Proposed estimate for Raising of 1Ha Plantation (SMM Method) in Degraded Forest area of Amrabad RF (Compt.No. 67) of Bommanpally Beat of Rangapur Section of Achampet Range during 2019-20

Espacement: 3 m x 3 m = 1111 plants

S. N	FSR.No 2019-20	Description of work	Qty	Rate	Per	Amount
1	2	3	4	5	6	7
1	02.08.00	ADVANCE OPERATION (PRE-PLANTING OPERATION) - All advance-operation works of plantations to be raised shall be completed before March. Perambulation of site, preparing site inspection report including type of vegetation and density, approval of site suitabilty and the category of jungle growth clearance, taking the images of the existing vegetation, preparation of treatment plan shall be prepared and approved in writing by DFO before taking up advance operation.				
2	02.08.01	Survey with hand-held GPS (staff to carry out) and demarcation - one manday is allowed for assistance. The surveyed sketch with exact effective area statement will be uploaded in MIS platform latest by	1	356.65	Plantation	357
3	02.08.02	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. All the above operations should be completed before December.  (b) Very Light Jungle Growth (>10% and upto 20% ground area covered with Jungle growth)	1	2979.55	На.	2980
4	02.08.03	Uprootal of Stumps (excluding unsuitable patches) to a minimum depth of 45 cm with heavy machinery fitted with 0.90 cum and above capacity bucket, filling the pits caused by uprootal, and levelling. For 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 process.				
5	02.08.04	(b) Very Light Jungle growth (>10% and up to 20% ground area covered with Jungle growth)  Collection and Removal of Uprooted Stumps of all sizes, other debris etc., to outside the plantation site.	1	10034.10	per ha	10034

S. N	FSR.No 2019-20	Description of work	Qty	Rate	Per	Amount
1	2	3	4	5	6	7
		(b) Very Light Jungle growth (>10% and up to 20% ground area covered with Jungle growth)	1	8759.80	per ha	8760
8	02.09.03	Deep Ploughing the effective (excluding unsuitable patches) plantation area across the slope to a depth of 30 cm with Heavy-duty Tractor of 55 HP and above with Firm Mould Board (FMB) plough. FOR TILLED AREA ONLY	1	3050.00	per ha	3050
9	02.09.04	Allignment & Stacking including demarcation of base line				
		(c) 3X3 m espacement = 1111 planting points	1111	3050.00	100 nos	33886
10	02.09.05	ii) Cost of preparation of stakes (2.0 m length) and transportation to site (subject to condition that the seedling height is 1.5m to 2.0m height)	1111	860.00	100 nos	9555
11	02.09.06	Digging of Pits in Ploughed Areas in June - July by adopting 50% of original rate of digging of pits of ordinary soil	1111	2.25	per pit	2500
		a) 30 cm3 pits				
12	02.09.07	(a) Transportation of Planting Stock (including loading and unloading) up to a distance of 5 km				
		(c) 20 X 30 cm (8"X12") bag plants	1111	196.60	100 nos	2184
13	02.09.08	(b) Transportation of Planting Stock (including loading and unloading) more than 5 km distance and upto 25 km distance  (c) 20 X 30 cm (8"X12") bag plants	1111	7.65	100 nos	1700
14	02.09.10	Internal transportation to planting points on head loads (c) 20 X 30 cm (8"X12") bag plants	1111	135.25	100 nos	1503
		Fortification of seedling with insecticide and		+		
15	02.09.11	treating pits with SSP				
		(a) 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 plantation site before planting	1111	37.40	100 nos	416
16	02.09.12	Planting in various size pits	1111	133.90	100 nos	1488
17	02.09.15	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.	222	1.13	per pit	250
18	02.09.16	Cost of DAP @ 25 gm / planting point			As per actua	1200

S. N	FSR.No 2019-20	Description of work	Qty	Rate	Per	Amount
1	2	3	4	5	6	7
19	02.09.17	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.	1111	37.40	100 nos	416
20	02.09.18	Weeding and saucer formation to a radius of 0.5 mts around the plant immediately after planting (i.e) during June.	1111	119.00	100 Nos	1322
21	02.09.19	Circular weeding cum Deep Soil working to a redius of 0.5m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (During Nov-Dec)	1111	625.00	100 Nos	6944
22	02.09.20	Inter-ploughing (during November) the effective (excluding unsuitable patches) plantation area across the slope to a depth of 30 cm with Heavyduty Tractor of 55  HP and above with Firm Mould Board (FMB) plough.				
		a) ordinary soil	1	2321.40	per ha	2321
23	02.09.21	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height during October	1111	118.30	100 Nos	1314
		CCT for boundary protection	700	42.40	Rmt	103880
24	02.09.24	Contingencies provision for Raising of plantaitons:		as per actual		3943
		Total				200000
		Unit cost 1 Ha				2.00000

Enhance 10% for 2020-21

2.20000

## **ABSTRACT**

	Rs. In lakhs
Raising of Ha Unit cost 2020-21	2.20000
1st year Maint., of 1 Ha Unit cost 2021-22 - 10% Enhance	0.13200
2nd year Maint., of 1 Ha Unit cost 2022-23 - 20% Enhance	0.10800
3rd year Maint., of 1 Ha Unit cost 2023-24 - 30% Enhance	0.11700
4th year Maint., of 1 Ha Unit cost 2024-25 - 40% Enhance	0.12600
5th year Maint., of 1 Ha Unit cost 2025-26 - 50% Enhance	0.13500
6th year Maint., of 1 Ha Unit cost 2026-27 - 60% Enhance	0.14400
7th year Maint., of 1 Ha Unit cost 2027-28 - 70% Enhance	0.15300
8th year Maint., of 1 Ha Unit cost 2028-29 - 80% Enhance	0.16200
9th year Maint., of 1 Ha Unit cost 2029-30 - 90% Enhance	0.17100
10th year Maint., of 1 Ha Unit cost 2030-31 - 70% Enhance	0.18000
Total per 1 Ha	3.62801

Proposed estimate for 1st year maintenance of 1 Ha Plantation (SMM Method) in Degraded Forest area of Amrabad RF (Compt.No. 67) of Bommanpally Beat of Rangapur Section of Achampet Range during 2019-20

Espacement: 3 m x 3 m = 1111 plants

S.	FSR.No	Description of work	Qty	Rate	Per	Amount
N 1	2019-20	3	4	5	6	7
-	02.10.00	1st YEAR MAINTENANCE	-	3	- 0	•
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 of July.	278	4.22	each	1172
2	02.10.02	Weeding and saucer formation to a radius of 0.5 mts around the plant immediately after planting (i.e) during June.	1111	119.00	100 Nos	1322
3	02.10.03	Circular weeding to a radius of 0.50 m around the plant (i.e. Aug - Sept)	1111	119.05	100 Nos	1323
4	02.10.04	Uprootal of Mahaveera (Hyptis suaveolens) weed with prior written approval of Circle Head and taking photograph before and after uprootal. The weed removal shall be completed before August-end (before flowering) at any cost before inter-ploughing.	1	3477.05	per ha	3477
5	02.10.05	Inter-ploughing (during September) the effective plantation area (excluding unsuitable patches) across the slope to a depth of 30 cm with Heavy-duty Tractor of 55 HP and above with Firm Mould Board (FMB) plough. This operation shall be carried out after Mahaveera uprootal is completed. Inter-ploughing should not be used as a means of Mahaveera uprootal.	1	2321.40	per ha	2321
6	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)	1111	118.35	100 Nos	1315
7	02.10.08	Contingencies provision for maintainence of plantaitons:				
		i) Maintenance of Plantation Boards and Corner Stones		As per actu	ual	1070
		TOTAL				12000
		Unit cost for 1 Ha @ 10% henance 2021-2022				1200
		Grand TOTAL				13200 0.13200

Proposed estimate for 2nd year maintenance of 1 Ha Plantation (SMM Method) in Degraded Forest area of Amrabad RF (Compt.No. 67) of Bommanpally Beat of Rangapur Section of Achampet Range during 2019-20

Espacement: 3 m x 3 m = 1111 plants

S. N	FSR.No 2019-20	Description of work	Qty	Rate	Per	Amount
1	2	3	4	5	6	7
	02.11.02	2nd YEAR MAINTENANCE				
1	02.11.02	Circular weeding cum Deep soil working to a radius of 0.5 m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (July-Aug)	1111	625.00	100 Nos	6944
2	02.11.03	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be carried out during July-Aug)	1111	118.35	100 Nos	1315
3	02.11.05	Contingencies provision for maintainence of plantaitons:				
		i) Maintenance of Plantation Boards and Corner Stones		As per act	tual	742
		TOTAL				9000
		Unit cost for 1 Ha @ 20% henance 2022-22				1800
		Grand TOTAL				10800
					OR	0.10800

Proposed estimate for 3rd year maintenance of 1 Ha Plantation (SMM Method) in Degraded Forest area of Amrabad RF (Compt.No. 67) of Bommanpally Beat of Rangapur Section of Achampet Range during 2019-20

Espacement: 3 m x 3 m = 1111 plants

S. N	FSR.No 2019-20	Description of work	Qty	Rate	Per	Amount
1	2	3	4	5	6	7
	02.11.02	3rd YEAR MAINTENANCE				
1	02.11.02	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)	1111	625.00	100 Nos	6944
2	02.11.03	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be carried out during July-Aug)	1111	118.35	100 Nos	1315
3	02.11.05	Contingencies provision for maintainence of plantaitons:				
		i) Maintenance of Plantation Boards and Corner Stones		As per act	tual	742
		TOTAL				9000
		Unit cost for 1 Ha @ 30% henance 2022-23				2700
		Grand TOTAL				11700
					OR	0.11700

Proposed estimate for 4th year maintenance of 1 Ha Plantation (SMM Method) in Degraded Forest area of Amrabad RF (Compt.No. 67) of Bommanpally Beat of Rangapur Section of Achampet Range during 2019-20

Espacement: 3 m x 3 m = 1111 plants

S. N	FSR.No 2019-20	Description of work	Qty	Rate	Per	Amount
1	2	3	4	5	6	7
	02.11.02	4th YEAR MAINTENANCE				
1	02.11.02	Circular weeding cum Deep soil working to a radius of 0.5 m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (July-Aug)	1111	625.00	100 Nos	6944
2	02.11.03	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be carried out during July-Aug)	1111	118.35	100 Nos	1315
3	02.11.05	Contingencies provision for maintainence of plantaitons:				
		i) Maintenance of Plantation Boards and Corner Stones	3	As per acti	ual	742
		TOTAL			4	9000
		Unit cost for 1 Ha @ 40% henance 2023-24				3600
		Grand TOTAL				12600
					OR	0.12600

-20

Proposed estimate for 5th year maintenance of 1 Ha Plantation (SMM Method) in Degraded Forest area of Amrabad RF (Compt.No. 67) of Bommanpally Beat of Rangapur Section of Achampet Range during 2019-20

Espacement: 3 m x 3 m = 1111 plants

FSR.No 2019-20	Description of work	Qty	Rate	Per	Amount
2	3	4	5	6	7
02.11.02	5th YEAR MAINTENANCE				
02.11.02	Circular weeding cum Deep soil working to a radius of 0.5 m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (July-Aug)	1111	625.00	100 Nos	6944
02.11.03	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be carried out during July-Aug)	1111	118.35	100 Nos	1315
02.11.05	Contingencies provision for maintainence of plantaitons:				
	i) Maintenance of Plantation Boards and Corner Stones		As per act	ual	742
	TOTAL				9000
	Unit cost for 1 Ha @ 50% henance 2024-25				4500
	Grand TOTAL				13500
	02.11.02 02.11.02	2 02.11.02  5th YEAR MAINTENANCE  Circular weeding cum Deep soil working to a radius of 0.5 m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (July-Aug)  Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be carried out during July-Aug)  Contingencies provision for maintainence of plantaitons:  i) Maintenance of Plantation Boards and Corner Stones  TOTAL  Unit cost for 1 Ha @ 50% henance 2024-25	2 02.11.02 5th YEAR MAINTENANCE Circular weeding cum Deep soil working to a radius of 0.5 m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (July-Aug)  Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be carried out during July-Aug)  1111  02.11.05 Contingencies provision for maintainence of plantaitons: i) Maintenance of Plantation Boards and Corner Stones  TOTAL  Unit cost for 1 Ha @ 50% henance 2024-25	2 3 4 5  02.11.02 5th YEAR MAINTENANCE  Circular weeding cum Deep soil working to a radius of 0.5 m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (July-Aug)  Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be carried out during July-Aug)  1111 118.35  02.11.05 Contingencies provision for maintainence of plantaitons:  i) Maintenance of Plantation Boards and Corner Stones  TOTAL  Unit cost for 1 Ha @ 50% henance 2024-25	2 02.11.02 Sth YEAR MAINTENANCE Circular weeding cum Deep soil working to a radius of 0.5 m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (July-Aug)  Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be carried out during July-Aug)  1111 118.35 100 Nos  Contingencies provision for maintainence of plantaitons:  i) Maintenance of Plantation Boards and Corner Stones  TOTAL  Unit cost for 1 Ha @ 50% henance 2024-25

Proposed estimate for 6th year maintenance of 1 Ha Plantation (SMM Method) in Degraded Forest area of Amrabad RF (Compt.No. 67) of Bommanpally Beat of Rangapur Section of Achampet Range during 2019-20

Espacement : 3 m x 3 m = 1111 plants

S. N	FSR.No 2019-20	Description of work	Qty	Rate	Per	Amount
1	2	3	4	5	6	7
	02.11.02	6th YEAR MAINTENANCE				
1	02.11.02	Circular weeding cum Deep soil working to a radius of 0.5 m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (July-Aug)		625.00	100 Nos	6944
2	02.11.03	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be carried out during July-Aug)		118.35	100 Nos	1315
3	02.11.05	Contingencies provision for maintainence of plantaitons:				
		i) Maintenance of Plantation Boards and Corner Stones		As per acti	ual	742
		TOTAL				9000
		Unit cost for 1 Ha @ 60% henance 2025-26				5400
		Grand TOTAL				14400

OR 0.14400

Proposed estimate for 7th year maintenance of 1 Ha Plantation (SMM Method) in Degraded Forest area of Amrabad RF (Compt.No. 67) of Bommanpally Beat of Rangapur Section of Achampet Range during 2019-20

Espacement: 3 m x 3 m = 1111 plants

S. N	FSR.No 2019-20	Description of work	Qty	Rate	Per	Amount
1	2	3	4	5	6	7
	02.11.02	7th YEAR MAINTENANCE				
1	02.11.02	Circular weeding cum Deep soil working to a radius of 0.5 m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (July-Aug)	1111	625.00	100 Nos	6944
2	02.11.03	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be carried out during July-Aug)	1111	118.35	100 Nos	1315
3	02.11.05	Contingencies provision for maintainence of plantaitons:				
		i) Maintenance of Plantation Boards and Corner Stones		As per acti	ual	742
		TOTAL				9000
		Unit cost for 1 Ha @ 70% henance 2026-27				6300
		Grand TOTAL				15300
					OR	0.15300

Proposed estimate for 8th year maintenance of 1 Ha Plantation (SMM Method) in Degraded Forest area of Amrabad RF (Compt.No. 67) of Bommanpally Beat of Rangapur Section of Achampet Range during 2019-20

Espacement : 3 m x 3 m = 1111 plants

S. N	FSR.No 2019-20	Description of work	Qty	Rate	Per	Amount
1	2	3	4	5	6	7
	02.11.02	8th YEAR MAINTENANCE				
1	02.11.02	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)	1111	625.00	100 Nos	6944
2	02.11.03	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be carried out during July-Aug)	1111	118.35	100 Nos	1315
3	02.11.05	Contingencies provision for maintainence of plantaitons:				
		i) Maintenance of Plantation Boards and Corner Stones		As per actu	ual	742
		TOTAL				9000
		Unit cost for 1 Ha @ 80% henance 2027-28				7200
		Grand TOTAL		7.		16200
					OR	0.16200

Proposed estimate for 9th year maintenance of 1 Ha Plantation (SMM Method) in Degraded Forest area of Amrabad RF (Compt.No. 67) of Bommanpally Beat of Rangapur Section of Achampet Range during 2019-20

Espacement: 3 m x 3 m = 1111 plants

S. N	FSR.No 2019-20	Description of work		Rate	Per	Amount	
1	2	3	4	5	6	7	
	02.11.02	9th YEAR MAINTENANCE					
1	02.11.02	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)	1111	625.00	100 Nos	6944	
2	02.11.03	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be carried out during July-Aug)	1111	118.35	100 Nos	1315	
3	02.11.05	Contingencies provision for maintainence of plantaitons:					
		i) Maintenance of Plantation Boards and Corner Stones		742			
	TOTAL						
		Unit cost for 1 Ha @ 90% henance 2029-30				8100	
Grand TOTAL							
OR							

Proposed estimate for 10th year maintenance of 1 Ha Plantation (SMM Method) in Degraded Forest area of Amrabad RF (Compt.No. 67) of Bommanpally Beat of Rangapur Section of Achampet Range during 2019-20

Espacement : 3 m x 3 m = 1111 plants

S. N	FSR.No 2019-20	Description of work		Rate	Per	Amount 7	
1	2	3		5	6		
	02.11.02	10th YEAR MAINTENANCE					
1	02.11.02	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)  1111 625.00 100 N					
2	02.11.03	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be carried out during July-Aug)	100 Nos	1315			
3	02.11.05	Contingencies provision for maintainence of plantaitons:					
		i) Maintenance of Plantation Boards and Corner Stones		742			
$\neg$	TOTAL						
		Unit cost for 1 Ha @ 100% henance 2030-31				9000	
	Grand TOTAL						
	OR						

## UNIT COST FOR DIGGING OF CATTLE PROOF TRENCH FOR THE YEAR 2019-20

\$1.No	Description of work	L in Rmt	Top Width in Meters 4	Bottom width in B2 in M 5	Debth in Meters  6  2.00	Quantity 7		Rate 8	Per 9	Amount 10
	2									
	Digging of Continous Contour Trench along the boundary of Reserve Forest Block (Earth work Excavaton with Machine) As per tender rate	700				2450	cum	42.40	cum	103880
	TOTAL									103880