


**UNIT COST FOR MAINTENANCE OF BAG PLANTS NURSERY FOR 2021-22 (9"x11") (FSR 2021-22)**

Sl. No.	FSR item No	Nature of work	Qty		Rate	Unit	Amount
	01.04.	<b>MAINTAINANCE YEAR OF NURSERY</b>					
		<b>MAINTAINANCE OF BAG PLANTS NURSERY UPTO PLANTING SEASON (APRIL TO AUGUST</b> <i>for 10 m X 1 m size secondary beds (2600 Nos of 4" X 7" bags; 1700 Nos of 5" X9" bags ; 1100 Nos. of 6"X12" bags; 800 Nos. of 8"X12" bags; 400 Nos. of 10"x16" bags per bed)</i>					
	01.04.01	<b>Watering</b> polybag secondary beds twice a day for 4 months					
		a) Manually with rose spray or finely perforated nozzle attached to a hose pipe . (FSR 2021-22) (301.09 /per month) ( April 2021- July21 (4 months))	100	Bed /month	301.09	4	120436
	01.04.02	<b>Weeding</b> once during maintenance year	100	Bed / weeding	55.29	1	5529
	01.04.03	Shifting, grading and re-arranging in beds	100	Bed / 2 times shifting	258.26	1	51652
	01.04.04	<b>Application prophylactic foliar spray</b> of 0.2% of Carbendazim / Dithane M-45 and any organo-phosphate (Monocrotophos / Phosphamidon @ 3-4 ml in 1 lit of water) at regular interval (once in a month from April to August) alternatively. Similarly, application of multiplex or NPK 19:19:19 (1 teaspoon in 1 lit water) - once in a month - to be applied by back-packed power-sprayer (preferably in morning or evening and no watering for at least 12 hours after spray)	100	By Nursery Watcher			0
	01.04.05	<b>Cost</b> of foliar nutrient formulations like multiplex or NPK-19:19:19; fungicides and insecticides (from April - August)	100	As per actuals with a maximum limit of Rs. 2000/ per 1 lakh polybag seedlings			1000
	01.04.06	<b>Cowdung Slurry application</b> (One can apply chemical foliar spray or apply cowdung slurry - not both)					
		(a) Cost and transportation of fresh cowdung	100	per 100 beds for 3 months	As per actual subject to maximum of Rs.2500/-		1700
		(b)Application of cowdung slurry - only once between April to June - Watering should not be done 12 hours before and after application of cowdung slurry treatment.		1000 bags	By Nursery Watcher		0
	01.04.07	<b>Weeding in the space between the beds,</b> inspection path and surroundings of Nursery	100	Beds	30.43	1	3043
		Nursery Watcher from April to August for 5 Months	5	Month	9654.59	1	48273
							<b>111197</b>
	01.04.08	<b>Contingencies for Raising Year</b> towards the expenditure like cost of hose pipe, nursery boards, ( store register for materials purchased to be maintained).		As per actuals, subject to max. of 3 % of estimate in Maint. Year.			3336
	01.04.09	<b>Contingencies for</b> Electricity charges, Running & maintainance charges of oil engines (bills to be certified by DFO/FDO) and a separate logbook to be maintained for oil engine.					10000
							<b>124533</b>

**Per 50000 Bags or 124550**  
 Add 10% extra every year 12455  
**2022-23 137005**  
 Add 10% extra every year 13700.5  
**2023-24 150706**

  
 Forest Divisional Officer (WL)  
 Nagarjunasagar

**UNIT COST FOR CONVERSION OF 50,000 BAG PLANTS NURSERY FOR 2021-22**  
(size of bag 5"x 9" Convesion to 9" x 11" ) (FSR 2021-22)

Sl. No	FSR item No	Nature of work	Qty		Rate	Unit	Amount
	i	CONVERSION of seedlings from 5" x 9" size bags into 12" x 13" size gusseted bags (300 bags per bed)					
1	01.03.03	Cost of Gusseted Polybags (including the cost of certification ): To ensure quality control, the quality of bags have to be certified by CIPET (Central Institute of Plastic Engineering & Technology), Hyderabad at the cost of tenderer by taking samples from various lots of gusseted polybags.					
		Cost of polythene bags of 12 "X 13 " Size - 18.909 Kgs (53 bags per kg) per 1000 Nos of 400 gauge. ( 5000 x 15% +50000 = 57500) ( 57500/53 = 1084.90 Kgs)	1084.90	Kgs	156	1	169244
2	01.03.22	<b>Cost &amp; Transport of ingredients for Potting Mixture:</b> Red Soil, tank-silt / clay soil, FYM in 2:1:1 ratio. To this soil mixture, 220 gm of Indophyll M-45, 4.5 kg of single super phosphate (SSP) and 250 gm of phorate granules per 1 cum of potting mixture will be added. Cost of chemicals is as per actuals.					
		5" x 9" to 9 x 11" polybags (4.717 - 1.12 = 3.597 cum)	50000	Nos	36.34	1000	1817
3	01.03.23	Cost of Chemical component			As per actuals		5000
4	01.03.29	Preparation of Potting Mixture by powdering of various ingredients, sieving and mixing them in prescribed proportion; opening of bags and filling with potting mixture partially, tearing the polybag plants and repotting them inside bigger bags and filling the rest of bags; gently pressing the same with finger tips and arranging in beds of 10 m x1 m size. (12"x13" size: 300 bag plants / bed )					
		5" x 9" to 9 x 11" polybags (4.717 - 1.12 = 3.597 cum)	50000	Nos	5673.42	1000	283671
5	01.03.30	Stakes to be provided to plants in 12"X13" bags	50000	Nos	5250.00	1000	262500
6	01.03.31	Weeding the plants ( November -march : 2 weedings)					
		1st weeding - December	100	1000 Nos. / Weeding	55.29	1000	5529
		2nd weeding - February	100	1000 Nos. / Weeding	55.29	1000	5529
7	01.03.32	1st shifting and grading after three months and consecutive shifting and grading after every two months till the nursery stock is lifted -(as per item no.01.03.14)					
		1st shifting - September	50000	1000 Nos. / Shifting	258.26	1000	12913
		2nd shifting - December	50000	1000 Nos. / Shifting	258.26	1000	12913
8	01.03.33	Watering the plants twice a day .					
	a	Manually with rose cans or finely perforated nozzles attached to a hose pipe ( from June to March - 10 months)					
		(a) Manually with rose cans or finely perforated nozzle attached to a hose pipe (10 months)	50000	1000 Nos. / Shifting	301.15	1000	150575
9	01.03.34	Application prophylactic foliar spray of 0.2% of Carbendazim / Dithane M-45 and any organo-phosphate (Monocrotophos / Phosphamidon @ 3-4 ml in 1 lit of water) at regular interval (once in a month) alternatively. Similarly application of multiplex or NPK 19:19:19 (a teaspoon in 1 lit water) - once in a month - to start 1 month after conversion by back-packed power-sprayer (preferably in morning or evening and no watering for at least 12 hours after spray)	By Nursery Watcher				
10	01.03.35	Cost of foliar nutritient formulations like multiplex or NPK- 19:19:19; fungicides and insecticides	50000	1000 Nos	20	1000	1000
11	01.07.16	Brushwood fencing around the Nursery (As per RSSR): 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 material should be fixed in 2 rows (staggered) at 30cm. apart. The fence should be tightened horizontally by tying with thorny creepers on both sides. (with specific permission of DFO since most of nurseries have	400	Rmt	30.54	1	12216

Sl. No	FSR item No	Nature of work	Qty		Rate	Unit	Amount
12	01.05.04	Cost of Protection: One Nursery Watcher is allowed up to 1 lakh RT nursery or 100 secondary beds of polybags / 100 Teak beds of 10 m x 1 m size or combination of both. One additional Nursery Watcher is permitted for nurseries having more than 1 lakh upto 3 lakh RT seedlings or more than 100 upto 300 secondray beds or Teak beds of 10 m x 1 m size or combination of both. For more than 3 lakh RT or 300 secondary beds of Teak beds or combination of both another additional Nursery Watcher is allowed. While calculating the number of Nursery Watcher, care shall be taken to include the nursery raising under all Schemes at a particular site. No extra Nursery Watcher is allowed for primary beds of 1 m x1 m size. However, the above narrative is subject to the provisions cited under general instructions.	1	Watcher/Month	9654.59	1	96546
							1019453
13	01.03.36	Contingencies for Raising Year towards the expenditure like cost of hose pipe, nursery boards, ( store register for materials purchased to be maintained).		As per actuals, subject to max. of 3 % of estimate in raising year			30584
14	01.03.37	Contingencies for Electricity charges, Running & maintainance charges of oil engines (bills to be certified by DFO/FDO) and a separate logbook to be maintained for oil engine.		As per Actuals			50000
		Total					1100037
Per 50000 Bags or							1100100

Per 50000 Bags or 110010  
Add 10% extra every year 110010  
**2022-23 1210110**  
Add 10% extra every year 121011  
**2023-24 1331121**

Forest Divisional Officer (WL)  
Nagarjunasagar

**UNIT COST FOR MAINTENANCE OF BAG PLANTS NURSERY FOR 2021-22 (5"x9") (50000 Nos)(FSR 2021-22)**

Sl. No.	FSR item No	Nature of work	Qty		Rate	Unit	Amount	Remarks
	01.04.	<b>MAINTAINANCE YEAR OF NURSERY</b>						
		<b>MAINTAINANCE OF BAG PLANTS NURSERY UPTO PLANTING SEASON (APRIL TO AUGUST)</b> <i>for 10 m X 1 m size secondary beds (2600 Nos of 4" X 7" bags; 1700 Nos of 5" X 9" bags ; 1100 Nos. of 6"X12" bags; 800 Nos. of 8"X12" bags; 400 Nos. of 10"x16" bags per bed)</i>						
	01.04.01	<b>Watering</b> polybag secondary beds twice a day for 4 months						
		a) Manually with rose spray or finely perforated nozzle attached to a hose pipe . (FSR 2019-20) ( 4 months i.e April to July 2019)	30	Bed /month	301.09	1	36131	
	01.04.02	<b>Weeding</b> once during maintenance year	30	Bed / weeding	55.29	1	1659	
	01.04.03	Shifting, grading and re-arranging in beds	30	Bed / 2 times shifting	258.26	1	15496	
	01.04.04	<b>Application prophylactic foliar spray</b> of 0.2% of Carbendazim / Dithane M-45 and any organo-phosphate (Monocrotophos / Phosphamidon @ 3-4 ml in 1 lit of water) at regular interval (once in a month from April to August) alternatively. Similarly, application of multiplex or NPK 19:19:19 (1 teaspoon in 1 lit water) - once in a month - to be applied by back-packed power-sprayer (preferably in morning or evening and no watering for at least 12 hours after spray)	30	By Nursery Watcher			0	
	01.04.05	<b>Cost</b> of foliar nutrient formulations like multiplex or NPK-19:19:19; fungicides and insecticides (from April - August)	30	As per actuals with a maximum limit of Rs. 2000/ per 1 lakh polybag seedlings			1000	
	01.04.06	<b>Cowdung Slurry application</b> (One can apply chemical foliar spray <b>or</b> apply cowdung slurry - not both )						
		(a) Cost and transportation of fresh cowdung	30	per 100 beds for 3 months	As per actual subject to maximum of Rs.2500/-		1700	
		(b) <b>Application</b> of cowdung slurry - only once between April to June - <i>Watering should not be done 12 hours before and after application of cowdung slurry treatment.</i>		1000 bags	By Nursery Watcher		0	
	01.04.07	<b>Weeding in the space between the beds,</b> inspection path and sorroundings of Nursery	30	Beds	30.43	1	913	
		Nursery Watcher from April to August for 5 Months	5	Month	9654.59	1	48273	
							<b>105172</b>	
	01.04.08	<b>Contingencies for Raising Year</b> towards the expenditure like cost of hose pipe, nursery boards, ( store register for materials purchased to be maintained).			As per actuals, subject to max. of 3 % of estimate in Maint. Year.		3155	
	01.03.09	<b>Contingencies for</b> Electricity charges, Running & maintainance charges of oil engines (bills to be certified by DFO/FDO) and a separate logbook to be maintained for oil engine.					5370	
							<b>113697</b>	

Per 50000 Bags or **113700**  
Add 10% extra every year 11370  
**2022-23 125070**  
Add 10% extra every year 12507  
**2023-24 137577**

Forest Divisional Officer (WL)  
Nagarjunasagar

**UNIT COST FOR RAISING OF Misc. PRIMARY BEDS NURSERY FOR THE YEAR 2021-22 (FSR 2021-22)**


Sl. No.	FSR item No	Nature of work	Qty		Rate	Unit	Amount	Remarks
		<b>PRIMARY BEDS of 1x1x0.3 m size for Miscellaneous species including bamboo - 50 primary beds for 1 lakh nursery is permitted. Primary beds should start from Jan - May depending on availability of fresh seeds. Once primary beds are formed, they can be used upto 5 years without changing the medium - what is required each time is solarization, burning a layer of grass on it and adding the below recommended fungicides and insecticides to the medium.</b>						
1	01.01.01	Preparation of New Site by clearing jungle growth, uprootal of stumps and removal of surface stones, pebbles etc.	1	Bed	5.46	1	5.46	
2	01.01.03	Digging soil of the demarcated beds of 1x1x0.30 m size	1	Bed	42.06	1	42.06	
3	01.01.04	Cost of sandy soil and transportation with 5 kms lead including loading and unloading charges (sandy soil and FYM in 5:1 ratio, i.e., 0.125 cum sandy soil and 0.025 cum FYM per primary bed	1	Bed	31.81	1	31.81	
4	01.01.05	For every extra km beyond 5 km upto 25 km( 20x 1.27=25.40)	1	Bed	25.40	1	25.40	
5	01.01.06	Cost and transport of 0.025 cum FYM	1	Bed	27.34	1	27.34	
6	01.01.07	Mixing of sandy soil and FYM in 5:1 proportion (50 % of volume of bed) with excavated soil and refilling the bed and levelling.	1	Bed	11.96	1	11.96	
7	01.01.08	Covering the beds with dried grass and leaf litter and burning them to ash which can form the upper layer	1	Bed	13.67	1	13.67	
8	01.01.09	Soil drenching with 0.1% Carbendazim (10 gm or 10 ml of Carbendazim in 1 lit of water)	1		By Nursery Watcher		0.00	
9	01.01.10	Cost of seed - seed weight, germination percentage and target of planting stock of individual species are to be taken into consideration while estimating the requirement of seeds	1		As per special instruction under FSR		250	
10	01.01.11	Seed dressing with Captan or Thiram at 3-5 gm / kg of seeds (the insecticide should be mixed with 250 gm of ash and then this should be thoroughly mixed with seeds to be sown after pretreatment and before sowing)	1		By Nursery Watcher		0.00	
11	01.01.12	Sowing of seed (finer seeds like Adina, Mitragyna, Anthocephalus etc. to be mixed with sand and bradcasted - Bigger seeds to be dibbled in lines 1-2 cm apart) and covering the bed to a thickness of 2.5 cm with paddy hay including cost and conveyance	1	Bed	13.62	1	13.62	
12	01.01.13	Watering the primary nursery beds with rose water cans twice daily for a maximum period of 2 months. ( 15.32 x 2 = 30.64 )	1	Bed	30.64	1	30.64	
13	01.01.14	Kerbing the primary beds all around with Cement Bricks (in permanent nurseries only) , if required. In all such permanent primary beds, no incurring of expenditure for making the primary beds every year is permitted except for cost of fungicides. <u>This item has to be done with prior written approval of DEO</u>	1	Per Bed	As per CSSR		200.00	
14	01.01.15	Cost of chemicals, fungicide and insecticide			As per actuals limited to Rs. 1000/- per 1 lakh seedlings in primary bed stage		20.00	
15	01.01.16	Application of Fungicide and insecticide with power-driven back-pack mechanized sprayer as used in agricultural fields to spray insecticide.	1		By Nursery Watcher		0.00	
							671.96	
		Rasing of seedlings 110% for abtaining 100%		10%			67.20	
		Grand Total					739.16	
		cost of each plant (2000 plants per bed) - 2021-22					0.36958	

Add 10% extra every year 0.036958

2022-23 0.40654

Add 10% extra every year 0.040654

2023-24 0.44719

  
Forest Divisional Officer (WL)  
Nagarjunasagar

# Estimate for Raising of 1Ha SMM Plantation

Espacement - 3 x2

No of plants- 1666

2022-23

Sl.No	Description of Work	FSR/SS R 2021- 22	Quantity	Rate	Per	Amount
<b>ADVANCE OPERATION (PREPLANTING OPERATIONS)</b>						
1	Clearing unsalable unwanted jungle growth (leaving all the tree species of good form particularly the hardwood tree species like Teak, Nallamaddi, Yegisa, Narepa, Somi, Jitregi, Billudu, Chenangi etc. and NTFP species like Ippa, Morri, Tani, Karaka, Vepa, Maredu, Tapasi, Tuniki, Chinta, Usuri, Nallajeedi etc.); Spreading the cut material all over the site; and Burning the same twice till completely burnt. The unsuitable area shall be excluded from the clearing operation and the expenditure shall be incurred for effective area only. All the above operations shall be completed before December. (b) Very Light Jungle Growth (>10% and upto 20% ground area covered with Jungle growth)	02.08.02 (b)	1	Ha	3284.95	1 3285
2	Uprootal of Stumps (excluding unsuitable patches) to a minimum depth of 45 cm with heavy machinery fitted with 0.90 cum and above capacity bucket, filling the pits caused by uprootal, and levelling. For retrieved encroached area, the approval of Circle Head is required and the approval should indicate clearly the density of stumps or vegetation to be removed through uprootal. The uprootal work can be carried out preferably through tender process. (b) Very Light Jungle growth (>10% and up to 20% ground area covered with Jungle growth)	02.08.03 (b)	1	Ha	11037.5	1 11038
3	Collection and Removal of Uprooted Stumps of all sizes, other debris etc., to outside the plantation site. (b) Very Light Jungle growth (>10% and up to 20% ground area covered with Jungle growth)	02.08.04 (b)	1	Ha	9657.68	1 9658
<b>Adv. Opns. Toatal</b>						<b>23980</b>
<b>(PLANTING OPERATIONS DURING RAISING YEAR)</b>						
4	Deep Ploughing the effective (excluding unsuitable patches) plantation area across the slope to a depth of 30 cm with Heavy-duty Tractor of 55 HP and above with Firm Mould Board (FMB) plough (FOR UNTILLED AREA) - to be completed by 15th of June (b) Hard soils like gravel and morum	02.09.02 (b)	1	Ha	5620.89	1 5621
5	Alignment and stacking including demarcation of base line (c) 2 x 3 cm espacement = 1666 planting points	02.09.04 (c)	1111	No's	93.82	100 1042
6	Cost and preparation of stakes (0.45 m length) and transportation to site	02.09.05 (i)	1111	No's	59.81	100 664
7	Cost and preparation of stakes (2.0 m length) and transportation to site (Subject to condition that the seedling height is 1.5m to 2.0 m height)	02.09.05 (ii)	1111	No's	1260.00	100 13999
8	Digging of pits in ploughed areas in June- July by adoting 50% of original rate of digging of pits of ordinary soil b) 45 cm3 pits	02.09.06 (b)	1666	No's	11.19	1 18643
10	Transportation of Planting strock (Including loading and un loading) up to a distance of 5 K.M (d) 23 X 28 cm (9"X11") bag plants (including 20% casualties)	02.09.07 (d)	1111	No's	268.03	100 2978
11	Transportation of Planting strock(Including loading and un loading) more than 5 km distance and upto 25 km distance (d) 23 X 28 cm (9"X11") bag plants	02.09.08 (d)	1111	No's	9.42	100 2093
12	Internal transportation to planting points on head loads (d) 23 X 28 cm (9"X11") bag plants	02.09.10 (d)	1111	No's	173.08	100 1923
13	(a) Application of SSP 50 gm per pit ( 1day before planting) for root growth and early establishment of plant after planting . ii) Similarly the bag plants to be planted will be dipped inside Chloropyriphos solution ( 5 ml Chloropyriphos in 1 ltr water) either at nursery site before transport or at plantation site before planting	02.09.11 (a)	1111	No's	41.23	100 458
14	Cost of SSP and Chlorodine duast of Chloropyriphos	02.09.11 (b)	83	Kgs	30	1 2490
15	Planting in 45 cm3 pits	02.09.12 (b)	1111	No's	459.36	100 5103

# Estimate for 1st Year Maintenance of SMM Plantation

Espacement - 3 x2  
No of plants- 1666

2023-24

2023-24		No of plants- 1666					
Sl.No	Description of Work	FSR/SS R 2021- 22	Quantity		Rate	Per	Amount
	<b>Replacement of Casualties: 25% during Maintenance Year</b>						
1	Digging of pits in ploughed areas in June- July by adoting 50% of original rate of digging of pits of ordinary soil b) 45 cm3 pits	02.09.06 (b)	278	No's	11.19	1	3111
2	Transportation of Planting strock (Including loading and un loading) up to a distance of 5 K.M(d) 23 X 28 cm (9"X11") bag plants (including 20% casualties)	02.09.07 (d)	278	No's	268.03	100	745
3	Transportation of Planting strock(Including loading and un loading) more than 5 km distance and upto 25 km distance (d) 23 X 28 cm (9"X11") bag plants	02.09.08 (d)	278	No's	9.42	100	524
4	Internal transportation to planting points on head loads (d) 23 X 28 cm (9"X11") bag plants	02.09.10 (d)	278	No's	173.08	100	481
5	(a) Application of SSP 50 gm per pit ( 1day before planting) for root growth and early establishment of plant after planting . ii) Similarly the bag plants to be planted will be dipped inside Chloropyriphos solution ( 5 ml Chloropyriphos in 1 ltr water) either at nursery site before transport or at plantation site before planting	02.09.11 (a)	278	No's	41.23	100	115
6	Cost of SSP and Chlorodine duast of Chloropyriphos	02.09.11 (b)	21	Kgs	30	1	630
7	Planting in 45 cm3 pits	02.09.12 (b)	278	No's	459.36	100	1277
8	Watering (one time) immediately after planting if the planting takes place on a non-rainy days and during dry spell a) One critical watering after planting if planting takes place on non-rainy days with the prior written permission of DFO / FDO	02.09.14 (a)	1111	No's	278.11	100	3090
9	b) 2nd watering if dry spell is more than 5-6 days after first watering on the day of planting with the prior written permission of Circle Head. Note: The Plantation in-charge Officer should record the watering operations in Watering Watch Register and MB on the same day of watering.	02.09.14 (b)	1111	No's	278.11	100	3090
10	Application of Fertilizer in August (30 days after planting) by making 3 holes of 10 cm depth with crow bar holes at a distance of 10 cm away from plant and putting fertilizers and closing. Ensure that the soil is really wet at the time of DAP application	02.09.17	1111	No's	41.23	100	458
11	Weeding and saucer formation to a radius of 0.5 mts around the plant immediately after planting (i.e) during June.	02.09.18	1111	No's	131.20	100	1458
12	Circular weeding cum Deep Soil working to a radius of 0.5m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (during Nov - Dec)	02.09.19	1111	No's	689.06	100	7655
13	Inter ploughing (During November) the effective (Excluding un suitable patches) plantation area across the slope to a depth of 30 cm with Heavy duty Tractor of 55 HP and above with Firm Mould Board (FMB) plough	02.09.20 (b)	1	Ha	3502.95	1	3503
14	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be done during October)	02.09.21	1111	No's	130.43	100	1449
15	Uprootal of Mahaveera (Hypits Suavelona) Weed with prior written approval of Circle Head and taking Photographs before and after uprootal permission	02.09.22	1	Ha	3833.45	1	3833
16	ii) Contingencies and Miscellaneous (with in 5% of the estimate cost subject to ceiling of Rs. 5,000/-)	02.09.24			As per Actuals		1000
17	Cost of protection (Per 25 Ha One Watcher) for 12 months (115848/1.1509 Ha= 100659/Ha) = 8388/PM	02:09:25	12	Month	8388.25	Month	
Total :-							32419
					Add 10% extra every year		3241.87

Add 10% extra every year	3241.87
<b>2022-23</b>	<b>35661</b>
Add 10% extra every year	3566
<b>2023-24</b>	<b>39227</b>
Add 10% extra every year	3923
<b>2024-25</b>	<b>43149</b>
Add 10% extra every year	4315
<b>2025-26</b>	<b>47464</b>

Forest Divisional Officer (WL)  
Nagarjunasagar

# Estimate for 2nd Year Maintenance of SMM Plantation

Espacement - 2 x 3

No of plants- 1666

2024-25

Sl.No	Description of Work	FSR/SS R 2021- 22	Quantity		Rate	Per	Amount
	<b>Replacement of Casualties: 5% during Maintenance Year</b>						
1	Digging of pits in ploughed areas in June- July by adopting 50% of original rate of digging of pits of ordinary soil b) 45 cm3 pits	02.09.06 (b)	56	No's	11.19	1	627
2	Transportation of Planting stock (Including loading and un loading) up to a distance of 5 K.M(d) 23 X 28 cm (9"X11") bag plants (including 20% casualties)	02.09.07 (d)	56	No's	268.03	100	150
3	Transportation of Planting stock(Including loading and un loading) more than 5 km distance and upto 25 km distance (d) 23 X 28 cm (9"X11") bag plants	02.09.08 (d)	56	No's	9.42	100	106
4	Internal transportation to planting points on head loads (d) 23 X 28 cm (9"X11") bag plants	02.09.10 (d)	56	No's	173.08	100	97
5	(a) Application of SSP 50 gm per pit ( 1day before planting) for root growth and early establishment of plant after planting . ii) Similarly the bag plants to be planted will be dipped inside Chloropyriphos solution ( 5 ml Chloropyriphos in 1 ltr water) either at nursery site before transport or at plantation site before planting	02.09.11 (a)	56	No's	41.23	100	23
6	Cost of SSP and Chlorodine duast of Chloropyriphos	02.09.11 (b)	21	Kgs	30	1	630
7	Planting in 45 cm3 pits	02.09.12 (b)	56	No's	459.36	100	257
8	Watering (one time) immediately after planting if the planting takes place on a non-rainy days and during dry spell a) One critical watering after planting if planting takes place on non-rainy days with the prior written permission of DFO / FDO.	02.09.14 (a)	1111	No's	278.11	100	3090
9	b) 2nd watering if dry spell is more than 5-6 days after first watering on the day of planting with the prior written permission of Circle Head. Note: The Plantation in-charge Officer should record the watering operations in Watering Watch Register and MB on the same day of watering.	02.09.14 (b)	1111	No's	278.11	100	3090
10	Application of Fertilizer in August (30 days after planting) by making 3 holes of 10 cm depth with crow bar holes at a distance of 10 cm away from plant and putting fertilizers and closing. Ensure that the soil is really wet at the time of DAP application	02.09.17	1111	No's	41.23	100	458
11	Weeding and saucer formation to a radius of 0.5 mts around the plant immediately after planting (i.e) during June.	02.09.18	1111	No's	131.20	100	1458
12	Circular weeding cum Deep Soil working to a radius of 0.5m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (during Nov - Dec)	02.09.19	1111	No's	689.06	100	7655
13	Inter ploughing (During November) the effective (Excluding un suitable patches) plantation area across the slope to a depth of 30 cm with Heavy duty Tractor of 55 HP and above with Firm Mould Board (FMB) plough	02.09.20 (b)	1	Ha	3502.95	1	3503
14	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be done during October)	02.09.21	1111	No's	130.43	100	1449
15	Uprootal of Mahaveera (Hypits Suavelona) Weed with prior written approval of Circle Head and taking Photographs before and after uprootal permission	02.09.22	1	Ha	3833.45	1	3833
<b>Total :-</b>							<b>26426</b>

Add 10% extra every year	2642.57
<b>2022-23</b>	<b>29068</b>
Add 10% extra every year	2907
<b>2023-24</b>	<b>31975</b>
Add 10% extra every year	3198
<b>2024-25</b>	<b>35173</b>
Add 10% extra every year	3517
<b>2025-26</b>	<b>38690</b>
Add 10% extra every year	3869
<b>2025-26</b>	<b>42559</b>

Forest Divisional Officer (WL)  
Nageri nasagar

**Estimate for 3rd Year Maintenance of SMM Plantation**

Espacement - 2 x 3  
No of plants- 1666

2027-28

Sl.No	Description of Work	FSR/SS R 2021- 22	Quantity		Rate	Per	Amount
1	Weeding and saucer formation to a radius of 0.5 mts around the plant immediately after planting (i.e) during June.	02.09.18	1111	No's	131.20	100	1458
2	Circular weeding cum Deep Soil working to a radius of 0.5m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (during Nov - Dec)	02.09.19	1111	No's	689.06	100	7655
3	Inter ploughing (During November) the effective (Excluding unsuitable patches) plantation area across the slope to a depth of 30 cm with Heavy duty Tractor of 55 HP and above with Firm Mould Board (FMB) plough	02.09.20 (b)	1	Ha	3502.95	1	3503
4	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be done during October)	02.09.21	1111	No's	130.43	100	1449
<b>Total :-</b>							<b>14065</b>

Add 10% extra every year	1406.51
<b>2022-23</b>	<b>15472</b>
Add 10% extra every year	1547
<b>2023-24</b>	<b>17019</b>
Add 10% extra every year	1702
<b>2024-25</b>	<b>18721</b>
Add 10% extra every year	1872
<b>2025-26</b>	<b>20593</b>
Add 10% extra every year	2059
<b>2026-27</b>	<b>22652</b>
Add 10% extra every year	2265
<b>2027-28</b>	<b>24917</b>

Forest Divisional Officer (WL)  
Nagarjunasagar

# Estimate for 4th Year Maintenance of SMM Plantation

Espacement - 2 x 3

No of plants- 1666

2028-29

Sl.No	Description of Work	FSR/SS R 2021- 22	Quantity		Rate	Per	Amount
1	Weeding and saucer formation to a radius of 0.5 mts around the plant immediately after planting (i.e) during June.	02.09.18	1111	No's	131.20	100	1458
2	Circular weeding cum Deep Soil working to a radius of 0.5m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (during Nov - Dec)	02.09.19	1111	No's	689.06	100	
4	Pruning of lower branch initials of Timber and NTFP species by sciculture upto 1/3 rd height (to be done during October)	02.09.21	1111	No's	130.43	100	1449
5	Uprootal of Mahaveera (Hypits Suavelona) Weed with prior written approval of Circle Head and taking Photographs before and after uprootal permission	02.09.22	1	Ha	3833.45	1	3833
<b>Total :-</b>							<b>6740</b>

Add 10% extra every year 674.02

**2022-23 7414**

Add 10% extra every year 741

**2023-24 8156**

Add 10% extra every year 816

**2024-25 8971**

Add 10% extra every year 897

**2025-26 9868**

Add 10% extra every year 987

**2026-27 10855**

Add 10% extra every year 1086

**2027-28 11941**

Add 10% extra every year 1194

**2028-29 13135**

Forest Divisional Officer (WL)  
Nagarjunasagar

# Estimate for 5th Year Maintenance of SMM Plantation

Espacement - 2 x 3

No of plants- 1666

2029-30

Sl. No	Description of Work	FSR/SS R 2021-22	Quantity		Rate	Per	Amount
1	Weeding and saucer formation to a radius of 0.5 mts around the plant immediately after planting (i.e) during June	02.09.18	1111	No's	131.20	100	1458
2	Circular weeding cum Deep Soil working to a radius of 0.5m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (during Nov - Dec)	02.09.19	1111	No's	689.06	100	7655
4	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be done during October)	02.09.21	1111	No's	130.43	100	1449
5	Uprootal of Mahaveera (Hypits Suavelona) Weed with prior written approval of Circle Head and taking Photographs before and after uprootal permission	02.09.22	1	Ha	3833.45	1	
6	ii) Contingencies and Miscellaneous (with in 5% of the estimate cost subject to ceiling of Rs. 5,000/-)	02.09.24			As per Actuals		1000
7	Cost of protection (Per 25 Ha One Watcher) for 12 months (115848/1.1509 Ha= 100659/Ha) = 8388/PM	02.09.25	12	Month	8388.25	Month	
Total :-							11562

Add 10% extra every year 1156.22

2022-23 12718

Add 10% extra every year 1272

2023-24 13990

Add 10% extra every year 1399

2024-25 15389

Add 10% extra every year 1539

2025-26 16928

Add 10% extra every year 1693

2026-27 18621

Add 10% extra every year 1862

2027-28 20483

Add 10% extra every year 2048

2028-29 22531

Add 10% extra every year 2253

2029-30 24785

Forest Divisional Officer (WL)  
Nagarjunasagar

# Estimate for 6th Year Maintenance of SMM Plantation

Espacement - 2 x 3  
No of plants- 1666

2030-31

Sl.No	Description of Work	FSR/SS R 2021- 22	Quantity		Rate	Per	Amount
1	Weeding and saucer formation to a radius of 0.5 mts around the plant immediately after planting (i.e) during June.	02.09.18	1111	No's	131.20	100	1458
2	Circular weeding cum Deep Soil working to a radius of 0.5m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (during Nov - Dec)	02.09.19	1111	No's	689.06	100	
4	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be done during October)	02.09.21	1111	No's	130.43	100	1449
5	Uprootal of Mahaveera (Hypits Suavelona) Weed with prior written approval of Circle Head and taking Photographs before and after uprootal permission	02.09.22	1	Ha	3833.45	1	3833
<b>Total :-</b>							<b>6740</b>
Add 10% extra every year							<b>674.02</b>

2022-23	7414
Add 10% extra every year	741
2023-24	8156
Add 10% extra every year	816
2024-25	8971
Add 10% extra every year	897
2025-26	9868
Add 10% extra every year	987
2026-27	10855
Add 10% extra every year	1086
2027-28	11941
Add 10% extra every year	1194
2028-29	13135
Add 10% extra every year	1313
2029-30	14448
Add 10% extra every year	1445
2030-31	15893

Forest Divisional Officer (WL)  
Nagarjunasagar

# Estimate for 7th Year Maintenance of SMM Plantation

Espacement - 2 x 3

No of plants- 1666

2031-32

Sl. No	Description of Work	FSR/SS R 2021-22	Quantity		Rate	Per	Amount
1	Weeding and saucer formation to a radius of 0.5 mts around the plant immediately after planting (i.e) during June.	02.09.18	1111	No's	131.20	100	1458
2	Circular weeding cum Deep Soil working to a radius of 0.5m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (during Nov - Dec)	02.09.19	1111	No's	689.06	100	7655
4	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be done during October)	02.09.21	1111	No's	130.43	100	1449
5	Uprootal of Mahaveera (Hypits Suavelona) Weed with prior written approval of Circle Head and taking Photographs before and after uprootal permission	02.09.22	1	Ha	3833.45	1	
6	ii) Contingencies and Miscellaneous (with in 5% of the estimate cost subject to ceiling of Rs. 5,000/-)	02.09.24			As per Actuals		1000
7	Cost of protection (Per 25 Ha One Watcher) for 12 months (115848/1.1509 Ha= 100659/Ha) = 8388/PM	02:09:25	12	Month	8388.25	Month	
Total :-							11562

Add 10% extra every year	1156.22
2022-23	12718
Add 10% extra every year	1272
2023-24	13990
Add 10% extra every year	1399
2024-25	15389
Add 10% extra every year	1539
2025-26	16928
Add 10% extra every year	1693
2026-27	18621
Add 10% extra every year	1862
2027-28	20483
Add 10% extra every year	2048
2028-29	22531
Add 10% extra every year	2253
2029-30	24785
Add 10% extra every year	2478
2030-31	27263
Add 10% extra every year	2726
2031-32	29989

Forest Divisional Officer (WL)  
Nagarjunasagar

# Estimate for 8th Year Maintenance of SMM Plantation

Espacement - 2 x 3  
No of plants- 1666

2032-33

Sl.No	Description of Work	FSR/SS R 2021- 22	Quantity		Rate	Per	Amount
1	Weeding and saucer formation to a radius of 0.5 mts around the plant immediately after planting (i.e) during June	02.09.18	1111	No's	131.20	100	1458
2	Circular weeding cum Deep Soil working to a radius of 0.5m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (during Nov - Dec)	02.09.19	1111	No's	689.06	100	
4	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be done during October)	02.09.21	1111	No's	130.43	100	1449
5	Uprootal of Mahaveera (Hypits Suavelona) Weed with prior written approval of Circle Head and taking Photographs before and after uprootal permission	02.09.22	1	Ha	3833.45	1	3833
<b>Total :-</b>							<b>6740</b>
Add 10% extra every year							<b>674.02</b>

2022-23	7414
Add 10% extra every year	741
2023-24	8156
Add 10% extra every year	816
2024-25	8971
Add 10% extra every year	897
2025-26	9868
Add 10% extra every year	987
2026-27	10855
Add 10% extra every year	1086
2027-28	11941
Add 10% extra every year	1194
2028-29	13135
Add 10% extra every year	1313
2029-30	14448
Add 10% extra every year	1445
2030-31	15893
Add 10% extra every year	1589
2031-32	17482
Add 10% extra every year	1748
2032-33	19230

Forest Divisional Officer (WL)  
Nagarjunasagar

# Estimate for 9th Year Maintenance of SMM Plantation

Espacement - 2 x 3

No of plants- 1666

2033-34

Sl. No	Description of Work	FSR/SS R 2021-22	Quantity		Rate	Per	Amount
1	Weeding and saucer formation to a radius of 0.5 mts around the plant immediately after planting (i.e) during June.	02.09.18	1111	No's	131.20	100	1458
2	Circular weeding cum Deep Soil working to a radius of 0.5m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (during Nov - Dec)	02.09.19	1111	No's	689.06	100	7655
4	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be done during October)	02.09.21	1111	No's	130.43	100	1449
5	Uprootal of Mahaveera (Hypits Suavelona) Weed with prior written approval of Circle Head and taking Photographs before and after uprootal permission	02.09.22	1	Ha	3833.45	1	
6	ii) Contingencies and Miscellaneous (with in 5% of the estimate cost subject to ceiling of Rs. 5,000/-)	02.09.24			As per Actuals		1000
7	Cost of protection (Per 25 Ha One Watcher) for 12 months (115848/1.1509 Ha= 100659/Ha) = 8388/PM	02.09.25	12	Month	8388.25	Month	
<b>Total :-</b>							<b>11562</b>

Add 10% extra every year	1156.22
<b>2022-23</b>	<b>12718</b>
Add 10% extra every year	1272
<b>2023-24</b>	<b>13990</b>
Add 10% extra every year	1399
<b>2024-25</b>	<b>15389</b>
Add 10% extra every year	1539
<b>2025-26</b>	<b>16928</b>
Add 10% extra every year	1693
<b>2026-27</b>	<b>18621</b>
Add 10% extra every year	1862
<b>2027-28</b>	<b>20483</b>
Add 10% extra every year	2048
<b>2028-29</b>	<b>22531</b>
Add 10% extra every year	2253
<b>2029-30</b>	<b>24785</b>
Add 10% extra every year	2478
<b>2030-31</b>	<b>27263</b>
Add 10% extra every year	2726
<b>2031-32</b>	<b>29989</b>
Add 10% extra every year	2999
<b>2032-33</b>	<b>32988</b>
Add 10% extra every year	3299
<b>2033-34</b>	<b>36287</b>

Forest Divisional Officer (WL)  
Nagarjunasagar

Estimate for 10th Year Maintenance of SMM Plantation

Espacement - 2 x 3  
No of plants- 1666

2034-35

Sl.No	Description of Work	FSR/SS R 2021- 22	Quantity		Rate	Per	Amount
1	Weeding and saucer formation to a radius of 0.5 mts around the plant immediately after planting (i.e) during June.	02.09.18	1111	No's	131.20	100	1458
2	Circular weeding cum Deep Soil working to a radius of 0.5m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (during Nov - Dec)	02.09.19	1111	No's	689.06	100	
4	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be done during October)	02.09.21	1111	No's	130.43	100	1449
5	Uprootal of Mahaveera (Hypits Suavelona) Weed with prior written approval of Circle Head and taking Photographs before and after uprootal permission	02.09.22	1	Ha	3833.45	1	3833
Total :-							6740

Add 10% extra every year	674.02
2022-23	7414
Add 10% extra every year	741
2023-24	8156
Add 10% extra every year	816
2024-25	8971
Add 10% extra every year	897
2025-26	9868
Add 10% extra every year	987
2026-27	10855
Add 10% extra every year	1086
2027-28	11941
Add 10% extra every year	1194
2028-29	13135
Add 10% extra every year	1313
2029-30	14448
Add 10% extra every year	1445
2030-31	15893
Add 10% extra every year	1589
2031-32	17482
Add 10% extra every year	1748
2032-33	19230
Add 10% extra every year	1923
2033-34	21154
Add 10% extra every year	2115
2034-35	23269

Forest Divisional Officer (WL)  
Nagarjunasagar