above 2 Mts including Transportation from Private Nurseries to Dept. nursery site	Actuals	75.00	Each	16650.00
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	490.82	100 Nos.	1089.62
222	Nos	Internal Transport of seedlings to planting points	02.03.020	152.54	100 Nos.	338.64
222	Nos	Planting of bag plants in 0.45 cube pits	02.03.034	469.92	100 Nos.	1043.22
1	На	Inter ploughing with heavy duty tractor of 45 HP to a depth of 30 cm in hard gravelly soils	02-03-045	4023.01	На	4023.01

Quantity	Unit	Item of Work	2019-20 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 in HG Soils	02-03-039	704.88	100 Nos.	7831.22
100	Rmt	Creation of Fire lines 3 mts wide	02-03-049	6.55	RMT	655.00
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	25.17	100 Nos.	279.64
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	133.41	100 Nos.	1482.19
1	На	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		1047.86	На	1047.86
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	29.87	Rmt	2987.00
LS	Nos	Contingencies for unforeseen items				351.66
				TOTAL	N 19	227500.00

Unit Rate for 2020 - 21	250200
Unit Rate for 2021 - 22	275200
Unit Rate for 2022 - 23	302700
Unit Rate for 2023 - 24	333000
Unit Rate for 2024 - 25	366300

Data Sheet for 1st year maintenance of Plantation - SMM

Quantity	Unit	Item of Work	2019-20 FSR Item No.	Rate	Per	Amount
1	2	3	4	5	6	7
		Replacement of casualities - 25%				
278	Nos	Digging of 0.45 mt cube pit in hard gravelly soils	02.03.025	22.36	Per No	6216.08
278	Nos	Cost of Tall plants of size 8" x 12" of height above 2 Mts including Transportation from Private Nurseries to Dept. nursery site	Actuals	75.00	Each	20850.00
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	490.82	100 Nos.	1364.48
278	Nos	Internal Transport of seedlings to planting points	02.03.020	152.54	100 Nos.	424.06
278	Nos	Planting of bag plants in 0.45 cube pits	02.03.034	469.92	100 Nos.	1306.38
1	НА	Inter ploughing with heavy duty tractor of 45 HP to a depth of 30 cm in hard gravelly soils	02-04-004	4023.01	На	4023.01
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 in HG Soils	02-04-007	704.88	100 Nos.	7831.22
100	Rmt	Creation of Fire lines 3 mts wide	02-04-008	6.55	RMT	655.00
1111	Nos	Enumeration of survivals, Pest control, labour amenities, sharpening of tools etc.	02.04.011	137.04	100 Nos.	1522.51
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	133.41	100 Nos.	1482.19
1	На	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	1047.86	На	1047.86
LS	Nos	Contingencies for unforeseen items				277.22
	1103			TOTAL		47000.0

 Unit Rate for 2020 - 21
 51700

 Unit Rate for 2021 - 22
 56900

 Unit Rate for 2022 - 23
 62600

 Unit Rate for 2023 - 24
 68900

 Unit Rate for 2024 - 25
 75800

Data Sheet for 2nd year maintenance of Plantation - SMM

Quantity	Unit	Item of Work	2019-20 FSR Item No.	Rate	Per	Amount
1	2	3	4	5	6	7
*		Replacement of casualities - 20%				
222	Nos	Digging of 0.45 mt cube pit in hard gravelly soils	02.03.025	22.36	Per No	4963.92
222	Nos	Cost of Tall plants of size 8" x 12" of height above 2 Mts including Transportation from Private Nurseries to Dept. nursery site	Actuals	75.00	Each	16650.00
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	490.82	100 Nos.	1089.62
222	Nos	Internal Transport of seedlings to planting points	02.03.020	152.54	100 Nos.	338.64
222	Nos	Planting of bag plants in 0.45 cube pits	02.03.034	469.92	100 Nos.	1043.22
1	На	Inter ploughing with heavy duty tractor of 45 HP to a depth of 30 cm in hard gravelly soils	02.05.006	4023.01	На	4023.01
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 in HG Soils	02.05.002	704.88	100 Nos.	7831.22
100	Rmt	Creation of Fire lines 3 mts wide	02.05.010	6.55	RMT	655.00
1111	Nos	Enumeration of survivals, Pest control, labour amenities, sharpening of tools etc.	02.04.011	137.04	100 Nos.	1522.51
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	133.41	100 Nos.	1482.19
1	На	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. I ow rainfall zone < 800 mm	02.05.008	1047.86	На	1047.86
LS	Nos	Contingencies for unforeseen items				352.81
			48	TOTAL		41000.00

Unit Rate for 2020 - 21	45100 49600
Unit Rate for 2021 - 22 Unit Rate for 2022 - 23	54600
Unit Rate for 2023 - 24	60100
Unit Rate for 2024 - 25	66100

Data Sheet for 3rd year maintenance of Plantation - SMM

Quantity	Unit	Item of Work	2019-20 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 in HG Soils	02.06.001	704.88	100 Nos.	7831.22
1	На	Inter ploughing with heavy duty tractor of 45 HP to a depth of 30 cm in hard gravelly soils	02.06.004	4023.01	На	4023.01
1	На	Enumeration of survivals, pest control, labour amenities, sharpening of tools, etc.	02.06.008	137.04	На	137.04
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	133.41	100 Nos.	1482.19
1	На	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	1047.86	На	1047.86
100	Rmt	Creation of Fire lines 3 mts wide	02.06.005	6.55	RMT	655.00
LS	Nos	Contingencies for unforeseen items				323.69
				TOTAL		15500.00

Unit Rate for 2020 - 21	17100
Unit Rate for 2021 - 22	18800
Unit Rate for 2022 - 23	20700
Unit Rate for 2023 - 24	22800
Unit Rate for 2024 - 25	25100
Unit Rate for 2025 - 26	27600
Unit Rate for 2026 - 27	30400

Data Sheet for 4th year maintenance of Plantation - SMM

Quantity	Unit	Item of Work	2019-20 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 in HG Soils	02.07.002	704.88	100 Nos.	7831.22
1	На	Inter ploughing with heavy duty tractor of 45 HP to a depth of 30 cm in hard gravelly soils	02.07.008	4023.01	На	4023.01
1	На	Enumeration of survivals, pest control, labour amenities, sharpening of tools, etc.	02.07.007	137.04	На	137.04
1111	Nos	Pruning of lower foliage/ branches of NTFP species like kanuga, Neem, Usiri, Seethaphal etc., plants upto 1/3 rd height.	02.07.006	133.41	100 Nos.	1482.19
1	На	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	02.07.003	1047.86	На	1047.86
100	Rmt	Creation of Fire lines 3 mts wide	02.07.001	6.55	RMT	655.00
LS	Nos	Contingencies for unforeseen items				323.69
				TOTAL		15500.00

Unit Rate for 2020 - 21	17100
Unit Rate for 2021 - 22	18800
Unit Rate for 2022 - 23	20700
Unit Rate for 2023 - 24	22800
Unit Rate for 2024 - 25	25100
Unit Rate for 2025 - 26	27600
Unit Rate for 2026 - 27	30400

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

Quantity	Unit	Item of Work	2019-20 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 in HG Soils	02.08.002	704.88	100 Nos.	7831.22
1	На	Enumeration of survivals, pest control, labour amenities, sharpening of tools, etc.	02.08.007	137.04	На	137.04
1111	Nos	Pruning of lower foliage/ branches of NTFP species like kanuga, Neem, Usiri, Seethaphal etc., plants upto 1/3 rd height.	02.08.006	133.41	100 Nos.	1482.19
1	На	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	02.08.003	1047.86	На	1047.86
100	Rmt	Creation of Fire lines 3 mts wide	02.08.001	6.55	RMT	655.00
LS	Nos	Contingencies for unforeseen items	9 6			346.70
	24		TOTAL		11500.00	

Unit Rate for 2020 - 21	12700
Unit Rate for 2021 - 22	14000
Unit Rate for 2022 - 23	15400
Unit Rate for 2023 - 24	16900
Unit Rate for 2024 - 25	18600
Unit Rate for 2025 - 26	20500
Unit Rate for 2026 - 27	22600
Unit Rate for 2027 - 28	24900
Unit Rate for 2028 - 29	27400
Unit Rate for 2029 - 30	30100
Unit Rate for 2030 - 31	33100
Unit Rate for 2031 - 32	36400