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UNIT COST FOR RAISING OF Misc. PRIMARY BEDS NURSERY FOR THE YEAR 2017-18

Sl. No.	FSR item No	Nature of work	Qty		Rate	Unit	Amount	Remarks
	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.							
	01.01.01	Preparation of New Site by clearing jungle growth, uprootal of stumps and removal of surface stones, pebbles etc.	1	Bed	4.54	1	5.00	
	01.01.03	Digging soil of the demarcated beds of 1x1x0.30 m size	1	Bed	34.92	1	35.00	
	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	25.45	1	25.45	
	01.01.05	For every extra km beyond 5 km upto 25 km( 20x 1.01 = 20.20)	1	Bed	20.2	1	20.20	
	01.01.06	Cost and transport of 0.025 cum FYM	1	Bed	21.87	1	21.87	
	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	9.92	1	9.92	
	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	11.34	1	11.34	
	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	
	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		500.00	
	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	
	01.01.12	Sowing of seed (finer seeds like Adina, Mitragyna, Anthocephalus etc. to be mixed with sand and broadcasted. 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	11.29	1	11.29	
	01.01.13	Watering the primary nursery beds with rose water cans twice daily for a maximum period of 2 months. ( 12.71 x 2 = 25.42 )	1	Bed	25.42	1	25.42	
	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. This item has to be done with prior written approval of DFO	1	Per Bed	As per CSSR		200.00	
	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	
	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	
							885.49	

Or 890 Per Bed

UNIT RATE :

899.00 As per FSR 2017-18  
 979.00 As per FSR 2018-19 (10% Escalation charges added)  
 1076.90 As per FSR 2019-20 (10% Escalation charges added)

Forest Divisional Officer  
 Kaghaznagar

22/7/17



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UNIT COST FOR RAISING OF 50,000 BAG PLANTS NURSERY FOR 2017-18 (size of bag 5"x9") and Convesion to 8" x 12"

Sl. No.	FSR item No.	Nature of work	Qty		Rate	Unit	Amount
	01.03.	BAG PLANT NURSERY: Seedlings need to be raised in 4"x7" (200 gauge) or 5"x9" (250 gauge) bags which are to be converted into 6"x12" (400 gauge) or 8"x12" (400 gauge) polybags. <u>The seedlings are to be transplanted from primary beds in February - March. Hence the bags are to be filled during January-February when the soil is dry.</u>					
		Raising of Nursery in Polythene bags in sizes of 4"x7" (200 gauge) or 5"x9" (250 gauge) bags and arranging in secondary beds (Bed size: 10 X 1 M).					
	01.03.01	Site preparation for New Sites - Clearing of growth, uprootal of stumps and removal of surface stones, rubbish of all sorts etc.	30	Bed	46.33	1	1390
		Cost of Polybags (including the cost of certification by ): 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 polybags.					
	01.03.03	ii) 12.5 cm x 22.5 cm (5" x 9") size bags: 200 g 366 bags / kg	150	Kgs	182.00	1	27300
	01.03.04	Cost and Transport of ingredients for Potting Mixture: (As per CSSR) Red Soil, tank-silt, 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.					
		Transportation of soil mixture ingredients					
		a) Distance up to 5 km					
	01.03.05	12.5 cm x 22.5 cm (5" x 9") = 1.12 cum vol. for 1000 bags	50000	Bags	348.16	1000	17408
		b) For every extra km beyond 5 km upto 25 km					
	01.03.06	12.5 cm x 22.5 cm (5" x 9") = 1.12 cum vol. for 1000 bags ( 20 Kms x 9.07 = 181.40)	50000	Bags	181.4	1000	9070
		Preparation of Potting Mixture by powdering of various ingredients, sieving and mixing them in prescribed proportion; opening of bags and filling with potting mixture and gently pressing the same with finger tips and arranging in beds.					
	01.03.07	b) 12.5 cm x 22.5 cm (5" x 9") size bags: 1700 bags / bed	50000	Bags	872.5	10000	4363
	01.03.08	Allignment of beds including allignment of inspection paths etc	30	Bed	6.92	1	208
	01.03.09	Pricking out seedlings from primary beds and transplanting into polybags	50000	Bags	128.88	1000	6444
	01.03.10	Sowing / dibbling of pretreated seeds (e.g. Yegisa, Nalamadi, Yerumaddi etc.) directly into bags including cost of treatment	0	Bags	76.66	1000	0
	01.03.11	Watering the plants twice a day from Feb - March					
		a) Manually with rose spray or finely perforated nozzle attached to a hose pipe	30	Bed / 2months	250.10	1	15006
		b) Mechanically with sprinkler seis fitted all along the beds at a height of 75-100 cm height.	0	Bed / month	69.51	1	0.00
	01.03.12	Weeding the beds during March	30	Bed / weeding	45.93	1	1378
	01.03.13	Shifting, Grading and rearranging in beds of 10x1 m size beds (2600 no. of 4"x7"bags; 1700 no. of 5"x9" bags) - One Grading in March	30	Bed / weeding	214.49	1	6435
	01.03.14	Replacement of casualties after sorting out the empty bags and keeping at one end of the bed (maximum 10% of total stock is permissible)	3	Bed	60.90	1	183
	01.03.15	Cost of foliar nutritient formulations like multiplex or NPK-19:19:19, fungicides and insecticides from February to March.		As per actuals with a maximum limit of Rs. 2000/ per 1 lakh polybag seedlings.			1000
	01.03.16	Application prophylactic foliar spray of 0.2% of Carbendazim / Dithane M-45 and any organo-phosphate (Monocrotophos / Phosphamidon @ 7-4 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			0.00
	01.03.17	Weeding in the space between the beds, inspection path and surroundings of Nursery	30	Bed	31.3	1	939
	01.03.18	Maintenance of Root Trainer plants or 4"x7" or 5"x9" bag-plants from April - August - Watering the plants twice a day from April - August ( 5 months)	30	Bed / month	250.10	1	27515
	01.03.19	Weeding the beds during May & July ( 3 months)	30	Bed / weeding	45.93	1	4134
	01.03.20	Shifting, Grading and rearranging in beds of 10 m x1 m size beds (2600 no. of 4"x7"bags; 1700 no. of 5"x9" bags) - One Grading in the month of May.	30	Bed / shifting	214.49	1	6435



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Sl. No.	FSR item No.	Nature of work	Qty	Rate	Unit	Amount
	01.03.21	CONVERSION of Root Trainer plants or 4"x7" or 5"x9" bags into higher size bags - to be done during September - October. At the time of conversion, the height of the plants should be at least above 0.45m in height (excluding the height of polybag).				
	01.03.22	Cost and Transport of ingredients for Potting Mixture: Red Soil, tank-silt / clayey soil, FYM in 2:1:1 ratio. To this soil mixture, 220 gmt 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.				
	01.03.23	Transportation of soil mixture ingredients up to a distance of 5 km				
		e) 5" x 9" to 8" x 12" polybags (3.82 - 1.12 = 2.70 cum)	50000	Nos	864.05	43203
	01.03.24	Transportation of soil mixture ingredients more than 5 km distance and upto 25 km distance				
		e) 5" x 9" to 8" x 12" polybags (3.82 - 1.12 = 2.70 cum) (20 Km x 21.87 = 437.40)	50000	Nos/Km	437.40	21870
	01.03.25	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 10x1 m size (6"x12" size: 1100 bag plants / bed and 8"x12" size": 800 bag plants per bed)				
		e) 5" x 9" to 8" x 12" polybags (3.82 - 1.12 = 2.70 cum)	50000	Nos	1552.61	77631
	01.03.29	Weeding the plants (1100 no. of 6"x12" bags; 800 no. of 8"x12" bags; and 400 no. of 10"x16" bags) from November - March: 2 weeding				
		1 <sup>st</sup> weeding - December	63	Bed / weeding	45.93	2894
		2 <sup>nd</sup> weeding - February	63	Bed / weeding	45.93	2894
	01.03.30	Shifting, Grading and rearranging in secondary beds - One Grading in February	63	Bed / weeding	214.49	13513
	01.03.31	Watering the plants manually twice a day (from November - March) with rose spray or finely perforated nozzle attached to a hose pipe.				
		a) Manually with rose spray or finely perforated nozzle attached to a hose pipe for 5 months	63	Bed / 5 months	250.10	78782
	01.03.32	Application prophylactic foliar spray of 0.2% of Carbendazim / Dinane M-45 and any organo-phosphate (Monocrotophos / Phosphamidon @ 3-4 ml in 1 lit of water) at regular interval (once in a month from Dec - March) 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		0
	01.03.33	Cost of foliar nutrient formulations like multiplex or NPK-19:19:19; fungicides and insecticides (from Dec - March)		As per actuals with a maximum limit of Rs. 2000/ per 1 lakh polybag seedlings.		1000
		Nursery Watcher from September to March for 7 Months	7	Month	8017	56119
	01.03.34	Contingencies for Raising Year towards the expenditure like cost of hose pipe, nursery boards, electricity charges, running and maintenance charges of oil engines (Bills to be certified by ACF / DFO; and separate logbook for repair of motor or oil engine and store register for materials purchased.		As per actuals, subject to max. of 5 % of estimate in raising year		25063
		Sub total				322969
		Gran total				526313

Per 50000 Bags or 526400

## UNIT RATE :

526400.00 As per FSR 2017-18

579040.00 As per FSR 2018-19 (10% Escalation charges added)

636944.00 As per FSR 2019-20 (10% Escalation charges added)

## OR:

10.53 Per Plant - 2017-18

11.58 Per Plant - 2018-19

12.74 Per Plant - 2019-20

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22/7/17



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UNIT COST FOR MAINTENANCE OF BAG PLANTS NURSERY FOR 2018-19 (size of bag 8"x12")

Sl. No.	FSR item No.	Nature of work	Qty	Rate	Unit	Amount	Remarks
	01.04.	MAINTAINANCE YEAR OF NURSERY					
		MAINTAINANCE OF BAG PLANTS NURSERY UPTO PLANTING SEASON (APRIL TO AUGUST) 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" X 12" bags; 800 Nos. of 8" X 12" bags; 400 Nos. of 10" X 16" bags per bed)					
	01.04.01	Watering polybag secondary beds twice a day for 4 months					
		a) Manually with rose spray or finely perforated nozzle attached to a hose pipe .	63	Bed / 4 months	250.10	1	63025
	01.04.02	Weeding once during maintenance year	63	Bed / weeding	45.93	1	2894
	01.04.03	Shifting, grading and re-arranging in beds for 10 m X 1 m size bed max. two shifts (one in April and another in June).	63	Bed / 2 times shifting	226.46	1	28534
	01.04.04	Application prophylactic foliar spray of 0.2% of Carbenidazim / 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)	63	By Nursery Watcher			0
	01.04.05	Cost of foliar nutrient formulations like multiplex or NPK-19:19:19; fungicides and insecticides (from April - August)	63	As per actuals with a maximum limit of Rs. 2000/ per 1 lakh polybag seedlings			1000
	01.04.06	Cowdung Slurry application (One can apply chemical foliar spray or apply cowdung slurry - not both)					
		(a) Cost and transportation of fresh cowdung	63	per 100 beds for 3 months	As per actual subject to maximum of Rs.2500/-		1575
		(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	Weeding in the space between the beds, inspection path and surroundings of Nursery	63	Beds	25.28	1	1593
	01.04.08	Contingencies for Maint. Year towards the expenditure like cost of hose pipe, nursery boards, electricity charges, running and maintenance charges of oil engines (Bills to be certified by ACF / DFO; and separate logbook for repair of motor or oil engine and store register for materials purchased.			As per actuals, subject to max. of 5 % of estimate in Maint. Year.		
		Nursery Watcher from April to August for 5 Months	5	Month	8017	1	40085
							138706

Per 50000 Bags or 138800

UNIT RATE :

138800.00 As per FSR 2017-18  
 152680.00 As per FSR 2018-19 (10% Escalation charges added)  
 167948.00 As per FSR 2019-20 (10% Escalation charges added)  
 184742.80 As per FSR 2020-21 (10% Escalation charges added)

2.78 Per plant 2017-18  
 3.05 Per plant 2018-19  
 3.36 Per plant 2019-20  
 3.69 Per plant 2020-21

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 22/7/17



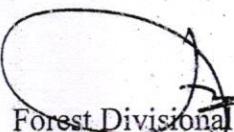
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**ESTIMATE FOR SCT WORKS IN C.A. PLANTATION AREAS**

Sl. No.	Nature of work	Quantity	Rate	Unit	Amount	Remarks
1	Digging of Staggered Contour Trenches (SCTs) for impounding rain water - Manual - Size: 3m Length, 0.45 m top-width, 0.30 m bottom-width and 0.45 m depth; earthwork volume per trench: 0.506 cum - Max. of 100 no. per ha. If they are made with machine, the works can be done by calling for tender. However, if they are intended to be done through machine, it has to be informed in advance. All the SCTs shall be completed before January. ( 100 Nos x 0.506 = 50.60 Cum X 10.931 Ha = 553.11 Cum )					
2.01.08	<b>Between January - March</b>					
	(a) Loamy and clayey soil like BC soils, red earth and chowdu soil	50.60	254.60	Per Cmt.	12883	
2	Misc. like cost of implements				117	
	<b>TOTAL:</b>				<b>13000</b>	

13000 As per FSR 2017-18  
 14300 As per FSR 2018-19 (10% Escalation charges added)  
 15730 As per FSR 2019-20 (10% Escalation charges added)  
 17303 As per FSR 2020-21(10% Escalation charges added)  
 19033 As per FSR 2021-22(10% Escalation charges added)

  
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22/7/07



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UNIT COST ERRECTION BARBED WIRE FENCE AROUND THE C.A. PLANTATION AREA

Sl. No.	FSR Item No.	Nature of work	Quantity	Rate	Unit	Amount	Remarks
1		Errection Barbed wire fence around the CA area	1480	700	Per Rmt.	1036000	
			<b>TOTAL:</b>			<b>1036000</b>	

1036000 For 2017-18

1139600 (10% Escalation charges added)for 2018-19

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The CA area proposed to be raised under various models as per the site conditions and Requirement of seedlings for CA scheme

Sl. No	Range	CA land village area	Area proposed in Ha	Model wise area to be afforested	
				SMM ( 3m x 3m)	Total
1	Penkalipet	Kammargaon	10.931	10.931	10.931
			10.931	10.931	10.931
Requirement of seedlings for the above area for CA scheme					
Sl. No	Range	CA land village area	Area proposed in Ha	SMM ( 3m x 3m) ( 1350 Per Ha)	Total
1	Penkalipet	Raising year	10.931	14757	14757
			10.931	14757	14757
		Inclusive 10 %		15000	15000
1	Penkalipet	Replancement for 1st year	10.931	3061	3061
			10.931	3061	3061
		Inclusive 10 %		3100	3100
		Grand Total		18100	18100

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**Development and improvement and existing of Chedwai Nursery  
infrastructure for CA scheme**

Sl. No	Range	Location of nursery	Item of work	Amount required
1	Penchikalpet	Chedwai	Borewell along with Motor	1.200
2			Central water system	1.000
3			Over head tanks 2 Nos.	0.800
4			Pedastal to over head tanks	0.400
5			Shade nets	0.200
6			Improvement of Seed store room	1.000
7			Kerbing the primary beds all around with Cement Bricks (in permanent nurseries only) 50 Nos @ 1500/-	0.700
			<b>Total</b>	<b>5.300</b>

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UNIT COST FOR ADVANCE OPERATIONS FOR CA SCHEME FOR 2017-18 UNDER SEMI MECHNIACAL METHOD- ( 3m X 3m espacement)

Sl. No.	FSR item No	Nature of work	Qty	Rate	Unit	Amount	Remarks
1	02.08.01	Survey with hand-held GPS (staff to carry out) and demarcation - one manday is allowed for assistance. The surveyed sketch with exact effective area statement will be uploaded in MIS platform by end of December.	1	326.59	1	327	
SUB-TOTAL						327	
						OR 327	

UNIT RATE :

327.00 As per FSR 2017-18

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22/7/17



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UNIT COST FOR RAISING OF C.A. PLANTATION UNDER SEMI MECHNIACAL METHOD- (3m X 3m espacement) FOR 2018-19

No	Item No.	Schedule of operations with Specification	Unit	Qty	Rate (in Rs)	Per	Amount
1	2	3	4	5	6	7	8
		<b>RAISING OF BLOCK PLANTATIONS</b>					
		<b>SEMI-MECHANICAL PLANTATION</b>					
	02.09.00	<b>PLANTING OPERATIONS DURING RAISING YEAR</b>					
	02.09.01	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	Ha	1	3004.60	1	3005
2	02.09.03	Removing congestion of root suckers and other uprooted material hindering the effective ploughing Note: After intensive site preparation including clear-felling, burning, stump uprootal, removal of uprooted material, ploughing with the provision of removal of remnants of root suckers from soil, it is expected that there would not be any coppice growth subsequently atleast 5-7 years.	Ha	1	896.09	1	896
3	02.09.04	Alignment & Stacking including demarcation of base line					
		c) 2X3 m espacement = 1111 planting points	100 no.	1111	70.08	100	779
4	02.09.05	Cost of preparation of stakes (0.45 m length) and transportation to site	100 no.	1111	49.67	100	552
	02.09.06	Digging of Pits in Ploughed Areas in June - July by adopting 50% of original rate of digging of pits of ordinary soil					
5		b) 45-cm <sup>3</sup> pits	Pit	1111	9.28	1	10310
		<b>PLANTING OPERATIONS DURING RAISING YEAR</b>					
	02.09.07	(a) Transportation of Planting Stock (including loading and unloading) up to a distance of 5 km					
6	b	15 X 30 cm (6"X12") bag plants	100 nos	1111	96.79	100	1075
	02.09.08	(b) Transportation of Planting Stock (including loading and unloading) more than 5 km distance and upto 25 km distance					
7	b	15 X 30 cm (6"X12") bag plants (15 x 3.38 =50.70)	100 nos / km	1111	50.70	100	563
	02.09.10	Internal transportation to planting points on head loads					
8	b	15 X 30 cm (6"X12") bag plants	100 Nos	1111	80.06	100	889
		PLANTING: No Eucalyptus, not even mixed with bamboo, shall be planted in CA area. Only indigenous secondary hardwood species and its associates mixed with local NTFP species shall be planted in CA areas. The minimum height of the planting stock to be plant					
	02.09.11	Fortification of seedling with insecticide and treating pits with SSP					
9	a	i) Application of 50 gm of SSP per pit (1 day 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 (5ml Chloropyriphos in 1 lit water)	100 No.	1111	34.25	100	381
10	b	Cost of SSP, Chloridine dust or Chloropyriphos (1111 x 50 / 1000/50 = 1.111 Bags)	Bag	1.10	500	1	550
11	02.09.13	Planting in 45 cm <sup>3</sup>	100 No.	1111	381.54	100	4239
	02.09.14	Watering (one time) immediately after planting if the planting takes place on a non-rainy day and if there is no rains after planting for 1-2 days with prior written permission of Circle Head and, under intimation to Head Office. Also the date of watering is to be recorded in plantation Journal. (Refer PCCF Office Rc. No. 17309/2006/G1, Dt. 16.08.2005 - Circular No. 6B/2005/G1)	100 No.	1111	231	100	2566
	02.09.29	Replacement of Casualties: 20% during Raising Year. The casualty replacement should be done in 3 stages at an interval of 15 days immediately after planting during raising year. 50% of unit rate of original pitting during raising year. Planting, transpor ( 1666 x 20% =333 Nos)					
12		a) Pitting (50% of Original Rate 9.28 x 50% =4.64)	Each	222	4.64	1	1030
13		b) Transportation of Seedlings- up to 5Kms	No.	222	96.79	100	215
14		- 5 to 20Kms	No.	222	50.70	100	113
15		c) Internal transporation	No.	222	80.06	100	176
16		d) Planting	No.	222	381.54	100	847
17	02.09.16	Cost of DAP @ 25 gm / planting point (1111 x 25 / 1000/ 50 = 0.555)	Bag	0.55	1400	1	770
		Application of fertilizer in August (30 days after planting) by					



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Sl No	Item No.	Schedule of operations with Specification	Unit	Qty	Rate (in Rs)	Per	Amount
	2	3	4	5	6	7	8
20	02.09.19	b) Circular weeding cum Deep soil working to a radius of 0.5 m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. ( during Nov - Dec.)	100	1111	572.33	100	6359
		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	Ha	1	2048.90	1	2049
21	02.09.20	i) Ordinary soil	100	1111	108.35	100	1204
22	02.09.21	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be done during October)	Ha	1	3184.10	1	3184
23	02.09.22	Uprootal of Mahaveera (Hyptis suaveolens) weed with prior written approval of Circle Head and taking photograph before and after uprootal. The weed removal shall be completed before September-end at any cost before inter-ploughing.	Ha	1	3184.10	1	3184
24	02.09.24	Cost of Protection: One Watcher is allowed for 10-30 ha. plantation; One more Watcher for more than 30 ha; and if the area is less than 10 ha, prior approval of Conservator of Forests is required. Identity Photo of Watchers shall be pasted in respective Plantation Journal. Every month payment to be made after satisfaction by Plantation-in-charge that fence is in proper condition and entry of grazing animals is stopped. The guiding principle for continuation of the services of a Plantation Watcher is at least 80% survival at the end of raising year. (8017 / 10 Ha = 802.00 Per Ha)	per month per watcher	9	802	1	7218
25		Preparation and fixing of plantation board of standard size 6'x3' with iron Angulars, guage 6 mm (Errected on 65 mm x 65 mm x 6 mm for length of 3.00 m) including construction of CC Base		1	A/A		400
						Total	50964

or 51000.00

51000.00 As per FSR 2017-18  
56100.00 As per FSR 2018-19 (10% Escalation charges added)

OR 56100 Per Ha.

Forest Divisional Officer,  
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**UNIT COST FOR 1st YEAR MAINTENANCE OF C.A. PLANTATION FOR 2019-20 UNDER SEMI MECHNIACAL METHOD.  
(3m X 3m espacement)**

SI No	Item No.	Schedule of operations with Specification	Unit	Qty	Rate (in Rs)	Per	Amount
1	2	3	4	5	6	7	8
	02.10.	<b>1<sup>ST</sup> YEAR MAINTAINANCE</b>					
	02.10.01	"Replacement of Casualties: 25% in 1st year (In case of Eucalyptus: no casualty replacement). The list of all casualty points shall be prepared by concerned FRO by and made a report to DFO latest by end of May. The pitting of all such casualty points shall be over by end of June. The planting shall be completed by 15th of July.					
	02.09.06	a) Pitting (Original Rate 9.26) -45 cm pits	Each	278	9.28	1	2580
	02.09.07	b) Transportation of Seedlings- up to 5Kms	No.	278	96.79	100	269
	02.09.08	- 5 to 20Kms	No.	278	50.70	100	141
	02.09.10	c) Internal transporation	No.	278	80.06	100	223
	02.09.13	d) Planting	No.	278	381.54	100	1061
	02.10.02	Circular weeding to a radius of 0.50 m around the plant during raising year (July - Aug)	No.	1111	108.98	100	1211
	02.10.03	Circular weeding cum Deep soil working to a radius of 0.5 m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant during Nov - Dec	No.	1111	572.33	100	6359
	02.10.04	Uprootal of Mahaveera ( <i>Hyptis suaveolens</i> ) weed with prior written approval of Circle Head and taking photograph before and after uprootal. The weed removal shall be completed before August-end (before flowering) at any cost before inter-ploughing.	Ha	1	3184.1	1	3184
	02.10.05	Inter-ploughing (during September) the effective plantation area (excluding unsuitable patches) across the slope to a depth of 30 cm with Heavy-duty Tractor of 55 HP and above with Firm Mould Board (FMB) plough. This operation shall be carried out after Mahaveera uprootal is completed. Inter-ploughing should not be used as a means of Mahaveera uprootal.	Ha	1	2048.9	1	2049
	02.10.06	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be done during July-Aug)	No.	1111	108.35	100	1204
	02.10.08	Enumeration of row-wise survival and average growth thrice a year - Number of plants planted and Number surviving (to be undertaken during June, Oct. and Jan.) and entered in Plantation Journal. Minimum stocking of 90% and average minimum	To be done by the staff (plantation-in-charge) with the help of Plantation Watcher				
	02.10.09	Cost of Protection: One Watcher is allowed for 10-30 ha. plantation; one more Watcher for more than 30 ha. and if the area is less than 10 ha, prior approval of Conservator of Forests is required. Identity Photo of Watchers shall be pasted in respective Plantation Journal. Every month payment to be made after satisfaction by Plantation-in-charge that fence is in proper condition and entry of grazing animals is stopped. (8017 / 10 Ha = 802.00 Per Ha)	Month	12	802.00	1	9624
						<b>Total</b>	<b>27905</b>

or 27900.00

**UNIT RATE**

27900.00 As per FSR 2017-18  
30690.00 As per FSR 2018-19 (10% Escalation charges added)  
33759.00 As per FSR 2019-20 (10% Escalation charges added)

OR 33759 Per Ha.

Forest Divisional Officer,  
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**UNIT COST FOR 2nd YEAR MAINTENANCE OF C.A. PLANTATION FOR 2020-21 UNDER SEMI MECHNIACAL METHOD- (3m X 3m espacement)**


SI No	Item No.	Schedule of operations with Specification	Unit	Qty	Rate (in Rs)	Per	Amount
1	2	3	4	5	6	7	8
	02.11.00	<b>2<sup>ND</sup> YEAR MAINTAINANCE</b>					
	02.11.01	Circular weeding cum Deep soil working to a radius of 0.5 m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (July-Aug) (1x1111= 1111)	Nos.	1111	572.33	100	6359
	02.11.02	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be carried out during July-Aug)	Nos.	1111	108.35	100	1204
	02.11.04	Enumeration of row-wise survival and average growth thrice a year - Number of plants planted and Number surviving (to be undertaken during June, Oct. and Jan.) and entered in Plantation Journal. Minimum stocking of 90% and average minimum height of 3 m at	To be done by the staff (plantation-in-charge) with the help of Plantation Watcher				
	02.11.05	Cost of Protection: One Watcher is allowed for 10-30 ha. plantation; One more Watcher for more than 30 ha; and if the area is less than 10 ha, prior approval of Conservator of Forests is required. Identity Photo of Watchers shall be pasted in respective Plantation Journal. Every month payment to be made after satisfaction by Plantation-in-charge that fence is in proper condition and incidence of grazing and fire is absent. The guiding principle for continuation of the services of a Plantation Watcher is at least 80% survival during 1st year maintainance period.	Month	12	802.00	1	9624
							<b>17187</b>

or **17200.00** per Ha

**UNIT RATE :**

17200.00 As per FSR 2017-18  
 18920.00 As per FSR 2018-19 (10% Escalation charges added)  
 20812.00 As per FSR 2019-20 (10% Escalation charges added)  
 22893.20 As per FSR 2020-21 (10% Escalation charges added)

OR **22893** Per Ha.

  
 Forest Divisional Officer,  
 Kaghaznagar  
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**UNIT COST FOR 3rd YEAR MAINTENANCE OF C.A. PLANTATION FOR 2021-22 UNDER SEMI MECHNIACAL METHOD- (3m X 3m espacement)**

SI No	Item No.	Schedule of operations with Specification	Unit	Qty	Rate (in Rs)	Per	Amount
1	2	3	4	5	6	7	8
	02.11.						
	02.11.01	Circular weeding cum Deep soil working to a radius of 0.5 m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant: (July-Aug) (1x1111= 1111)	Nos.	1111	572.33	100	6359
	02.11.02	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be carried out during July-Aug)	Nos.	1111	108.35	100	1204
	02.11.04	Enumeration of row-wise survival and average growth thrice a year - Number of plants planted and Number surviving (to be undertaken during June, Oct. and Jan.) and entered in Plantation Journal. Minimum stocking of 90% and average minimum height of 3 m at	To be done by the staff (plantation-in-charge) with the help of Plantation Watcher				
	02.11.05	Cost of Protection: One Watcher is allowed for 10-30 ha. plantation; One more Watcher for more than 30 ha; and if the area is less than 10 ha, prior approval of Conservator of Forests is required. Identity Photo of Watchers shall be pasted in respective Plantation Journal. Every month payment to be made after satisfaction by Plantation-in-charge that fence is in proper condition and incidence of grazing and fire is absent. The guiding principle for continuation of the services of a Plantation Watcher is at least 80% survival during 1st year maintenance period.	Month	12	802.00	1	9624
							17187

or 17200.00 per Ha

**UNIT RATE :**

17200.00 As per FSR 2017-18  
 18920.00 As per FSR 2018-19 (10% Escalation charges added)  
 20812.00 As per FSR 2019-20 (10% Escalation charges added)  
 22893.20 As per FSR 2020-21 (10% Escalation charges added)  
 25182.52 As per FSR 2021-22 (10% Escalation charges added)

OR 25183 Per Ha.

  
 Forest Divisional Officer,  
 Kaghaznagar  
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UNIT COST FOR 4th YEAR MAINTENANCE OF C.A. PLANTATION FOR 2022-23 UNDER SEMI MECHANICAL  
METHOD- (3m X 3m espacement)

SI No	Item No.	Schedule of operations with Specification	Unit	Qty	Rate (in Rs)	Per	Amount
1	2	3	4	5	6	7	8
	02.11.						
	02.11.01	Circular weeding cum Deep soil working to a radius of 0.5 m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (July-Aug) ( 1x1111=1111)	Nos.	1111	572.33	100	6359
	02.11.02	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be carried out during July-Aug)	Nos.	1111	108.35	100	1204
	02.11.04	Enumeration of row-wise survival and average growth thrice a year - Number of plants planted and Number surviving (to be undertaken during June, Oct. and Jan.) and entered in Plantation Journal. Minimum stocking of 90% and average minimum height of 3 m at	To be done by the staff (plantation-in-charge) with the help of Plantation Watcher				
	02.11.05	Cost of Protection: One Watcher is allowed for 10-30 ha. plantation; One more Watcher for more than 30 ha; and if the area is less than 10 ha, prior approval of Conservator of Forests is required. Identity Photo of Watchers shall be pasted in respective Plantation Journal. Every month payment to be made after satisfaction by Plantation-in-charge that fence is in proper condition and incidence of grazing and fire is absent. The guiding principle for continuation of the services of a Plantation Watcher is at least 80% survival during 1st year maintenance period.	Month	12	802.00	1	9624
							17187

or 17200.00 per Ha

UNIT RATE :

17200.00	As per FSR 2017-18
18920.00	As per FSR 2018-19 (10% Escalation charges added)
20812.00	As per FSR 2019-20 (10% Escalation charges added)
22893.20	As per FSR 2020-21 (10% Escalation charges added)
25182.52	As per FSR 2021-22 (10% Escalation charges added)
27700.77	As per FSR 2022-23 (10% Escalation charges added)

OR 27701. Per Ha.

Forest Divisional Officer,  
Kaghaznagar

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**UNIT COST FOR 5th YEAR MAINTENANCE OF C.A. PLANTATION FOR 2023-24 UNDER SEMI MECHNIACAL METHOD- (3m X 3m espacement)**

SI No	Item No.	Schedule of operations with Specification	Unit	Qty	Rate (in Rs)	Per	Amount
1	2	3	4	5	6	7	8
	02.11.						
	02.11.01	Circular weeding cum Deep soil working to a radius of 0.5 m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (July-Aug) ( 1x1111=1111)	Nos.	1111	572.33	100	6359
	02.11.02	Pruning of lower branch initials of Timber and NTFP species by scicature upto. 1/3 rd height (to be carried out during July-Aug)	Nos.	1111	108.35	100	1204
	02.11.04	Enumeration of row-wise survival and average growth thrice a year - Number of plants planted and Number surviving (to be undertaken during June, Oct. and Jan.) and entered in Plantation Journal. Minimum stocking of 90% and average minimum height of 3 m at	To be done by the staff (plantation-in-charge) with the help of Plantation Watcher				
	02.11.05	Cost of Protection: One Watcher is allowed for 10-30 ha; plantation; One more Watcher for more than 30 ha; and if the area is less than 10 ha, prior approval of Conservator of Forests is required. Identity Photo of Watchers shall be pasted in respective Plantation Journal. Every month payment to be made after satisfaction by Plantation-in-charge that fence is in proper condition and incidence of grazing and fire is absent. The guiding principle for continuation of the services of a Plantation Watcher is at least 80% survival during 1st year maintenance period.	Month	12	802.00	1	9624
							17187

UNIT RATE :

or 17200.00 per Ha

- 17200.00 As per FSR 2017-18
- 18920.00 As per FSR 2018-19 (10% Escalation charges added)
- 20812.00 As per FSR 2019-20 (10% Escalation charges added)
- 22893.20 As per FSR 2020-21 (10% Escalation charges added)
- 25182.52 As per FSR 2021-22 (10% Escalation charges added)
- 27700.77 As per FSR 2022-23 (10% Escalation charges added)
- 30470.85 As per FSR 2023-24 (10% Escalation charges added)

OR 30471 Per Ha.

Forest Divisional Officer,  
Kaghaznagar

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**UNIT COST FOR 6th YEAR MAINTENANCE OF C.A. PLANTATION FOR 2024-25 UNDER SEMI MECHNIACAL METHOD- (3m X 3m espacement)**

Sl No	Item No.	Schedule of operations with Specification	Unit	Qty	Rate (in Rs)	Per	Amount
1	2	3	4	5	6	7	8
	02.11.						
	02.11.01	Circular weeding cum Deep soil working to a radius of 0.5 m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (July-Aug) (1x1111=1111)	Nos.	1111	572.33	100	6359
	02.11.02	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be carried out during July-Aug)	Nos.	1111	108.35	100	1204
	02.11.04	Enumeration of row-wise survival and average growth thrice a year - Number of plants planted and Number surviving (to be undertaken during June, Oct. and Jan.) and entered in Plantation Journal. Minimum stocking of 90% and average minimum height of 3 m at	To be done by the staff (plantation-in-charge) with the help of Plantation Watcher				
	02.11.05	Cost of Protection: One Watcher is allowed for 10-30 ha. plantation; One more Watcher for more than 30 ha; and if the area is less than 10 ha, prior approval of Conservator of Forests is required. Identity Photo of Watchers shall be pasted in respective Plantation Journal. Every month payment to be made after satisfaction by Plantation-in-charge that fence is in proper condition and incidence of grazing and fire is absent. The guiding principle for continuation of the services of a Plantation Watcher is at least 80% survival during 1st year maintenance period.	Month	12	802.00	1	9624
							17187

or 17200.00 per Ha

**UNIT RATE :**

17200.00	As per FSR 2017-18
18920.00	As per FSR 2018-19 (10% Escalation charges added)
20812.00	As per FSR 2019-20 (10% Escalation charges added)
22893.20	As per FSR 2020-21 (10% Escalation charges added)
25182.52	As per FSR 2021-22 (10% Escalation charges added)
27700.77	As per FSR 2022-23 (10% Escalation charges added)
30470.85	As per FSR 2023-24 (10% Escalation charges added)
33517.94	As per FSR 2024-25 (10% Escalation charges added)

OR 33518 Per Ha.

Forest Divisional Officer,  
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**UNIT COST FOR 7th YEAR MAINTENANCE OF C.A. PLANTATION FOR 2025-26 UNDER SEMI MECHNIACAL METHOD- (3m X 3m espacement)**

Sl No	Item No.	Schedule of operations with Specification	Unit	Qty	Rate (in Rs)	Per	Amount
1	2	3	4	5	6	7	8
	02.11.						
	02.11.01	Circular weeding cum Deep soil working to a radius of 0.5 m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (July-Aug) (1x1666= 1666)	Nos.	1111	572.33	100	6359
	02.11.02.	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be carried out during July-Aug)	Nos.	1111	108.35	100	1204
	02.11.04	Enumeration of row-wise survival and average growth thrice a year - Number of plants planted and Number surviving (to be undertaken during June, Oct. and Jan.) and entered in Plantation Journal. Minimum stocking of 90% and average minimum height of 3 m at	To be done by the staff (plantation-in-charge) with the help of Plantation Watcher				
	02.11.05	Cost of Protection: One Watcher is allowed for 10-30 ha. plantation; One more Watcher for more than 30 ha; and if the area is less than 10 ha. prior approval of Conservator of Forests is required. Identity Photo of Watchers shall be pasted in respective Plantation Journal: Every month payment to be made after satisfaction by Plantation-in-charge that fence is in proper condition and incidence of grazing and fire is absent. The guiding principle for continuation of the services of a Plantation Watcher is at least 80% survival during 1st year maintainance period.	Month	12	802.00	1	9624
							17187

UNIT RATE :

or. 17200.00 per Ha

17200.00 As per FSR 2017-18  
 18920.00 As per FSR 2018-19 (10% Escalation charges added)  
 20812.00 As per FSR 2019-20 (10% Escalation charges added)  
 22893.20 As per FSR 2020-21 (10% Escalation charges added)  
 25182.52 As per FSR 2021-22 (10% Escalation charges added)  
 27700.77 As per FSR 2022-23 (10% Escalation charges added)  
 30470.85 As per FSR 2023-24 (10% Escalation charges added)  
 33517.94 As per FSR 2024-25 (10% Escalation charges added)  
 36869.73 As per FSR 2025-26 (10% Escalation charges added)

OR 36870 Per Ha.

Forest Divisional Officer,  
Kaghaznagar

22/7/17