

ANNEXTURE -IV-A

Compensatory Afforestation 86.00 Ha Block Plantation of L.K.H.E.P. A. of APGCL



Area (Ha)	86
Spacing (mXm)	2X2
Number of Saplings/ha	2500
Length of JFence (RM)	4228
Wage rate for the 1 st year (Rs.)	240
Increase in wage for subsequent years by a factor	1.1
Appreciation of material costs by a factor	1.1

Sl No.	Particulars of works	Units	Qty./ ha	Total Qty.	Rate/Unit	Amount (Rs.)
A	ERECTION OF FENCING	@ Rs. 240/ DL				
	(a) Cost of full Chain-linked Goat Proof fencing (4' ht. with 10 Gauge, 3" dia link) to be fitted on Pre-cast RCC pillars* at 1.8 mt. apart including transportation of fencing materials to site for 4228 RM! @ RS. 800 per RM as per estimate	RMs		4228	800	33,82,400
	(b) Wages of DLs for carrying, fitting, fixing etc. of fencing materials @ 20 DLs/ 100 RM	DLs		846	240	2,03,040
	Sub Total					35,85,440
B	INFRASTRUCTURE IN PLANTATION AREA					
	Construction of camp hut (at least one upto 25 ha & thereafter one per every 25 ha) as per estimate	Nos.		4	1,50,000	6,00,000
	Installation of ring/tube well (atleast one upto 10 ha & thereafter two per every 25 ha)	Nos.		7	50,000	3,50,000
	Irrigation facility with Diesel generator and hose pipes for watering the nursery and plantation (during dry spells)	Nos.		2	50,000	1,00,000
	Cost of tools & implements (One unit upto 25 ha & thereafter one unit per every 25 ha)	Nos.		4	10,000	40,000
	Cost of RCC signboard & Gate including fitting and fixing of the same (atleast one upto 25 ha & thereafter one per every 25 ha)	Nos.		4	60,000	2,40,000
	Camp accessories @ Rs. 10,001 per camp	Nos.		4	10,000	40,000
	Construction of Inspection Path 1400 RM @ Rs. 50/- RM	RMs		3526	50	1,76,300
	Construction of Staff quarter. as per estimate (One unit for 10 to 50 ha & thereafter one unit per every 50 ha)	Nos.		2	8,00,000	16,00,000
	Provision of Solar energy for staff quarters including installation	Nos.		2	70,000	1,40,000
	Sub Total					32,86,300
C	ADVANCE WORK	@ Rs. 240/ DL				
	Site selection, surveying, demarcation, jungle cutting, burning etc. 20 DLs/ha	DLs	20	1720	240	4,12,800
	Preparation and acquisition of polypot saplings in the field nursery for planting 2500 Nos. Seedlings/ ha @ Rs. 6/- per polypot	Nos.	2500	2,15,000	6	12,90,000
	Preparation of polypot saplings in the field nursery for vacancy filling					
	a) 25% mortality expected during 1st year (to be planted in the field during the 2nd year) ,i.e., 625 Seedlings/ @ (i.e. Rs 6.5/- per polypot	Nos.	625	53,750	6.5	3,49,375

b) 20% mortality expected during 2nd year (to be planted in the field during the 3rd year), i.e., 500 Seedlings/ ha Rs.7/- per polypot	Nos.	500	43,000	7	3,01,000
c) 15% mortality expected during 3rd year (to be planted in the field during the 4th year), i.e., 375 Seedlings/ ha @ Rs.7.5/- per polypot	Nos.	375	32,250	7.5	2,41,875
d) 10% mortality expected during 4th year (to be planted in the field during the 5th year), i.e., 250 Seedlings/ ha @ Rs.8/- per polypot	Nos.	250	21,500	8	1,72,000
Cost of Bamboo, making of stacking & transportation etc	Nos.	625	53,750	1	53,750
Line alignment, carriage of stacking materials and fixing the stacking @ 5 DLs/ha	DLs	5	430	240	1,03,200
Supervision and Monitoring	L.S				30,000
Sub total					29,54,000
D. CREATION & 1st YEAR MAINTENANCE	@ Rs. 240/ DL				
Soil working, carriage of stumps, polypot seedling and planting at the plantation site including dibbling of seeds wherever necessary to complete raising of plantation with all necessary operation @ 40 DLs/ ha	DLs	40	3440	240	8,25,600
5 weedings, mulching and fire protection works @ 18 DLs/ha/weeding	DLs	90	7740	240	18,57,600
Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha	DLs	5	430	240	1,03,200
Maintenance and protection of field nursery (2 DL 365 Days) and watch and ward for the plantation area (2DL for 365 days).	DLs		1460	240	3,50,400
Maintenance of camp huts, implements, ring/tube- well, upkeepment of plantation, signboard, documentation, upkeepment of records and other misc. work	L.S				20,000
Awareness & Monitoring @, Rs. 800/ha	L.S		86	800	68,800
Sub total					32,25,600
E. 2ND YEAR MAINTENANCE	@ Rs. 264/ DL				
5 weedings, fire protection works @ 15 DLs/ha/weeding	DLs	75	6450	264	17,02,800
25% Vacancy filling by 1 year old seedlings from nursery @ 100DLs/ha	DLs	10	860	264	2,27,040
Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha	DLs	5	430	264	1,13,520
Maintenance and protection of field nursery (2 DL 365 days) and watch and ward for the plantation area (2DL for 365 days).	DLs		1460	264	3,85,440
Maintenance of camp hut, implements, ring/tube- well upkeepment of plantation, signboard, documentation, upkeepment of records etc.	L.S				22,000
Supervision Cost	L.S		1		50,000
Contingency L.S.	L.S				8,000
Sub total					25,08,800

3 RD YEAR MAINTENANCE		@ Rs. 290/ DL				
	4 weedings, fire protection works @15 DLs/ha/weeding	DLs	60	5160	290	14,96,400
	20% Vacancy filling by 2 year old seedlings from nursery @ 8DLs/ha	DLs	8	688	290	1,99,520
	Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day @ 5 DLs/ha	DLs	5	430	290	1,24,700
	Maintenance and protection of field nursery (2 DL 365 days) and watch and ward for the plantation area (2DL for 365 days).	DLs		1460	290	4,23,400
	Maintenance of camp hut, implements, ring/tube- well upkeepment of plantation, signboard, documentation, upkeepment of records	L.S				24,200
	Supervision Cost	L.S		1		50,000
	Contingency @ 15 % over previous year	L.S				9,200
	Sub Total					23,27,420
G. 4 th YEAR MAINTENANCE		@ Rs. 319/ DL				
	4 weedings, fire protection works @15 dls/ha/weeding	DLs	60	5160	319	16,46,040
	15% Vacancy filling by 2 year old seedlings from nursery @6DLs/ha	DLs	6	516	319	1,64,604
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis a. 5 DLs/ha	DLs	5	430	319	1,37,170
	Maintenance and protection of field nursery (2 DL 365 days) and watch and ward for the plantation area (2DL for 365 days).	DLs		1460	319	4,65,740
	Maintenance of camp hut, implements, ring/tube- well upkeepment of plantation, signboard, documentation, upkeepment of records etc.	L.S				26,620
	Supervision Cost	L.S		1		50,000
	Contingency @ 15 % over previous year	L.S				10,580
	Sub Total					25,00,754

H 5 th YEAR MAINTENANCE		@ Rs. 351/ DL				
	Climber cutting, weeding & other silvicultural works and fire protection works (@ 15DLs/ha)	DLs	15	1290	351	4,52,790
	10% Vacancy filling by 2 year old seedlings from nursery @ 4DLs/ha	DLs	4	344	351	1,20,744
	Maintenance & fencing post replacement @ 3% initial cost of material			0.03	33,82,400	1,01,472
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs/ha	DLs	4	344	351	1,20,744
	Watch and ward for the plantation area (3DL for 365 days).	DLs		730	351	2,56,230
	Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S				29,282

	Supervision Cost	L.S	1		50,000
	Contingency @ 15 % over previous year				12,167
	Sub Total				11,43,429
I.	6th Year Maintenance	@ Rs. 386/ DL			
	Climber cutting, other silvicultural works and fire protection works @15 DLs/ha	DLs	15	1290	4,97,940
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @, 4 DLs/ha	DLs	4	344	1,32,784
	Watch and ward for the plantation area(3DL for 365 days).	DLs		730	2,81,780
	Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation &upkeepment of records etc.	L.S			32,210
	Supervision Cost	L.S	1		50,000
	Contingency @ 15 % over previous year	L.S			13,992
	Sub total				10,08,706
J.	7th Year Maintenance	@ Rs. 425/ DL			
	Climber cutting, other silvicultural works and fire protection works @ 12 DLs/ha	DLs	12	1032	4,38,600
	Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs / ha	DLs	5	430	1,82,750
	Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation &upkeepment of records etc.	L.S			35,431
	Supervision Cost	L.S	1		50,000
	Contingency @ 15 % over previous year	L.S			16,091
	Sub-Total				7,22,872

K.	8th Year maintenance	@ Rs. 468/ DL			
	Climber cutting, other silvicultural works and fire protection works @ 8 DLs/ha	DLs	8	688	3,21,984
	Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs	DLs	5	430	2,01,240
	Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation &upkeepment of records etc.	L.S			38,974
	Supervision Cost	L.S	1		50,000
	Contingency @ 15 % over previous year	L.S			18,505
	Sub Total				6,30,703

9 th YEAR MAINTENANCE		@ Rs. 515/ DL			
Climber cutting, other silvicultural works and fire protection works 7 DLs/ha	DLs	7	602	515	3,10,030
Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ ha	DLs	5	430	515	2,21,450
Maintenance of camp hut, implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				42,871
Supervision Cost	LS		1		50,000
Contingency @. 15 % over previous year					21,281
Sub Total					6,45,632
M 10 th YEAR MAINTENANCE		@ Rs. 567/ DL			
Climber cutting, other silvicultural works, fire protection works 6 DLs/ha	DLs	6	516	567	2,92,572
Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs /ha	DLs	4	344	567	1,95,048
Maintenance of camp hut, implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				47,158
Supervision Cost	LS				50,000
Contingency @ 15 % over previous year	LS				24,473
Sub-Total					6,09,251
Total					2,51,48,907
Over head expenditure @ 50% of the total cost of scheme					1,25,74,453
Grand Total					3,77,23,360


(Rupees Three crore seventy seven lakh twenty three thousand three hundred sixty) only.


Note : Cost escalation of 10% annually has been considered for wages

The norms should be revised annually based on wage rate & cost of materials

Pre-cast RCC pillar with 5"x5" cross-section-of 6 ft height (1.5 below ground 4.5 ft above ground) with readymade concrete base 1 ft width for fixing.

Technically approved


Chief Conservator of Forests
Dima Hasao Dist., Assam, Haflong


Divisional Forest Officer
Dima, Hasao Forest Division (West)
Haflong, Assam
Divisional Forest Officer,
Dima Hasao Forest Divn. (W)
Haflong.

ANNEXTURE -IV-B

Compensatory Afforestation 87.00 Ha Block Plantation of L.K.H.E.P. A. of APGCL



Area (Ha)	87
Spacing (mXm)	2X2
Number of Saplings/ha	2500
Length of JFence (RM)	3808
Wage rate for the 1 st year (Rs.)	240
Increase in wage for subsequent years by a factor	1.1
Appreciation of material costs by a factor	1.1

Sl No.	Particulars of works	Units	Qty./ ha	Total Qty.	Rate/Unit	Amount (Rs.)
A	ERECTION OF FENCING					
	@ Rs. 240/ DL					
	(a) Cost of full Chain-linked Goat Proof fencing (4' ht. with 10 Gauge, 3" dia link) to be fitted on Pre-cast RCC pillars* at 1.8 mt. apart including transportation I of fencing materials to site for 3808 RM! @ RS. 800 per RM as per estimate	RMs		3808	800	30,46,400
	(b) Wages of DLs for carrying, fitting, fixing etc. of fencing materials @ 20 DLs/ 100 RM	DLs		762	240	1,82,880
	Sub Total					32,29,280
B	INFRASTRUCTURE IN PLANTATION AREA					
	Construction of camp hut (at least one upto 25 ha & thereafter one per every 25 ha) as per estimate	Nos.		4	1,50,000	6,00,000
	Installation of ring/tube well (atleast one upto 10 ha & thereafter two per every 25 ha)	Nos.		7	50,000	3,50,000
	Irrigation facility with Diesel generator and hose pipes for watering the nursery and plantation (during dry spells)	Nos.		2	50,000	1,00,000
	Cost of tools & implements (One unit upto 25 ha & thereafter one unit per every 25 ha)	Nos.		4	10,000	40,000
	Cost of RCC signboard & Gate including fitting and fixing of the same (atleast one upto 25 ha & thereafter one per every 25 ha)	Nos.		4	60,000	2,40,000
	Camp accessories @ Rs. 10,001 per camp	Nos.		4	10,000	40,000
	Construction of Inspection Path 1400 RM @ Rs. 50/- RM	RMs		3567	50	1,78,350
	Construction of Staff quarter. as per estimate (One unit for 10 to 50 ha & thereafter one unit per every 50 ha)	Nos.		2	8,00,000	16,00,000
	Provision of Solar energy for staff quarters including installation	Nos.		2	70,000	1,40,000
	Sub Total					32,88,350
C	ADVANCE WORK					
	@ Rs. 240/ DL					
	Site selection, surveying, demarcation, jungle cutting, burning etc. 20 DLs/ha	DLs	20	1740	240	4,17,600
	Preparation and acquisition of polypot saplings in the field nursery for planting 2500 Nos. Seedlings/ ha @ R.,6/- per polypot	Nos.	2500	2,17,500	6	13,05,000

Preparation of polypot saplings in the field nursery for vacancy filling

a) 25% mortality expected during 1st year (to be planted in the field during the 2nd year) ,i.e., 625 Seedlings/ ha (i.e, Rs 6.5/- per polypot	Nos.	625	54,375	6.5	3,53,438
b) 20% mortality expected during 2nd year (to be planted in the field during the 3rd year) ,i.e., 500 Seedlings/ ha Rs.7/- per polypot	Nos.	500	43,500	7	3,04,500
c) 15% mortality expected during 3rd year (to be planted in the field during the 4th year),i.e., 375 Seedlings/ ha @ Rs.7.5/- per polypot	Nos.	375	32,625	7.5	2,44,688
d) 10% mortality expected during 4th year (to be planted in the field during the 5th year),i.e., 250 Seedlings/ ha @ Rs.8/- per polypot	Nos.	250	21,750	8	1,74,000
Cost of Bamboo, making of stacking & transportation etc	Nos.	625	54,375	1	54,375
Line alignment, carriage of stacking materials and fixing the stacking (4) 5 DLs/ha	DLs	5	435	240	1,04,400
Supervision and Monitoring	L.S				30,000
Sub total					29,88,001
D. CREATION & 1st YEAR MAINTENANCE	@ Rs. 240/ DL				
Soil working, carnage of stumps, polypot seedling and planting at the plantation site including. dibbling of seeds wherever necessary to complete raising of plantation with all necessary operation @ 40 DLs/ ha	DLs	40	3480	240	8,35,200
5 weedings, mulching and fire protection works @ 18 DLs/ha/weeding	DLs	90	7830	240	18,79,200
Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha	DLs	5	435	240	1,04,400
Maintenance and protection of field nursery and watch and ward for the plantation area(3DL for 365 days).	DLs		1460	240	3,50,400
Maintenance of camp huts, implements, ring/tube-well, upkeepment of plantation, signboard, documentation, .upkeepment of records and other misc. work	L.S		87		20,000
Awareness & Monitoring @, Rs. 800/ha	L.S			800	69,600
Sub total					32,58,800
E. 2ND YEAR MAINTENANCE	@ Rs. 264/ DL				
5 weedings, fire protection works @ 15 DLs/ha/weeding	DLs	75	6525	264	17,22,600
25% Vacancy filling by 1 year old seedlings from nursery@ 100DLs/ha	DLs	10	870	264	2,29,680
Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha	DLs	5	435	264	1,14,840
Maintenance and protection of field nursery (2 DL 365 day)and watch and ward for the plantation area(2DL for 365 days).	DLs		1460	264	3,85,440
Maintenance of camp hut, implements, ring/tube- well upkeepment of plantation, signboard, documentation, upkeepment of records etc.	L.S				22,000

Supervision Cost	L.S		1		50,000
Contingency L.S.	L.S				8,000
<i>Sub total</i>					25,32,560

F.	3RD YEAR MAINTENANCE	@ Rs. 290/ DL				
	4 weedings, fire protection works @15 DLs/ha/weeding	DLs	60	5220	290	15,13,800
	20% Vacancy filling by 2 year old seedlings from nursery @ 8DLs/ha	DLs	8	696	290	2,01,840
	Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day @ 5 DLs/ha	DLs	5	435	290	1,26,150
	Maintenance and protection of field nursery (2 DL 365 day)and watch and ward for the plantation area(2DL for 365 days).	DLs		1460	290	4,23,400
	Maintenance of camp hut, implements, ring/tube-well upkeepment of plantation, signboard, documentation, upkeepment of records	L.S				24,200
	Supervision Cost	L.S		1		50,000
	Contingency @ 15 % over previous year	L.S				9,200
	Sub Total					23,48,590
G.	4th YEAR MAINTENANCE	@ Rs. 319/ DL				
	4 weedings, fire protection works @15 dls/ha/weeding	DLs	60	5220	319	16,65,180
	15% Vacancy filling by 2 year old seedlings from nursery @6DLs/ha	DLs	6	522	319	1,66,518
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis a. 5 DLs/ha	DLs	5	435	319	1,38,765
	Maintenance and protection of field nursery (2 DL 365 day)and watch and ward for the plantation area(2DL for 365 days).	DLs		1460	319	4,65,740
	Maintenance of camp hut, implements, ring/tube-well upkeepment of plantation, signboard, documentation, upkeepment of records etc.	L.S				26,620
	Supervision Cost	L.S		1		50,000
	Contingency @ 15 % over previous year	L.S				10,580
	Sub Total					25,23,403

H	5th YEAR MAINTENANCE	@ Rs. 351/ DL				
	Climber cutting, weeding & other silvicultural works and fire protection works (@ 15DLs/ha)	DLs	15	1305	351	4,58,055
	10% Vacancy filling by 2 year old seedlings from nursery @ 4DLs/ha	DLs	4	348	351	1,22,148
	Maintenance & fencing post replacement @ 3% initial cost of material			0.03	30,46,400	91,392
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs/ha	DLs	4	348	351	1,22,148

Watch and ward for the plantation area(3DL for 365 days).	DLs		730	351	2,56,230
Maintenance of camp hut, implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S				29,282

Supervision Cost	L.S		1		50,000
Contingency @ 15 % over previous year					12,167
Sub Total					11,41,422

I. 6th Year Maintenance

@ Rs. 386/ DL

Climber cutting, other silvicultural works and fire protection works @15 DLs/ha	DLs	15	1305	386	5,03,730
Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @, 4 DLs/ha	DLs	4	348	386	1,34,320
Watch and ward for the plantation area(2DL for 365 days).	DLs		730	386	2,81,780
Maintenance of camp hut, implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S				32,210
Supervision Cost	L.S		1		50,000
Contingency @ 15 % over previous year	L.S				13,992
Sub total					10,16,040

J. 7th Year Maintenance

@ Rs. 425/ DL

Climber cutting, other silvicultural works and fire protection works @ 12 DLs/ha	DLs	12	1044	425	4,43,700
Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs / ha	DLs	5	435	425	1,84,875
Maintenance of camp hut, implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S				35,431
Supervision Cost	L.S		1		50,000
Contingency @ 15 % over previous year	L.S				16,091
Sub-Total					7,30,097

K. 8th Year maintenance

@ Rs. 468/ DL

Climber cutting, other silvicultural works and fire protection works @ 8 DLs/ha	DLs	8	696	468	3,25,728
Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs	DLs	5	435	468	2,03,580
Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S				38,974
Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs	DLs	5	435	468	2,03,580

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	Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S				38,974
	Supervision Cost	L.S		1		50,000
	Contingency @ 15 % over previous year	L.S				18,505
	Sub Total					6,36,787
L	9th YEAR MAINTENANCE	@ Rs. 515/ DL				
	Climber cutting. other silvicultural works and fire protection works 7 DLs/ha		7	609	515	3,13,635
	Protection work. cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ ha		5	435	515	2,24,025
	Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				42,871
	Supervision Cost	LS		1		50,000
	Contingency @.; 15 % over previous year					21,281
	Sub Total					6,51,812
M	10th YEAR MAINTENANCE	@ Rs. 567/ DL				
	Climber cutting, other silvicultural works, fire protection works @ 6 DLs/ha		6	522	567	2,95,974
	Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs /ha		4	348	567	1,97,316

Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				47,158
Supervision Cost	LS				50,000
Contingency @ 15 % over previous year					24,473
<i>Sub-Total</i>					6,14,921
<i>Total</i>					2,49,60,063
<i>Over head expenditure @ 50% of the total cost of scheme</i>					1,24,80,032
<i>Grand Total</i>					3,74,40,094

(Rupees Three crore seventy four lakh forty thousand ninety four) only.

Note : Cost escalation of 10% annually has been considered for wages

The norms should be revised annually based on wage rate & cost of materials

Pre-cast RCC pillar with 5"x5" cross-section-of 6 ft height (1.5 below ground 4.5 ft above ground) with readymade concrete base 1 ft width for fixing.

Technically approved

Divisional Forest Officer
Dima, Hasao Forest Division(West)
Haflong
Divisional Forest Officer,
Dima Hasao Forest Divn. (W)
Haflong.

Chief Conservator of Forests
Dima Hasao Dist., Assam, Haflong



Compensatory Afforestation 63.00 Ha Block Plantation of L.K.H.E.P. of APGCL

ANNEXTURE -IV-C

Area (Ha)	63
Spacing (mXm)	2X2
Number of Saplings/ha	2500
Length of JFence (RM)	3342
Wage rate for the 1 st year (Rs.)	240
Increase in wage for subsequent years by a factor	1.1
Appreciation of material costs by a factor	1.1

Sl No.	Particulars of works	Units	Qty./ ha	Total Qty.	Rate/Unit	Amount (Rs.)
A	ERECTION OF FENCING	@ Rs. 240/ DL				
	(a) Cost of full Chain-linked Goat Proof fencing (4' ht. with 10 Gauge, 3" dia link) to be fitted on Pre-cast RCC pillars* at 1.8 mt. apart including transportation of fencing materials to site for 3342 RM! @ RS. 800 per RM as per estimate	RMs		3342	800	26,73,600
	(b) Wages of DLs for carrying, fitting, fixing etc. of fencing materials @ 20 DLs/ 100 RM	DLs		668	240	1,60,320
	Sub Total					28,33,920
B	INFRASTRUCTURE IN PLANTATION AREA					
	Construction of camp hut (at least one upto 25 ha & thereafter one per every 25 ha) as per estimate	Nos.		3	1,50,000	4,50,000
	Installation of ring/tube well (atleast one upto 10 ha & thereafter two per every 25 ha)	Nos.		5	50,000	2,50,000
	Irrigation facility with Diesel generator and hose pipes for watering the nursery and plantation (during dry spells)	Nos.		2	50,000	1,00,000
	Cost of tools & implements (One unit upto 25 ha & thereafter one unit per every 25 ha)	Nos.		3	10,000	30,000
	Cost of RCC signboard & Gate including fitting and fixing of the same (atleast one upto 25 ha & thereafter one per every 25 ha)	Nos.		3	60,000	1,80,000
	Camp accessories @ Rs. 10,001 per camp	Nos.		3	10,000	30,000
	Construction of Inspection Path 1400 RM @ Rs. 50/- RM	RMs		2583	63	1,29,150
	Construction of Staff quarter. as per estimate (One unit for 10 to 50 ha & thereafter one unit per every 50 ha)	Nos.		2	8,00,000	16,00,000
	Provision of Solar energy for staff quarters including installation	Nos.		2	70,000	1,40,000
	Sub Total					29,09,150
C	ADVANCE WORK	@ Rs. 240/ DL				
	Site selection, surveying, demarcation, jungle cutting, burning etc. 20 DLs/ha	DLs	20	1260	240	3,02,400
	Preparation and acquisition of polypot saplings in the field nursery for planting 2500 Nos. Seedlings/ ha @ R.,6/- per polypot	Nos.	2500	1,57,500	6	9,45,000
	Preparation of polypot saplings in the field nursery for vacancy filling					
	a) 25% mortality expected during 1st year (to be planted in the field during the 2nd year) ,i.e., 625 Seedlings/ ha (i.e, Rs 6.5/- per polypot	Nos.	625	39,375	6.5	2,55,938
	b) 20% mortality expected during 2nd year (to be planted in the field during the 3rd year) ,i.e., 500 Seedlings/ @ Rs.7/- per polypot	Nos.	500	31,500	7	2,20,500

500 Seedlings/ @ Rs.7/- per polypot					
c) 15% mortality expected during 3rd year (to be planted in the field during the 4th year), i.e., 375 Seedlings/ ha @ Rs.7.5/- per polypot	Nos.	375	23,625	7.5	1,77,188
d) 10% mortality expected during 4th year (to be planted in the field during the 5th year), i.e., 250 Seedlings/ ha @ Rs.8/- per polypot	Nos.	250	15,750	8	1,26,000
Cost of Bamboo, making of stacking & transportation etc	Nos.	625	39,375	1	39,375
Line alignment, carriage of stacking materials and fixing the stacking 5 DLs/ha	DLs	5	315	240	75,600
Supervision and Monitoring	L.S				25,000
Sub total					21,67,001
D. CREATION & 1st YEAR MAINTENANCE	@ Rs. 240/ DL				
Soil working, carriage of stumps, polypot seedling and planting at the plantation site including dibbling of seeds wherever necessary to complete raising of plantation with all necessary operation @ 40 DLs/ ha	DLs	40	2520	240	6,04,800
5 weedings, mulching and fire protection works @ 18 DLs/ha/weeding	DLs	90	5670	240	13,60,800
Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha	DLs	5	315	240	75,600
Maintenance and protection of field nursery (2 DL 365 days) and watch and ward for the plantation area (2DL for 365 days).	DLs		1460	240	3,50,400
Maintenance of camp huts, implements, ring/tube- well, upkeepment of plantation, signboard, documentation, upkeepment of records and other misc. work	L.S				15,000
Awareness & Monitoring @, Rs. 800/ha	L.S		63	800	50,400
Sub total					24,57,000
E. 2ND YEAR MAINTENANCE	@ Rs. 264/ DL				
5 weedings, fire protection works @ 15 DLs/ha/weeding	DLs	75	4725	264	12,47,400
25% Vacancy filling by 1 year old seedlings from nursery @ 100/ha	DLs	10	630	264	1,66,320
Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha	DLs	5	315	264	83,160
Maintenance and protection of field nursery (2 DL 365 days) and watch and ward for the plantation area (3DL for 365 days).	DLs		1460	264	3,85,440
Maintenance of camp hut, implements, ring/tube- well upkeepment of plantation, signboard, documentation, upkeepment of records etc.	L.S				16,500
Supervision Cost	L.S	1			45,000
Contingency L.S.	L.S				6,000
Sub total					19,49,820

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3 RD YEAR MAINTENANCE		@ Rs. 290/ DL			
4 weedings, fire protection works @15 DLs/ha/weeding	DLs	60	3780	290	10,96,200
20% Vacancy filling by 2 year old seedlings from nursery@ 8DLs/ha	DLs	8	504	290	1,46,160
Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day @ 5 DLs/ha	DLs	5	315	290	91,350
Maintenance and protection of field nursery (2 DL 365 days) and watch and ward for the plantation area(3DL for 365 days).	DLs		1460	290	4,23,400
Maintenance of camp hut, implements, ring/tube- well upkeepment of plantation, signboard, documentation, upkeepment of records	L.S				18,150
Supervision Cost	L.S			1	45,000
Contingency @ 15 % over previous year	L.S				6,900
Sub Total					18,27,160
G. 4 th YEAR MAINTENANCE		@ Rs. 319/ DL			
4 weedings, fire protection works @15 dls/ha/weeding	DLs	60	3780	319	12,05,820
15% Vacancy filling by 2 year old seedlings from nursery @6DLs/ha	DLs	6	378	319	1,20,582
Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis a. 5 DLs/ha	DLs	5	315	319	1,00,485
Maintenance and protection of field nursery and watch and ward for the plantation area(3DL for 365 days)	DLs		1460	319	4,65,740
Maintenance of camp hut, implements, ring/tube- well upkeepment of plantation, signboard, documentation, upkeepment of records etc.	L.S				19,965
Supervision Cost	L.S		1		45,000
Contingency @ 15 % over previous year	L.S				7,935
Sub Total					19,65,527

H 5 th YEAR MAINTENANCE		@ Rs. 351/ DL			
Climber cutting, weeding & other silvicultural works and fire protection works (@ 15DLs/ha)	DLs	15	945	351	3,31,695
10% Vacancy filling by 2 year old seedlings from nursery@ 4DLs/ha	DLs	4	252	351	88,452
Maintenance & fencing post replacement @ 3% initial cost of material			0.03		80,208
Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs/ha	DLs	4	252	351	88,452
Watch and ward for the plantation area(3DL for 365 days).	DLs		730	351	2,56,230
Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S				21,962

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Supervision Cost		L.S		1		45,000
Contingency @ 15 % over previous year						9,125
Sub Total						9,21,124
I.	6th Year Maintenance	@ Rs. 386/ DL				
	Climber cutting, other silvicultural works and fire protection works 15 DLs/ha	DLs	15	945	386	3,64,770
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @, 4 DLs/ha	DLs	4	252	386	97,272
	Watch and ward for the plantation area(3DL for 365 days).	DLs		730	386	2,81,780
	Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation &upkeepment of records etc.	L.S				24,158
	Supervision Cost	L.S				45,000
	Contingency @ 15 % over previous year	L.S				10,494
	Sub total					8,23,474
J.	7th Year Maintenance	@ Rs. 425/ DL				
	Climber cutting, other silvicultural works and fire protection works @ 12 DLs/ha	DLs	12	756	425	3,21,300
	Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs / ha	DLs	5	315	425	1,33,875
	Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation &upkeepment of records etc.	L.S				26,574
	Supervision Cost	L.S		1		45,000
	Contingency @ 15 % over previous year	L.S				12,068
	Sub-Total					5,30,017

K.	8th Year maintenance	@ Rs. 468/ DL				
	Climber cutting, other silvicultural works and fire protection works @ 8 DLs/ha	DLs	8	504	468	2,35,872
	Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs	DLs	5	315	468	1,47,420
	Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation &upkeepment of records etc.	L.S				29,231
	Supervision Cost	L.S		1		45,000
	Contingency @ 15 % over previous year	L.S				13,878
	Sub Total					4,71,401

9 th YEAR MAINTENANCE		@ Rs. 515/ DL			
	Climber cutting, other silvicultural works and fire protection works 7 DLs/ha	DLs	7	441	2,27,115
	Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ ha	DLs	5	315	1,62,225
	Maintenance of camp hut, implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS			32,154
	Supervision Cost	LS		1	45,000
	Contingency @. 15 % over previous year				15,960
	Sub Total				4,52,454
M 10 th YEAR MAINTENANCE		@ Rs. 567/ DL			
	Climber cutting, other silvicultural works, fire protection works 6 DLs/ha	DLs	6	378	2,14,326
	Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs /ha	DLs	4	252	14,28,884
	Maintenance of camp hut, implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS			35,369
	Supervision Cost	LS			45,000
	Contingency @ 15 % over previous year	LS			18,354
	Sub-Total				4,55,933
	Total				1,98,02,781
	Over head expenditure @ 50% of the total cost of scheme				99,01,391
	Grand Total				2,97,04,172

(Rupees Two crore ninety seven lakh four thousand one hundred seventy two) only.

Note : Cost escalation of 10% annually has been considered for wages

The norms should be revised annually based on wage rate & cost of materials

Pre-cast RCC pillar with 5"x5" cross-section-of 6 ft height (1.5 below ground 4.5 ft above ground) with readymade concrete base 1 ft width for fixing.

Technically approved

Chief Conservator of Forests
Dima Hasao Dist., Assam, Haflong

Divisional Forest Officer
Dima, Hasao Forest Division(West)
Divisional Joint Officer,
Dima Hasao Forest Divn. (W)
Haflong.

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ANNEXTURE -IV-D

Compensatory Afforestation 75.00 Ha Block Plantation of L.K.H.E.P. A. of APGCL



Area (Ha)	75
Spacing (mXm)	2X2
Number of Saplings/ha	2500
Length of Fence (RM)	3492
Wage rate for the 1 st year (Rs.)	240
Increase in wage for subsequent years by a factor	1.1
Appreciation of material costs by a factor	1.1

Sl No.	Particulars of works	Units	Qty./ ha	Total Qty.	Rate/Unit	Amount (Rs.)
A	ERECTION OF FENCING	@ Rs. 240/ DL				
	(a) Cost of full Chain-linked Goat Proof fencing (4' ht. with 10 Gauge, 3" dia link) to be fitted on Pre-cast RCC pillars* at 1.8 mt. apart including transportation of fencing materials to site for 3492 RM! @ RS. 800 per RM as per estimate	RMs		3492	800	27,93,600
	(b) Wages of DLs for carrying, fitting, fixing etc. of fencing materials @ 20 DLs/ 100 RM	DLs		698	240	1,67,520
	Sub Total					29,61,120
B	INFRASTRUCTURE IN PLANTATION AREA					
	Construction of camp hut (at least one upto 25 ha & thereafter one per every 25 ha) as per estimate	Nos.		3	1,50,000	4,50,000
	Installation of ring/tube well (atleast one upto 10 ha & thereafter two per every 25 ha)	Nos.		6	50,000	3,00,000
	Irrigation facility with Diesel generator and hose pipes for watering the nursery and plantation (during dry spells)	Nos.		2	50,000	1,00,000
	Cost of tools & implements (One unit upto 25 ha & thereafter one unit per every 25 ha)	Nos.		3	10,000	30,000
	Cost of RCC signboard & Gate including fitting and fixing of the same (atleast one upto 25 ha & thereafter one per every 25 ha)	Nos.		3	60,000	1,80,000
	Camp accessories @ Rs. 10,001 per camp	Nos.		3	10,000	30,000
	Construction of Inspection Path 3075 RM @ Rs. 50/- RM	RMs		3075	50	1,53,750
	Construction of Staff quarter. as per estimate (One unit for 10 to 50 ha & thereafter one unit per every 50 ha)	Nos.		2	8,00,000	16,00,000
	Provision of Solar energy for staff quarters including installation	Nos.		2	70,000	1,40,000
	Sub Total					29,83,750
C	ADVANCE WORK	@ Rs. 240/ DL				
	Site selection, surveying, demarcation, jungle cutting, burning etc. 20 DLs/ha	DLs	20	1500	240	3,60,000
	Preparation and acquisition of polypot saplings in the field nursery for planting 2500 Nos. Seedlings/ ha @ R.,6/- per polypot	Nos.	2500	1,87,500	6	11,25,000
	Preparation of polypot saplings in the field nursery for vacancy filling					
	a) 25% mortality expected during 1st year (to be planted in the field during the 2nd year) ,i.e., 625 Seedlings/ ha (i.e, Rs 6.5/- per polypot	Nos.	625	46,875	6.5	3,04,688

b) 20% mortality expected during 2nd year (to be planted in the field during the 3rd year), i.e., 500 Seedlings/ @ Rs.7/- per polypot	Nos.	500	37,500	7	2,62,500
c) 15% mortality expected during 3rd year (to be planted in the field during the 4th year), i.e., 375 Seedlings/ ha @ Rs.7.5/- per polypot	Nos.	375	28,125	7.5	2,10,938
d) 10% mortality expected during 4th year (to be planted in the field during the 5th year), i.e., 250 Seedlings/ ha @ Rs.8/- per polypot	Nos.	250	18,750	8	1,50,000
Cost of Bamboo, making of stacking & transportation etc	Nos.	625	46,875	1	46,875
Line alignment, carriage of stacking materials and fixing the stacking @ 5 DLs/ha	DLs	5	375	240	90,000
Supervision and Monitoring	L.S				30,000
Sub total					25,80,001
D. CREATION & 1st YEAR MAINTENANCE	@ Rs. 240/ DL				
Soil working, carriage of stumps, polypot seedling and planting at the plantation site including dibbling of seeds wherever necessary to complete raising of plantation with all necessary operation @ 40 DLs/ ha	DLs	40	3000	240	7,20,000
5 weedings, mulching and fire protection works @ 18 DLs/ha/weeding	DLs	90	6750	240	16,20,000
Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha	DLs	5	375	240	90,000
Maintenance and protection of field nursery (2 DL 365 dayd)and watch and ward for the plantation area(2DL for 365 days).	DLs		1460	240	3,50,400
Maintenance of camp huts, implements, ring/tube-well, upkeepment of plantation, signboard, documentation, .upkeepment of records and other misc. work	L.S				15,000
Awareness & Monitoring @, Rs. 800/ha	L.S		756	800	60,000
Sub total					28,55,400
E. 2ND YEAR MAINTENANCE	@ Rs. 264/ DL				
5 weedings, fire protection works @ 15 DLs/ha/weeding	DLs	75	5625	264	14,85,000
25% Vacancy filling by 1 year old seedlings from nursery@ 100DLs/ha	DLs	10	750	264	1,98,000
Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha	DLs	5	375	264	99,000
Maintenance and protection of field nursery (2 DL 365 dayd)and watch and ward for the plantation area(2DL for 365 days).	DLs		1460	264	3,85,440
Maintenance of camp hut, implements, ring/tube-well upkeepment of plantation, signboard, documentation, upkeepment of records etc.	L.S				16,500
Supervision Cost	L.S		1		50,000
Contingency L.S.	L.S				7,000
Sub total					22,40,940

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3 rd YEAR MAINTENANCE		@ Rs. 290/ DL				
4 weedings, fire protection works @15 DLs/ha/weeding	DLs	60	4500	290	13,05,000	
20% Vacancy filling by 2 year old seedlings from nursery@ 8DLs/ha	DLs	8	600	290	1,74,000	
Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day @ 5 DLs/ha	DLs	5	375	290	1,08,750	
Maintenance and protection of field nursery (2 DL 365 dayd)and watch and ward for the plantation area(2DL for 365 days).	DLs		1460	290	4,23,400	
Maintenance of camp hut, implements, ring/tube-well upkeepment of plantation, signboard, documentation, upkeepment of records	L.S				18,150	
Supervision Cost	L.S		1		50,000	
Contingency @ 15 % over previous year	L.S				8,050	
Sub Total					20,87,350	
G. 4 th YEAR MAINTENANCE		@ Rs. 319/ DL				
4 weedings, fire protection works @15 dls/ha/weeding	DLs	60	4500	319	14,35,500	
15% Vacancy filling by 2 year old seedlings from nursery @6DLs/ha	DLs	6	450	319	1,43,550	
Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis a. 5 DLs/ha	DLs	5	375	319	1,19,625	
Maintenance and protection of field nursery (2 DL 365 dayd)and watch and ward for the plantation area(2DL for 365 days).	DLs		1460	319	4,65,740	
Maintenance of camp hut, implements, ring/tube-well upkeepment of plantation, signboard, documentation, upkeepment of records etc.	L.S				19,965	
Supervision Cost	L.S		1		50,000	
Contingency @ 15 % over previous year	L.S				9,258	
Sub Total					22,43,638	

H	5 th YEAR MAINTENANCE	@ Rs. 351/ DL				
	Climber cutting, weeding & other silvicultural works and fire protection works (@ 15DLs/ha)	DLs	15	1125	351	3,94,875
	10% Vacancy filling by 2 year old seedlings from nursery @ 4DLs/ha	DLs	4	300	351	1,05,300
	Maintenance & fencing post replacement @ 3% initial cost of material			0.03	29,93,600	83,808
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs/ha	DLs	4	300	351	1,05,300
	Watch and ward for the plantation area(3DL for 365 days).	DLs		730	351	2,56,230
	Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S				21,962

24/2

	Supervision Cost	L.S		1		50,000
	Contingency @ 15 % over previous year					10,647
	Sub Total					10,28,122
I.	6th Year Maintenance	@ Rs. 386/ DL				
	Climber cutting, other silvicultural works and fire protection works @15 DLs/ha	DLs	15	1125	386	4,34,250
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @, 4 DLs/ha	DLs	4	300	386	1,15,800
	Watch and ward for the plantation area(3DL for 365 days).	DLs		730	386	2,81,780
	Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation &upkeepment of records etc.	L.S				24,158
	Supervision Cost	L.S		1		50,000
	Contingency @ 15 % over previous year	L.S				12,244
	Sub total					9,18,232
J.	7th Year Maintenance	@ Rs. 425/ DL				
	Climber cutting, other silvicultural works and fire protection works @ 12 DLs/ha	DLs	12	900	425	3,82,500
	Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs / ha	DLs	5	375	425	1,59,375
	Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation &upkeepment of records etc.	L.S				26,574
	Supervision Cost	L.S		1		50,000
	Contingency @ 15 % over previous year	L.S				14,081
	Sub-Total					6,32,530

K.	8th Year maintenance	@ Rs. 468/ DL				
	Climber cutting, other silvicultural works and fire protection works @ 8 DLs/ha	DLs	8	600	468	2,80,800
	Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs	DLs	5	375	468	1,75,500
	Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation &upkeepment of records etc.	L.S				29,231
	Supervision Cost	L.S		1		50,000
	Contingency @ 15 % over previous year	L.S				16,193
	Sub Total					5,51,724

23/10

9 th YEAR MAINTENANCE		@ Rs. 515/ DL			
Climber cutting, other silvicultural works and fire protection works 7 DLs/ha	DLs	7	525	515	2,70,375
Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ ha	DLs	5	375	515	1,93,125
Maintenance of camp hut, implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				32,154
Supervision Cost	LS		1		50,000
Contingency @: 15 % over previous year					18,622
<i>Sub Total</i>					5,64,276
M 10 th YEAR MAINTENANCE		@ Rs. 567/ DL			
Climber cutting, other silvicultural works, fire protection works @ 6 DLs/ha	DLs	6	450	567	2,55,150
Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs /ha	DLs	4	300	567	1,70,100
Maintenance of camp hut, implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				35,369
Supervision Cost	LS				50,000
Contingency @ 15 % over previous year					21,415
<i>Sub-Total</i>					5,32,034
<i>Total</i>					2,21,79,117
<i>Over head expenditure @ 50% of the total cost of scheme</i>					1,10,89,559
<i>Grand Total</i>					3,32,68,676

(Rupees Three crore thirty two lakh sixty eight thousand six hundred seventy six) only.

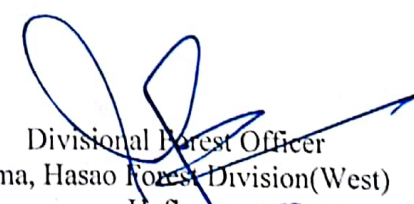
Note : Cost escalation of 10% annually has been considered for wages

The norms should be revised annually based on wage rate & cost of materials

Pre-cast RCC pillar with 5" x 5" cross-section-of 6 ft height (1.5 below ground 4.5 ft above ground) with readymade concrete base 1 ft width for fixing.

Technically approved


Chief Conservator of Forests
 Dima Hasao Dist., Assam, Haflong


 Divisional Forest Officer
 Dima, Hasao Forest Division(West)
 Divisional Forest Officer,
 Dima Hasao Forest Divn. (W)
 Haflong.

Increase in wage for subsequent years by a factor

Appreciation of material costs by a factor

Sl No.	Particulars of works	Units	Qty./ ha	Total Qty.	Rate/Unit	Amount (Rs.)
A	ERECTION OF FENCING	@ Rs. 240/ DL				
	(a) Cost of full Chain-linked Goat Proof fencing (4' ht. with 10 Gauge, 3" dia link) to be fitted on Pre-cast RCC pillars* at 1.8 mt. apart including transportation I of fencing materials to site for 3808 RM! @ RS. 800 per RM as per estimate	RMs		3808	800	30,46,400
	(b) Wages of DLs for carrying, fitting, fixing etc. of fencing materials @ 20 DLs/ 100 RM	DLs		762	240	1,82,880
	Sub Total					32,29,280
B	INFRASTRUCTURE IN PLANTATION AREA					
	Construction of camp hut (at least one upto 25 ha & thereafter one per every 25 ha) as per estimate	Nos.		4	1,50,000	6,00,000
	Installation of ring/tube well (atleast one upto 10 ha & thereafter two per every 25 ha)	Nos.		7	50,000	3,50,000
	Irrigation facility with Diesel generator and hose pipes for watering the nursery and plantation (during dry spells)	Nos.		2	50,000	1,00,000
	Cost of tools & implements (One unit upto 25 ha & thereafter one unit per every 25 ha)	Nos.		4	10,000	40,000
	Cost of RCC signboard & Gate including fitting and fixing of the same (atleast one upto 25 ha & thereafter one per every 25 ha)	Nos.		4	60,000	2,40,000
	Camp accessories @ Rs. 10,000/ per camp	Nos.		4	10,000	40,000
	Construction of Inspection Path 1400 RM @ Rs. 50/- RM	RMs		3403	50	1,70,150
	Construction of Staff quarter. as per estimate (One unit for 10 to 50 ha & thereafter one unit per every 50 ha)	Nos.		2	8,00,000	16,00,000
	Provision of Solar energy for staff quarters including installation	Nos.		2	70,000	1,40,000
	Sub Total					32,80,150
C	ADVANCE WORK	@ Rs. 240/ DL				
	Site selection, surveying, demarcation, jungle cutting, burning etc. 20 DLs/ha	DLs	20	1660	240	3,98,400
	Preparation and acquisition of polypot saplings in the field nursery for planting 2500 Nos. Seedlings/ ha @ Rs.6/- per polypot	Nos.	2500	2,07,500	6	12,45,000
	Preparation of polypot saplings in the field nursery for vacancy filling					
	a) 25% mortality expected during 1st year (to be planted in the field during the 2nd year) ,i.e., 625 Seedlings/ ha (i.e, Rs 6.5/- per polypot	Nos.	625	51,875	6.5	3,37,188

Seedlings/ ha @ Rs.7/- per polypot					
c) 15% mortality expected during 3rd year (to be planted in the field during the 4th year), i.e., 375 Seedlings/ ha @ Rs.7.5/- per polypot	Nos.	375	31,125	7.5	2,33,438
d) 10% mortality expected during 4th year (to be planted in the field during the 5th year), i.e., 250 Seedlings/ ha @ Rs.8/- per polypot	Nos.	250	20,750	8	1,66,000
Cost of Bamboo, making of stacking & transportation etc	Nos.	625	51,875	1	51,875
Line alignment, carriage of stacking materials and fixing the stacking @ 5 DLs/ha	DLs	5	415	240	99,600
Supervision and Monitoring	L.S				30,000
Sub total					28,52,001
D. CREATION & 1st YEAR MAINTENANCE	@ Rs. 240/ DL				
Soil working, carriage of stumps, polypot seedling and planting at the plantation site including dibbling of seeds wherever necessary to complete raising of plantation with all necessary operation @ 40 DLs/ ha	DLs	40	3320	240	7,96,800
5 weedings, mulching and fire protection works @ 18 DLs/ha/weeding	DLs	90	7470	240	17,92,800
Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha	DLs	5	415	240	99,600
Maintenance and protection of field nursery (2 DL 365 day) and watch and ward for the plantation area (2DL for 365 days).	DLs		1460	240	3,50,400
Maintenance of camp huts, implements, ring/tube-well, upkeepment of plantation, signboard, documentation, upkeepment of records and other misc. work	L.S				20,000
Awareness & Monitoring @, Rs. 800/ha	L.S		50	800	66,400
Sub total					31,26,000
E. 2ND YEAR MAINTENANCE	@ Rs. 264/ DL				
5 weedings, fire protection works @ 15 DLs/ha/weeding	DLs	75	6225	264	16,43,400
25% Vacancy filling by 1 year old seedlings from nursery @ 100DLs/ha	DLs	10	830	264	2,19,120
Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha	DLs	5	415	264	1,09,560
Maintenance and protection of field nursery (2 DL 365 day) and watch and ward for the plantation area (2DL for 365 days).	DLs		1460	264	3,85,440
Maintenance of camp hut, implements, ring/tube-well upkeepment of plantation, signboard, documentation, upkeepment of records etc.	L.S				22,000
Supervision Cost	L.S		1		50,000
Contingency L.S.	L.S				8,000
Sub total					24,37,520
F. 3RD YEAR MAINTENANCE	@ Rs. 290/ DL				

	4 weedings, fire protection works @15 DLs/ha/weeding	DLs	60	4980	290	14,44,200
	20% Vacancy filling by 2 year old seedlings from nursery @ 8DLs/ha	DLs	8	664	290	1,92,560
	Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day @ 5 DLs/ha	DLs	5	415	290	1,20,350
	Maintenance and protection of field nursery (2 DL 365 dayd)and watch and ward for the plantation area(2DL for 365 days).	DLs		1460	290	4,23,400
	Maintenance of camp hut, implements, ring/tube-well upkeepment of plantation, signboard, documentation, upkeepment of records	L.S				24,200
	Supervision Cost	L.S		1		50,000
	Contingency @ 15 % over previous year	L.S				9,200
	Sub Total					22,63,910
G.	4th YEAR MAINTENANCE	@ Rs. 319/ DL				
	4 weedings, fire protection works @15 dls/ha/weeding	DLs	60	4980	319	15,88,620
	15% Vacancy filling by 2 year old seedlings from nursery @6DLs/ha	DLs	6	498	319	1,58,862
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis a. 5 DLs/ha	DLs	5	415	319	1,32,385
	Maintenance and protection of field nursery (2 DL 365 dayd)and watch and ward for the plantation area(2DL for 365 days).	DLs		1460	319	4,65,740
	Maintenance of camp hut, implements, ring/tube well upkeepment of plantation, signboard, documentation, upkeepment of records etc.	L.S				26,620
	Supervision Cost	L.S		1		50,000
	Contingency @ 15 % over previous year	L.S				10,580
	Sub Total					24,32,807

H	5th YEAR MAINTENANCE	@ Rs. 351/ DL				
	Climber cutting, weeding & other silvicultural works and fire protection works (@ 15DLs/ha)	DLs	15	1245	351	4,36,995
	10% Vacancy filling by 2 year old seedlings from nursery @ 4DLs/ha	DLs	4	332	351	1,16,532
	Maintenance & fencing post replacement @ 3% initial cost of material			0.03	30,46,400	91,392
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs/ha	DLs	4	332	351	1,16,532
	Watch and ward for the plantation area(2DL for 365 days).	DLs		730	351	2,56,230
	Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S				29,282

	Supervision Cost	L.S		1		50,000
	Contingency @ 15 % over previous year	LS				12,167
	Sub Total					11,09,130
I.	6th Year Maintenance	@ Rs. 386/ DL				
	Climber cutting, other silvicultural works and fire protection works @15 DLs/ha	DLs	15	1245	386	4,80,570
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @, 4 DLs/ha	DLs	4	332	386	1,28,152
	Watch and ward for the plantation area(3DL for 365 days).	DLs		730	386	2,81,780
	Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation &upkeepment of records etc.	L.S				32,210
	Supervision Cost	L.S		1		50,000
	Contingency @ 15 % over previous year	L.S				13,992
	Sub total					9,86,704
J.	7th Year Maintenance	@ Rs. 425/ DL				
	Climber cutting, other silvicultural works and fire protection works @ 12 DLs/ha	DLs	12	996	425	4,23,300
	Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs / ha	DLs	5	415	425	1,76,375
	Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation &upkeepment of records etc.	L.S				35,431
	Supervision Cost	L.S		1		50,000
	Contingency @ 15 % over previous year	L.S				16,091
	Sub-Total					7,01,197

K.	8th Year maintenance	@ Rs. 468/ DL				
	Climber cutting, other silvicultural works and fire protection works @ 8 DLs/ha	DLs	8	664	468	3,10,752
	Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs	DLs	5	415	468	1,94,220
	Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation &upkeepment of records etc.	L.S				38,974
	Supervision Cost	L.S		1		50,000
	Contingency @ 15 % over previous year	L.S				18,505
	Sub Total					6,12,451

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9 TH YEAR MAINTENANCE		@ Rs. 515/ DL				
	Climber cutting, other silvicultural works and fire protection works 7 DLs/ha	DLs	7	581	515	2,99,215
	Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ ha	DLs	5	415	515	2,13,725
	Maintenance of camp hut, implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				42,871
	Supervision Cost	LS		1		50,000
	Contingency @: 15 % over previous year					21,281
	Sub Total					6,27,092
M 10 TH YEAR MAINTENANCE		@ Rs. 567/ DL				
	Climber cutting, other silvicultural works, fire protection works 6 DLs/ha	DLs	6	498	567	2,82,366
	Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs /ha	Dls	4	332	567	1,88,244
	Maintenance of camp hut, implements, ring/tube-well, upkeepment of plantation, signboard, documentation &upkeepment of records etc.	LS				47,158
	Supervision Cost	LS				50,000
	Contingency @ 15 % over previous year					24,473
	Sub-Total					5,92,241
	Total					2,42,50,483
	Over head expenditure @ 50% of the total cost of scheme					1,21,25,242
	Grand Total					3,63,75,725

(Rupees Three crore sixty three lakh seventy five thousand seven hundred twenty five) only.

Note : Cost escalation of 10% annually has been considered for wages

The norms should be revised annually based on wage rate & cost of materials

Pre-cast RCC pillar with 5"x5" cross-section-of 6 ft height (1.5 below ground 4.5 ft above ground) with readymade concrete base 1 ft width for fixing.

Technically approved

Chief Conservator of Forests
Dima Hasao Dist., Assam, Haflong

Divisional Forest Officer
Dima, Hasao Forest Division(West)
Divisional Forest Officer,
Dima Hasao Forest Divn. (W)
Haflong.

ANNEXTURE -IV-F



Compensatory Afforestation 23.00 Ha Block Plantation of L.K.H.E.P. of APGCL

Area (Ha)	23
Spacing (mXm)	2X2
Number of Saplings/ha	2500
Length of JFence (RM)	1938
Wage rate for the 1 st year (Rs.)	240
Increase in wage for subsequent years by a factor	1.1
Appreciation of material costs by a factor	1.1

Sl No.	Particulars of works	Units	Qty./ ha	Total Qty.	Rate/Unit	Amount (Rs.)
A	ERECTION OF FENCING					
				@ Rs. 240/ DL		
	(a) Cost of full Chain-linked Goat Proof fencing (4' ht. with 10 Gauge, 3" dia link) to be fitted on Pre-cast RCC pillars* at 1.8 mt. apart including transportation of fencing materials to site for 1938 RM! @ RS. 800 per RM as per estimate	RMs		1938	800	15,50,400
	(b) Wages of DLs for carrying, fitting, fixing etc. of fencing materials @ 20 DLs/ 100 RM	DLs		388	240	93,120
	Sub Total					16,43,520
B	INFRASTRUCTURE IN PLANTATION AREA					
	Construction of camp Hut (at least one upto 25 ha & thereafter one per every 25 ha) as per estimate	Nos.		1	1,50,000	1,50,000
	Installation of ring/tube well (atleast one upto 10 ha & thereafter two per every 25 ha)	Nos.		2	50,000	1,00,000
	Irrigation facility with Diesel generator and hose pipes for watering the nursery and plantation (during dry spells)	Nos.		2	50,000	1,00,000
	Cost of tools & implements (One unit upto 25 ha & thereafter one unit per every 25 ha)	Nos.		1	10,000	10,000
	Cost of RCC signboard & Gate including fitting and fixing of the same (atleast one upto 25 ha & thereafter one per every 25 ha)	Nos.		1	60,000	60,000
	Camp accessories @ Rs. 10,000/ per camp	Nos.		1	10,000	10,000
	Construction of Inspection Path 1400 RM @ Rs. 50/- RM	RMs		1400	50	70,000
	Construction of Staff quarter. as per estimate (One unit for 10 to 50 ha & thereafter one unit per every 50 ha)	Nos.		1	8,00,000	8,00,000
	Provision of Solar energy for staff quarters including installation	Nos.		1	70,000	70,000
	Sub Total					13,70,000
C	ADVANCE WORK					
				@ Rs. 240/ DL		
	Site selection, surveying, demarcation, jungle cutting, burning etc. 20 DLs/ha	DLs	20	460	240	1,10,400
	Preparation and acquisition of polypot saplings in the field nursery for planting 2500 Nos. Seedlings/ ha @ Rs. 6/- per polypot	Nos.	2500	57,500	6	3,45,000

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Preparation of polypot saplings in the field nursery for vacancy filling					
a) 25% mortality expected during 1st year (to be planted in the field during the 2nd year) ,i.e., 625 Seedlings/ ha (i.e, Rs 6.5/- per polypot	Nos.	625	14,375	6.5	93,438
b) 20% mortality expected during 2nd year (to be planted in the field during the 3rd year) ,i.e., 500 Seedlings/ ha@ Rs.7/- per polypot	Nos.	500	11,500	7	80,500
c) 15% mortality expected during 3rd year (to be planted in the field during the 4th year),i.e., 375 Seedlings/ ha @ Rs.7.5/- per polypot	Nos.	375	8,625	7.5	64,688
d) 10% mortality expected during 4th year (to be planted in the field during the 5th year),i.e., 250 Seedlings/ ha @ Rs.8/- per polypot	Nos.	250	5,750	8	46,000
Cost of Bamboo, making of stacking & transportation etc	Nos.	625	14,375	1	14,375
Line alignment, carriage of stacking materials and fixing the stacking @ 5 DLs/ha	DLs	5	115	240	27,600
Supervision and Monitoring	L.S				10,000
Sub total					7,92,001
D. CREATION & 1st YEAR MAINTENANCE	@ Rs. 240/ DL				
Soil working, carriage of stumps, polypot seedling and planting at the plantation site including. dibbling of seeds wherever necessary to complete raising of plantation with all necessary operation @ 40 DLs/ ha	DLs	40	920	240	2,20,800
5 weedings, mulching and fire protection works @ 18 DLs/ha/weeding	DLs	90	2070	240	4,96,800
Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha	DLs	5	115	240	27,600
Maintenance and protection of field nursery (2 DL 365 dayd)and watch and ward for the plantation area(2DL for 365 days).	DLs	2	730	240	1,75,200
Maintenance of camp huts, implements, ring/tube-well, upkeepment of plantation, signboard, documentation, .upkeepment of records and other misc. work	L.S				10,000
Awareness & Monitoring @, Rs. 800/ha	L.S	23		800	18,400
Sub total					9,48,800
E. 2ND YEAR MAINTENANCE	@ Rs. 264/ DL				
5 weedings, fire protection works @ 15 DLs/ha/weeding	DLs	75	1725	264	4,55,400
25% Vacancy filling by 1 year old seedlings from nursery@ 100DLs/ha	DLs	10	230	264	60,720
Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha	DLs	5	115	264	30,360
Maintenance and protection of field nursery (2 DL 365 dayd)and watch and ward for the plantation area(2DL for 365 days).	DLs	2	730	264	1,92,720

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	Maintenance of camp hut, implements, ring/tube-well upkeepment of plantation, signboard, documentation, upkeepment of records etc.	L.S				11,000
	Supervision Cost	L.S		1		20,000
	Contingency L.S.	L.S				2,500
	Sub total					7,72,700
F.	3RD YEAR MAINTENANCE	@ Rs. 290/ DL				
	4 weedings, fire protection works @15 DLs/ha/weeding	DLs	60	1380	290	4,00,200
	20% Vacancy filling by 2 year old seedlings from nursery@ 8DLs/ha	DLs	8	184	290	53,360
	Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day @ 5 DLs/ha	DLs	5	115	290	33,350
	Maintenance and protection of field nursery (2 DL 365 dayd)and watch and ward for the plantation area(2DL for 365 days).	DLs	2	730	290	2,11,700
	Maintenance of camp hut, implements, ring/tube-well upkeepment of plantation, signboard, documentation, upkeepment of records	L.S				12,100

	Supervision Cost	L.S		1		20,000
	Contingency @ 15 % over previous year	L.S				2,875
	Sub Total					7,33,585
G.	4th YEAR MAINTENANCE	@ Rs. 319/ DL				
	4 weedings, fire protection works @15 dls/ha/weeding	DLs	60	1380	319	4,40,220
	15% Vacancy filling by 2 year old seedlings from nursery @6DLs/ha	DLs	6	138	319	44,022
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis a. 5 DLs/ha	DLs	5	115	319	36,685
	Maintenance and protection of field nursery (2 DL 365 dayd)and watch and ward for the plantation area(2DL for 365 days).	DLs		730	319	2,32,870
	Maintenance of camp hut, implements, ring/tube-well upkeepment of plantation, signboard, documentation, upkeepment of records etc.	L.S				13,310
	Supervision Cost	L.S		1		20,000
	Contingency @ 15 % over previous year	L.S				3,306
	Sub Total					7,90,413

H	5th YEAR MAINTENANCE	@ Rs. 351/ DL				
	Climber cutting, weeding & other silvicultural works and fire protection works (@ 15DLs/ha)	DLs	15	345	351	1,21,095
	10% Vacancy filling by 2 year old seedlings from nursery@ 4DLs/ha	DLs	4	92	351	32,292
	Maintenance & fencing post replacement @ 3% initial cost of material			0.03	15,50,400	46,512

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Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs/ha	DLs	4	92	351	32,292
Watch and ward for the plantation area(3DL for 365 days).	DLs		365	351	1,28,115
Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation &upkeepment of records etc.	L.S				14,641
Supervision Cost	L.S		1		20,000
Contingency @ 15 % over previous year					3,802
Sub Total					3,98,749
I. 6th Year Maintenance	@ Rs. 386/ DL				
Climber cutting, other silvicultural works and fire protection works @15 DLs/ha	DLs	15	345	386	1,33,170
Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @, 4 DLs/ha	DLs	4	92	386	35,512
Watch and ward for the plantation area(3DL for 365 days).	DLs		365	386	1,40,890
Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation &upkeepment of records etc.	L.S				16,105

Supervision Cost	L.S				20,000
Contingency @ 15 % over previous year	L.S				4,373
Sub total					3,50,050
J. 7th Year Maintenance	@ Rs. 425/ DL				
Climber cutting, other silvicultural works and fire protection works @ 12 DLs/ha	DLs	12	276	425	1,17,300
Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs / ha	DLs	5	115	425	48,875
Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation &upkeepment of records etc.	L.S				17,716
Supervision Cost	L.S				20,000
Contingency @ 15 % over previous year	L.S				5,028
Sub-Total					2,08,919

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8 th Year maintenance		@ Rs. 468/ DL			
	Climber cutting, other silvicultural works and fire protection works @ 8 DLs/ha	DLs	8	184	86,112
	Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs	DLs	5	115	53,820
	Maintenance of camp hut, implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S			19,488
	Supervision Cost	L.S			20,000
	Contingency @ 15 % over previous year	L.S			5,783
	Sub Total				1,85,203
L 9 th YEAR MAINTENANCE		@ Rs. 515/ DL			
	Climber cutting, other silvicultural works and fire protection works 7 DLs/ha	DLs	7	161	82,915
	Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ ha	DLs	5	115	59,225
	Maintenance of camp hut, implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS			21,437
	Supervision Cost	LS			20,000
	Contingency @. 15 % over previous year				6,650
	Sub Total				1,90,227

M 10 th YEAR MAINTENANCE		@ Rs. 567/ DL			
	Climber cutting, other silvicultural works, fire protection works @ 6 DLs/ha	DLs	6	138	78,246
	Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs /ha	DLs	4	92	52,164

Maintenance of camp hut, implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				23,581
Supervision Cost	LS				20,000
Contingency @ 15 % over previous year					7,648
<i>Sub-Total</i>					1,81,639
<i>Total</i>					85,65,806
<i>Over head expenditure @ 50% of the total cost of scheme</i>					42,82,903
<i>Grand Total</i>					1,28,48,709

(Rupees one crore twenty eight lakh forty eight thousand seven hundred nine) only.

Note : Cost escalation of 10% annually has been considered for wages

The norms should be revised annually based on wage rate & cost of materials

Pre-cast RCC pillar with 5"x5" cross-section-of 6 ft height (1.5 below ground 4.5 ft above ground) with readymade concrete base 1 ft width for fixing.

Technically approved

Chief Conservator of Forests
Dima Hasao Dist., Assam, Haflong

Divisional Forest Officer
Dima, Hasao Forest Division(West)
Divisional Forest Officer,
Dima Hasao Forest Divn. (W)
Haflong.



Compensatory Afforestation 63.00 Ha Block Plantation of L.K.H.E.P. of APGCL

ANNEXTURE -IV-G

Area (Ha)	63
Spacing (mXm)	2X2
Number of Saplings/ha	2500
Length of JFence (RM)	3493
Wage rate for the 1 st year (Rs.)	240
Increase in wage for subsequent years by a factor	1.1
Appreciation of material costs by a factor	1.1

Sl No.	Particulars of works	Units	Qty./ ha	Total Qty.	Rate/Unit	Amount (Rs.)
A	ERECTION OF FENCING					
	(a) Cost of full Chain-linked Goat Proof fencing (4' ht. with 10 Gauge, 3" dia link) to be fitted on Pre-cast RCC pillars* at 1.8 mt. apart including transportation l/ of fencing materials to site for 3493 RM! @ RS. 800 per RM as per estimate	RM's		3493	800	27,94,400
	(b) Wages of DLs for carrying, fitting, fixing etc. of fencing materials @ 20 DLs/ 100 RM	DLs		699	240	1,67,760
	Sub Total					
B	INFRASTRUCTURE IN PLANTATION AREA					29,62,160
	Construction of camp hut (at least one upto 25 ha & thereafter one per every 25 ha) as per estimate	Nos.		3	1,50,000	4,50,000
	Installation of ring/tube well (atleast one upto 10 ha & thereafter two per every 25 ha)	Nos.		5	50,000	2,50,000
	Irrigation facility with Diesel generator and hose pipes for watering the nursery and plantation (during dry spells)	Nos.		2	50,000	1,00,000
	Cost of tools & implements (One unit upto 25 ha & thereafter one unit per every 25 ha)	Nos.		3	10,000	30,000
	Cost of RCC signboard & Gate including fitting and fixing of the same (atleast one upto 25 ha & thereafter one per every 25 ha)	Nos.		3	60,000	1,80,000
	Camp accessories @ Rs. 10,001 per camp	Nos.		3	10,000	30,000
	Construction of Inspection Path 2542 RM @ Rs. 50/- RM	RM's		2542	50	1,27,100
	Construction of Staff quarter. as per estimate (One unit for 10 to 50 ha & thereafter one unit per every 50 ha)	Nos.		2	8,00,000	16,00,000
	Provision of Solar energy for staff quarters including installation	Nos.		2	70,000	1,40,000
	Sub Total					29,07,100
C	ADVANCE WORK					
	Site selection, surveying, demarcation, jungle cutting, burning etc. 20 DLs/ha	DLs	20	1260	240	3,02,400
	Preparation and acquisition of polypot saplings in the field nursery for planting 2500 Nos. Seedlings/ ha @ R.,6/- per polypot	Nos.	2500	1,57,500	6	9,45,000
	Preparation of polypot saplings in the field nursery for vacancy filling					
	a) 25% mortality expected during 1st year (to be planted in the field during the 2nd year) ,i.e., 625 Seedlings/ @ (i.e, Rs 6.5/- per polypot	Nos.	625	39,375	6.5	2,55,938

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b) 20% mortality expected during 2nd year (to be planted in the field during the 3rd year), i.e., 500 Seedlings/ ha Rs.7/- per polypot	Nos.	500	31,500	7	2,20,500
c) 15% mortality expected during 3rd year (to be planted in the field during the 4th year), i.e., 375 Seedlings/ ha @ Rs.7.5/- per polypot	Nos.	375	23,625	7.5	1,77,188
d) 10% mortality expected during 4th year (to be planted in the field during the 5th year), i.e., 250 Seedlings/ ha @ Rs.8/- per polypot	Nos.	250	15,750	8	1,26,000
Cost of Bamboo, making of stacking & transportation etc	Nos.	625	39,375	1	39,375
Line alignment, carriage of stacking materials and fixing the stacking @ 5 DLs/ha	DLs	5	315	240	75,600
Supervision and Monitoring	L.S				25,000
Sub total					21,67,001
D. CREATION & 1st YEAR MAINTENANCE	@ Rs. 240/ DL				
Soil working, carriage of stumps, polypot seedling and planting at the plantation site including dibbling of seeds wherever necessary to complete raising of plantation with all necessary operation @ 40 DLs/ ha	DLs	40	2520	240	6,04,800
5 weedings, mulching and fire protection works @ 18 DLs/ha/weeding	DLs	90	5670	240	13,60,800
Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha	DLs	5	315	240	75,600
Maintenance and protection of field nursery (2 DL for 365 days) and watch and ward for the plantation area (2DL for 365 days).	DLs		1460	240	3,50,400
Maintenance of camp huts, implements, ring/tube- well, upkeepment of plantation, signboard, documentation, upkeepment of records and other misc. work	L.S				15,000
Awareness & Monitoring @, Rs. 800/ha	L.S		63	800	50,400
Sub total					24,57,000
E. 2ND YEAR MAINTENANCE	@ Rs. 264/ DL				
5 weedings, fire protection works @ 15 DLs/ha/weeding	DLs	75	4725	264	12,47,400
25% Vacancy filling by 1 year old seedlings from nursery @ /0DLs/ha	DLs	10	630	264	1,66,320
Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha	DLs	5	315	264	83,160
Maintenance and protection of field nursery (2 DL for 365 Days) and watch and ward for the plantation area (2DL for 365 days).	DLs		1460	264	3,85,440
Maintenance of camp hut, implements, ring/tube- well upkeepment of plantation, signboard, documentation, upkeepment of records etc.	L.S				16,500
Supervision Cost	L.S	1			45,000
Contingency L.S.	L.S				6,000
Sub total					19,49,820

9/c

3 RD YEAR MAINTENANCE		@ Rs. 290/ DL				
4 weedings, fire protection works @15 DLs/ha/weeding	DLs	60	3780	290	10,96,200	
20% Vacancy filling by 2 year old seedlings from nursery @ 8DLs/ha	DLs	8	504	290	1,46,160	
Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day @ 5 DLs/ha	DLs	5	315	290	91,350	
Maintenance and protection of field nursery (2 DL for 365 Days) and watch and ward for the plantation area (2DL for 365 days).	DLs		1460	290	4,23,400	
Maintenance of camp hut, implements, ring/tube- well upkeepment of plantation, signboard, documentation, upkeepment of records	L.S				18,150	
Supervision Cost	L.S			1	45,000	
Contingency @ 15 % over previous year	L.S				6,900	
Sub Total					18,27,160	
G. 4 th YEAR MAINTENANCE		@ Rs. 319/ DL				
4 weedings, fire protection works @15 dls/ha/weeding	DLs	60	3780	319	12,05,820	
15% Vacancy filling by 2 year old seedlings from nursery @ 6DLs/ha	DLs	6	378	319	1,20,582	
Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis a. 5 DLs/ha	DLs	5	315	319	1,00,485	
Maintenance and protection of field nursery and watch and ward for the plantation area (3DL for 365 days)	DLs		1460	319	4,65,740	
Maintenance of camp hut, implements, ring/tube- well upkeepment of plantation, signboard, documentation, upkeepment of records etc.	L.S				19,965	
Supervision Cost	L.S		1		45,000	
Contingency @ 15 % over previous year	L.S				7,935	
Sub Total					19,65,527	

H	5 th YEAR MAINTENANCE	@ Rs. 351/ DL				
	Climber cutting, weeding & other silvicultural works and fire protection works (@ 15DLs/ha)	DLs	15	945	351	3,31,695
	10% Vacancy filling by 2 year old seedlings from nursery @ 4DLs/ha	DLs	4	252	351	88,452
	Maintenance & fencing post replacement @ 3% initial cost of material			0.03		83,832
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs/ha	DLs	4	252	351	88,452
	Watch and ward for the plantation area (3DL for 365 days).	DLs		730	351	2,56,230
	Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S				21,962

Supervision Cost		L.S		1		45,000
Contingency @ 15 % over previous year						9,125
Sub Total						9,24,748
I.	6th Year Maintenance	@ Rs. 386/ DL				
	Climber cutting, other silvicultural works and fire protection works @15 DLs/ha	DLs	15	945	386	3,64,770
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @, 4 DLs/ha	DLs	4	252	386	97,272
	Watch and ward for the plantation area(3DL for 365 days).	DLs		730	386	2,81,780
	Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation &upkeepment of records etc.	L.S				24,158
	Supervision Cost	L.S				45,000
	Contingency @ 15 % over previous year	L.S				10,494
	Sub total					8,23,474
J.	7 th Year Maintenance	@ Rs. 425/ DL				
	Climber cutting, other silvicultural works and fire protection works @ 12 DLs/ha	DLs	12	756	425	3,21,300
	Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs / ha	DLs	5	315	425	1,33,875
	Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation &upkeepment of records etc.	L.S				26,574
	Supervision Cost	L.S		1		45,000
	Contingency @ 15 % over previous year	L.S				12,068
	Sub-Total					5,38,817

K.	8 th Year maintenance	@ Rs. 468/ DL				
	Climber cutting, other silvicultural works and fire protection works @ 8 DLs/ha	DLs	8	504	468	2,35,872
	Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs	DLs	5	315	468	1,47,420
	Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation &upkeepment of records etc.	L.S				29,231
	Supervision Cost	L.S		1		45,000
	Contingency @ 15 % over previous year	L.S				13,878
	Sub Total					4,71,401

7/c

9 th YEAR MAINTENANCE		@ Rs. 515/ DL			
Climber cutting, other silvicultural works and fire protection works , 7 DLs/ha		7	441	515	2,27,115
Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ ha		5	315	515	1,62,225
Maintenance of camp hut, implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				32,154
Supervision Cost	LS		1		45,000
Contingency @. 15 % over previous year					15,960
Sub Total					4,82,454
M 10 th YEAR MAINTENANCE		@ Rs. 567/ DL			
Climber cutting, other silvicultural works, fire protection works 6 DLs/ha		6	378	567	2,14,326
Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs /ha		4	252	567	1,42,884
Maintenance of camp hut, implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				35,369
Supervision Cost	LS				45,000
Contingency @ 15 % over previous year					18,354
Sub-Total					4,55,933
Total					1,99,32,595
Over head expenditure @ 50% of the total cost of scheme					99,66,298
Grand Total					2,98,98,893

(Rupees Two crore ninety eight lakh ninety eight thousand eight hundred ninety three) only.

Note : Cost escalation of 10% annually has been considered for wages

The norms should be revised annually based on wage rate & cost of materials

Pre-cast RCC pillar with 5"x5" cross-section-of 6 ft height (1.5 below ground 4.5 ft above ground) with readymade concrete base 1 ft width for fixing.

Technically approved

Chief Conservator of Forests
Dima Hasao Dist., Assam, Haflong

Divisional Forest Officer
Dima, Hasao Forest Division (West)

Divisional Forest Officer,
Dima Hasao Forest Divn. (W)
Haflong.