

COMPREHENSIVE SCHEME FOR COMPENSATORY AFFORESTATION FOR IMPROVEMENT OF ROAD FROM KM 121/0 TO KM 154/0 OF NAKAREKAL TO MALLAMPALLY OF NH – 365 IN JAYASHANKER DISTRICT IF TELANGANA STATE C.A. (DOUBLE DEGRADED FOREST) IN MULUG RANGE, FOREST DIVISION, MULUG.

1) Introduction of the Scheme:-

The Executive Engineer, (R&B) National Highways Division, Warangal has submitted proposals for diversion of 25.00 Ha of forest land for improvement of road from Km 121/0 to Km 154/0 of Nakarekal to Mallampally of NH – 365 in Mulug Range in Forest Division, Mulug.

2) Suitability of the Area:-

The Executive Engineer, (R&B) National Highways Division, Warangal has requested the Forest Divisional Officer, Mulug that C.A. can be raised in double the degraded forests land in Forest Division, Mulug. Hence the CA area of 50.00 Ha is identified in double degraded forest area in Compt. No. 596, 597 in Jakaram – I R.F., Pandikunta Beat of Mulug Range.

3) Areas identified for Compensatory Afforestation and species.

Accordingly 50.00 Ha., is identified in contiguous in Reserve Forest compartment No. 596, 597 of Jakaram – I R.F. Pandikunta Beat in Mulug Range.

Keeping the suitability and management point in view, it is proposed to raise Miscellaneous species through ANR Method in 10.00 Ha and tending operations in 50.00 Ha each at an espacement of 5M x 5M.

The details of areas to be planted, species and different techniques as follows

Sl. No	Planting technique	Total (ha)	Species	Location	Remarks
1	ANR method	10.00	Misc.,	596, 597 – Pandikunta Beat	Double Degraded forest area
2	Tending operations	50.00	Misc.,		

4) Planting Technique:-

The plantation under this scheme is proposed to be raised by adopting ANR method. Advance works like clearance of miscellaneous growth will be taken up and Miscellaneous species plantations will be taken up under ANR method.

It is proposed to raise plantations of Miscellaneous under ANR method with 5M x 5M.

Basal dressing with super phosphate will be done to boost up the root system. Weeding and soil workings are provided. The plantation will be provided with a watcher up to 8th year maintenance of plantations for protection.

The entire area of C.A will be planted within One year i.e., during 2017 – 18.

5) Scheme Implementation Agency:-

The Forest Divisional Officer, Mulug will be the project implementation and monitoring agency and works will be taken up through concerned Forest Range Officer.

Raising of successful C.A. Plantation requires frequent inspections and close monitoring by the Forest Range Officer and senior officers.

6) Monitoring Mechanism :-

The Forest Divisional Officer, Mulug and District Forest Officer, Jayashanker / Conservator of Forests, Warangal will be closely monitoring the implementation of C.A. scheme by regular inspection and ensuing maintenance of connected records like nursery journals, plantation journals, Cash books, work register, Measurement books, etc., Monthly Progress of planting and maintenance along with expenditure will be submitted to the Prl. Chief Conservator of Forests, Telangana Hyderabad. Other Senior officers of Forest Department of Telangana and Chief Conservator of Forests (Central), Bangalore will also be monitoring the implementation of C.A. scheme.

7) Period of the scheme :-

Period of the scheme is for (10) years which includes 1st year of Advance works and nursery raising, 2nd year and 3rd year of raising of plantations and (8) years of maintenance commencing from 2016 - 17 to 2025 - 26.

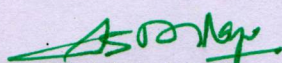
8) Cost Structure:-

The cost of the scheme is worked out adopting present F.S.R. of 2016 - 17 and wage structure of Rs. 323/- per day (as approved by the District Collector, Warangal). The total year wise cost structure of the project to an extent of 50.00 Ha., is shown in Annexure – I. The details of requirement of funds and year wise action plan are shown in Annexure-II. Unit costs of different planting techniques are shown in Annexure – III to V. The Abstract of the scheme is as follows:

DETAILED ABSTARCT OF CA SCHEME FOR 50.00 Ha

(Rs. in Lakhs)

Sl. No	Item of Work	Total Outlay	
		Phy	Fin
1	Raising of Nurseries	6000	1.32780
2	Maintenance of Nurseries	6000	0.16320
3	Nursery infratructure (Including solar panel, pipe line, HP motor etc.,)		10.00000
4	Advance Operations	10.00	0.62810
5	Raising	10.00	11.59040
6	1st Year Maintenance	10.00	2.99210
7	2nd Year Maintenance	10.00	3.53320
8	3rd Year Maintenance	10.00	3.88652
9	4th Year Maintenance	10.00	4.27517
10	5th Year Maintenance	10.00	4.70269
11	6th Year Maintenance	10.00	5.17296
12	7th Year Maintenance	10.00	5.69025
13	8th Year Maintenance	10.00	6.25928
14	Tending operations	50.00	4.08050
15	Formation of new fire lines - 5 Mt width	5000 Rmt	0.37564
16	Erection of chain link fence around the CA area	3000 Rmt	30.00000
17	Construction of watch towers	2 Nos	6.00000
18	Engaging of watrcher for watch towers (Day & Night)	4 Nos	46.08000
19	Engaging of Technical Assistants (ITI Civil) & Computer Operators (PGDCA) for the project period	1 Nos	14.40000
20	Administrative Cost (10%) (Digitization of Maps, Purchase of Computers, Stationary, Purchase of GPS instruments, Payment of Electricity bills, RRT, Internet, Communication charges etc.,)	LS	16.84218
Grand Total:		50 Ha	178.00000
Unit cost per Ha:			3.56000


 Forest Divisional Officer,
 Mulug

ANNEXURE - D

Unit Cost for Adv. Works for Raising of Misc., Plantations 5m X 5m. (ANR) 400 plants per Ha

Unit Rate per Ha

Code	Item of work	Units	Qty	Rate	Per	Amount
1	2	3	4	5	6	7
	Advance operations (Pre planting operations)					
02.01.01	Survey with GPS (Only staff to carry out)	Plantation	1	311.04	1	311.00
	Preparation of site for planting by clearing thorny unsalable, unusable jungle growth, creepers, bushes etc. spreading the cut material all over the site and burning the same.					
02.01.04	Light jungle growth	Ha	1	5207.65	1	5208.00
02.01.05	Formation of sector lines / fire lines of 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. Applicable for plantations other than Semi Mechanical Plantation.	Rmt	150	5.08	1	762.00
Unit cost as per FSR 2016 - 17 :						6281.00
Add 10% escalation on FSR 2016 - 17 (Unit cost for 2017 - 18):						6909.00
Add 10% escalation on FSR 2017 - 18 (Unit cost for 2018 - 19):						7600.00
Add 10% escalation on FSR 2018 - 19 (Unit cost for 2019 - 20):						8360.00
Add 10% escalation on FSR 2019 - 20 (Unit cost for 2020 - 21):						9196.00


Forest Divisional Officer,
Mulug

ANNEXURE - D

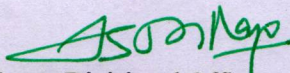
Unit Cost for Raising of Misc., Plantations 5m X 5m. (ANR) 400 plants per Ha

Unit Rate per Ha

Code	Item of work	Units	Qty	Rate	Per	Amount
1	2	3	4	5	6	7
RAISING OF PLANTATIONS						
	Alignment and staking including laying base line					
02.01.08	5x5 m espacement = 400 planting points	Nos	400	98.77	100	395.00
02.01.09	Cost of 0.45 M Stake preparation and transportation to site.	Nos	400	47.30	100	189.00
	Digging of pits in hard gravelly soils (as per RSSR)					
02.16.04	60 cm ³ pit (0.216 Cum)	Nos	400	40.32	1	16128.00
	Transport of Bag plants / Root trainer plants from nursery site to plantation site including loading and unloading upto 5 Km lead					
02.16.08	25 x 40 cm (10"x16") bag plants	Nos	400	358.34	100	1433.00
	Transport of Bag plants / Root trainer plants from nursery site to plantation site including loading and unloading beyond 5 Km - extra for every each Km. (25 Kms - 5 Kms = 20 Kms)					
02.16.10	25 x 40 cm (10"x16") bag plants	Nos	400	14.05	100	1120.00
	Internal transport of bag plants/root trainers to planting points on head loads (as per RSSR)					
02.16.14	25 x 40 cm (10"x16") bag plants	Nos	400	379.02	100	1516.00
02.02.14	Cost of SSP, Chloridine dust (50 gm) or Chloropyriphos	Nos	400	1.50	1	600.00
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	Nos	400	32.62	100	130.00
	Planting bag plants (as per RSSR)					
02.02.16	45 cm ³	Nos	400	363.37	100	1453.00
	Watering - To be done through tractor fitted with water tanker					
02.16.20	Watering the plants - Main Rows (32 Waterings from July - March)	Nos / Watering	400	539.35	100	69024.00
02.02.17	Replacement of Casualties 20% during Raising & 25% in 1st year (In case of Eucalyptus 10% during raising and no casualty replacement for further maintenance)					
	Transportation	100 Nos	80	14.05	100	11.00

Code	Item of work	Units	Qty	Rate	Per	Amount
1	2	3	4	5	6	7
	Internal Transportation	100 Nos	80	379.02	100	303.00
	Pitting	Each	80	20.16	1	1613.00
	Planting	100 Nos	80	363.37	100	291.00
	Application of Fertilizers					
02.02.18	Cost of DAP @ 25 gm / planting point	A/a	400	5000.00	1	5000.00
02.09.19	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	Nos	400	32.62	100	130.00
	Weeding & Soil Working					
02.02.20	a) 1st circular weeding to a radius of 0.50 m around the plant after 30 days of planting (i.e. July - Aug)	Nos	400	103.79	100	415.00
02.02.21	b) 2nd circular weeding to a radius of 0.50 m around the plant during Sept. - Oct.	Nos	400	103.79	100	415.00
	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	Nos	400	545.08	100	2180.00
	Cutting of coppice growth flush to the ground over the entire area including retaining useful species just after planting and placing the cut material in between the planting rows (to be undertaken during July - August)					
02.02.25	High rainfall zone < 800 mm	Ha	1	1215.43	1	1215.00
02.02.26	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height during October	Nos	400	103.10	100	412.00
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	Ha	1	750	1	750.00

Code	Item of work	Units	Qty	Rate	Per	Amount
1	2	3	4	5	6	7
04.01.06	Cost of publicity boards including cost of board, painting charges, transportation fixing etc.,					644.00
Unit cost as per FSR 2016 - 17 :						105367.00
Add 10% escalation on FSR 2016 - 17 (Unit cost for 2017 - 18):						115904.00
Add 10% escalation on FSR 2017 - 18 (Unit cost for 2018 - 19):						127494.00
Add 10% escalation on FSR 2018 - 19 (Unit cost for 2019 - 20):						140243.00
Add 10% escalation on FSR 2019 - 20 (Unit cost for 2020 - 21):						154267.00



 Forest Divisional Officer,
 Mulug

ANNEXURE - D

Unit Cost for Raising of Misc., Plantations 5m X 5m. (ANR) 400 plants per Ha

Unit Rate per Ha

Code	Item of work	Units	Qty	Rate	Per	Amount
1	2	3	4	5	6	7
RAISING OF PLANTATIONS						
	Cleraning unsalable unwanted growth					
02.01.04	Light jungle growth	Ha	1	5207.65	1	5208.00
	Alignment and staking including laying base line					
02.01.08	5x5 m espacement = 400 planting points	Nos	400	98.77	100	395.00
02.01.09	Cost of 0.45 M Stake preparation and transportation to site.	Nos	400	47.30	100	189.00
	Singling / Cutting of coppice growth flush to the ground over the entire area including retaining useful species just after planting and placing the cut material in between the planting rows (to be undertaken during July - August)					
02.02.25	High rainfall zone < 800 mm	Ha	1	1215.43	1	1215.00
02.02.26	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height during October	Nos	400	103.10	100	412.00
Unit cost as per FSR 2016 - 17 :						7419.00
Add 10% escalation on FSR 2016 - 17 (Unit cost for 2017 - 18):						8161.00
Add 10% escalation on FSR 2017 - 18 (Unit cost for 2018 - 19):						8977.00
Add 10% escalation on FSR 2018 - 19 (Unit cost for 2019 - 20):						9875.00
Add 10% escalation on FSR 2019 - 20 (Unit cost for 2020 - 21):						10863.00


 Forest Divisional Officer,
 Mulug

ANNEXURE - D

Unit Cost for 1st year maintenance of Misc., Plantations 5m X 5m. (ANR) 400 plants / Ha

Unit Rate per Ha						
Code	Item of work	Units	Qty	Rate	Per	Amount
1	2	3	4	5	6	7
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. The casualty replacement shall be completed by end of July.					
	Transportation	100 Nos	100	14.05	100	14.00
	Internal Transportation	100 Nos	100	379.02	100	379.00
	Pitting	Each	100	40.32	1	4032.00
	Planting	100 Nos	100	363.37	100	363.00
	Watering - To be done through tractor fitted with water tanker					
02.17.05	Watering the plants - Main Rows (27 Waterings from April - March)	Nos / Watering	100	539.35	100	14553.00
	WEEDING & SOIL WORKING (To be carried out after replacement of casualties are over)					
02.03.02	a) 1st circular weeding to a radius of 0.50 m around the plant after 30 days of planting (i.e. July - Aug)	Nos	400	103.79	100	415.00
02.03.03	b) 2nd circular weeding to a radius of 0.50 m around the plant during Sept. - Oct.	Nos	400	103.79	100	415.00
	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	Nos	400	545.08	100	2180.00
	Cutting of coppice growth flush to the ground over the entire area including retaining useful species just after planting and placing the cut material in between the planting rows (to be undertaken during July - August)					
02.03.06	High rainfall zone < 800 mm	Ha	1	1215.43	1	1215.00
02.03.08	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height during October	Nos	400	103.10	100	412.00

Code	Item of work	Units	Qty	Rate	Per	Amount
1	2	3	4	5	6	7
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 at the end of raising year	Ha	1	750	1	750.00
Unit cost as per FSR 2016 - 17 :						24728.00
Add 10% escalation on FSR 2016 - 17 (Unit cost for 2017 - 18):						27201.00
Add 10% escalation on FSR 2017 - 18 (Unit cost for 2018 - 19):						29921.00
Add 10% escalation on FSR 2018 - 19 (Unit cost for 2019 - 20):						32913.00
Add 10% escalation on FSR 2019 - 20 (Unit cost for 2020 - 21):						36204.00
Add 10% escalation on FSR 2020 - 21 (Unit cost for 2021 - 22):						39824.00


 Forest Divisional Officer,
 Mulug

ANNEXURE - D

Unit Cost for 2nd year maintenance of Misc., Plantations 5m X 5m. (ANR) 400 plants / Ha

Unit Rate per Ha

Code	Item of work	Units	Qty	Rate	Per	Amount
1	2	3	4	5	6	7
	Watering - To be done through tractor fitted with water tanker					
02.18.01	Watering the plants - Main Rows (10 Waterings from April - March)	Nos / Watering	400	539.35	100	21570.00
	WEEDING & SOIL WORKING (To be carried out after replacement of casualties are over)					
02.04.01	a) 1st circular weeding to a radius of 0.50 m around the plant after 30 days of planting (i.e. July - Aug)	Nos	400	103.79	100	415.00
02.04.02	b) 2nd circular weeding to a radius of 0.50 m around the plant during Sept. - Oct.	Nos	400	103.79	100	415.00
	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)					
02.04.04	ii) For hard gravelly soil	Nos	400	545.08	100	2180.00
	Cutting of coppice growth flush to the ground over the entire area including retaining useful species just after planting and placing the cut material in between the planting rows (to be undertaken during July - August)					
02.04.06	High rainfall zone < 800 mm	Ha	1	1215.43	1	1215.00
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 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	Ha	1	750	1	750.00
Unit cost as per FSR 2016 - 17 :						26545.00
Add 10% escalation on FSR 2016 - 17 (Unit cost for 2017 - 18):						29200.00
Add 10% escalation on FSR 2017 - 18 (Unit cost for 2018 - 19):						32120.00
Add 10% escalation on FSR 2018 - 19 (Unit cost for 2019 - 20):						35332.00
Add 10% escalation on FSR 2019 - 20 (Unit cost for 2020 - 21):						38865.00
Add 10% escalation on FSR 2020 - 21 (Unit cost for 2021 - 22):						42752.00


 Forest Divisional Officer,
 Mulug

ANNEXURE - D

Unit Cost for 3rd year maintenance of Misc., Plantations 5m X 5m. (ANR) 400 plants / Ha

Unit Rate per Ha

Code	Item of work	Units	Qty	Rate	Per	Amount
1	2	3	4	5	6	7
	Watering - To be done through tractor fitted with water tanker					
02.18.01	Watering the plants - Main Rows (10 Waterings from April - March)	Nos / Watering	400	539.35	100	21570.00
	WEEDING & SOIL WORKING (To be carried out after replacement of casualties are over)					
02.04.01	a) 1st circular weeding to a radius of 0.50 m around the plant after 30 days of planting (i.e. July - Aug)	Nos	400	103.79	100	415.00
02.04.02	b) 2nd circular weeding to a radius of 0.50 m around the plant during Sept. - Oct.	Nos	400	103.79	100	415.00
	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)					
02.04.04	ii) For hard gravelly soil	Nos	400	545.08	100	2180.00
	Cutting of coppice growth flush to the ground over the entire area including retaining useful species just after planting and placing the cut material in between the planting rows (to be undertaken during July - August)					
02.04.06	High rainfall zone < 800 mm	Ha	1	1215.43	1	1215.00
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 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	Ha	1	750	1	750.00
Unit cost as per FSR 2016 - 17 :						26545.00
Add 10% escalation on FSR 2016 - 17 (Unit cost for 2017 - 18):						29200.00
Add 10% escalation on FSR 2017 - 18 (Unit cost for 2018 - 19):						32120.00
Add 10% escalation on FSR 2018 - 19 (Unit cost for 2019 - 20):						35332.00
Add 10% escalation on FSR 2019 - 20 (Unit cost for 2020 - 21):						38865.00
Add 10% escalation on FSR 2020 - 21 (Unit cost for 2021 - 22):						42752.00
Add 10% escalation on FSR 2021 - 22 (Unit cost for 2022 - 23):						47027.00
Add 10% escalation on FSR 2022 - 23 (Unit cost for 2023 - 24):						51730.00
Add 10% escalation on FSR 2023 - 24 (Unit cost for 2024 - 25):						56903.00


 Forest Divisional Officer,
 Mulug

ANNEXURE - D

Unit Cost for 4th year maintenance of Misc., Plantations 5m X 5m. (ANR) 400 plants / Ha

Unit Rate per Ha

Code	Item of work	Units	Qty	Rate	Per	Amount
1	2	3	4	5	6	7
	Watering - To be done through tractor fitted with water tanker					
02.18.01	Watering the plants - Main Rows (10 Waterings from April - March)	Nos / Watering	400	539.35	100	21570.00
	WEEDING & SOIL WORKING (To be carried out after replacement of casualties are over)					
02.04.01	a) 1st circular weeding to a radius of 0.50 m around the plant after 30 days of planting (i.e. July - Aug)	Nos	400	103.79	100	415.00
02.04.02	b) 2nd circular weeding to a radius of 0.50 m around the plant during Sept. - Oct.	Nos	400	103.79	100	415.00
	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)					
02.04.04	ii) For hard gravelly soil	Nos	400	545.08	100	2180.00
	Cutting of coppice growth flush to the ground over the entire area including retaining useful species just after planting and placing the cut material in between the planting rows (to be undertaken during July - August)					
02.04.06	High rainfall zone < 800 mm	Ha	1	1215.43	1	1215.00
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 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	Ha	1	750	1	750.00
Unit cost as per FSR 2016 - 17 :						26545.00
Add 10% escalation on FSR 2016 - 17 (Unit cost for 2017 - 18):						29200.00
Add 10% escalation on FSR 2017 - 18 (Unit cost for 2018 - 19):						32120.00
Add 10% escalation on FSR 2018 - 19 (Unit cost for 2019 - 20):						35332.00
Add 10% escalation on FSR 2019 - 20 (Unit cost for 2020 - 21):						38865.00
Add 10% escalation on FSR 2020 - 21 (Unit cost for 2021 - 22):						42752.00
Add 10% escalation on FSR 2021 - 22 (Unit cost for 2022 - 23):						47027.00
Add 10% escalation on FSR 2022 - 23 (Unit cost for 2023 - 24):						51730.00
Add 10% escalation on FSR 2023 - 24 (Unit cost for 2024 - 25):						56903.00

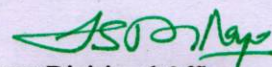

 Forest Divisional Officer,
 Mulug

ANNEXURE - D

Unit Cost for 5th year maintenance of Misc., Plantations 5m X 5m. (ANR) 400 plants / Ha

Unit Rate per Ha

Code	Item of work	Units	Qty	Rate	Per	Amount
1	2	3	4	5	6	7
	Watering - To be done through tractor fitted with water tanker					
02.18.01	Watering the plants - Main Rows (10 Waterings from April - March)	Nos / Watering	400	539.35	100	21570.00
	WEEDING & SOIL WORKING (To be carried out after replacement of casualties are over)					
02.04.01	a) 1st circular weeding to a radius of 0.50 m around the plant after 30 days of planting (i.e. July - Aug)	Nos	400	103.79	100	415.00
02.04.02	b) 2nd circular weeding to a radius of 0.50 m around the plant during Sept. - Oct.	Nos	400	103.79	100	415.00
	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)					
02.04.04	ii) For hard gravelly soil	Nos	400	545.08	100	2180.00
	Cutting of coppice growth flush to the ground over the entire area including retaining useful species just after planting and placing the cut material in between the planting rows (to be undertaken during July - August)					
02.04.06	High rainfall zone < 800 mm	Ha	1	1215.43	1	1215.00
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 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	Ha	1	750	1	750.00
Unit cost as per FSR 2016 - 17 :						26545.00
Add 10% escalation on FSR 2016 - 17 (Unit cost for 2017 - 18):						29200.00
Add 10% escalation on FSR 2017 - 18 (Unit cost for 2018 - 19):						32120.00
Add 10% escalation on FSR 2018 - 19 (Unit cost for 2019 - 20):						35332.00
Add 10% escalation on FSR 2019 - 20 (Unit cost for 2020 - 21):						38865.00
Add 10% escalation on FSR 2020 - 21 (Unit cost for 2021 - 22):						42752.00
Add 10% escalation on FSR 2021 - 22 (Unit cost for 2022 - 23):						47027.00
Add 10% escalation on FSR 2022 - 23 (Unit cost for 2023 - 24):						51730.00
Add 10% escalation on FSR 2023 - 24 (Unit cost for 2024 - 25):						56903.00


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ANNEXURE - D

Unit Cost for 6th year maintenance of Misc., Plantations 5m X 5m. (ANR) 400 plants / Ha

Unit Rate per Ha

Code	Item of work	Units	Qty	Rate	Per	Amount
1	2	3	4	5	6	7
	Watering - To be done through tractor fitted with water tanker					
02.18.01	Watering the plants - Main Rows (10 Waterings from April - March)	Nos / Watering	400	539.35	100	21570.00
	WEEDING & SOIL WORKING (To be carried out after replacement of casualties are over)					
02.04.01	a) 1st circular weeding to a radius of 0.50 m around the plant after 30 days of planting (i.e. July - Aug)	Nos	400	103.79	100	415.00
02.04.02	b) 2nd circular weeding to a radius of 0.50 m around the plant during Sept. - Oct.	Nos	400	103.79	100	415.00
	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)					
02.04.04	ii) For hard gravelly soil	Nos	400	545.08	100	2180.00
	Cutting of coppice growth flush to the ground over the entire area including retaining useful species just after planting and placing the cut material in between the planting rows (to be undertaken during July - August)					
02.04.06	High rainfall zone < 800 mm	Ha	1	1215.43	1	1215.00
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 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	Ha	1	750	1	750.00
Unit cost as per FSR 2016 - 17 :						26545.00
Add 10% escalation on FSR 2016 - 17 (Unit cost for 2017 - 18):						29200.00
Add 10% escalation on FSR 2017 - 18 (Unit cost for 2018 - 19):						32120.00
Add 10% escalation on FSR 2018 - 19 (Unit cost for 2019 - 20):						35332.00
Add 10% escalation on FSR 2019 - 20 (Unit cost for 2020 - 21):						38865.00
Add 10% escalation on FSR 2020 - 21 (Unit cost for 2021 - 22):						42752.00
Add 10% escalation on FSR 2021 - 22 (Unit cost for 2022 - 23):						47027.00
Add 10% escalation on FSR 2022 - 23 (Unit cost for 2023 - 24):						51730.00
Add 10% escalation on FSR 2023 - 24 (Unit cost for 2024 - 25):						56903.00


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ANNEXURE - D

Unit Cost for 7th year maintenance of Misc., Plantations 5m X 5m. (ANR) 400 plants / Ha

Unit Rate per Ha

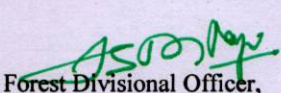
Code	Item of work	Units	Qty	Rate	Per	Amount
1	2	3	4	5	6	7
	Watering - To be done through tractor fitted with water tanker					
02.18.01	Watering the plants - Main Rows (10 Waterings from April - March)	Nos / Watering	400	539.35	100	21570.00
	WEEDING & SOIL WORKING (To be carried out after replacement of casualties are over)					
02.04.01	a) 1st circular weeding to a radius of 0.50 m around the plant after 30 days of planting (i.e. July - Aug)	Nos	400	103.79	100	415.00
02.04.02	b) 2nd circular weeding to a radius of 0.50 m around the plant during Sept. - Oct.	Nos	400	103.79	100	415.00
	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)					
02.04.04	ii) For hard gravelly soil	Nos	400	545.08	100	2180.00
	Cutting of coppice growth flush to the ground over the entire area including retaining useful species just after planting and placing the cut material in between the planting rows (to be undertaken during July - August)					
02.04.06	High rainfall zone < 800 mm	Ha	1	1215.43	1	1215.00
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 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	Ha	1	750	1	750.00
Unit cost as per FSR 2016 - 17 :						26545.00
Add 10% escalation on FSR 2016 - 17 (Unit cost for 2017 - 18):						29200.00
Add 10% escalation on FSR 2017 - 18 (Unit cost for 2018 - 19):						32120.00
Add 10% escalation on FSR 2018 - 19 (Unit cost for 2019 - 20):						35332.00
Add 10% escalation on FSR 2019 - 20 (Unit cost for 2020 - 21):						38865.00
Add 10% escalation on FSR 2020 - 21 (Unit cost for 2021 - 22):						42752.00
Add 10% escalation on FSR 2021 - 22 (Unit cost for 2022 - 23):						47027.00
Add 10% escalation on FSR 2022 - 23 (Unit cost for 2023 - 24):						51730.00
Add 10% escalation on FSR 2023 - 24 (Unit cost for 2024 - 25):						56903.00


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ANNEXURE - D

Unit Cost for 8th year maintenance of Misc., Plantations 5m X 5m. (ANR) 400 plants / Ha

Unit Rate per Ha						
Code	Item of work	Units	Qty	Rate	Per	Amount
1	2	3	4	5	6	7
	Watering - To be done through tractor fitted with water tanker					
02.18.01	Watering the plants - Main Rows (10 Waterings from April - March)	Nos / Watering	400	539.35	100	21570.00
	WEEDING & SOIL WORKING (To be carried out after replacement of casualties are over)					
02.04.01	a) 1st circular weeding to a radius of 0.50 m around the plant after 30 days of planting (i.e. July - Aug)	Nos	400	103.79	100	415.00
02.04.02	b) 2nd circular weeding to a radius of 0.50 m around the plant during Sept. - Oct.	Nos	400	103.79	100	415.00
	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)					
02.04.04	ii) For hard gravelly soil	Nos	400	545.08	100	2180.00
	Cutting of coppice growth flush to the ground over the entire area including retaining useful species just after planting and placing the cut material in between the planting rows (to be undertaken during July - August)					
02.04.06	High rainfall zone < 800 mm	Ha	1	1215.43	1	1215.00
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 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	Ha	1	750	1	750.00
Unit cost as per FSR 2016 - 17 :						26545.00
Add 10% escalation on FSR 2016 - 17 (Unit cost for 2017 - 18):						29200.00
Add 10% escalation on FSR 2017 - 18 (Unit cost for 2018 - 19):						32120.00
Add 10% escalation on FSR 2018 - 19 (Unit cost for 2019 - 20):						35332.00
Add 10% escalation on FSR 2019 - 20 (Unit cost for 2020 - 21):						38865.00
Add 10% escalation on FSR 2020 - 21 (Unit cost for 2021 - 22):						42752.00
Add 10% escalation on FSR 2021 - 22 (Unit cost for 2022 - 23):						47027.00
Add 10% escalation on FSR 2022 - 23 (Unit cost for 2023 - 24):						51730.00
Add 10% escalation on FSR 2023 - 24 (Unit cost for 2024 - 25):						56903.00
Add 10% escalation on FSR 2024 - 25 (Unit cost for 2025 - 26):						62593.00


 Forest Divisional Officer,
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