

**Indicative cost Estimation for Raising and Maintenance of Compensatory Afforestation as part of compliance of conditions of Stage-I approval
(Based on KFD CSSR for 2020-21)**

Extent : 13 Ha

ABSTRACT (Amount in Rs.; Cost per hectares)

ABSTRACT (Amount in Rs.; Cost per hectares)														
Particulars		Advance work Year	Raising Year	Maintenance										Grand Total
				Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
A:	Advance works													
1	Advance works (including raising of Pbs of 8"x12"size	1,739,400												1,739,400
B:	Raising of Plantation													-
1	Raising of Plantation in advance worked area		959,400											959,400
2	Maintenance of seedlings before planting (8"x12" Size Pbs 1200 pbs @ Rs.6.94 each)		108,264											108,264
3	Raising nursery for replacement of casualties next year 10% (8"x12" Size 100 Pbs @ Rs.22.83 each)		29,679											29,679
C:	Maintenance of Plantation (with Casualty Replacement, Cultural operations and manuring)													-
1	Maintenance of the Plantation during 1st year			516,100										516,100
2	Maintenance of Seedlings raised for casualty replacements (8"x12" size 100 Pbs @ Rs.6.94 = 694.00)			9,022										9,022
D:	Maintenance of plantation (with cultural operations & manuring)													-
1	Maintenance of Plantation during 2nd year				430,300									430,300
E:	Maintenance of Plantation (with cultural operations but without manuring)													-
1	Maintenance of Plantation during 3rd year					356,200								356,200
2	Maintenance of Plantation during 4th year						356,200							356,200
3	Maintenance of Plantation during 5th year							356,200						356,200
F:	Maintenance of Plantation (without cultural operations)													-
1	Maintenance of Plantation during 6th year								105,300					105,300
2	Maintenance of Plantation during 7th year									105,300				105,300
3	Maintenance of Plantation during 8th year										105,300			105,300
4	Maintenance of Plantation during 9th year											105,300		105,300
5	Maintenance of Plantation during 10th year												105,300	105,300
	Total : (A to F)	1,739,400	1,097,343	525,122	430,300	356,200	356,200	356,200	105,300	105,300	105,300	105,300	105,300	5,387,265
I	Total (A to F) Amount after takling 10% escalation cost for each year (Compounding factor at 10%)	1,913,340	1,327,781	698,932	630,006	573,664	631,033	694,135	225,719	248,287	273,117	300,430	330,473	7,846,917
II	Soil and Moisture conservation measures (15% on total plantation cost)	1,177,046												1,177,046

III	Resurveying redemarcation and other works for Section 4 notification (LS)	135,200																	135,200
IV	Chainlink fencing (Considering 200 meter average periphery)(33% escalation over rates adopted for 2019-20)	10,562,500																	10,562,500
	Total Advance work Year to 10th Year of Maintenance (I+II+III)	13,788,086	1,327,781	698,932	630,006	573,664	631,033	694,135	225,719	248,287	273,117	300,430	330,473	19,721,663	986,083	254			
	Administration & Supervision Charges @ 5% of above																		
	Miscellaneous for rounding off																		
	GRAND TOTAL	20,708,000																	

Deputy Conservator of Forests,
Chhataprabha Division, Gokak.

9

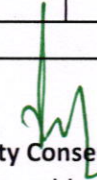
DATA SHEETS FOR RAISING AND MAINTAINING CA PLANTATION

A : DATA SHEET FOR ADVANCE WORKS

(500 Trenches of size 4x x 0.5m x 0.5m per hectare; 1000 Seedlings @ 2 plants per Trench)

Extent/ Ha.

Sl. No.	SSR Item No.	Particulars of works	Quantity		Rate (Rs.) Per UNIT		Amount (Rs.)
1	100(b)	Survey & Demarcation of Planting Areas : Survey and demarcation of plantation boundary lines after clearing the rank growth to a width of 2 m. in the areas with sparse under growth	200	Mtrs	1258.73	Per Km.	251.75
2	28(a)	Aligning in the planting area along the contours & marking for trenches	500	Trs	1463.70	Per 1000 trs.	731.85
3	28(b)(II)	Excavation of contour trenches of size 4 m x 0.5 m x 0.5 m with uncut portion of 25 cm. In between the adjacent trenches, and depositing the 1/3rd top soil on upper slopes and remaining 2/3rd excavated earth on lower slopes of the trenches in: (b)(ii) Hasrd soil.	500	M3	210.76	Per Cum	105,380.00
4	Sub Estimate	Raising of 8"x12" size PB Seedlings including 20% casualty replacement	1200	Seedlings	22.83	each	27,396.00
5		Miscellaneous and rounding off					40.40
TOTAL							133,800.00


Deputy Conservator of Forests,
Ghataprabha Division, Gokak.

DATA SHEET FOR RAISING OF 8"X12" SIZED WOVEN BAG SEEDLINGS

Seedling/1000							
Sl. No.	SR Item No.	Particulars of works	Quantity		Rate (Rs.) Per UNIT		Amount (Rs.)
1	By Tender	Cost of HDPE Woven sack bags including GST	1000	Bags	4.50	1	4,500.00
2	14(a)	Purchase of 4.20 cum. of ingredients i.e. farmyard manure, sand and red earth in 1:1:2 proportion	1000	PBs	3273.36	1000	3,273.36
3	14(b)	Mixing the ingredients, filling the polythene bags and arranging in rows after scraping the earth	1000	PBs	3103.13	1000	3,103.13
4	LS/RQ	Cost of quality seeds/Quality Planting material	500	PBs	327.18	1000	163.59
5	14(d)	Pricking out the seedlings from seed beds & transplanting in the polythene bags	500	PBs	319.03	1000	159.52
6	Sub Est.	Raising of 4"x6" Seedlings (Transplanting seedlings)	500	PBs	3.11	1	1,555.00
7	14(e)	Transplanting of 4" x 6" or 5" x 8" size bagged seedlings into 8" x 12" size bags after removal of the seedlings along with the trimmed ball of earth	500	PBs	319.03	1000	159.52
8	14(f)	Watering to the polythene-bagged seedlings twice a day: from 01-09-2019 to 31-03-2020 for 212 days (Limited to 183 days)	1000 183 Days	PBs	44.04	1000	8,059.32
9	14(g)	Weeding the polythene-bagged seedlings	1000 4 Times	PBs	134.70	1000	538.80
10	14(h)	Shifting & grading the polythene-bagged seedlings	1000 2 Times	PBs	382.91	1000	765.82
11	LS/RQ	Cost of application of pesticides/fungicides biofertilisers, diesel bill, repairs to pumpset, electricity bills, nursery dev.charges.	1000	PBs	546.95	1000	546.95
12	LS/RQ	Miscellaneous, UNFORESEEN & rounding off	LS				5.00
Sub Total (I)							22,830.00

DATA SHEET FOR MAINTENANCE OF 8"X12" SIZED WOVEN BAG SEEDLINGS

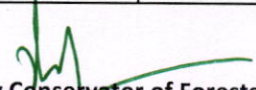
Seedling/1000							
Sl. No.	SSR Item No.	Particulars of works	Quantity		Rate (Rs.) Per UNIT		Amount (Rs.)
1	14(f)	Watering to the polythene-bagged seedlings twice a day: from 01-09-2019 to 31-03-2020 for 212 days (Limited to 183 days)	1000 120	PBs Days	44.04	1000	5,284.80
2	14(g)	Weeding the polythene-bagged seedlings	1000 2	PBs Times	134.70	1000	269.40
3	14(h)	Shifting & grading the polythene-bagged seedlings	1000 3	PBs Times	382.91	1000	1,148.73
4	LS/RQ	Electricity charges, diesel charges, maintenance charges of nursery, etc. and Misc.					237.07
Sub Total (II)							6,940.00
Total (I + II)							29,770.00


Deputy Conservator of Forests,
Ghataprabha Division, Gokak.

B : DATA SHEETS FOR RAISING OF CA PLANTATION
(500 Trenches; 1000 Seedlings per hectare)

Sl. No.	SSR Item No.	Particulars of works	Quantity		Rate (Rs.) Per UNIT		Extent/ Ha.
							Amount (Rs.)
1	28(c)	Refilling of trenches, cutting the edges of the excavated trench on the lower side & refilling the trench with 75% of the excavated earth duly breaking the clods & formation of uniformly sloping continuous mound all along the lower side of the trench.	500	Cum	21.07	1	10,535.00
2	28(d)	Sowing of seeds on trench mound of 4 Meter in length.	500	Trs	5.02	1	2,510.00
3	23(d)	Loading & unloading of Polythene Bagged Seedlings: Loading of polythene-bagged seedlings into the vehicle at the nursery site and unloading at the site nearest to the planting site (including 10% for casualty replacement. Seedlings raised in 8"x12" size bags	1100	Pbs	2342.01	1000	2,576.21
4	24(d)(iv)	Transportation: Transportation of polythene-bagged seedlings in hired truck from the nursery site to planting site (Distance from 31 to 40 Km) Seedlings raised in 8"x12" size bags	1100	Pbs	3742.82	1000	4,117.10
5	25(d)	Conveyance: Conveyance of polythene-bagged seedlings on head load from the dumping site to planting location near each trench / pit (distance up to 3 Km.) Seedlings raised in 8"x12" size bags	1100	Pbs	4683.99	1000	5,152.39
6	26 (c)	Watering by dipping: Watering polythene bagged seedlings at planting site by dipping in water, including carrying of water Seedlings raised in 8"x12" size bags	1100	Pbs	995.33	1000	1,094.86
7	27(d)	Planting: Planting of P.B. Seedlings after tearing with blade & removing the polythene bags in trenches / pits including scooping the soil to required depth, pressing the soil gently around the seedlings after planting. Seedlings raised in 8"x12" size bags	1000	Pbs	4467.35	1000	4,467.35
8	34(d)	Collection of Agave suckers of one foot and above height from field areas, and transportation to the plantation area, including loading and unloading charges, for planting in the plantation - distance above 8 Km	1500	Nos	2404.01	1000	3,606.02
9	34(e)	Conveyance of Agave suckers from plantation boundary to planting site on head load	1500	Nos	585.50	1000	878.25
10	34(f)	Digging the earth by pickaxe to the required depth, planting of Agave seedlings in the plantation and pressing the soil around the seedling.	1500	Nos	2049.22	1000	3,073.83
11	28(e)	Weeding inside the trenches and on mounds of 4 Meter length trench	500	Trs	8.71	1	4,355.00

Sl. No.	SSR Item No.	Particulars of works	Quantity		Rate (Rs.) Per UNIT		Amount (Rs.)
12	28(g)	Soil working the trenches by digging with pickaxe to a depth of 15 cm. and to a width of 60 cm. starting from the lower edge of the trench towards the other side of the trench of 4 m length so as to loosen the soil uniformly including scraping around the plant before digging and reformation of damaged mounds during rains. (Trench mound should not be disturbed while soil working)	500	Trs	16.95	1	8,475.00
13	Market Rate	Cost of Chemical Fertilizer @ 25 g/plant	1000	Pits or 25 Kg.	50.00	Kg	1,250.00
14	38(e)	Application of chemical fertilizer around the plants about 15 cm. away in a furrow duly covering with soil (excluding the cost of fertilizer)	1000	Plants	468.33	1000	468.33
15	28(f)	Scraping of grass and other growth around the trenches & mounds to a width of 60 cm on each side of trenches (4 meter length trench)	500	Trs	9.96	1	4,980.00
16	82	Fire Protection work in Plantations: New Fire Lines: Cutting of all existing weed growth to a width of 3 m. heaping, burning and re-burning in younger Pltn.	0.4	Km/per ha.	2459.08	1	983.63
17		Watch and ward @ one Maz. For 10 ha. (i.e. 305 days @ 495.49 per day = 1,51,124.45)	1	ha	151,124.45	10	15,112.45
18		Plantation Board, Miscellaneous and rounding off.	LS				164.58
TOTAL							73,800.00


 Deputy Conservator of Forests,
 Ghataprabha Division, Gokak.

C : DATA SHEETS FOR 1st YEAR MAINTENANCE OF CA PLANTATION

Extent/ Ha..

Sl. No.	Item No.	Particulars of works	Quantity		Rate (Rs.) Per UNIT		Amount (Rs.)
1	40(a)	Re-opening of pits of size 0.30 m x 0.30 m x 0.30 m for replacement of casualties	2.7	M3	70.27	1	189.73
2	23(d)	Loading & unloading of Polythene Bagged Seedlings: Loading of polythene-bagged seedlings into the vehicle at the nursery site and unloading at the site nearest to the planting site Seedlings raised in 8"x12" size bags	100	Pbs	2342.01	1000	234.20
3	24(d)(iv)	Transportation: Transportation of polythene-bagged seedlings in hired truck from the nursery site to planting site (Distance from 31 to 40 Km) Seedlings raised in 8"x12" size bags	100	Pbs	3742.82	1000	374.28
4	25(d)	Conveyance: Conveyance of polythene-bagged seedlings on head load from the dumping site to planting location near each trench / pit (distance up to 3 Km.) Seedlings raised in 8"x12" size bags	100	Pbs	4683.99	1000	468.40
5	26 (c)	Watering by dipping: Watering polythene bagged seedlings at planting site by dipping in water, including carrying of water Seedlings raised in 8"x12" size bags	100	Pbs	995.33	1000	99.53
6	27(d)	Planting: Planting of P.B. Seedlings after tearing with blade & removing the polythene bags in trenches / pits including scooping the soil to required depth, pressing the soil gently around the seedlings after planting. Seedlings raised in 8"x12" size bags	100	Pbs	4467.35	1000	446.74
7	Market Rate	Cost of Chemical Fertilizer @ 25 g/plant	25	Kg	50.00	1	1,250.00
8	38(e)	Application of chemical fertilizer around the plants about 15 cm. away in a furrow duly covering with soil (excluding the cost of fertilizer)	1000	Plants	468.33	1000	468.33
9	39(b)	Weeding inside the trenches and on mounds of 4 meter length	500	Trs	8.71	1	4,355.00
10	39(d)	Soil working the trenches by digging with pickaxe to a depth of 15 cm. and to a width of 60 cm. starting from the lower edge of the trench towards the other side of trench of 4 m. length so as to loosen the soil uniformly including scraping around the plants before digging & reformation of damaged mounds during rains	500	Trs	11.73	1	5,865.00
11	39 (c)	Scraping of grass and other growth around the trench of 4 m length to a width of 60 cm. on each side of the trenches	500	Trs	8.71	1	4,355.00
12	40(g)	Karada and other pernicious grass cutting flush to the ground in highly problematic plantation areas where the grass is suppressing the plants	0.5	ha	5855.06	1	2,927.53
13	83(a)	Maintenance of Fire Line along Roadside, Plantation, Block and Compartment Boundaries: a) Cleaning existing fire lines and fire tracing 3 M wide.	0.33	Km	1463.70	1	483.02

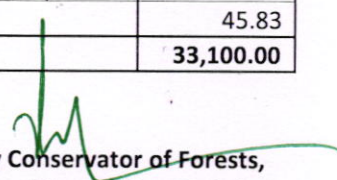
Sl. No.	SSR Item No.	Particulars of works	Quantity		Rate (Rs.) Per UNIT		Amount (Rs.)	
14	83(b)	Maintenance of Fire Line along Roadside, Plantation, Block and Compartment Boundaries: b) Re-sweeping and re-burning the above fire line.	0.33	Km	204.90	1	67.62	
15		Watch and ward @ one Maz. For 10 ha. (i.e. 365 days @ 495.49 per day = 180853.00)	1	ha	180853.00	10	18,085.30	
16		Miscellaneous and rounding off.	LS					30.32
TOTAL							39,700.00	


 Deputy Conservator of Forests,
 Ghataprabha Division, Gokak.

D : DATA SHEETS FOR 2nd YEAR MAINTENANCE OF CA PLANTATION

Extent/ Ha..

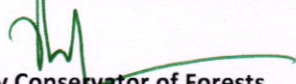
Sl. No.		Item No.	Particulars of works	Quantity		Rate (Rs.) Per UNIT		Amount (Rs.)
1		Market Rate	Cost of Chemical Fertilizer @ 25 g/plant for 1000 Plants	25	Kg	50.00	1	1,250.00
2		38(e)	Application of chemical fertilizer around the plants about 15 cm. away in a furrow duly covering with soil (excluding the cost of fertilizer)	1000	Plants	468.33	1000	468.33
3		42 (c)	Weeding inside the trenches and on mounds of 4 meter length	500	Trs	8.24	1	4,120.00
4		42(d)	Soil working the trenches by digging with pickaxe to a depth of 15 cm. and to a width of 60 cm. starting from the lower edge of the trench towards the other side of trench of 4 m. length so as to loosen the soil uniformly including scraping around the plants before digging & reformation of damaged mounds during rains	500	Trs	9.32	1	4,660.00
5		42(e)	Scraping of grass and other growth around the trench of 4 m length to a width of 60 cm. on each side of the trenches	500	Trs	7.89	1	3,945.00
6		83(a)	Maintenance of Fire Line along Roadside, Plantation, Block and Compartment Boundaries: a) Cleaning existing fire lines and fire tracing 3 M wide.	0.33	Km	1387.65	1	457.92
7		83(b)	Maintenance of Fire Line along Roadside, Plantation, Block and Compartment Boundaries: b) Re-sweeping and re-burning the above fire line.	0.33	Km	204.90	1	67.62
8			Watch and ward @ one Maz. For 10 ha. (i.e. 365 days @ 495.49 per day = 180853.00)	1	ha	180853.00	10	18,085.30
9			Miscellaneous and rounding off.	LS				45.83
TOTAL								33,100.00


Deputy Conservator of Forests,
Ghataprabha Division, Gokak.

E : DATA SHEETS FOR 3rd/4th/5th YEAR MAINTENANCE OF CA PLANTATION

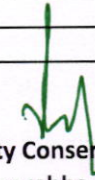
Extent/ Ha..

Sl. No.	Item No.	Particulars of works	Quantity		Rate (Rs.) Per UNIT		Amount (Rs.)
1	42 (c)	Weeding inside the trenches and on mounds of 4 meter length	500	Trs	8.24	1	4,120.00
2	42(d)	Soil working the trenches by digging with pickaxe to a depth of 15 cm. and to a width of 60 cm. starting from the lower edge of the trench towards the other side of trench of 4 m. length so as to loosen the soil uniformly including scraping around the plants before digging & reformation of damaged mounds during rains	500	Trs	9.32	1	4,660.00
3	83(a)	Maintenance of Fire Line along Roadside, Plantation, Block and Compartment Boundaries: a) Cleaning existing fire lines and fire tracing 3 M wide.	0.3	Km	1387.65	1	416.30
4	83(b)	Maintenance of Fire Line along Roadside, Plantation, Block and Compartment Boundaries: b) Re-sweeping and re-burning the above fire line.	0.33	Km	204.90	1	67.62
5		Watch and ward @ one Maz. For 10 ha. (i.e. 365 days @ 495.49 per day = 180853.00)	1	ha	180853.00	10	18,085.30
6		Miscellaneous and rounding off.	LS				50.79
TOTAL							27,400.00


**Deputy Conservator of Forests,
Ghataprabha Division, Gokak.**

F : DATA SHEETS FOR 6th/7th/8th/9th/10th YEAR MAINTENANCE OF CA PLANTATION

Extent/ Ha.							
Sl. No.	S.R. Item No.	Particulars of works	Quantity		Rate (Rs.) Per UNIT		Amount (Rs.)
1	83(a)	Maintenance of Fire Line along Roadside, Plantation, Block and Compartment Boundaries: a) Cleaning existing fire lines and fire tracing 3 M wide.	0.33	Km	1463.70	1	483.02
2	83(b)	Maintenance of Fire Line along Roadside, Plantation, Block and Compartment Boundaries: b) Re-sweeping and re-burning the above fire line.	0.33	Km	204.90	1	67.62
3		Watch and ward @ one Maz. For 10 ha. (i.e. 152 days - April & May, Jan to March @ 495.49 per day = 75314.50)	1	ha	75314.50	10	7,531.45
4		Miscellaneous and rounding off.	LS				17.91
TOTAL							8,100.00


Deputy Conservator of Forests,
Ghataprabha Division, Gokak.