

Statement showing the year wise funds flow in (CA Raised in 65.669 Ha Venkatapur village of Kasipet Mandal) lieu of Diversion of 34.4167 Ha Package-IV of forest land in Mancherla Forest Divisions - For construction of Barrage at Tumidihetti village and main canal for Dr.B.R. Abmedkar Pranahitha Project- In favour of Chief Engineer (Projects), Adilabad in Neelwai Range of Mancherla Division

Sl No	Name of the work	Units	Year wise requirement of funds																											Total											
			2017-18			2018-19			2019-20			2020-21			2021-22			2022-23			2023-24			2024-25			2025-26					2026-27			2027-28			2028-29			
			Qty	Rate	Amount	Qty	Rate	Amount	Qty	Rate	Amount	Qty	Rate	Amount	Qty	Rate	Amount	Qty	Rate	Amount	Qty	Rate	Amount	Qty	Rate	Amount	Qty	Rate	Amount	Qty	Rate	Amount	Qty	Rate	Amount						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40.000	41	
1	Providing protection to area	Cum	14792	42	6.272																																	14792.0	6.272		
2	Barbud wire fencing with poles @2 mtr 5 rows (4300 / 2 + 5% Extra = 2258 OR Rubble stone wall		2258	850	19.193																																	2258.0	19.193		
3	Construction of Check Dams	No	1	10.000	10.000	1	10	10.000																														2.000	20.000		
4	Construction of PTs	No				2	2.000	4.000																														2.000	4.000		
5	Construction of bundary pillar @20 mtr	Nos	215	7500	16.125																																	215.000	16.125		
6	Construction of Nursery Shed	LS						30.000																														0.000	30.000		
7	Procurement of nursery Infrastructure	LS			10.000			5.000																														0.000	15.000		
8	Engaging of Technical Assistant	Nos / Month	12	0.300	3.600	12	0.300	3.600	12	0.300	3.600																											36.000	10.800		
9	Engaging of Data Entry Operator	Nos / Month	12	0.150	1.800	12	0.150	1.800	12	0.150	1.800																											36.000	5.400		
10	Raising of Bag plant nursery Raising year @ 400 Plants per Ha (200 Plants Baniyan Ravi etc., 200 Plants Bamboo)	Lakh Nos	1.379	15.948	21.992																																	1.379	21.992		
11	1st year maintenance	Lakh Nos				0.288	17.543	5.052																														0.288	5.052		
12	Maintenance of nursery	Lakh Nos				1.379	5.640	7.777	0.288	6.204	1.787																											1.667	9.564		
13	Advance operations	Ha	65.669	0.321	21.071																																	65.669	21.071		
14	Raising of plantations	Ha				65.669	0.251	16.496																														65.669	16.496		
15	1st year maintenance	Ha							65.669	0.216	14.168																											65.669	14.168		
16	2nd year maintenance	Ha										65.669	0.223	14.672																								65.669	16.139		
17	3rd year maintenance	Ha													65.669	0.246	16.139																					65.669	17.753		
18	4th year maintenance	Ha															65.669	0.270	17.753																			65.669	15.676		
19	5th year maintenance	Ha																	65.669	0.239	15.676																	65.669	17.244		
20	6th year maintenance	Ha																			65.669	0.263	17.244															65.669	18.968		
21	7th year maintenance	Ha																						65.669	0.289	18.968												65.669	20.865		
22	8th year maintenance	Ha																									65.669	0.318	20.865										65.669	22.952	
23	9th year maintenance	Ha																												65.669	0.350	22.952							65.669	25.247	
24	10th year maintenance	Ha																															65.669	0.384	25.247					65.669	25.247
	Total				110.053			83.726			21.355			14.672			16.139			17.753			15.676			17.244			18.968			20.865			22.952			25.247		384.649	
	Administative Cost 5%				5.503			4.186			1.068			0.734			0.807			0.888			0.784			0.862			0.948			1.043			1.148			1.262		19.232	
	Grand Total				115.555			87.912			22.423			15.406			16.946			18.641			16.460			18.106			19.916			21.908			24.100			26.509		403.882	

Divisional Forest Officer
Mancherla

Annexure - 2

Statement showing the number of plants required for raising of 65.669 Ha

Year	Area	No. of planting points @ 3m x 2m 5x5	Replacement of casualties	Total	5% Extra	Grand Total	Rounded to
1	2	3	4	5	6	7	8
Raising year (20% replaements)	65.669	109470	21894	131364	6568	137932	137950
1st year (25% replacement)		109470	27368	27368	1368	28736	28750
	Total	218940	49262	158732	7936	166668	166700

 
Divisional Forest Officer
Mancherial

Annexure - 3

Providing protection to area by Diggin of Cattle proof Trench

12/08

Sl No	Description of work		Qty	Rate	Per	Amount in Rs
1	2		3	4	5	6
1	Digging of cattle proof trench with size 2.00 Mt Top, 1.50 Mt bootom with a depth of 2.00 Mt (As per GO Ms. 261, EFS&T Dt 30.07.2005					
	Peripheral lengh	4300	15050	7525	15050	
	Width	(2+1.5)/2				
	Depth	2.00	15050 Cum			
	Leaving a septa of 0.60 m @ 20 m intervals 4300 / 20 = 215 Nos septas x 0.60 x 2 = 258 Cum	258	-258			
	Total		14792	42.400	1	627181

Annexure - 3

Carrying out SMC works

1 Check dam	10.000
2 Formation of Mini Percolation Tanks 2 Nos @ Rs. 1.00 Lakhs/ each	2.000
Total	12.000

Annexure -4

Unit cost for raising of 1,00,000 Nos. Bag Plants Nursery as per the FSR 2016-17



Sl.No.	Item No.	Schedule of operations with Specifications	Units	Qty	Rate (in Rs)	Per	Amount
1	2	3	4	5	6	7	8
	A)	PRIMARY BED NURSERY (MAY-JUNE)					
	I	NURSERIES					
		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. It is expected to 500 Plants per bed $100000/500=200$ Beds					
	01.01.01	Preparation of New Site by clearing jungle growth, uprootal of stumps and removal of surface stones, pebbles etc.	Bed	200	4.32	1.00	864.00
	01.01.03	Digging soil of the demarcated beds of 1x1x0.30 m size	Bed	200	33.26	1.00	6653.00
	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	Bed	200	25.45	1.00	5090.00
	01.01.06	Cost and transport of 0.025 cum FYM	Bed	200	21.87	1.00	4374.00
	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 lavelling.	Bed	200	9.45	1.00	1890.00
	01.01.08	Covering the beds with dried grass and leaf litter and burning them to ash which can form the upper layer	Bed	200	10.80	1.00	2160.00
	01.01.09	Soil drenching with 0.1% Carbendazim (10 gm or 10 ml of Carbendazim in 1 lit of water)			By Nursery Watcher		
	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 $5\text{Kg} \times 200 \text{ Beds} = 10000$	Kg	10000	25	1	250000.00
	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)			By Nursery Watcher		0.00
	01.01.12	Sowing of seed (finer seeds like <i>Adina</i> , <i>Mitragyna</i> , <i>Anthocephalus</i> 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	Bed	200	10.75	1.00	2149.00
	01.01.13	Watering the primary nursery beds with rose water cans twice daily for a maximum period of 2 months. $200 \times 2\text{months} = 400$ Beds	Bed/ month	400	12.10	1.00	4838.00
	01.01.15	Cost of chemicals, fungicide and insecticide	As per actuals limited to Rs. 1000/- per 1				1000
	01.01.16	Application of Fungicide and insecticide with power-driven backpack mechanized sprayer as used in agricultural fields to spray insecticide.	By Nursery Watcher				
		Wages to Nursery watcher May-June	Months	2	7500	1	15000.00
		Primary Bed Nursery Total:					294018.00
	B)	RAISING OF 4 X 7 BAGS					
	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. The seedlings are to be transplanted from primary beds in June - July. Hence the bags are to be filled during April-May when the soil is dry. $100000/2600 (4 \times 7) = 38.46$					
		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.	Bed	38.46	44.12	1.00	1697.00
	01.03.02	Site preparation for Old Site - Clearing of growth, weeds, grass etc.,	Bed	38.46	11.56	1.00	444.00
		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.			As per approved Tender Rate finalized by the procurement committee.		
	01.03.03	i) 10 cm x 17.5 cm (4" x 7") size bags of 200 g: 589 bags / kg $100000/589 = 169.78 + 10\% = 186.75$	Kg	186.75	159.00	1.00	29693.00
		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	10 cm x 17.5 cm (4" x 7") = 0.56 cum vol. for 1000 bags	1000	100000	174.06	1000.00	17406.00
		b) For every extra km beyond 5 km upto 25 km					

Sl.No.	Item No.	Schedule of operations with Specifications	Units	Qty	Rate (in Rs)	Per	Amount
1	2	3	4	5	6	7	8
	01.03.07	10 cm x 17.5 cm (4" x 7") = 0.56 cum vol. for 1000 bags (100000x20=20000000)	1000 / km	2000000	4.54	1000.00	9080.00
		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.					
	01.03.09	i) 10 cm x 17.5 cm (4" x 7") size bags: 2600 bags / bed	1000	100000	509.22	1000.00	50922.00
	01.03.11	Alignment of beds including alignment of inspection paths etc	Bed	38.46	6.59	1.00	253.00
	01.03.12	Pricking out seedlings from primary beds and transplanting into polybags	1000	100000	122.74	1000.00	12274.00
		Watering the plants <i>twice a day</i> from July - October					
	01.03.14	a) <i>Manually</i> with rose spray or finely perforated nozzle attached to a hose pipe (4Months x 38.46=153.84)	Bed / month	153.84	238.19	1.00	36644.00
		Weeding the plants from July to October (3 times)					
	01.03.16	1 st weeding - July	Bed / weeding	38.46	43.74	1.00	1682.00
	01.03.17	2 nd weeding - Aug	Bed / weeding	38.46	43.74	1.00	1682.00
	01.03.18	3 rd weeding - Sept	Bed / weeding	38.46	43.74	1.00	1682.00
		Shifting, Grading and rearranging in beds of 10x1 m size beds (2600 no. of 4"x7"bags; 1700 no. of 5"x9" bags)					
	01.03.19	One Grading in Sept.	Bed / shifting	38.46	204.28	1.00	7857.00
	01.03.20	Replacement of casualties after sorting out the empty bags and keeping at one end of the bed (maximum 10% of total stock is permissible)	Bed	3.846	58.00	1.00	223.00
	01.03.21	Cost of foliar nutrient formulations like multiplex or NPK-19:19:19; fungicides and insecticides from July to Oct.	As per actuals with a maximum limit of Rs. 2000/ per 1 lakh polybag seedlings.				2000
	01.03.22	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				
	01.03.23	Weeding in the space between the beds, inspection path and surroundings of Nursery	Bed	3.846	29.81	1.00	115.00
		Wages to Nursery watcher July-Oct	Months	4	7500	1	30000.00
		Raising 4x7 Bag Total:					203654.00
	C)	CONVERSION AND MAINTENANCE OF SEEDLINGS (4x7 to 8x12) Nov To Mar					
		CONVERSION of RT plants or 4"x7" or 5"x9" bag-plants into higher size bags - to be done during November - December. At the time of conversion, the height of the plants should be at least above 0.45m in height (excluding the height of polybag).					
		Cost of Polybags (100000/86=1163 Kg+10%=1279.30)	Kg	1279.3	159.00	1.00	203409.00
		Cost and Transport of ingredients for Potting Mixture: Red Soil, tank-silt, FYM in 2:1:1 ratio. To this soil mixture, 220 gm of Indophyl 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					
	01.03.27	iv) 4" x 7" to 8" x 12" polybags (3.82 - 0.56 = 3.26 cum)	1000	100000	1013.45	1000.00	101345.00
		b) For every extra km beyond 5 km upto 25 km					
	01.03.32	iv) 4" x 7" to 8" x 12" polybags (3.82 - 0.56 = 3.26 cum) 20x100000=20000000	1000 No. / km	2000000	26.41	1000.00	52820.00
		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)					
	01.03.37	iv) 4" x 7" to 8" x 12" polybags (3.82 - 0.56 = 3.26 cum)	1000	100000	1785.38	1000.00	178538.00
		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 weedings (100000/400 (8x12)=250)					
	01.03.44	1 st weeding - December	Bed / weeding	250	43.74	1.00	10935.00
	01.03.45	2 nd weeding - February	Bed / weeding	250	43.74	1.00	10935.00
	01.03.46	Shifting, Grading and rearranging in secondary beds - One Grading in February	Bed / weeding	250	204.28	1.00	51071.00
		Watering the plants manually twice a day (from Novemebr - March) with rose spray or finely perforated nozzle attached to a hose pipe.					
	01.03.47	a) Manually with rose spray or finely perforated nozzle attached to a hose pipe (250 x 5 = 1250)	Per bed / month	1250	238.19	1.00	297743.00

23

Sl.No.	Item No.	Schedule of operations with Specifications	Units	Qty	Rate (in Rs)	Per	Amount
1	2	3	4	5	6	7	8
	01.03.49	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 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				
	01.03.50	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.				
							906796.00
	01.03.51	Contingencies for Raising Year towards the expenditure like cost of hose pipe, nursery boards, electricity charges, running and maintainance 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 906796x5%.	As per actuals, subject to max. of 5 % of estimate in raising year				45340.00
		Conversion and Maintenance 4x7 to 8x12 of seedlings Total:					952136.00
		Grand Total:					1449808.00
		Cost per 1 seedling Rs.1449808 /100000 =14.498					14.498

Amount per FSR 2016-17	14.498
Amount as per FSR 2017-18 (Add 10% escalation on 2016-17)	15.948
Amount as per FSR 2018-19 (Add 10% escalation on 2017-18)	17.543
Amount as per FSR 2019-20 (Add 10% escalation on 2018-19)	19.297
Amount as per FSR 2020-21 (Add 10% escalation on 2019-20)	21.227
Amount as per FSR 2021-22 (Add 10% escalation on 2020-21)	23.349
Amount as per FSR 2022-23 (Add 10% escalation on 2021-22)	25.684
Amount as per FSR 2023-24 (Add 10% escalation on 2022-23)	28.253

 
Divisional Forest Officer
Mancherial

Annexure -5

Unit cost for Maintenance of 1,00,000 Nursery April to August as per the FSR 2016-17

Sl.No.	Item No.	Schedule of operations with Specifications	Units	Qty	Rate (in Rs)	Per	Amount
1	2	3	4	5	6	7	8
	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"X12" bags; 800 Nos. of 8"X12" bags; 400 Nos. of 10"x16" bags per bed)					
		Watering polybag secondary beds twice a day for 4 months					
	01.04.01	a) Manually with rose spray or finely perforated nozzle attached to a hose pipe (100000/400=250x5=1250)	Bed / month	1250	238.19	1	297743
	01.04.03	Weeding once during maintenance year	Bed / weeding	250	43.74	1	10935
	01.04.04	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) (250x2=500)	Bed / shifting	500	215.68	1	107838
	01.04.05	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 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)	By Nursery Watcher				
	01.04.06	Cost of foliar nutrient formulations like multiplex or NPK-19:19:19; fungicides and insecticides (from April - August)	As per actuals with a maximum limit of Rs. 2000/ per 1 lakh polybag seedlings				2000
		Cowdung Slurry application (One can apply chemical foliar spray or apply cowdung slurry - not both)					
	01.04.07	Preparation of cowdung slurry -	per 100 beds	As per actual subject to maximum of Rs. 1500/-			1500
	01.04.08	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	100000	178.79	1000	17879
	01.04.09	Weeding in the space between the beds, inspection path and surroundings of Nursery	per bed	250	24.03	1	6008
							443903
	01.04.10	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. 443903x5%	As per actuals, subject to max. of 5 % of estimate in Maint. Year.		The cost of protection provision provided at code No. 01.05.04 may be provided maintenance of bags plants also.		22195
		Grand Total:					466098
		Cost per 1 seedling Rs.466098 /100000 =4.661					4.661

Amount per FSR 2016-17	4.661
Amount as per FSR 2017-18 (Add 10% escalation on 2016-17)	5.127
Amount as per FSR 2018-19 (Add 10% escalation on 2017-18)	5.640
Amount as per FSR 2019-20 (Add 10% escalation on 2018-19)	6.204
Amount as per FSR 2020-21 (Add 10% escalation on 2019-20)	6.824
Amount as per FSR 2021-22 (Add 10% escalation on 2020-21)	7.507
Amount as per FSR 2022-23 (Add 10% escalation on 2021-22)	8.257
Amount as per FSR 2023-24 (Add 10% escalation on 2022-23)	9.083

Divisional Forest Officer
Mancherial

Annexure -6

Unit Rate for carrying out Advance operations in 10 Ha (5m x 5m) NTSHW LIM Plantation as per FSR 2016-17

Sl No	Item No.	Schedule of operations with Specification	Unit	Qty	Rate (in Rs)	Per	Amount
1	2	3	4	5	6	7	8
	02.01.	LABOUR INTENSIVE METHOD (LI METHOD)					
		ADVANCE OPERATION (PRE-PLANTING OPERATION) - All advance-operation works of plantations to be raised shall be completed before March. Perambulation of site, preparing site inspection report including type of vegetation and density, approval of site suitability and the category of jungle growth clearance, taking the images of the existing vegetation, preparation of treatment plan shall be prepared and approved in writing by DFO before taking up advance operation.					
	02.01.01	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 latest by December end.	Plantation	1	311.04	1	311
		Clearing unsalable unwanted jungle growth (<i>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.</i>); Spreading the cut material all over the site; and Burning the same twice till completely burnt. All the above operations should be completed before December.					
	02.01.04	<i>Light Jungle Growth</i> (> 20% and upto 30% ground area covered with Jungle growth) with prior written approval of DFO based on the field inspection of DFO.	Ha	10.000	5207.65	1	52077
		ALIGNMENT & STACKING INCLUDING DEMARCATION OF BASE LINE					
	02.01.08	iv) 5X5 m espacement = 400 planting points	100 no.	4000	98.766	100	3951
	02.01.09	Cost of preparation of stakes (0.45 m length) and transportation to site	100 no.	4000	47.3	100	1892
		Digging of Pits - Manual (As per RSSR): All efforts shall be made to complete pitting works before March-end. Under exceptional circumstances (if the target of plantation is given in the month of March-April), the pitting can be done during June and July . But any pitting done during June-July, plants can only be planted after the pits are verified by field inspections of FROs and DFOs of proper dimensions to avoid simultaneous pitting and planting which may result in higher percentage of casualties.					
		Between January - March					
		b) Hard Soil like gravel and moram					
	02.01.13	ii) 45 cm ³ pits	per pit	4000	21.23	1	84920
		Digging of Staggered Contour Trenches (SCTs) for impounding rain water - Manual - Size: 6m Length, 0.45 m top-width, 0.30 m bottom-width and 0.45 m depth; earthwork volume per trench: 1.012 cum - Max. of 50 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.					
		Between January - March					
	02.01.19	ii) Hard soils like gravel and morum	per cum	500	272.71	1	136355

Sl No	Item No.	Schedule of operations with Specification	Unit	Qty	Rate (in Rs)	Per	Amount
1	2	3	4	5	6	7	8
		Cutting of coppice growth flush to the ground to reduce the competition over the entire area duly retaining useful species after planting and placing the cut material in between the planting rows (to be undertaken during July - August)					
	02.02.25	High rainfall zone > 800 mm (for Warangal, Khammam & Adilabad Circle.)	ha	10.000	1215.43	1	12154

Total 291660

Cost per 1Ha Rs.291660 /10 =0.2917						0.292
------------------------------------	--	--	--	--	--	-------

Amount per FSR 2016-17	0.292
Amount as per FSR 2017-18 (Add 10% escalation on 2016-17)	0.321
Amount as per FSR 2018-19 (Add 10% escalation on 2017-18)	0.353
Amount as per FSR 2019-20 (Add 10% escalation on 2018-19)	0.388
Amount as per FSR 2020-21 (Add 10% escalation on 2019-20)	0.427
Amount as per FSR 2021-22 (Add 10% escalation on 2020-21)	0.470
Amount as per FSR 2022-23 (Add 10% escalation on 2021-22)	0.517
Amount as per FSR 2023-24 (Add 10% escalation on 2022-23)	0.568


 Divisional Forest Officer
 Mancherla

Annexure -7

Unit cost for Raising of 10 Ha NTSHW LIM (5m x 5m) Plantation as per FSR 2016-17

Sl. No	Item No.	Schedule of operations with Specification	Unit	Qty	Rate (in Rs)	Per	Amount
1	2	3	4	5	6	7	8
	II	RAISING OF BLOCK PLANTATIONS					
	02.02.	LABOUR INTENSIVE METHOD (LI METHOD)					
		Transportation of Planting Stock (including loading and unloading)					
		<i>From nursery to plantation site - upto 5 Km lead</i>					
	02.02.03	20 X 30 cm (8"X12") bag plants	100 nos	4000	173.49	100	6940
		<i>From nursery to plantation site - Beyond 5 Km lead</i>					
		<i>i) For every extra km beyond 5 km upto 25 km</i>					
	02.02.06	20 X 30 cm (8"X12") bag plants (6.75 x 40 = 270)	100 nos / km	4000	270	100	10800
		Internal transportation to planting points on head loads					
	02.02.12	20 X 30 cm (8"X12") bag plants	100 Nos	4000	117.94	100	4718
		PLANTING: Seedlings of local species of secondary hardwood along with their associates and NTFP species will have to be chosen for planting. The minimum height of the planting stock to be planted is 0.75 m - 1m height (excluding the height of the bag)					
	02.02.13	Application of 50 gm of SSP per pit (1 day before planting) for root growth and early establishment of plant after planting. Similarly, the bag plants to be planted are to be dipped inside Chloropyriphos solution (5 ml of Chloropyriphos in 1 lit water) either at nursery site before transport or at plantation site before planting	100 No.	4000	32.62	100	1305
	02.02.14	Cost of SSP, Chloridine dust or Chloropyriphos (4000 x 50 / 1000/50 = 4 Bags)	Bag	4	500	1	2000
		Planting					
	02.02.16	ii) 45 cm ³	100 No.	4000	363.366	100	14535
		Replacement of Casualties					
	02.02.17	Replacement of Casualties: 20% during Raising Year & 25% in 1 st 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 and 100% during maint. year. Planting, transportation and internal transportation same as adopted during raising year					
12		a) Pitting (50% of Original Rate 8.84 x 50% = 4.42)	Each	800	4.42	1	3536
13		b) Transportation of Seedlings- up to 5Kms	No.	800	173.49	100	1388
14		- 5 to 20Kms	No.	800	270.00	100	2160
15		c) Internal transporation	No.	800	117.94	100	944
16		d) Planting	No.	800	0	100	0
		Fertilizer Application for boosting growth					
	02.21.02	b) Broadcasting of orthodox hard-coated treated seeds (with hot water treatment) of Sandra (<i>Acacia chundra</i>), Narlingi (<i>Albizia amara</i>), Moduga (<i>Butea monosperma</i>), Vepa (<i>Azadirachta indica</i>) and Rela (<i>Cassia fistula</i>) seeds - 2 kg seeds of each of the above species per ha (including cost of seeds) mixed uniformly and broadcasted. The broadcasting of seeds needs to be done in July when the rains is there and the soil is adequately moist. This operation has to be done in presence of Forest Range Officer and the date of broadcast has to be recorded in Plantation Journal. This operation has to be carried out every year for 2 years.	Ha	10	1080	1	10800
		Application of Fertilizers					
	02.02.18	Cost of DAP @ 25 gm / planting point (4000 x 25 / 1000/ 50 = 2	Bag	2	1400	1	2800
	02.02.19	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.	100	4000	32.62	100	1305

Sl No	Item No.	Schedule of operations with Specification	Unit	Qty	Rate (in Rs)	Per	Amount
1	2	3	4	5	6	7	8
		WEEDING & SOIL WORKING					
	02.02.20	a) 1 st circular weeding to a radius of 0.50 m around the plant after 30 days of planting (i.e. July - Aug)	100	4000	103.79	100	4152
	02.02.21	b) 2 nd circular weeding to a radius of 0.50 m around the plant 90 days after planting (i.e. Sept - Oct)	100	4000	103.79	100	4152
		c) Deep soil working to a radius of 0.5 m and to a depth of 10 cm (to be done by pick-axe only) without damaging the plant (to be carried out during Nov - Dec)					
	02.02.23	ii) For hard gravelly soil	100	4000	545.08	100	21803
		Cutting of coppice growth flush to the ground to reduce the competition over the entire area duly retaining useful species after planting and placing the cut material in between the planting rows (to be undertaken during July - August)					
	02.02.25	High rainfall zone > 800 mm (for Warangal, Khammam & Adilabad Circle.)	ha	10	1215.43	1	12154
	02.02.26	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height during October	100 Nos	4000	103.194	100	4128
	02.02.28	Enumeration of row-wise survival and average growth twice in the raising year - Number of plants planted and Number surviving (to be undertaken during October and March) and entered in Plantation Journal. With so much inputs like nutrition, augmentation of moisture status by SCTs and other cultural operations; deploying indegenous forest species and planting of seedlings of minimum height of 0.75 - 1.0 m, it is prescribed that the minimum stocking of 90% with minimum average height of 1.25 - 1.50 m at the end of the raising year.	To be done by the staff (plantation-in-charge) with the help of Plantation Watcher				0
	02.02.29	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 with address 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 and site is not affected with fire. The guiding principle for continuation of the services of a Plantation Watcher is at least 80% survival at the end of raising year.	per month per watcher	12	7500	1	90000
24		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		8000
						Total	207620
		Cost per 1Ha Rs.207620 /10 =0.2076					0.208

Amount per FSR 2016-17 0.208
Amount as per FSR 2017-18 (Add 10% escalation on 2016-17) 0.228
Amount as per FSR 2018-19 (Add 10% escalation on 2017-18) 0.251
Amount as per FSR 2019-20 (Add 10% escalation on 2018-19) 0.276
Amount as per FSR 2020-21 (Add 10% escalation on 2019-20) 0.304
Amount as per FSR 2021-22 (Add 10% escalation on 2020-21) 0.334
Amount as per FSR 2022-23 (Add 10% escalation on 2021-22) 0.368
Amount as per FSR 2023-24 (Add 10% escalation on 2022-23) 0.405

Divisional Forest Officer
Mancherial

Annexure -8

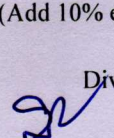
Unit cost for 1st year Maintenance of NTSHW plantation for 10.00 Ha. under LIM @5mx 5m as per FSR 2016-17

SI No	Item No.	Schedule of operations with Specification	Unit	Qty	Rate (in Rs)	Per	Amount
1	2	3	4	5	6	7	8
	02.3.	1ST YEAR MAINTAINANCE					
	02.03.01	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. <i>The casualty replacement shall be completed by end of July. Pitting, planting, transportation and internal transportation same as prescribed in fresh planting</i>					
		a) Pitting (Original Rate 8.84)	Each	1000	8.84	1	8840
		b) Transportation of Seedlings- up to 5Kms	No.	1000	96.79	100	968
		- 5 to 25Kms	No.	1000	67.60	100	676
		c) Internal transportation	No.	1000	76.25	100	763
		d) Planting	No.	1000	363.37	100	3634
	02.23.02	b) Broadcasting of orthodox hard-coated treated seeds (with hot water treatment) of Sandra (<i>Acacia chundra</i>), Narlingi (<i>Albizia amara</i>), Moduga (<i>Butea monosperma</i>), Vepa (<i>Azadirachta indica</i>) and Rela (<i>Cassia fistula</i>) seeds - 2 kg seeds of each of the above species per ha (including cost of seeds) mixed uniformly and broadcasted. The broadcasting of seeds needs to be done in July when the rains is there and the soil is adequately moist. This operation has to be done in presence of Forest Range Officer and the date of broadcast has to be recorded in Plantation Journal. This operation has to be carried out every year for 2 years.	Ha	10	1080	1	10800
		WEEDING & SOIL WORKING (To be carried out after replacement of casualties are over)					
	02.03.02	a) 1 st Circular weeding to a radius of 0.50 m around the plant during July - Aug	100	4000	103.79	100	4152
	02.03.03	b) 2 nd Circular weeding to a radius of 0.50 m around the plant during Sept - Oct	100	4000	103.79	100	4152
		c) Deep soil working to a radius of 0.5 m and to a depth of 10 cm (to be done by pick-axe only) without damaging the plant (to be carried out during Nov - Dec)					
	02.03.05	ii) For hard gravelly soil	100	4000	545.08	100	21803
		Cutting of coppice growth flush to the ground to reduce the competition over the entire area duly retaining useful species after planting and placing the cut material in between the planting rows (to be undertaken during July - August)					
	02.03.07	High rainfall zone > 800 mm (for Warangal, Khammam & Adilabad Circle)	ha	10	1215.43	1	12154
	02.03.08	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height during October.	100 Nos	4000	103.194	100	4128
	02.03.09	Enumeration of row-wise survival and average growth thrice in 1st Maintainance year - Number of plants planted and number surviving (to be undertaken during June, Oct. and Jan.) to be ascertained and entered in Plantation Journal. With so much inputs like nutrition, augmentation of moisture status by SCTs and other cultural operations; deploying indigenous forest species and planting of seedlings of minimum height of 0.75 - 1.0 m, it is prescribed that the minimum stocking of 90% with minimum average height of 1.75 - 2 m at the end of 1st year maintainance.	To be done by the staff (plantation-in-charge) with the help of Plantation Watcher				0

22/5

Sl No	Item No.	Schedule of operations with Specification	Unit	Qty	Rate (in Rs)	Per	Amount
1	2	3	4	5	6	7	8
	02.03.10	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 with address 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 and site is not affected with fire. The guiding principle for continuation of the services of a Plantation Watcher is at least 80% survival during 1st year maintainance period.	per month per watcher	12	7500	1	90000
						Total	162069
		Cost per 1Ha Rs.162069.1 /10 =0.1621					0.162

Amount per FSR 2016-17	0.162
Amount as per FSR 2017-18 (Add 10% escalation on 2016-17)	0.178
Amount as per FSR 2018-19 (Add 10% escalation on 2017-18)	0.196
Amount as per FSR 2019-20 (Add 10% escalation on 2018-19)	0.216
Amount as per FSR 2020-21 (Add 10% escalation on 2019-20)	0.237
Amount as per FSR 2021-22 (Add 10% escalation on 2020-21)	0.261
Amount as per FSR 2022-23 (Add 10% escalation on 2021-22)	0.287
Amount as per FSR 2023-24 (Add 10% escalation on 2022-23)	0.316


 Divisional Forest Officer
 Mancherial

Unit cost for 2nd year Maintenance of NTSHW plantation for 10.00 Ha. under LIM @ 5m x 5m as per FSR 2016.

17

Sl No	Item No.	Schedule of operations with Specification	Unit	Qty	Rate (in Rs)	Per	Amount
1	2	3	4	5	6	7	8
	02.04.	2ND YEAR MAINTAINANCE					
		WEEDING & SOIL WORKING					
	02.04.01	a) 1 st circular weeding to a radius of 0.50 m around the plant during July - Aug.	100	4000	103.79	100	4152
	02.04.02	b) 2 nd circular weeding to a radius of 0.50 m around the plant during Sept. - Oct.	100	4000	103.79	100	4152
		c) Deep soil working to a radius of 0.5 m and to a depth of 10 cm (to be done by pick-axe only) without damaging the plant during Nov. - Dec.					
	02.04.04	ii) For hard gravelly soil	100	4000	545.08	100	21803
		Cutting of coppice growth flush to the ground to reduce the competition over the entire area duly retaining useful species after planting and placing the cut material in between the planting rows (to be undertaken during July - August)					
	02.04.06	High rainfall zone > 800 mm (for Warangal, Khammam & Adilabad Circle)	ha	10	1215.43	1	12154
	02.04.07	Enumeration of row-wise survival and average growth thrice in 2nd Maintainance year - Number of plants planted and Number surviving (<i>to be undertaken during June, Oct. and Jan.</i>) and entered in Plantation Journal. With so much inputs like nutrition, augmentation of moisture status by SCTs and other cultural operations; deploying indigenous forest species and planting of seedlings of minimum height of 0.75 - 1.0 m, it is prescribed that the minimum stocking of 90% with average minimum height of 2.5 - 3 m at the end of 1st year maintainance.	To be done by the staff (plantation-in-charge) with the help of Plantation Watcher				0
	02.05.05	Formation of Sector Lines / Fire Lines to a width of 3 m by giving surface treatment (sector to be in conformity with slope direction). All stumps to be cut to ground level.	Rmt	4000	5.08	1	20320
	02.04.08	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 with address shall be pasted in respective Plantation Journal. Every month payment will be made after satisfaction by Plantation-in-charge that fence is in proper condition and incidence of grazing and fire is not there. The guiding principle of charging the Plantation Watcher in 2nd year is at least 80% stocking during 2nd year of maintainance period.	per month per watcher	12	7500	1	90000
						Total	152581
		Cost per 1Ha Rs.152581 /10 =0.1526					0.153

Amount per FSR 2016-17 0.153

Amount as per FSR 2017-18 (Add 10% escalation on 2016-17) 0.168

Amount as per FSR 2018-19 (Add 10% escalation on 2017-18) 0.185

Amount as per FSR 2019-20 (Add 10% escalation on 2018-19) 0.203

Amount as per FSR 2020-21 (Add 10% escalation on 2019-20) 0.223

Amount as per FSR 2021-22 (Add 10% escalation on 2020-21) 0.246

Amount as per FSR 2022-23 (Add 10% escalation on 2021-22) 0.270

Amount as per FSR 2023-24 (Add 10% escalation on 2022-23) 0.297

Divisional Forest Officer
Mancherial

Sl No	Item No.	Schedule of operations with Specification	Unit	Qty	Rate (in Rs)	Per	Amount
1	2	3	4	5	6	7	8
	02.04.	3rd YEAR MAINTAINANCE					
		WEEDING & SOIL WORKING					
	02.04.01	a) 1 st circular weeding to a radius of 0.50 m around the plant during July - Aug.	100	4000	103.79	100	4152
	02.04.02	b) 2 nd circular weeding to a radius of 0.50 m around the plant during Sept. - Oct.	100	4000	103.79	100	4152
		c) Deep soil working to a radius of 0.5 m and to a depth of 10 cm (to be done by pick-axe only) without damaging the plant during Nov. - Dec.					
	02.04.04	ii) For hard gravelly soil	100	4000	545.08	100	21803
		Cutting of coppice growth flush to the ground to reduce the competition over the entire area duly retaining useful species after planting and placing the cut material in between the planting rows (to be undertaken during July - August)					
	02.04.06	High rainfall zone > 800 mm (for Warangal, Khammam & Adilabad Circle)	ha	10	1215.43	1	12154
	02.04.07	Enumeration of row-wise survival and average growth thrice in 2nd Maintainance year - Number of plants planted and Number surviving (<i>to be undertaken during June, Oct. and Jan.</i>) and entered in Plantation Journal. With so much inputs like nutrition, augmentation of moisture status by SCTs and other cultural operations; deploying indigenous forest species and planting of seedlings of minimum height of 0.75 - 1.0 m, it is prescribed that the minimum stocking of 90% with average minimum height of 2.5 - 3 m at the end of 1st year maintainance.	To be done by the staff (plantation-in-charge) with the help of Plantation Watcher				0
	02.05.05	Formation of Sector Lines / Fire Lines to a width of 3 m by giving surface treatment (sector to be in conformity with slope direction). All stumps to be cut to ground level.	Rmt	4000	5.08	1	20320
	02.04.08	Cost of Protection: One Watcher is allowed for 10-30 ha. plantation; One more Watcher for more than 30 ha; <i>and if the area is less than 10 ha, prior approval of Conservator of Forests is required. Identity Photo of Watchers with address shall be pasted in respective Plantation Journal. Every month payment will be made after satisfaction by Plantation-in-charge that fence is in proper condition and incidence of grazing and fire is not there. The guiding principle of charging the Plantation Watcher in 2nd year is at least 80% stocking during 2nd year of maintainance period.</i>	per month per watcher	12	7500	1	90000
						Total	152581
		Cost per 1Ha Rs.152581 /10 =0.1526					0.153

Amount per FSR 2016-17 0.153

Amount as per FSR 2017-18 (Add 10% escalation on 2016-17) 0.168

Amount as per FSR 2018-19 (Add 10% escalation on 2017-18) 0.185

Amount as per FSR 2019-20 (Add 10% escalation on 2018-19) 0.203

Amount as per FSR 2020-21 (Add 10% escalation on 2019-20) 0.223

Amount as per FSR 2021-22 (Add 10% escalation on 2020-21) 0.246

Amount as per FSR 2022-23 (Add 10% escalation on 2021-22) 0.270

Amount as per FSR 2023-24 (Add 10% escalation on 2022-23) 0.297

Amount as per FSR 2024-25 (Add 10% escalation on 2023-24) 0.327

Amount as per FSR 2025-26 (Add 10% escalation on 2024-25) 0.360

Amount as per FSR 2026-27 (Add 10% escalation on 2025-26) 0.396

Amount as per FSR 2027-28 (Add 10% escalation on 2026-27) 0.435

Amount as per FSR 2028-29 (Add 10% escalation on 2027-28) 0.479

Amount as per FSR 2029-30 (Add 10% escalation on 2028-29) 0.527

Divisional Forest Officer
Mancherial

Sl No	Item No.	Schedule of operations with Specification	Unit	Qty	Rate (in Rs)	Per	Amount
1	2	3	4	5	6	7	8
	02.04.	4th YEAR MAINTAINANCE					
		WEEDING & SOIL WORKING					
	02.04.01	a) 1 st circular weeding to a radius of 0.50 m around the plant during July - Aug.	100	4000	103.79	100	4152
	02.04.02	b) 2 nd circular weeding to a radius of 0.50 m around the plant during Sept. - Oct.	100	4000	103.79	100	4152
		c) Deep soil working to a radius of 0.5 m and to a depth of 10 cm (to be done by pick-axe only) without damaging the plant during Nov. - Dec.					
	02.04.04	ii) For hard gravelly soil	100	4000	545.08	100	21803
		Cutting of coppice growth flush to the ground to reduce the competition over the entire area duly retaining useful species after planting and placing the cut material in between the planting rows (to be undertaken during July - August)					
	02.04.06	High rainfall zone > 800 mm (for Warangal, Khammam & Adilabad Circle)	ha	10	1215.43	1	12154
	02.04.07	Enumeration of row-wise survival and average growth thrice in 2nd Maintainance year - Number of plants planted and Number surviving (to be undertaken during June, Oct. and Jan.) and entered in Plantation Journal. With so much inputs like nutrition, augmentation of moisture status by SCTs and other cultural operations; deploying indigenous forest species and planting of seedlings of minimum height of 0.75 - 1.0 m, it is prescribed that the minimum stocking of 90% with average minimum height of 2.5 - 3 m at the end of 1st year maintainance.	To be done by the staff (plantation-in-charge) with the help of Plantation Watcher				0
	02.05.05	Formation of Sector Lines / Fire Lines to a width of 3 m by giving surface treatment (sector to be in conformity with slope direction). All stumps to be cut to ground level.	Rmt	4000	5.08	1	20320
	02.04.08	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 with address shall be pasted in respective Plantation Journal. Every month payment will be made after satisfaction by Plantation-in-charge that fence is in proper condition and incidence of grazing and fire is not there. The guiding principle of charging the Plantation Watcher in 2nd year is at least 80% stocking during 2nd year of maintainance period.	per month per watcher	12	7500	1	90000
						Total	152581
		Cost per 1Ha Rs.152581 /10 =0.1526					0.153

Amount per FSR 2016-17 0.153

Amount as per FSR 2017-18 (Add 10% escalation on 2016-17)	0.168
Amount as per FSR 2018-19 (Add 10% escalation on 2017-18)	0.185
Amount as per FSR 2019-20 (Add 10% escalation on 2018-19)	0.203
Amount as per FSR 2020-21 (Add 10% escalation on 2019-20)	0.223
Amount as per FSR 2021-22 (Add 10% escalation on 2020-21)	0.246
Amount as per FSR 2022-23 (Add 10% escalation on 2021-22)	0.270
Amount as per FSR 2023-24 (Add 10% escalation on 2022-23)	0.297
Amount as per FSR 2024-25 (Add 10% escalation on 2023-24)	0.327
Amount as per FSR 2025-26 (Add 10% escalation on 2024-25)	0.360
Amount as per FSR 2026-27 (Add 10% escalation on 2025-26)	0.396
Amount as per FSR 2027-28 (Add 10% escalation on 2026-27)	0.435
Amount as per FSR 2028-29 (Add 10% escalation on 2027-28)	0.479
Amount as per FSR 2029-30 (Add 10% escalation on 2028-29)	0.527

Divisional Forest Officer
Mancherial

Unit Cost for 5th year Maintenance of NTSHW plantation for 10.00 Ha. under LIM @ 5mx5m as per FSR 2016-17

Sl No	Item No.	Schedule of operations with Specification	Unit	Qty	Rate (in Rs)	Per	Amount
1	2	3	4	5	6	7	8
	02.04.	5th YEAR MAINTAINANCE					
		Cutting of coppice growth flush to the ground to reduce the competition over the entire area duly retaining useful species after planting and placing the cut material in between the planting rows (to be undertaken during July - August)					
	02.04.06	<i>High rainfall zone > 800 mm</i> (for Warangal, Khammam & Adilabad Circle)	ha	10	1215.43	1	12154
	02.04.07	Enumeration of row-wise survival and average growth thrice in 2nd Maintainance year - Number of plants planted and Number surviving (<i>to be undertaken during June, Oct. and Jan.</i>) and entered in Plantation Journal. With so much inputs like nutrition, augmentation of moisture status by SCTs and other cultural operations; deploying indigenous forest species and planting of seedlings of minimum height of 0.75 - 1.0 m, it is prescribed that the minimum stocking of 90% with average minimum height of 2.5 - 3 m at the end of 1st year maintainance.	To be done by the staff (plantation-in-charge) with the help of Plantation Watcher				0
	02.05.05	Formation of Sector Lines / Fire Lines to a width of 3 m by giving surface treatment (sector to be in conformity with slope direction). All stumps to be cut to ground level.	Rmt	4000	5.08	1	20320
	02.04.08	Cost of Protection: One Watcher is allowed for 10-30 ha. plantation; One more Watcher for more than 30 ha; <i>and if the area is less than 10 ha, prior approval of Conservator of Forests is required. Identity Photo of Watchers with address shall be pasted in respective Plantation Journal. Every month payment will be made after satisfaction by Plantation-in-charge that fence is in proper condition and incidence of grazing and fire is not there. The guiding principle of charging the Plantation Watcher in 2nd year is at least 80% stocking during 2nd year of maintainance period.</i>	per month per watcher	12	7500	1	90000
						Total	122474
		Cost per 1Ha Rs.122474 /10 =0.1225					0.123

Amount per FSR 2016-17 0.123

Amount as per FSR 2017-18 (Add 10% escalation on 2016-17)	0.135
Amount as per FSR 2018-19 (Add 10% escalation on 2017-18)	0.148
Amount as per FSR 2019-20 (Add 10% escalation on 2018-19)	0.163
Amount as per FSR 2020-21 (Add 10% escalation on 2019-20)	0.179
Amount as per FSR 2021-22 (Add 10% escalation on 2020-21)	0.197
Amount as per FSR 2022-23 (Add 10% escalation on 2021-22)	0.217
Amount as per FSR 2023-24 (Add 10% escalation on 2022-23)	0.239
Amount as per FSR 2024-25 (Add 10% escalation on 2023-24)	0.263
Amount as per FSR 2025-26 (Add 10% escalation on 2024-25)	0.289
Amount as per FSR 2026-27 (Add 10% escalation on 2025-26)	0.318
Amount as per FSR 2027-28 (Add 10% escalation on 2026-27)	0.350
Amount as per FSR 2028-29 (Add 10% escalation on 2027-28)	0.384
Amount as per FSR 2029-30 (Add 10% escalation on 2028-29)	0.423


Divisional Forest Officer
Mancherial

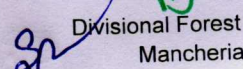
Unit Cost for 6th year Mainetence of NTSHW plantation for 10.00 Ha. under LIM @ 5mx5m as per FSR 2016-

17

Sl No	Item No.	Schedule of operations with Specification	Unit	Qty	Rate (in Rs)	Per	Amount
1	2	3	4	5	6	7	8
	02.04.	6th YEAR MAINTAINANCE					
		Cutting of coppice growth flush to the ground to reduce the competition over the entire area duly retaining useful species after planting and placing the cut material in between the planting rows (to be undertaken during July - August)					
	02.04.06	High rainfall zone > 800 mm (for Warangal, Khammam & Adilabad Circle)	ha	10	1215.43	1	12154
	02.04.07	Enumeration of row-wise survival and average growth thrice in 2nd Maintainance year - Number of plants planted and Number surviving (<i>to be undertaken during June, Oct. and Jan. </i>) and entered in Plantation Journal. With so much inputs like nutrition, augmentation of moisture status by SCTs and other cultural operations; deploying indegenous forest species and planting of seedlings of minimum height of 0.75 - 1.0 m, it is prescribed that the minimum stocking of 90% with average minimum height of 2.5 - 3 m at the end of 1st year maintainance.	To be done by the staff (plantation-in-charge) with the help of Plantation Watcher				0
	02.05.05	Formation of Sector Lines / Fire Lines to a width of 3 m by giving surface treatment (sector to be in conformity with slope direction). All stumps to be cut to ground level.	Rmt	4000	5.08	1	20320
	02.04.08	Cost of Protection: One Watcher is allowed for 10-30 ha. plantation; One more Watcher for more than 30 ha; <i>and if the area is less than 10 ha, prior approval of Conservator of Forests is required. Identity Photo of Watchers with address shall be pasted in respective Plantation Journal. Every month payment will be made after satisfaction by Plantation-in-charge that fence is in proper condition and incidence of grazing and fire is not there. The guiding principle of charging the Plantation Watcher in 2nd year is at least 80% stocking during 2nd year of maintainance period.</i>	per month per watcher	12	7500	1	90000
						Total	122474
		Cost per 1Ha Rs.122474 /10 =0.1225					0.123

Amount per FSR 2016-17 0.123

Amount as per FSR 2017-18 (Add 10% escalation on 2016-17) 0.135
Amount as per FSR 2018-19 (Add 10% escalation on 2017-18) 0.148
Amount as per FSR 2019-20 (Add 10% escalation on 2018-19) 0.163
Amount as per FSR 2020-21 (Add 10% escalation on 2019-20) 0.179
Amount as per FSR 2021-22 (Add 10% escalation on 2020-21) 0.197
Amount as per FSR 2022-23 (Add 10% escalation on 2021-22) 0.217
Amount as per FSR 2023-24 (Add 10% escalation on 2022-23) 0.239
Amount as per FSR 2024-25 (Add 10% escalation on 2023-24) 0.263
Amount as per FSR 2025-26 (Add 10% escalation on 2024-25) 0.289
Amount as per FSR 2026-27 (Add 10% escalation on 2025-26) 0.318
Amount as per FSR 2027-28 (Add 10% escalation on 2026-27) 0.350
Amount as per FSR 2028-29 (Add 10% escalation on 2027-28) 0.384
Amount as per FSR 2029-30 (Add 10% escalation on 2028-29) 0.423


Divisional Forest Officer
Mancherial

Sr No	Item No.	Schedule of operations with Specification	Unit	Qty	Rate (in Rs)	Per	Amount
1	2	3	4	5	6	7	8
	02.04.	7th YEAR MAINTAINANCE					
		Cutting of coppice growth flush to the ground to reduce the competition over the entire area duly retaining useful species after planting and placing the cut material in between the planting rows (to be undertaken during July - August)					
	02.04.06	High rainfall zone > 800 mm (for Warangal, Khammam & Adilabad Circle)	ha	10	1215.43	1	12154
	02.04.07	Enumeration of row-wise survival and average growth thrice in 2 nd Maintainance year - Number of plants planted and Number surviving (to be undertaken during June, Oct. and Jan.) and entered in Plantation Journal. With so much inputs like nutrition, augmentation of moisture status by SCTs and other cultural operations; deploying indogenous forest species and planting of seedlings of minimum height of 0.75 - 1.0 m, it is prescribed that the minimum stocking of 90% with average minimum height of 2.5 - 3 m at the end of 1st year maintainance.	To be done by the staff (plantation-in-charge) with the help of Plantation Watcher				0
	02.05.05	Formation of Sector Lines / Fire Lines to a width of 3 m by giving surface treatment (sector to be in conformity with slope direction). All stumps to be cut to ground level.	Rmt	4000	5.08	1	20320
	02.04.08	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 with address shall be pasted in respective Plantation Journal. Every month payment will be made after satisfaction by Plantation-in-charge that fence is in proper condition and incidence of grazing and fire is not there. The guiding principle of charging the Plantation Watcher in 2nd year is at least 80% stocking during 2nd year of maintainance period.	per month per watcher	12	7500	1	90000
						Total	122474
		Cost per 1Ha Rs.122474 /10 =0.1225					0.123

Amount per FSR 2016-17 0.123

Amount as per FSR 2017-18 (Add 10% escalation on 2016-17)	0.135
Amount as per FSR 2018-19 (Add 10% escalation on 2017-18)	0.148
Amount as per FSR 2019-20 (Add 10% escalation on 2018-19)	0.163
Amount as per FSR 2020-21 (Add 10% escalation on 2019-20)	0.179
Amount as per FSR 2021-22 (Add 10% escalation on 2020-21)	0.197
Amount as per FSR 2022-23 (Add 10% escalation on 2021-22)	0.217
Amount as per FSR 2023-24 (Add 10% escalation on 2022-23)	0.239
Amount as per FSR 2024-25 (Add 10% escalation on 2023-24)	0.263
Amount as per FSR 2025-26 (Add 10% escalation on 2024-25)	0.289
Amount as per FSR 2026-27 (Add 10% escalation on 2025-26)	0.318
Amount as per FSR 2027-28 (Add 10% escalation on 2026-27)	0.350
Amount as per FSR 2028-29 (Add 10% escalation on 2027-28)	0.384
Amount as per FSR 2029-30 (Add 10% escalation on 2028-29)	0.423


 Divisional Forest Officer
 Mancherla

Sl No	Item No.	Schedule of operations with Specification	Unit	Qty	Rate (in Rs)	Per	Amount
1	2	3	4	5	6	7	8
	02.04.	8th YEAR MAINTAINANCE					
		Cutting of coppice growth flush to the ground to reduce the competition over the entire area duly retaining useful species after planting and placing the cut material in between the planting rows (to be undertaken during July - August)					
	02.04.06	<i>High rainfall zone > 800 mm (for Warangal, Khammam & Adilabad Circle)</i>	ha	10	1215.43	1	12154
	02.04.07	Enumeration of row-wise survival and average growth thrice in 2nd Maintenance year - Number of plants planted and Number surviving (<i>to be undertaken during June, Oct. and Jan.</i>) and entered in Plantation Journal. With so much inputs like nutrition, augmentation of moisture status by SCTs and other cultural operations; deploying indigenous forest species and planting of seedlings of minimum height of 0.75 - 1.0 m, it is prescribed that the minimum stocking of 90% with average minimum height of 2.5 - 3 m at the end of 1st year maintainance.	To be done by the staff (plantation-in-charge) with the help of Plantation Watcher				0
	02.05.05	Formation of Sector Lines / Fire Lines to a width of 3 m by giving surface treatment (sector to be in conformity with slope direction). All stumps to be cut to ground level.	Rmt	4000	5.08	1	20320
	02.04.08	Cost of Protection: One Watcher is allowed for 10-30 ha. plantation; One more Watcher for more than 30 ha; <i>and if the area is less than 10 ha, prior approval of Conservator of Forests is required. Identity Photo of Watchers with address shall be pasted in respective Plantation Journal. Every month payment will be made after satisfaction by Plantation-in-charge that fence is in proper condition and incidence of grazing and fire is not there. The guiding principle of charging the Plantation Watcher in 2nd year is at least 80% stocking during 2nd year of maintainance period.</i>	per month per watcher	12	7500	1	90000
						Total	122474
		Cost per 1Ha Rs.122474 /10 =0.1225					0.123
							Amount per FSR 2016-17 0.123
							Amount as per FSR 2017-18 (Add 10% escalation on 2016-17) 0.135
							Amount as per FSR 2018-19 (Add 10% escalation on 2017-18) 0.148
							Amount as per FSR 2019-20 (Add 10% escalation on 2018-19) 0.163
							Amount as per FSR 2020-21 (Add 10% escalation on 2019-20) 0.179
							Amount as per FSR 2021-22 (Add 10% escalation on 2020-21) 0.197
							Amount as per FSR 2022-23 (Add 10% escalation on 2021-22) 0.217
							Amount as per FSR 2023-24 (Add 10% escalation on 2022-23) 0.239
							Amount as per FSR 2024-25 (Add 10% escalation on 2023-24) 0.263
							Amount as per FSR 2025-26 (Add 10% escalation on 2024-25) 0.289
							Amount as per FSR 2026-27 (Add 10% escalation on 2025-26) 0.318
							Amount as per FSR 2027-28 (Add 10% escalation on 2026-27) 0.350
							Amount as per FSR 2028-29 (Add 10% escalation on 2027-28) 0.384
							Amount as per FSR 2029-30 (Add 10% escalation on 2028-29) 0.423


 Divisional Forest Officer
 Mancherla

Sl No	Item No.	Schedule of operations with Specification	Unit	Qty	Rate (in Rs)	Per	Amount
1	2	3	4	5	6	7	8
	02.04.	9th YEAR MAINTAINANCE					
		Cutting of coppice growth flush to the ground to reduce the competition over the entire area duly retaining useful species after planting and placing the cut material in between the planting rows (to be undertaken during July - August)					
	02.04.06	<i>High rainfall zone > 800 mm (for Warangal, Khammam & Adilabad Circle)</i>	ha	10	1215.43	1	12154
	02.04.07	Enumeration of row-wise survival and average growth thrice in 2nd Maintainance year - Number of plants planted and Number surviving (<i>to be undertaken during June, Oct. and Jan.)</i> and entered in Plantation Journal. With so much inputs like nutrition, augmentation of moisture status by SCTs and other cultural operations; deploying indigenous forest species and planting of seedlings of minimum height of 0.75 - 1.0 m, it is prescribed that the minimum stocking of 90% with average minimum height of 2.5 - 3 m at the end of 1st year maintainance.	To be done by the staff (plantation-in-charge) with the help of Plantation Watcher				0
	02.05.05	Formation of Sector Lines / Fire Lines to a width of 3 m by giving surface treatment (sector to be in conformity with slope direction). All stumps to be cut to ground level.	Rmt	4000	5.08	1	20320
	02.04.08	Cost of Protection: One Watcher is allowed for 10-30 ha. plantation; One more Watcher for more than 30 ha; <i>and if the area is less than 10 ha, prior approval of Conservator of Forests is required. Identity Photo of Watchers with address shall be pasted in respective Plantation Journal. Every month payment will be made after satisfaction by Plantation-in-charge that fence is in proper condition and incidence of grazing and fire is not there. The guiding principle of charging the Plantation Watcher in 2nd year is at least 80% stocking during 2nd year of maintainance period.</i>	per month per watcher	12	7500	1	90000
						Total	122474
		Cost per 1Ha Rs.122474 /10 =0.1225					0.123
							Amount per FSR 2016-17 0.123
							Amount as per FSR 2017-18 (Add 10% escalation on 2016-17) 0.135
							Amount as per FSR 2018-19 (Add 10% escalation on 2017-18) 0.148
							Amount as per FSR 2019-20 (Add 10% escalation on 2018-19) 0.163
							Amount as per FSR 2020-21 (Add 10% escalation on 2019-20) 0.179
							Amount as per FSR 2021-22 (Add 10% escalation on 2020-21) 0.197
							Amount as per FSR 2022-23 (Add 10% escalation on 2021-22) 0.217
							Amount as per FSR 2023-24 (Add 10% escalation on 2022-23) 0.239
							Amount as per FSR 2024-25 (Add 10% escalation on 2023-24) 0.263
							Amount as per FSR 2025-26 (Add 10% escalation on 2024-25) 0.289
							Amount as per FSR 2026-27 (Add 10% escalation on 2025-26) 0.318
							Amount as per FSR 2027-28 (Add 10% escalation on 2026-27) 0.350
							Amount as per FSR 2028-29 (Add 10% escalation on 2027-28) 0.384
							Amount as per FSR 2029-30 (Add 10% escalation on 2028-29) 0.423


 Divisional Forest Officer
 Mancherial

Sl No	Item No.	Schedule of operations with Specification	Unit	Qty	Rate (in Rs)	Per	Amount
1	2	3	4	5	6	7	8
	02.04.	10th YEAR MAINTAINANCE					
		Cutting of coppice growth flush to the ground to reduce the competition over the entire area duly retaining useful species after planting and placing the cut material in between the planting rows (to be undertaken during July - August)					
	02.04.06	<i>High rainfall zone > 800 mm</i> (for Warangal, Khammam & Adilabad Circle)	ha	10	1215.43	1	12154
	02.04.07	Enumeration of row-wise survival and average growth thrice in 2nd Maintainance year - Number of plants planted and Number surviving (<i>to be undertaken during June, Oct. and Jan.</i>) and entered in Plantation Journal. With so much inputs like nutrition, augmentation of moisture status by SCTs and other cultural operations; deploying indigenous forest species and planting of seedlings of minimum height of 0.75 - 1.0 m, it is prescribed that the minimum stocking of 90% with average minimum height of 2.5 - 3 m at the end of 1st year maintainance.	To be done by the staff (plantation-in-charge) with the help of Plantation Watcher				0
	02.05.05	Formation of Sector Lines / Fire Lines to a width of 3 m by giving surface treatment (sector to be in conformity with slope direction). All stumps to be cut to ground level.	Rmt	4000	5.08	1	20320
	02.04.08	Cost of Protection: One Watcher is allowed for 10-30 ha. plantation; One more Watcher for more than 30 ha; <i>and if the area is less than 10 ha, prior approval of Conservator of Forests is required. Identity Photo of Watchers with address shall be pasted in respective Plantation Journal. Every month payment will be made after satisfaction by Plantation-in-charge that fence is in proper condition and incidence of grazing and fire is not there. The guiding principle of charging the Plantation Watcher in 2nd year is at least 80% stocking during 2nd year of maintainance period.</i>	per month per watcher	12	7500	1	90000
						Total	122474
		Cost per 1Ha Rs.122474 /10 =0.1225					0.123

Amount per FSR 2016-17 0.123

Amount as per FSR 2017-18 (Add 10% escalation on 2016-17) 0.135

Amount as per FSR 2018-19 (Add 10% escalation on 2017-18) 0.148

Amount as per FSR 2019-20 (Add 10% escalation on 2018-19) 0.163

Amount as per FSR 2020-21 (Add 10% escalation on 2019-20) 0.179

Amount as per FSR 2021-22 (Add 10% escalation on 2020-21) 0.197

Amount as per FSR 2022-23 (Add 10% escalation on 2021-22) 0.217

Amount as per FSR 2023-24 (Add 10% escalation on 2022-23) 0.239

Amount as per FSR 2024-25 (Add 10% escalation on 2023-24) 0.263

Amount as per FSR 2025-26 (Add 10% escalation on 2024-25) 0.289

Amount as per FSR 2026-27 (Add 10% escalation on 2025-26) 0.318

Amount as per FSR 2027-28 (Add 10% escalation on 2026-27) 0.350

Amount as per FSR 2028-29 (Add 10% escalation on 2027-28) 0.384

Amount as per FSR 2029-30 (Add 10% escalation on 2028-29) 0.423


 Divisional Forest Officer
 Mancherial