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Compensatory Afforestation Scheme for diversion of 18.68 Ha for 400 QMDC line from the proposed 4 x 270 MW Bhadradri Theremal Power Station Near Manuguru to the proposed 400/220 KV SS at Padamati Narsapuram village, Julurpad Mandal in favour of Chief Engineer, Projects II/TS, TRANSCO, Vidyutsoudha, Hyderabad

I. Introduction:

1. The Prl. Chief Conservator of Forests, TS, Hyderabad in reference No.17743/2015/FCA-3 dt. 27.07.2016 while enclosing the proposals received from the Chief Engineer, Projects II/TS, TRANSCO, Vidyutsoudha, Hyderabad for construction of 400 QMDC line from the proposed 4 x 270 MW Bhadradri Theremal Power Station Near Manuguru to the proposed 400/220 KV SS at Padamati Narsapuram village, Julurpad Mandal, Khammam District to an extent of 19.2096 Ha, and issued instructions to process the proposals as per Forest (Conservation) Act, 1980. The actual area after survey comes to 18.68 Ha. Due to non-availability of non-forest lands with the District Administration, the User Agency requested the Department to identify double the extent of forest land diverted for CA purpose.

(a) Total Area diverted is

(b) Double the area to be identified is 37.36 Ha

II. Identification of degraded area:

The Forest Range Officer, Ramavaram, to whom the matter was referred for identification of double the extent of degraded area in lieu of diversion of forest land of 18.68 Ha for the above mentioned projects, has identified degraded forest land of 37.36 Ha in Compartment No. 34 of Damaracherla Beat and Compartment No.35 of Abbugudem Beat, Abbugudem Section of Ramavaram Range. The surveyed sketch of the double the degraded area and location on Toposheet 1:50000 is enclosed to the scheme proposals.

III. Planting Techniques

It is proposed to raise Miscellaneous Plantation by adopting artificial regeneration under Semi-Mechanical Method and also through labour intentive method in the following degraded forest areas in the following areas. The said areas with black cotton soil, red loam soil and sandy soil which are suitable for planting for raising Miscellaneous plantation as per the guidelines issued by Prl. Chief Conservator of Forests in Rc.No.43246/2012/CAMPA, dt.29.11.2012. It is noticed that the afforestation will prevent the attempt of encroachment besides cover the forest land with good tree growth.

III.A. Activities proposed in Artificial Regneration under Semi-Mechanical Method in Degraded forest of 37.36 Ha

1. Raising of misc. nursery: The seedlings suitable such as for soil with two years old are to be raised in the nursery for planting during 2016-17.

- Taking up advance operations: The advance works under Semi-Mechanical Method in Ramavaram Range includes clearance of misc. growth, uprootal of stumps, heaping and burning.
- 3. Raising of plantations: The esplacement proposed is 3 M x 2 M 1666 plants/
 Ha. The activities includes ploughing, alignment, Scoping and Planting in 45
 Cms. Cub pits, with misc. species under the direct supervision of Forest Range
 Office concerned. One circular weeding, Circular weeding, deep soil working,
 Application of fertilizers, inter-ploughing, protection watcher, digging of
 cattle proof trench top width 1.5M, bottom width 1 M and height 1M @ 125
 Cmt. per Ha.
- 4. Maintenance of plantations up to 7 years as per calendar operations.
- 5. Planting targets proposed.

2017-18 - Raising of 4x7 Bag Nurseries

2018-19 - Advance Operations & Maint of Nurseries - 37.36 Ha

2019-20 - Raising of Plantation

2020-21 to 2026-27 - Maintenance of Plantation

IV. Project period

It is proposed to implement the scheme from 2017-18 to 2026-27 for a period of (10) years.

V. Project Implementation Agency

The Divisional Forest Officer, Kothagudem will be the Project Implementation Agency and work will be taken through the Forest Range Officer, Ramavaram in Damaracharla and Abbugudem Beats. The raising of Compensatory Afforestation Plantation requires additional manpower and mobility. Hence, it is proposed to hire services of one forester in Ramavaram Range, one Data Entry Operator for initial (3) years in Division office. Similarly one hired vehicle will be engaged for initial (2) years. Accordingly, necessary provisions are made in the Scheme proposals.

VI. Cost structure

Basic rates proposed as per FSR 2016-17 and 10% price escalation is proposed every year on the basic rate of FSR 2016-17. Nursery for all required seedlings will be raised at one central place and accordingly required infrastructure is proposed in the scheme. The details of year-wise physical and financial target are enclosed in Annexure No. I. Unit cost of different planting techniques and plantation operations are shown in Annexure No. 2 (A) to 2 (C).

VII. Cost of the (Scheme) Project

Total cost of the project is Rs. 173.876 lakhs. The details are shown in Annexure 3.

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VIII. <u>Employment Generation</u>

The degraded forest land proposed for Compensator Afforestation is located in Kothagudem and Chandrugonda Mandal in Agency Area. The local labour mostly Tribals along with Scheduled Castes will be benefitted by implementation of this project for their daily livelihood, generation expected to be created is 42203 man days during the project period from 2017-18 to 2026-27 (60% manual component 42203 wage rate during 2017-18 on Rs. 412/- per day.

Further, it is mentioned that in case the selected locations and the areas are unavailable for taking up planting anticipating the delay of approval of the proposal, suitable degraded areas will be selected and planting will be taken up and accordingly the deviation, in any in implementing the scheme will be borne by the User Agency in the jurisdiction of Kothagudem Division. Similarly, it is also mentioned that the User Agency will be remitting the equal amount into CAMPA Account, in case the degraded forest lands were taken up for re-afforestation with any funding agency since Kothagudem Forest Division has been taking up re-afforestation in the retrieved areas of forest lands, where encroachment problem is severe. To curb the encroachment problem and re-afforestation the gap areas this modification is proposed.

Divisional Forest Officer Kothagudem

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Site Inspection Report of 37.36 Ha of degraded forest areas identified in Damaracheral and Abbugudem Beats of Ramavaram Range for diversion of 18.68 Ha for 400 QMDC line from the proposed 4 x 270 MW Bhadradri Theremal Power Station Near Manuguru to the proposed 400/220 KV SS at Padamati Narsapuram village, Julurpad Mandal in favour of Chief Engineer, Projects II/TS, TRANSCO, Vidyutsoudha, Hyderabad

I have inspected the degraded forest areas of 37.36 ha in Compt. No.34 of Damaracharla Beat and Compt No.35 in Abbugudem Beat along with Forest Range Officer, Ramavaram and concerned filed staff on 04.04.2016. The degraded area is identified for raising Compensatory Afforestation plantation under S.M.M. Method. The C.A. area identified is double the degraded forests (37.36 Ha) against the proposed diversion of 18.68 ha of forest land in Chatakonda Reserve Forest of Kothagudem Range of Kothagudem Division in favour of Chief Engineer, Projects II/TS, TRANSCO, Vidyutsoudha, Hyderabad. The forest type in previous years is Southern Tropical dry deciduous forest and at present the area is totally degraded due to encroachments. The soils are Black Cotton, Red soil and sandy. This area is suitable for raising C.A. plantations. It is also proposed to take up plantation with Misc. species as per the Prl. Chief Conservator of Forests, Hyderabad instructions issued Ref.No.43246/2012/CAMPA dt.29.11.2012. The detailed scheme proposals are enclosed.

> Divisional Forest Officer Kothagudem

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CERTIFICATE

This is to certify that the 37.36 Ha of degraded forest area identified in Ramavaram Range in lieu of forest land of 18.68 Ha diverted in Kothagudem Range in Kothagudem Division in favour of Chief Engineer, Projects II/TS, TRANSCO, Vidyutsoudha, Hyderabad. in Compt.No.34 of Damaracheral Beat, Compt.No.35 of Abbugudem Beat of Ramavaram Range of Kothagudem Division is suitable for raising Misc. Plantations. These areas are not allotted to any V.S.S. of Ramavaram Range. Preference is to be given to raise plantations with local species at the choice of the local villagers but at the technical guidance of the forest staff to avoid encroachment on the said proposed areas once prone for encroachment.

Divisional Forest Officer Kothagudem

10/8/14

8AA 85-

Cost of extraction charges in proposed diversion of 18.68 Ha Forest Land in Chatakonda R.F for Diversion of 18.68 Ha for 400 QMDC line from the proposed 4x70 MW Bhadradri Theremal Power Station Near nuguru to the proposed 400/220 KV SS at Padamati Narsapuram village, Julurpad (FSR of 2016-17 of Zone-II including 25% extra over basic rate)

SI. No.	FSR Item No.	Description of work	Quantiy	Unit	Rate	Amount
1	2	3	4	5	6	7
	03.01.00	MARKING AND ENUMERATION OF STNDING TREES				
1	03.01.01	Marking of trees for retension as reserves	207	Nos	235.18	487
		EXTRACTION OF TIMBER	- William	1403	200.10	407
Pre		Conversion of illicitly felled trees including those found		THE STATE OF		
		during beat inspection including digiting on the stump	0	0	0	0
2	03.01.12	belting, measuring, painting and digiting Non-Teak			E. C. House	
-	03.01.12	Labour amenities for working in coupe or unit i.e.,	35.728	Cu.M	347.35	12410
3	03.01.13	providing shelter, supply of drinking water and medical aid	18.68 Ha	Bits	20072.40	20072
		etc, to the labourers.	10.00 11a	Dits	20072.40	20072
4	03.01.14	Purchase of saws with sharpening tools.	L.S	0	0	2865.5
		Watch and ward charges at coupe (Timber and Fuel)				2000.0
5	03.01.15	(As per average of minimum wage fixed by District	1	Month	7500	7500
		Collectors in the state for unskilled labour)		WOTH	7300	7500
6	03.01.16	Dragging of timber to loading point - plain areas	05.700	0.11	10000	
7	03.08	EXTRACTION OF POLES	35.728	Cu.M	199.94	7143
		Felling and conversion of poles in DET areas/ illicitly				
		felled trees including those found in beat inspection and				
		thinning areas:				
a)	03.08.01	(a) Upto 30 cm basal girth	60	Nos	6.35	381
b)	03.08.02 03.08.03	(b) 31 cms to 45 cms basal girth	23	Nos	13.50	311
c)	03.00.03	(c) 46 cms to 60 cms basal girth TRANSPORTATION	43	Nos	19.58	842
1	03.02	Preparation/repairs of Lorry/ Cart track				
		NOTE: There should not be separate expenditure for				
8	03.02.01	preparation of lorry/cart track for timber, fuel, pole brought	35.728	Cu.M	66.70	2202
		from the single area.	33.720	Cu.ivi	00.70	2383
9	03.02.04	Transportation of timber by carts from beat / section Hq. including loading, unloading, dragging charges				
_		etc.				
a)		Upto 1st 10 Kms lead:. lead Depot at Yellandu 30 Kms				
	03.02.05	Non-Teak (Up to 1st 10 KMs)	35.728	Cu.M	832.90	29758
b)		(ii) 11 Kms to 30 Kms (per each KM)				20,00
10	03.02.07	Non-Teak (20 KMs)	35.728	Cum	32.08	22923
10	03.04	EXTRACTION OF FUEL				
	03.04.01	Felling, billeting and stacking of fire wood stacks of size 0.80M x 1.25 M x 1.0 Mt	150	Cu.M	203.71	30557
11	03.03	LOTTING AND CLASSIFICATION AT DEPOT				
a)	03.03.01	Depot numbering of logs with paints (including cost of paints)	100	Cu.M	0.97	97
b)	03.03.02	Lotting of timber	35.728	Cu.M	315.90	11286
c)	03.03.05	Belting and measuring	100	Cu.M	21.82	2182
d)	03.03.06	Cost of paints for painting the lot boards	100	Cu.M	11.6	1160
e)	03.03.07	Purchase of Tapes, Ropes and Stationery etc.,	100	Cu.M	17.9	1790
f)	03.03.08	Electricity Charges for Depot	6 months	A/a	1000/- per	6000
12	03.05	SALE DEPOTS			month	, 2 by ,
		Misc. expenditure for conducting sales of timber, fuel,		FILE		A State
a)		poles & bámboo including refreshment for bidders in the sale depots etc,.				
	03.05.01	Upto 150 CMT irrespective of quantity	6 months	Per sale	3052.40	18314
13	03.05.03	Clearance of depot site in the month of November or December (per annum)	1 time	Ha / season	591.41	591
4		Casual Labours (2 Nos x 6 months x 7500/- per month per	6 Monthsx	7500	Month	75000
+		each)	2 Nos			
					Total::	254054

Divisional Forest Officer Kothagudem

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ANNEXURE-I ABSTRACT

CA Scheme for Diversion of 18.68 Ha for 400 QMDC line from the proposed 4x70 MW Bhadradri Theremal Power Station Near Manuguru to the proposed 400/220 KV SS at Padamati Narsapuram village, Julurpad Manuguru to the proposed 400/220 KV SS at Padamati Narsapuram village, Julurpad Manuguru to the proposed 400/220 KV SS at Padamati Narsapuram village, Julurpad Manuguru to the proposed 400/220 KV SS at Padamati Narsapuram village, Julurpad Manuguru to the proposed 400/220 KV SS at Padamati Narsapuram village, Julurpad Manuguru to the proposed 400/220 KV SS at Padamati Narsapuram village, Julurpad Manuguru to the proposed 400/220 KV SS at Padamati Narsapuram village, Julurpad Manuguru to the proposed 400/220 KV SS at Padamati Narsapuram village, Julurpad Manuguru to the proposed 4x70 MW Bhadradri Theremal Power Station Near Manuguru to the proposed 4x70 MW Bhadradri Theremal Power Station Near Manuguru to the proposed 4x70 MW Bhadradri Theremal Power Station Near Manuguru to the proposed 4x70 MW Bhadradri Theremal Power Station Near Manuguru to the proposed 4x70 MW Bhadradri Theremal Power Station Near Manuguru to the proposed 4x70 MW Bhadradri Theremal Power Station Near Manuguru to the proposed 4x70 MW Bhadradri Theremal Power Station Near Manuguru to the proposed 4x70 MW Bhadradri Theremal Power Station Near Manuguru to the proposed 4x70 MW Bhadradri Theremal Near Manuguru to the proposed 4x70 MW Bhadradri Theremal Near Manuguru to the proposed 4x70 MW Bhadradri Theremal Near Manuguru to the proposed 4x70 MW Bhadradri Theremal Near Manuguru to the proposed 4x70 MW Bhadradri Theremal Near Manuguru to the proposed 4x70 MW Bhadradri Theremal Near Manuguru to the proposed 4x70 MW Bhadradri Theremal Near Manuguru to the proposed 4x70 MW Bhadradri Theremal Near Manuguru to the proposed 4x70 MW Bhadradri Theremal Near Manuguru to the proposed 4x70 MW Bhadradri Theremal Near Manuguru to the proposed 4x70 MW Bhadradri Theremal Near Manuguru to the proposed 4x70 MW Bhadradri Theremal Near Manuguru to the proposed 4x70 MW Bha

			7.1										(CA Sche	me in deg	raded Fo	orest (N	TFP)													ncin	Total
l	Raisi	ing & Ma	aint of	Adva	nce Ope	rations	Raisin	g of Pla	ntation	15	t year m	aint	200	d year n	naint	310	d year n	naint	4th	year m	aint	5th	year m	aint	6th	n year ma	aint	7th	year ma	aint	of Fen (CPT)	Amount in Lakhs
Year		Nurseri	es	Auva								Amount		Unit	Amount		Unit	Amount	Phy.		Amount	Phy.		Amount	Phy.	Unit	Amount in Lakhs	Phy.	Unit	Amount in Lakhs	Cost	Lakiis
	Phy.		Amount in Lakhs	Phy.	Unit Rate	Amount in Lakhs	Phy.	Unit Rate	Amount in Lakhs	Phy.		in Lakhs	Phy.	Rate	in Lakhs	Phy.		in Lakhs	Pny.	Rate	in Lakhs	r try .	Rate	in Lakhs	-	Rate	in Lakins		Rate	III LUKIIS		4.110
017-18	37.36	0.110	4.110														-										_				1.98	22.901
2018-19	37.36	0.112	4.184	37.36	0.448	16.737		-					-					-														33.474
2019-20	37.36	0.031	1.158				37.36	0.865	32.316																							15.878
2020-21										37.36	0.425	15.878					-		-								910 Ta					10.573
2021-22	Pig-	7								1 2	7	1 2	37.36	0.283	10.573						-	-	-									11.656
2022-23																37.36	0.312	11.656		-	-			-			-					12.814
2023-24													,						37.36	0.343	12.814	+	8					-	-			14.085
2024-25			1																			37.36	0.377	14.085								
2025-26																									37.36	0.415	15.504					15.504
		-	-			1 ,	-										Tr.											37.36	0.457	17.074		17.074
2026-27	11/2 -21/6	-	-			-		-	32.316	27.26	0	15.878	37 36	0	10.573	37.36	5 0	11.656	37.36	0	12.814	37.36	0	14.085	37.36	0	15.504	37.36	0	17.074	1.980	158.069
TOTAL::	37.36	0	9.452	37.36	0	16.737	37.36	0	32.316	37.30	-	13.070	37.50	+		-	+	4		i h	18.11			Million of				Admir	nistratio	on Cost (10%) ::	15.807
										-	-	-		-		+-						1					1000			GRAND	TOTAL::	173.876
	100 A	12.7		a'					10					3							1			1	01					RITHER!	11	N

Divisional Forest Officer Kothayudem

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nit Cost for Raising of Misc., Nursery (4x7) in the year 2017-18 as per FSR 2016-17

CI	565.6.4			Wij		Rate in R	s.		
SI. No.	FSR Code No.	Item of work	,	Qty	Asper FSR	Agency allowanc e 25%	Total	Per	Amount
1	2	3		4	5	6	7	8	9
		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.							
1	01.01.01	Preparation of New Site by clearing jungle growth, uprootal of stumps and removal of surface stones, nebbles etc.	1	Bed	4.32	1.08	5.40	1 Bed	5.40
2	01.01.03	Digging soil of the demarcated beds of 1x1x0.30 m size	1	Bed	33.26	8.32	41.58	1 Bed	41.58
3	01.01.04	Cost of sandy soil and transportation with 5 kms lead including loading and unloading charges (sandy soil and FYM in 5:1 ratio, i.e., 0.125 cum sandy soil and 0.025 cum FYM per primary bed	1	Bed	25.45	6.36	31.81	1 Bed	31.81
4		For every extra km beyond 5 km upto 25 km	1	Bed	1.01	0	1.01	1 Bed	25.25
5	01.01.06	Cost and transport of 0.025 cum FYM	1	Bed	21.87	0	21.87	1 Bed	21.87
6	01.01.07	Mixing of sandy soil and FYM in 5:1 proportion (50 % of volume of bed) with exacavated soil and refilling the bed and lavelling.	1	Bed	9.45	2.36	11.81	1 Bed	11.81
7	01.01.08	Covering the beds with dried grass and leaf litter and burning them to ash which can form the upper layer	1	Bed	10.80	2.70	13.50	1 Bed	13.50
8	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	Bed	A/a				500.00
9	01.01.12	Sowing of seed (finer seeds like Adina, Mitragyna, Anthocephalus etc. to be mixed with sand and bradcasted - Bigger seeds to be dibbled in lines 1-2 cm apart) and covering the bed to a thickness of 2.5 cm with paddy hay including cost and	1	Bed	10.75	2.69	13.44	1 Bed	13.44
10	01.01.13	Watering the primary nursery beds with rose water cans twice daily for a maximum period of 2 months.	1	Bed	12.10	3.03	15.13	1 Bed	30.25
11		Cost of chemicals, fungicide and	1	Bed		ctuals limit seedlings ir		1000/- per 1 bed stage	1000.00
	TILLUS A	DAG DIANT						S.TOTAL::	1694.91
12	1.03	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							

(88) -91-

						-	D		1	
1		Raising of Nursery in Polythene bags	5				1 法法国	Tom		
-	at .	in sizes of 4"x7" (200 gauge) of	r		E PAR					
	4	5"x9" (250 gauge) bags and arranging in secondary beds (Bed						like the		
		size: 10 X 1 M)	"							
1-6	STOWN TO	Site preparation for New Sites		-					Surviva se	
	01.03.01	Clearing of growth, uprootal of		Nos	44.12	11.03	55.15		Bed	FF 15
		stumps and removal of surface	2 1	. 1103	77.12	11.03	33.13	1	beu	55.15
13		stones, rubbish of all sorts etc. Cost of Polybags (including the cost	-							The second second
13	11	of certification by): To ensure								
	1	quality control, the quality of bags								
		have to be certified by CIPET (Centra								
		Institute of Plastic Engineering 8							RIP .	
		Technology), Hyderabad at the cost							FE IN	
		of tenderer by taking samples from various lots of polybags.								
	a leading to									
	01.03.03	10 cm x 17.5 cm (4" x 7") size bags	4.41	Kgs	156.00	0.00	156.00	1	Kg	687.96
14		of 200 q: 589 bags / kg Cost and Transport of ingredients for							1.19	007.50
- 1		Potting Mixture: (As per CSSR) Red				THE PARTY				
		Soil, tank-silt, FYM in 2:1:1 ratio. To				THE R			3	
		this soil mixture, 220 gm of Indophyll						100		
(Ph		M-45, 4.5 kg of single super								
		phosphate (SSP) and 250 gm of phorate granules per 1 cum of potting				The same	A STATE			
1		mixture will be added. Cost of							18.2	
		chamicals is as per actuals	A. Yun	331						
		Transportation of soil mixture								Transle
a)		a) Distance up to 5 km								
	01.03.05	10 cm x 17.5 cm (4" x 7") = 0.56	2600	NI	174.06	0.00				
	01.05.05	cum vol. for 1000 bags		IVOS	174.06	0.00	174.06	1000	Nos	452.56
b)		b) For every extra km beyond 5								
		km upto 25 km 10 cm x 17.5 cm (4" x 7") = 0.56								
1	01.03.07	cum vol. for 1000 bags	2600	Nos	4.54	0.00	4.54	1000	Nos	236.08
15		Preparation of Potting Mixture by		Vein	N. E. S.			Kar		
		powdering of various ingredients,								
		sieving and mixing them in prescribed proportion; opening of bags and								
		filling with potting mixture and gently			li elii			100	. + 7	
		pressing the same with finger tips								
		and arranging in heds	da. W							
	01.03.09	10 cm x 17.5 cm (4" x 7") size bags:	2600	Nos	509.22	127.31	636.53	1000	Nos	1654.98
16	04.02.44	2600 bags / bed Allignment of beds including	PRUE							
	01.03.11	allignment of inspection paths etc	1	Bed	6.59	1.65	8.24	1	Bed	8.24
17	04 00 40	Pricking out seedlings from primary	The second second							
	01.03.12	beds and transplanting into polybags	2600	Nos	122.74	30.69	153.43	1000	Nos	398.92
18		Sowing / dibbling of pretreated seeds								
	01.03.13	(e.g. Yegisa, Nalamadi, Yerumaddi			72.04					
	01.03.13	etc.) directly into bags including cost	2600	IVOS	73.01	18.25	91.26	1000	Nos	237.28
10		of treatment			Marine Co.				-6.5	
19		Watering the plants twice a day from July - October							The state of	
		a) Manually with rose spray or finely			198					
	01.03.14	perforated nozzle attached to a hose		Bed	238.19	59.55	297.74	1	Bed/ Month	1190.96
20		pipe	E						MOHLH	
20		Weeding the plants from July to October (3 times)								
		1st weeding - July			Me T		X 14 18		Bed/	
	01.03.16		1	Bed	43.74	10.94	54.68	1	Weedi	54.68
-		2-4							na	
	01.03.17	2nd weeding - Aug	1	Bed	43.74	10.94	54.68		Bed/	E4.60
			1	Deu	73.74	10.54	34.00	1	Weedi na	54.68
ād I		3rd weeding - Sept							Bed/	Y TO S
	01.03.18		1	Bed	43.74	10.94	54.68	1	Weedi	54.68
21		Shifting, Grading and rearranging							na	
		in beds of 10x1 m size beds								u.
		(2600 no. of 4"x7"bags; 1700 no.			l eligi					
		of 5"x9" bags)								
				17	THE PARTY OF				Bed/	
		One Grading in Sent	- 1			of the second parties of			DCU/	
	01.03.19	One Grading in Sept.	1	Bed	204.28	51.07	255.35	1	Shiftin	255.35
	01.03.19		1	Bed	204.28	51.07	255.35	1	Shiftin a	255.35
22	01.03.19	Replacement of casualties after		Bed	204.28	51.07	255.35	1	STATE OF STA	255.35
22	01.03.19	Replacement of casualties after sorting out the empty bags and							а	
22		Replacement of casualties after	1	Bed Bed	58.00	51.07 14.50	72.50		STATE OF STA	255.35 72.50

235			
18	_0	73	1

23		Cook of full time to	1			10	-9	31		
	01 03.21	fungicides and insecticides from July to Oct.	;	1 Bed			th a maxim lakh polyb			53.0
24	01.03.23	sorroundings of Nursery		1 Bed	29.81	7.45	37.26		1 Bed	37.2
25	D.C Rate	Watch and Ward					CUSES III			50.0
26		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).						S.	TOTAL::	5554.2
		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 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								
		Transportation of soil mixture ingredients	7							
		a) Distance up to 5 km								
	01.03.26	4" x 7" to 6" x 12" polybags (2.15 - 0.56 = 1.59 cum) b) For every extra km beyond 5 km upto 25 km		Nos	494.29	123.57	617.86	1000	Nos	679.65
	01.03.31	4" x 7" to 6" x 12" polybags (2.15 - 0.56 = 1.59 cum)	1100	Nos	12.88	3.22	16.10	1000	Nos	354.20
		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								
		4" x 7" to 6" x 12" polybags (2.15 -	1100	Nos	870.78	217.70	1088.48	1000	Nos	1197.33
		0.56 = 1.59 cum) 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					2330.10	2000	7103	1197.33
	01.03.44	1st weeding - December	1	Bed	43.74	10.94	54.68	1	Bed	54.68
-	01.03.45	2nd weeding - February Shifting, Grading and rearranging in	1	Bed	43.74	10.94	54.68		Bed	54.68
	01.03.46	secondary beds - One Grading in February Watering the plants manually twice a	1	Bed	204.28	51.07	255.35	1	Bed/ Weedi na	255.35
		day (from Novemebr - March) with rose spray or finely perforated nozzle attached to a hose pine. Manually with rose spray or finely								
22	01.03.47	perforated nozzle attached to a hose pipe	1	Bed	238.19	59.55	297.74	1	Bed/ month	1488.70
23	01.03.50	Cost of foliar nutritient formulations like multiplex or NPK-19:19; fungicides and insecticides from July to Oct.	1	Bed			a maximu akh polyba			53.00

						19	5"	-95.	
244	01.05.04	Cost of Protection: One Nursery Watcher is allowed up to 1 lakh RT nursery or 100 secondary beds of polybags / 100 Teak beds of 10 x 1 m size or combination of both. One additional Nursery Watcher is permitted for nurseries having more than 1 lakh upto 3 lakh RT seedlings or more than 100 upto 300 secondray beds or Teak beds of 10 x 1 m size or combination of both. For more than 3 lakh RT or 300 secodary beds of Teak bedsor combination of both another additional Nursery Watcher is allowed. While calculating the number of Nursery Watcher, care shall be taken to include the nursery raising under all Schemes at a particular site. No extra Nursery Watcher is allowed for primary beds of 1x1 m size. However, the above narrative is subject to the provisions cited under general instructions.	1	No.					996.00
25	01.03.51	Contingencies for Raising Year towards the expenditure like cost of hose pipe, nursery boards, electricty 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.	As	per act	uals, sub	ject to ma: Maint. Ye		of estimate in	569.34
								S.TOTAL::	5702.93
				1		Unit Rat		SR 2016-17::	
			Terr	Tota	l unit rat	e arrived	for the w	6 escalation:: ear 2017-18::	1295.00
			HTT	Tota	will rat	carrived		per seedling::	14247.12 5.480
			NR.			K Self		Cost per Ha::	
						and the second		cost per maii	10900.00

Unit Cost Maintenance of Misc., Bag Plants (6x12) Nursery (04/18 to 07/18= 4 Months) as per FSR 2016-17

		pe	rFS	R 201	6-17					
CI	ECD C-4-		113			Rate in R	s.			
SI. No.	FSR Code No.	Item of work	C	(ty	Asper FSR	Agency allowanc e 25%	Total		Per	Amount
1	2	3		4	5	6	7		8	9
		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" X9" bags; 1100 Nos. of 6"X12" bags; 800 Nos. of 8"X12" bags; 400 Nos. of 10"x16" bags per bed)								
1		Watering polybag secondary beds twice a day for 4 months								
	01.04.01	Manually with rose spray or finely perforated nozzle attached to a hose pipe		Beds x mont	238.19	59.55	297.74	1	Bed/ Month	1191.00
2	01.04.03	Weeding once during maintenance year	1	Bed	43.74	10.94	54.68	1	Bed	55.00
3	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)	1 v 2	Beds x shifti na	215.68	53.92	269.6	1	Bed/ shiftin g	539.00
4		Cowdung Slurry application (One can apply chemical foliar spray or apply cowdung slurry - not both)								
	01.04.07	Preparation of cowdung slurry -	1	Bed	As per		ject to max 1500/-	kimum	of Rs.	15.00
5	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	1100	Bed	179.17	44.79	223.96	1000	Nos	246.00

							25	. 73	7	
6	01.04.09	Weeding in the space between the beds, inspection path and sorroundings of Nursery	1	Bed	24.08	6.02	30.1	1 Be	ed	30.00
7	01.05.04	Cost of Protection: One Nursery Watcher is allowed up to 1 lakh RT nursery or 100 secondary beds of polybags / 100 Teak beds of 10 x 1 m size or combination of both. One additional Nursery Watcher is permitted for nurseries having more than 1 lakh upto 3 lakh RT seedlings or more than 100 upto 300 secondray beds or Teak beds of 10 x 1 m size or combination of both. For more than 3 lakh RT or 300 secodary beds of Teak bedsor combination of both another additional Nursery Watcher is allowed. While calculating the number of Nursery Watcher, care shall be taken to include the nursery raising under all Schemes at a particular site. No extra Nursery Watcher is allowed for primary beds of 1x1 m size. However, the above narrative is subject to the provisions cited under general instructions.	1	No.						332.00
8	01.04.10	Contingencies for Maint. Year towards the expenditure like cost of hose pipe, nursery boards, electricty 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	As	per act	uals, sub	ject to ma: Maint. Ye	x. of 5 % of ar.	estimate	e in	103.80
					FLANE			S.TOT	TAL::	2511.80
					E BASE	Unit Rat	e as per F			2511.80
							Add 10%	escalat or 2017		251.00
							Add 10%			2762.80 276.00
				Tota	I unit rat	e arrived	for the ye			3038.80
					MEET		Cost p	er seedl	ling::	2.763
								Cost per	Ha::	5526.00

Unit Cost Maintenance of Misc., Bag Plants (6x12) Nursery (08/18 to 03/19= 8 Months) as per FSR 2016-17

		pe	LESI	4 201	0-11					
						Rate in Rs				
SI. No.	FSR Code No.	Item of work	Q	ty	Asper FSR	Agency allowanc e 25%	Total		Per	Amount
1	2	3		4	5	6	7	1.0	8	9
	1.05	MAINTENANCE OF BAG NURSERY FROM SEPTEMBER ONWARDS TILL DISPOSAL								
1	01.05.01	Watering the plants for 10 m X 1 m size secondary bed	1 x 8	Beds x mont h	144.5	36.13	180.63	1	Bed/ Month	1445.00
2		Shifting, grading and re-arranging in beds for 10 m X 1 m size bed - with prior written permission of Circle Head	1 x 2	Beds x shifti	186.84	46.71	233.55	1	Bed/ shiftin g	467.00

-891-99-

Lance			3 2 6 5				20 10 10 10	//	
6	01.04.09	Weeding in the space between the beds, inspection path and sorroundings of Nursery		Bed	24.08	6.02	30.1	1 Bed	30.00
7	01.05.04	Cost of Protection: One Nursery Watcher is allowed up to 1 lakh RT nursery or 100 secondary beds of polybags / 100 Teak beds of 10 x 1 m size or combination of both. One additional Nursery Watcher is permitted for nurseries having more than 1 lakh upto 3 lakh RT seedlings or more than 100 upto 300 secondray beds or Teak beds of 10 x 1 m size or combination of both. For more than 3 lakh RT or 300 secodary beds of Teak bedsor combination of both another additional Nursery Watcher is allowed. While calculating the number of Nursery Watcher, care shall be taken to include the nursery raising under all Schemes at a particular site. No extra Nursery Watcher is allowed for primary beds of 1x1 m size. However, the above narrative is subject to the provisions cited under general instructions.	1	No.					332.00
8	01.04.10	Contingencies for Maint. Year towards the expenditure like cost of hose pipe, nursery boards, electricty 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	As	per act	uals, sub	ject to ma: Maint. Ye		f estimate in	103.80
		materials purchased	4 5		HE THE			S.TOTAL::	2511.80
-						Unit Rat	e as per F	SR 2016-17::	2511.80
				TOTAL -			Add 10%	escalation::	251.00
					MESTE.			for 2017-18::	2762.80
					BYVIII			escalation::	276.00
				Tota	l unit ra	te arrived		ear 2018-19::	3038.80
	P. Maria		175.40					er seedling::	2.763
				TO U.S.				Cost per Ha::	5526.00

Unit Cost Maintenance of Misc., Bag Plants (6x12) Nursery (08/18 to 03/19= 8 Months) as per FSR 2016-17

		pe	r FSF	₹ 201	6-1/	Review !		10-7		
						Rate in Rs				
SI. No.	FSR Code No.	Item of work	Q	ty	Asper FSR	Agency allowanc e 25%	Total	F	Per	Amount
1	2	3		4	5	6	7	W S	8	9
	1.05	MAINTENANCE OF BAG NURSERY FROM SEPTEMBER ONWARDS TILL DISPOSAL								
1	01.05.01	Watering the plants for 10 m X 1 m size secondary bed	1 x 8	Beds x mont	144.5	36.13	180.63	1	Bed/ Month	1445.00
2	01.05.02	Shifting, grading and re-arranging in beds for 10 m X 1 m size bed - with prior written permission of Circle	1 x 2	Beds x shifti	186.84	46.71	233.55		Bed/ shiftin g	467.00

			11					100	
0	01.05.04	Cost of Protection: One Nursery Watcher is allowed up to 1 lakh RT nursery or 100 secondary beds of polybags / 100 Teak beds of 10 x 1 m size or combination of both. One additional Nursery Watcher is permitted for nurseries having more than 1 lakh upto 3 lakh RT seedlings or more than 100 upto 300 secondray beds or Teak beds of 10 x 1 m size or combination of both. For more than 3 lakh RT or 300 secodary beds of Teak bedsor combination of both another additional Nursery Watcher is allowed. While calculating the number of Nursery Watcher, care shall be taken to include the nursery raising under all Schemes at a particular site. No extra Nursery Watcher is allowed for primary beds of 1x1 m size. However, the above narrative is subject to the provisions cited under general instructions.	1	No.					664.00
								S.TOTAL::	2576.00
				34		Unit Ra	te as per F	SR 2016-17::	2576.00
							Add 10%	escalation::	258.00
							Rate f	or 2017-18::	2834.00
							Add 10%	escalation::	283.00
				Tot	al unit r	ate arrive	for the ye	ar 2018-19::	3117.00
							Cost p	er seedling::	2.834
					No.			Cost per Ha::	5668.00

-895-101-

Unit Cost Maintenance of Misc., Bag Plants (6x12) Nursery (04/19 to 07/19= 4 Months) as per FSR 2016-17

CI	FCD C					Rate in R	s.			
SI. No.	FSR Code No.	Item of work	C	<u>O</u> ty	Asper FSR	Agency allowanc e 25%	Total	F	Per	Amount
1	2	3		4	5	6	7	14.00	8	9
	1.05	MAINTENANCE OF BAG NURSERY FROM SEPTEMBER ONWARDS TILL DISPOSAL								
1	01.05.01	Watering the plants for 10 m X 1 m size secondary bed	1 x 4	Beds x mont	144.5	36.13	180.63	1	Bed/ Month	723.00
2	01.05.02	Shifting, grading and re-arranging in beds for 10 m X 1 m size bed - with prior written permission of Circle Head	1 x 1	Beds x shifti	186.84	46.71	233.55	1	Bed/ shiftin g	234.00
3		Cost of Protection: One Nursery Watcher is allowed up to 1 lakh RT nursery or 100 secondary beds of polybags / 100 Teak beds of 10 x 1 m size or combination of both. One additional Nursery Watcher is permitted for nurseries having more than 1 lakh upto 3 lakh RT seedlings or more than 100 upto 300 secondray beds or Teak beds of 10 x 1 m size or combination of both. For more than 3 lakh RT or 300 secodary beds of Teak bedsor combination of both another additional Nursery Watcher is allowed. While calculating the number of Nursery Watcher, care shall be taken to include the nursery raising under all Schemes at a particular site. No extra Nursery Watcher is allowed for primary beds of 1x1 m size. However, the above narrative is subject to the provisions cited under general instructions.		No.						332.00
					19-18-5	7.6		S.T	OTAL::	1289.00
						Unit Rate	e as per FS			1289.00
							Add 10%			129.00
_			Vind.			7 7 2 30	Rate fo			1418.00
T				-		-	Add 10%			142.00
_			7 3 7				Rate fo			1560.00
				13,755		W = 100	Add 10%			
_				Total	unit rat	e arrived	for the year			156.00
\dashv				TOTAL	unit rat	e arrived	Cost pe			1716.00
\dashv									er Ha::	1.560
\dashv										3120.00
			L'age				RAND	TOT	AL::	25274.00

Divisional Forest Officer, Kothagudem

899 13.

ANNEXURE- 2 (B)

Unit st for Advance Operations in the year 2018-19 under Semi Mechanical Method as per FSR 2016-17

Espacement 3 x 2 M Name of the Species: Misc., Rate in Rs. FSR Code SI. Item of work Qty Agency Per Amount No. No. Asper Total allowanc **FSR** e 25% 2 4 8 1 5 6 7 9 1 Survey with hand-held GPS (staff to carry out) and demarcation - one manday is allowed for assistance. The 1 No. 311.04 0.00 311.04 1 No. 311 surveyed sketch with exact effective area statement will be uploaded in MIS platform by end of December. 1 Clearing unsalable unwanted jungle growth (leaving all the tree species of good form particularly the hardwood tree species like Teak, Nallamaddi, Yegisa, Narepa, Somi, Jitregi, Billudu, Chenangi etc. and NTFP species like Ippa, Morri, Tani, Karaka, Vepa, Maredu, Tapasi, Tuniki, Chinta, Usuri, Nallajeedi etc.); Spreading the cut material all over the site; and Burning the same twice till completely burnt. The unsuitable area shall be excuded from the clearing opearation and the expenditure shall be incurred for effective only. All the above operations shall be completed before December. Light Jungle Growth (> 20% and upto a) 30% ground area covered with Jungle 02.08.04 1 Ha 5207.65 1301.91 6509.56 growth) with prior written approval of 1 Ha 6510 DFO based on field inspection of DEO Uprootal of Stumps (excluding 2 unsuitable patches) to minimum depth of 45 cm with heavy machinery fitted with 0.90 cum and above capacity bucket, filling the pits caused by uprootal, and levelling. For retrived encroached area, the approval of Circle Head is required and the approval should indicate clearly the density of stumps or vegetation to be removed through uprootal. The uprootal work can be carried out preferably through tender Light Jungle Growth (> 20% and upto a) 30% ground area covered with Jungle 02.08.07 1 Ha 10965.25 10965.25 1 Ha 10965 growth) with prior written approval of DFO based on field inspection of DFO 3 Collection and Removal Uprooted Stumps of all sizes, other debris etc., to outside the plantation site. Light Jungle Growth (> 20% and upto a) 30% ground area covered with Jungle 02.08.10 1 Ha 8585.68 2146.42 10732.10 1 Ha 10732 growth) with prior written approval of DFO based on field inspection of

DFO

-105-Tilling (PERMISSIBLE FOR CA AREA ONLY) the soil to a depth of 45 cm in the effective area (excluding unsuitable patches) with heavy duty machinery fitted with 0.90 cum and above capacity bucket and levelling - ONLY PERMISSIBLE FOR CA AREA and written approval of Circle Head is needed and required budgetary provision has to find place in annual approved plan) and VIP planting area (minimum area should be more than 1 ha area).The uprootal and tilling ha works shall be done preferably through tender process and the execution of work should be completed befor end of March. a) Light Jungle Growth (> 20% and upto 30% ground area covered with Jungle 0.00 1 Ha 8527.85 8527.85 Ha 8528 growth) with prior written approval of DFO based on field inspection of DFO Unit Rate as per FSR 2016-17:: 37046.00 Add 10% escalation:: 3705.00 Rate for 2017-18:: 40751.00

Unit Cost for Raising of Plantations in the year 2019-20 under Semi Mechanical Method as per FSR 2016-17

Add 10% escalation::

Total unit rate arrived for the year 2018-19::

4075.00

44826.00

Espacement 3 x 2 M Name of the Species : Misc., Rate in Rs. FSR Code SI. Agency Per Item of work Qty Amount Asper No No. allowanc Total **FSR** e 25% 8 2 3 4 5 6 7 9 1 Deep Ploughing effective the (excluding unsuitable patches) plantation area across the slope to a depth of 30 cm with Heavy-duty 1 Tractor of 55 HP and above with Firm Mould Board (FMB) plough (FOR UNTILLED AREA) - to be completed 15th of lun 02.09.01 Ordinary soil 3004.60 3004.60 3005 1 Ha 0 1 Ha. Removing congestion of root suckers and other uprooted material 02.09.04 1 Ha 853.42 213.36 1066.78 1 Ha. 1067 hindering the effective ploughing Allignment & Stacking including 3 demarcation of base line 2X3 m espacement = 1666 planting 02.09.06 1666 Nos 83.43 66.74 16.69 100 Nos 1390 a) Cost of preparation of stakes (0.45 m 02.09.09 1666 Nos 47.30 0.00 47.30 100 Nos 788 length) and transportation of site Digging of Pits in Ploughed Areas in June - July by adopting 50% of original rate of digging of pits of 5 ordinary soil 11.05 1 No 02.09.11 45 cm3 pits 1666 Nos 8.84 2.21 18409 PLANTING OPERATIONS DURING RAISING YEAR Transportation of Planting Stock 6 (including loading and unloading) Total :: 30 KMs From nursery to plantation site a) upto 5 Km lead 02.09.13 | 15 X 30 cm (6"X12") bag plants 1666 Nos 96.79 96.79 0 100 Nos 1613 From nursery to plantation site b) beyond 5 Km lead For every extra km beyond 5 km upto 25 km (20 KMs) 15 X 30 cm (6"X12") bag plants 1666 Nos 3.38 0 3.38 100 Nos 1126 For every extra km beyond 25 km c) (with prior written approval of Circle Head) (5 KMs)

	02.09.19	15 X 30 cm (6"X12") bag plants	1666 Nos	1.69	0	1.69	100 Nos	141
7	~	Internal transportation to				Philipson		
-	02.09.22	planting points on head loads 15 X 30 cm (6"X12") bag plants	1666 Nos	76.25	19.06	95.31	100 Nos	1588
8		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 Chloropyriohos in 1 lit water) either at nursery site before transport or at	1666 Nos	32.62	8.16	40.78	100 Nos	679
9	02.09.25	plantation site before planting Cost of SSP, Chloridine dust or	85 Kgs	6.00	0.00	6.00	1 Kg	510
10		Chloropyriphos Planting						
	02.09.27	45 cm3	1666 Nos	363.37	90.84	454.21	100 Nos	7567
11	02.09.29	Replacement of Casualties: 20% during Raising Year. (In case of Eucalyptus: 10% during raising and no casualty replacement for further maintenance). The caualty replacement should be done in 3 stages at an interval of 15 days immediately after planting during raising year.						
a)		Digging of Pits in Ploughed Areas in June - July by adopting 50% of original rate of digging of pits of ordinary soil						
	02.09.11	45 cm3 pits PLANTING OPERATIONS DURING	333 Nos	4.42	1.11	5.53	1 No	1843
b)		RAISING YEAR Transportation of Planting Stock (including loading and unloading)						
a)		From nursery to plantation site - upto 5 Km lead						
	02.09.13	15 X 30 cm (6"X12") bag plants	333 Nos	96.79	0	96.79	100 Nos	32:
b)	02.09.16	From nursery to plantation site - beyond 5 Km lead For every extra km beyond 5 km upto 25 km (20 KMs) 15 X 30 cm (6"X12") bag plants Internal transportation to	333 Nos	3.38	0	3.38	100 Nos	22!
c)		planting points on head loads						
	02.09.22	15 X 30 cm (6"X12") bag plants	333 Nos	76.25	19.06	95.31	100 Nos	317
d)		Planting						
12	02.09.27	45 cm3 Fertilizer Application for boosting	333 Nos	363.37	90.84	454.21	100 Nos	1513
		cost of DAP @ 25 gm / planting point	42 Kgs	20.00	0.00	20.00	1 Kg	84
13	02.09.30	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.	1666 Nos	32.62	8.16	40.78	100 Nos	679
14		WEEDING & SOIL WORKING						
	02.09.31	Circular weeding to a radius of 0.50 m around the plant (during July - Aug)	1666 Nos	103.79	25.95	129.74	100 Nos	216
	02.09.32	Circular weeding cum Deep soil working to a radius of 0.5 m and to a depth of 15 cm (to be done by pickaxe only) without damaging the plant (during Nov - Dec.)	1666 Nos	545.08	136.27	681.35	100 Nos	1135
15		Inter-ploughing (during November) the effective (excluding unsuitable patches) plantation area across the slope to a depth of 30 cm with Heavy duty Tractor of 55 HP and above with Firm Mould Board (FMB) plough						
	02.09.33	Ordinary soil	1 Ha	2048.90	0	2048.90	1 Ha.	2049

905-107

							/
02.09.35			103.19	25.80	128.99	100 Nos	2149
02.09.38	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.		0	0	0	1 Month	3700
	Miscellanous (Plantation Board and etc.,)				A/a		
				Unit Rat			65030.00
							6503.00
					Add 10%	escalation::	7153.00
					Rate f	or 2018-19::	78686.00
					Add 10%	escalation::	7869.00
		То	tal unit rat	te arrived	for the ye	ar 2019-20::	
				× ×			r,
	02.09.38	Timber and NTFP species by scicature upto 1/3 rd height (to be done during October) 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.	Upto 1/3 rd height (to be done during October) 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. Miscellanous (Plantation Board and etc.,)	Timber and NTFP species by scicature upto 1/3 rd height (to be done during October) 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. Miscellanous (Plantation Board and etc)	Timber and NTFP species by scicature upto 1/3 rd height (to be done during October) 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 Watcher is at least 80% survival at the end of raising year. Miscellanous (Plantation Board and etc) 1666 Nos 103.19 25.80 103.19 25.80 103.19 25.80 Unit Rai	Timber and NTFP species by scicature upto 1/3 rd height (to be done during October) 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. Miscellanous (Plantation Board and etc) Miscellanous (Plantation Board and etc) Unit Rate as per F3 Add 10% Rate f Add 10% Total unit rate arrived for the ye	Timber and NTFP species by scicature upto 1/3 rd height (to be done during October) 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. Miscellanous (Plantation Board and

ANNEXURE- 2 (C) Unit Cost for 1st year maintenance of Plantations in the year 2020-21 Raised under Semi Mechanical Method as per FSR 2016-17

_	100	Mechanical M	Ctilou us	per 13k	2010-1	,		
				3 10 3	Rate in R	S.		
SI. No.	FSR Code No.	Item of work	Qty	Asper FSR	Agency allowanc e 25%	Total	Per	Amount
1	2	3	4	5	6	7	8	9
1	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						
I		Digging of Pits in Ploughed Areas in June - July by adopting 50% of original rate of digging of pits of						
	02.09.11	ordinary soil 45 cm3 pits	417 Nos	8.84	2.21	11.05	1 No	4608
		PLANTING OPERATIONS DURING			2,12,2	11.05	1110	1000
II		RAISING YEAR Transportation of Planting Stock (including loading and unloading) Total 35 KMs						
a)		From nursery to plantation site -		THE PERSON				
-/	02 00 12	upto 5 Km lead 15 X 30 cm (6"X12") bag plants	417 Nos	96.79	0	06.70	100 Nr.	10.
b)	02.09.13	From nursery to plantation site - beyond 5 Km lead		96.79	0	96.79	100 Nos	404
	1 2	For every extra km beyond 5 km upto 25 km (20 KMs)		134			Of Live and and	
	02.09.16	15 X 30 cm (6"X12") bag plants	417 Nos	3.38	0	3.38	100 Nos	282
c)		For every extra km beyond 25 km (with prior written approval of Circle Head) (10 KMs)						
	02.09.19	15 X 30 cm (6"X12") bag plants	417 Nos	1.69	0	1.69	100 Nos	70
IV		Internal transportation to						
-	02 09 22	planting points on head loads 15 X 30 cm (6"X12") bag plants	417 Nos	76.25	19.06	95.31	100 Nos	207
VI	02.05.22	Planting	417 NOS	70.23	19.00	93.31	100 1005	397
	02.09.27		417 Nos	363.37	90.84	454.21	100 Nos	1894
2	02.10.02	Circular weeding to a radius of 0.50 m around the plant during raising year (July - Aug)		103.79	25.95	129.74	100 Nos	2161
3	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 pickaxe only) without damaging the plant (during Nov - Dec)	1666 Nos	545.08	136.27	681.35	100 Nos	11351
4	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	1 Ha	2048.90	0.00	2048.90	1 Ha.	2049
5	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)		103.19	25.80	128.99	100 Nos	2149
6	02.10.08	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 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.	2 Nos	0.00	0.00	0.00	1 Month	3700
					Unit Rate		R 2016-17::	29065.00
						Add 10%	escalation::	2907.00

Rate for 2017-18:: 31972.00

Add 10% escalation:: 3197.00

Rate for 2018-19:: 35169.00

Add 10% escalation:: 3517.00

Rate for 2019-20:: 38686.00

Add 10% escalation:: 3869.00

Total unit rate arrived for the year 2020-21:: 42555.00

Unit Cost for 2nd year maintenance of Plantations in the year 2021-22 Raised under Semi Mechanical Method as per FSR 2016-17

C I	FCD C I				Rate in R	ls.		
SI. No.	FSR Code No.	Item of work	Qty	Asper FSR	Agency allowanc e 25%	Total	Per	Amount
1	2	3	4	5	6	7	8	9
1	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 pickaxe only) without damaging the plant (July-Aug)	1666 Nos	545.08	136.27	681.35	100 Nos	11351
2	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)	1666 Nos	103.19	25.80	128.99	100 No	2149
3	02.09.10	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 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.				L.S		3700
4		Miscellanous contingeines like implements, plantation board display boards etc.,						398
-					Unit Rate		R 2016-17::	
						Add 10%	escalation::	1760.00
T						Rate fo	or 2017-18::	19358.00
						Add 10%	escalation::	1936.00
T							or 2018-19::	21294.00
							escalation::	2129.00
7							or 2019-20:: escalation::	23423.00
							escalation:: or 2020-21::	2342.00
T			100			Add 100%	escalation::	
					e arrived	Aug 10-70	escaration::	2577.00

Unit Cost for 3rd year maintenance of Plantations in the year 2022-23 Raised under Semi Mechanical Method as per FSR 2016-17

Servicia d	FSR Code No.				Rate in Rs			
SI. No.		Item of work	Qty	Asper FSR	Agency allowanc e 25%	Total	Per	Amount
1	2	3	4	5	6	7	8	9
1	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 pickaxe only) without damaging the plant (July-Aug)	1666 Nos	545.08	136.27	681.35	100 Nos	11351
2	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)		103.19	25.80	128.99	100 No	2149

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Unit Cost for 4th year maintenance of Plantations in the year 2023-24 Raised under Semi Mechanical Method as per FSR 2016-17

		SR Code Item of work			Rate in R	s.		
SI. No.	FSR Code No.	Item of work	Qty	Asper FSR	Agency allowance 25%	Total	Per	Amount
1	2	3	4	5	6	7	8	9
1	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 pickaxe only) without damaging the plant (July-Aug). Pruning of lower branch initials of	1666 Nos	545.08	136.27	681.35	100 Nos	11351
2	02.11.02	Timber and NTFP species by scicature upto 1/3 rd height (to be carried out during July-Aug)		103.19	25.80	128.99	100 No	2149
3	02.09.10	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 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.				L.S		3700
4		Miscellanous contingeines like implements, plantation board display boards etc.,						398
-					Unit Rat		SR 2016-17::	
L					2112915111		escalation::	1760.00
							or 2017-18::	19358.00
							or 2018-19::	1936.00 21294.00
							escalation::	21294.00
							or 2019-20::	23423.00
							escalation::	2342.00
							or 2020-21::	
	A WENT					Add 10%	escalation::	2577.00

-911 - 112-

Rate for 2021-22::	28342.00
Add 10% escalation::	
Rate for 2022-23::	31176.00
Add 10% escalation::	3118.00
Total unit rate arrived for the year 2023-24::	34294.00

Unit Cost for 5th year maintenance of Plantations in the year 2024-25 Raised under Semi Mechanical Method as per FSR 2016-17

		5.	Rate in Re				FSR Code	SI.
Amount	Per	Total	Agency allowance 25%	Asper FSR	Qty	Item of work	No.	No.
9	8	7	6	5	4	3	2	1
113	100 Nos	681.35	136.27	545.08	1666 Nos	Circular weeding cum Deep soil working to a radius of 0.5 m and to a depth of 15 cm (to be done by pickaxe only) without damaging the plant (July-Aug). Pruning of lower branch initials of	02.11.01	1
214	100 No	128.99	25.80	103.19	1666 Nos	Timber and NTFP species by scicature upto 1/3 rd height (to be carried out during July-Aug)	02.11.02	2
						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		
370		L.S				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.		3
39						Miscellanous contingeines like implements, plantation board display boards etc.,		4
17598.0	R 2016-17::							-
1760.0	escalation::							
19358.0								
1936.0	escalation::							
21294.0	or 2018-19::							
2129.0	escalation::							
23423.0	or 2019-20::							Т
2342.0	escalation:: or 2020-21::							
25765.0 2577.0	escalation::			TE				T
28342.0	or 2021-22::							_
2834.0	escalation::							T
31176.0	or 2022-23::							
3118.0	escalation::							T
34294.0	or 2023-24::							
3429.0	escalation::							
37723 0	r 2024-25::	for the vea	arrived	unit rate	Total			

Unit Cost for 6th year maintenance of Plantations in the year 2025-26 Raised under Semi Mechanical Method as per FSR 2016-17

	FSR Code No.				Rate in Rs			
SI. No.		Item of work	Qty	Asper FSR	Agency allowanc e 25%	Total	Per	Amount
1	2	3	4	5	6	7	8	9
1	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 pickaxe only) without damaging the plant (July-Aug.)	1666 Nos	545.08	136.27	681.35	100 Nos	11351
2	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)		103.19	25.80	128.99	100 No	2149

913-117.

					Section 1		
3	02.09.10	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 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.			L.S		3700
4		Miscellanous contingeines like implements, plantation board display boards etc.,					398
				Unit Rat	e as per F	SR 2016-17::	17607.00
						escalation::	1761.00
						or 2017-18::	
			2 7/4/19		Add 10% escalation::		1937.00
			- 1.5 E			or 2018-19::	
						escalation::	2131.00
					Rate for 2019-20		23436.00
			S TO THE REAL PROPERTY.		Add 10% escalation::		2344.00
					Rate f	or 2020-21::	25780.00
					Add 10%	escalation::	2578.00
				3 2 3 2 3	Rate 1	or 2021-22::	28358.00
						escalation::	2836.00
				No to the second		or 2022-23::	31194.00
						escalation::	3119.00
						or 2023-24::	34313.00
				66 TH 358	Add 10%	escalation::	3431.00
					Rate	or 2024-25::	37744.00
						escalation::	37744.00

Unit Cost for 7th year maintenance of Plantations in the year 2026-27 Raised under Semi Mechanical Method as per FSR 2015-16

SI. No.	FSR Code No.	Item of work	Qty	Rate in Rs.				
				Asper FSR	Agency allowanc e 25%	Total	Per	Amount
1	2	3	4	5	6	7	8	9
1	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 pickaxe only) without damaging the plant (July-Aug)	1666 Nos	545.08	136.27	681.35	100 Nos	11351
2	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)	1000 N==	103.19	25.80	128.99	100 No	2149
3	02.09.10	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 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.				L.S		3700
4		Miscellanous contingeines like implements, plantation board display boards etc.,						398
	Parls Vije				Unit Rate as per FSR 2016-17::			
					Add 10% escalation::		1761.00	

19181 Rate for 2017-18:: 19368.00 Add 10% escalation:: 1937.00 Rate for 2018-19:: 21305.00 2131.00 Add 10% escalation:: Rate for 2019-20:: 23436.00 Add 10% escalation:: 2344.00 Rate for 2020-21:: 25780.00 Add 10% escalation:: 2578.00 Rate for 2021-22:: 28358.00 Add 10% escalation:: 2836.00 Rate for 2022-23:: 31194.00 Add 10% escalation:: 3119.00 34313.00 3431.00 Rate for 2023-24:: Add 10% escalation:: Rate for 2024-25:: 37744.00 Add 10% escalation:: 3774.00 Rate for 2025-26:: 41518.00 Add 10% escalation:: 4152.00 Total unit rate arrived for the year 2026-27:: 45670.00

> Divisional Forest Officer, Kothagudem

18/8/18