

SCHEME FOR COMPENSATORY AFFORESTATION

Detail scheme for Compensatory Afforestation to be carried out in lieu of 1.9413 ha of forest area to be diverted for “132 KV S/C Transmission line from Salakati Grid S/S to APM (Jogighopa)” under Haltugaon Division in Kokrajhar District.

1. Schedule of land:-

District: Kokrajhar, Mouza: 4th Part Sidli Mouja, Village: Ouguri, Dag No. 3

Range: Jharbari,

Area to be afforested: 1.9413 ha (15 Bigha) for CA

2. Description of Area

- i. Topography: a. Plain land
b. Slope: Gentle

- ii. Whether the area is bearing any root stock of vegetation: Almost Barren land

NORM FOR 1.9413 ha BLOCK PLANTATION

Area (ha)	=	1.9413
Spacing (m X m)	=	2 X 2
Number of Saplings/ ha	=	2500
Length of Fence (RM)	=	600
Wage rate for the 1st year(Rs.)	=	273
Increase in wage rate for subsequent years by a factor	=	1.1
Appreciation of material costs by a factor	=	1.1

S.No.	Particulars of works	Units	Qty./ha	Total Qty.	Rate / Unit	Amount (Rs.)
A	ERCTION OF FENCING			@Rs.	273	/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 600 RM @ Rs. 1016 per RM as per estimate	RMs		600	1016	609600
	(b) Wages of DLs for carrying, fitting, fixing etc. of fencing materials @ 20 DLs/ 100 RM	DLs		120	273	32760
	<i>Sub-total</i>					642360

B	INFRASTRUCTURE IN PLANTATION AREA			-	-	
	Construction of camp hut (atleast one upto 25 ha & thereafter one per every 25 ha) as per estimate	nos.		1	150,000	150000
	Installation of ring/tube well (atleast one upto 10 ha & thereafter two per every 25 ha)	nos.		1	50,000	50000
	Irrigation facility with Diesel generator and hose pipes for watering the nursery and plantation (during dry spells)	nos.		1	50,000	50000
	Cost of tools & implements (One unit upto 25 ha & thereafter one unit per every 25 ha)	nos.		1	10,000	10000
	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	60000
	Camp accessories @ Rs. 10,000/ per camp	nos.		1	10,000	10000
	Construction of Inspection Path 1400 RM @ Rs. 50/- RM	RMs		300	50	15000
	<i>sub total</i>					345000
C	ADVANCE WORK			@Rs.	273	/DL
	Site selection, surveying, demarcation, jungle cutting, burning etc. 20 DLs/ha	DLs	20	38.826	273	10599
	Preparation and acquisition of polypot saplings in the field nursery for planting 2500 Nos. Seedlings/ ha @ Rs.6/- per polypot	nos.	2500	4853.3	6	29120
	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 @ Rs.6.5/- per polypot	nos.	625	1213.3	6.5	7887
	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	970.65	7	6795
	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	727.99	7.5	5460
	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	485.33	8	3883
	Cost of Bamboo, making of stacking & transportation etc	nos.	625	1213.3	1	1213
	Line alignment, carriage of stacking materials and fixing the stacking @ 5 DLs/ha	DLs	5	9.7065	273	2650
	Supervision and Monitoring	L.S.				10000
	<i>Sub total</i>					77606

D	CREATION & 1st YEAR MAINTENANCE			@Rs.	273	/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	78	273	21199
	5 weedings, mulching and fire protection works @ 18 DLs/ha/weeding	DLs	90	175	273	47698
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha	DLs	5	10	273	2650
	Maintenance and protection of field nursery and watch and ward for the plantation area(1DL for 365 days).	DLs		365	273	99645
	Maintenance of camp huts, implements, ring/tube-well, upkeepment of plantation, signboard, documentation, upkeepment of records and other misc. work	L.S.				10000
	Awareness & Monitoring @ Rs. 800/ha	L.S.		1.9413	800	1553
	<i>Sub total</i>					182745
E	2nd YEAR MAINTENANCE			@ Rs.	300	/DL
	5 weedings, fire protection works @ 15 DLs/ha/weeding	DLs	75	146	300	43723
	25% Vacancy filling by 1 year old seedlings from nursery@ 10DLs/ha	DLs	10	19	300	5830
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha	DLs	5	9.7065	300	2915
	Maintenance and protection of field nursery and watch and ward for the plantation area(1DL for 365 days).	DLs		365	300	109610
	Maintenance of camp hut, implements, ring/tube-well upkeepment of plantation, signboard, documentation, upkeepment of records etc.	L.S.				11000
	Supervision Cost	L.S.		1		1553
	Contingency L.S.	L.S.				2500
	<i>sub total</i>					177130
F	3rd YEAR MAINTENANCE			@ Rs.	330	/DL
	4 weedings, fire protection works @15 DLs/ha/weeding	DLs	60	116	330	38476
	20% Vacancy filling by 2 year old seedlings from nursery@ 8DLs/ha	DLs	8	16	330	5130
	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	9.7065	330	3206

	Maintenance and protection of field nursery and watch and ward for the plantation area(1DL for 365 days).	DLs		365	330	120570
	Maintenance of camp hut, implements, ring/tube-well upkeepment of plantation, signboard, documentation, upkeepment of records	L.S.				12100
	Supervision Cost	L.S.		1		1553
	Contingency @ 15 % over previous year	L.S.				2875
	<i>Sub total</i>					183911
G	4th YEAR MAINTENANCE			@ Rs.	363	/DL
	4 weedings, fire protection works @15 dls/ha/weeding	DLs	60	116	363	42324
	15% Vacancy filling by 2 year old seedlings from nursery@ 6DLs/ha	DLs	6	12	363	4232
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha	DLs	5	9.7065	363	3527
	Maintenance and protection of field nursery and watch and ward for the plantation area(1DL for 365 days).	DLs		365	363	132627
	Maintenance of camp hut, implements, ring/tube-well upkeepment of plantation, signboard, documentation, upkeepment of records etc.	L.S.				13310
	Supervision Cost	L.S.		1		1553
	Contingency @ 15 % over previous year	L.S.				3306
	<i>sub total</i>					200880
H	5th YEAR MAINTENANCE			@ Rs.	400	/DL
	Climber cutting, weeding & other silvicultural works and fire protection works @ 15DLs/ha	DLs	15	39	400	15519
	10% Vacancy filling by 2 year old seedlings from nursery@ 4DLs/ha	DLs	4	8	400	3104
	Maintenance & fencing post replacement @ 3% initial cost of material			0.03	609600	18288
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs/ha	DLs	4	7.7652	400	3104
	Watch and ward for the plantation area(1DL for 365 days).	DLs		365	400	145890
	Maintenance of camp hut, implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S.				14641
	Supervision Cost	L.S.		1		1553
	Contingency @ 15 % over previous year	L.S.				3802
	<i>sub total</i>					205901

I	6th YEAR MAINTENANCE			@ Rs.	440	/DL
	Climber cutting, other silvicultural works and fire protection works @15 DLs/ha	DLs	15	29	440	12803
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs/ha	DLs	4	7.7652	440	3414
	Watch and ward for the plantation area(1DL for 365 days).	DLs		365	440	160479
	Maintenance of camp hut, implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S.				16105
	Supervision Cost	L.S.				1553
	Contingency @ 15 % over previous year	L.S.				4373
	<i>sub total</i>					198727
J	7th YEAR MAINTENANCE			@ Rs.	484	/DL
	Climber cutting, other silvicultural works and fire protection works @ 12 DLs/ha	DLs	12	23	484	11267
	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	9.7065	484	4694
	Maintenance of camp hut, implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S.				17716
	Supervision Cost	L.S.				1553
	Contingency @ 15 % over previous year	L.S.				5028
	<i>sub total</i>					40258
K	8th YEAR MAINTENANCE			@ Rs.	532	/DL
	Climber cutting, other silvicultural works and fire protection works @ 8 DLs/ha	DLs	8	16	532	8262
	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	9.7065	532	5164
	Maintenance of camp hut, implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S.				19487
	Supervision Cost	L.S.				1553
	Contingency @ 15 % over previous year	L.S.				5783
	<i>sub total</i>					40249

I	9th YEAR MAINTENANCE			@ Rs.	585	/DL
	Climber cutting, other silvicultural works and fire protection works @ 7 DLs/ha	DLs	7	14	585	7952
	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	9.7065	585	5680
	Maintenance of camp hut, implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S.				21436
	Supervision Cost	L.S.				1553
	Contingency @ 15 % over previous year	L.S.				6650
	<i>sub total</i>					43272
M	10th YEAR MAINTENANCE			@ Rs.	644	/DL
	Climber cutting, other silvicultural works, fire protection works @ 6 DLs/ha	DLs	6	12	644	7498
	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	7.7652	644	4999
	Maintenance of camp hut, implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S.				23579
	Supervision Cost	L.S.				1553
	Contingency @ 15 % over previous year	L.S.				7648
	<i>sub total</i>					45277
	Grand Total					2383314
						1191657
						3574972

(Rupees Thirty Five Lakh Seventy Four Thousand Nine Hundred Seventy Two) Only

1. Technical details

Technical details of Compensatory Afforestation Scheme are as follows:-

- (a) Spacing: 2m X 2m
- (b) Species: *Shorea robusta, Gmelina arborea, Michaelia champaka, Bamboo, Amlokh, Bohera etc.*
- (c) Plantation Method: Planting through seedlings

Technically Approved by,

Addl. Principal Chief Conservator of Forests
cum

CHD, Forests, BTC, Kokrajhar

Divisional Forest Officer,
Haltugaon Division,
Kokrajhar



**SCHEME FOR PLANTATION OF MEDICINAL PLANTS (DWARF SPECIES) UNDER
THE PROPOSED DIVERSION 1.9413 ha FOREST LAND FOR 132KV TRANSMISSION LINE OF AEGCL**

Area (ha)	=	1.9413
Spacing (m X m)	=	2 X 2
Number of Saplings/ ha	=	2500
Length of Fence (RM)	=	1602
Wage rate for the 1st year(Rs.)	=	273
Increase in wage rate for subsequent years by a factor	=	1.1
Appreciation of material costs by a factor	=	1.1

S.No.	Particulars of works	Units	Qty./ha	Total Qty.	Rate / Unit	Amount (Rs.)
A	ERCTION OF FENCING			@Rs. 273 /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 1602 RM @ Rs. 1016 per RM as per estimate	RMs		1602	1016	1627632
	(b) Wages of DLs for carrying, fitting, fixing etc. of fencing materials @ 20 DLs/ 100 RM	DLs		320	273	87469
	Sub-total					1715101
B	INFRASTRUCTURE IN PLANTATION AREA			- - -		
	Construction of camp hut (atleast one upto 25 ha & thereafter one per every 25 ha) as per estimate	nos.		1	150,000	150000
	Installation of ring/tube well (atleast one upto 10 ha & thereafter two per every 25 ha)	nos.		1	50,000	50000
	Irrigation facility with Diesel generator and hose pipes for watering the nursery and plantation (during dry spells)	nos.		1	50,000	50000
	Cost of tools & implements (One unit upto 25 ha & thereafter one unit per every 25 ha)	nos.		1	10,000	10000
	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	60000
	Camp accessories @ Rs. 10,000/ per camp	nos.		1	10,000	10000
	Construction of Inspection Path 1400 RM @ Rs. 50/- RM	RMs		801	50	40050
	sub total					370050

C	ADVANCE WORK			@Rs.	273	/DL
	Site selection, surveying, demarcation, jungle cutting, burning etc. 20 DLs/ha	DLs	20	38.826	273	10599
	Preparation and acquisition of polypot saplings in the field nursery for planting 2500 Nos. Seedlings/ ha @ Rs.8/- per polypot	nos.	2500	4853.3	8	38826
	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 @ Rs.9/- per polypot	nos.	625	1213.3	9	10920
	b) 20% mortality expected during 2nd year (to be planted in the field during the 3rd year) ,i.e., 500 Seedlings/ ha @ Rs.10/- per polypot	nos.	500	970.65	10	9707
	c) 15% mortality expected during 3rd year (to be planted in the field during the 4th year),i.e., 375 Seedlings/ ha @ Rs.12/- per polypot	nos.	375	727.99	12	8736
	d) 10% mortality expected during 4th year (to be planted in the field during the 5th year),i.e., 250 Seedlings/ ha @ Rs.14/- per polypot	nos.	250	485.33	14	6795
	Cost of Bamboo, making of stacking & transportation etc	nos.	625	1213.3	1	1213
	Line alignment, carriage of stacking materials and fixing the stacking @ 5 DLs/ha	DLs	5	9.7065	273	2650
	Supervision and Monitoring	L.S.				10000
	<i>Sub total</i>					99445
D	CREATION & 1st YEAR MAINTENANCE			@Rs.	273	/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	78	273	21199
	5 weedings, mulching and fire protection works @ 18 DLs/ha/weeding	DLs	90	175	273	47698
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha	DLs	5	10	273	2650
	Maintenance and protection of field nursery and watch and ward for the plantation area(1DL for 365 days).	DLs		365	273	99645
	Maintenance of camp huts, implements, ring/tube- well, upkeepment of plantation, signboard, documentation, upkeepment of records and other misc. work	L.S.				10000
	Awareness & Monitoring @ Rs. 800/ha	L.S.		1.9413	800	1553
	<i>Sub total</i>					182745

E	2nd YEAR MAINTENANCE			@ Rs.	300	/DL
	5 weedings, fire protection works @ 15 DLs/ha/weeding	DLs	75	146	300	43723
	25% Vacancy filling by 1 year old seedlings from nursery@ 10DLs/ha	DLs	10	19	300	5830
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha	DLs	5	9.7065	300	2915
	Maintenance and protection of field nursery and watch and ward for the plantation area(1DL for 365 days).	DLs		365	300	109610
	Maintenance of camp hut, implements, ring/tube-well upkeepment of plantation, signboard, documentation, upkeepment of records etc.	L.S.				11000
	Supervision Cost	L.S.		1		1553
	Contingency L.S.	L.S.				2500
	<i>sub total</i>					177130
F	3rd YEAR MAINTENANCE			@ Rs.	330	/DL
	4 weedings, fire protection works @15 DLs/ha/weeding	DLs	60	116	330	38476
	20% Vacancy filling by 2 year old seedlings from nursery@ 8DLs/ha	DLs	8	16	330	5130
	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	9.7065	330	3206
	Maintenance and protection of field nursery and watch and ward for the plantation area(1DL for 365 days).	DLs		365	330	120570
	Maintenance of camp hut, implements, ring/tube-well upkeepment of plantation, signboard, documentation, upkeepment of records	L.S.				12100
	Supervision Cost	L.S.		1		1553
	Contingency @ 15 % over previous year	L.S.				2875
	<i>Sub total</i>					183911
G	4th YEAR MAINTENANCE			@ Rs.	363	/DL
	4 weedings, fire protection works @15 dls/ha/weeding	DLs	60	116	363	42324
	15% Vacancy filling by 2 year old seedlings from nursery@ 6DLs/ha	DLs	6	12	363	4232
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha	DLs	5	9.7065	363	3527
	Maintenance and protection of field nursery and watch and ward for the plantation area(1DL for 365 days).	DLs		365	363	132627

	Maintenance of camp hut, implements, ring/tube-well upkeepment of plantation, signboard, documentation, upkeepment of records etc.	L.S.				13310
	Supervision Cost	L.S.		1		1553
	Contingency @ 15 % over previous year	L.S.				3306
	<i>sub total</i>					200880
H	5th YEAR MAINTENANCE			@ Rs.	400	/DL
	Climber cutting, weeding & other silvicultural works and fire protection works @ 15DLs/ha	DLs	15	39	400	15519
	10% Vacancy filling by 2 year old seedlings from nursery@ 4DLs/ha	DLs	4	8	400	3104
	Maintenance & fencing post replacement @ 3% initial cost of material			0.03	1627632	48829
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs/ha	DLs	4	7.7652	400	3104
	Watch and ward for the plantation area(1DL for 365 days).	DLs		365	400	145890
	Maintenance of camp hut, implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S.				14641
	Supervision Cost	L.S.		1		1553
	Contingency @ 15 % over previous year	L.S.				3802
	<i>sub total</i>					236442
I	6th YEAR MAINTENANCE			@ Rs.	440	/DL
	Climber cutting, other silvicultural works and fire protection works @15 DLs/ha	DLs	15	29	440	12803
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs/ha	DLs	4	7.7652	440	3414
	Watch and ward for the plantation area(1DL for 365 days).	DLs		365	440	160479
	Maintenance of camp hut, implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S.				16105
	Supervision Cost	L.S.				1553
	Contingency @ 15 % over previous year	L.S.				4373
	<i>sub total</i>					198727

J	7th YEAR MAINTENANCE			@ Rs.	484	/DL
	Climber cutting, other silvicultural works and fire protection works @ 12 DLs/ha	DLs	12	23	484	11267
	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	9.7065	484	4694
	Maintenance of camp hut, implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S.				17716
	Supervision Cost	L.S.				1553
	Contingency @ 15 % over previous year	L.S.				5028
	<i>sub total</i>					40258
K	8th YEAR MAINTENANCE			@ Rs.	532	/DL
	Climber cutting, other silvicultural works and fire protection works @ 8 DLs/ha	DLs	8	16	532	8262
	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	9.7065	532	5164
	Maintenance of camp hut, implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S.				19487
	Supervision Cost	L.S.				1553
	Contingency @ 15 % over previous year	L.S.				5783
	<i>sub total</i>					40249
I	9th YEAR MAINTENANCE			@ Rs.	585	/DL
	Climber cutting, other silvicultural works and fire protection works @ 7 DLs/ha	DLs	7	14	585	7952
	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	9.7065	585	5680
	Maintenance of camp hut, implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S.				21436
	Supervision Cost	L.S.				1553
	Contingency @ 15 % over previous year	L.S.				6650
	<i>sub total</i>					43272

M	10 th YEAR MAINTENANCE			@ Rs.	644	/DL
	Climber cutting, other silvicultural works, fire protection works @ 6 DLs/ha	DLs	6	12	644	7498
	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	7.7652	644	4999
	Maintenance of camp hut, implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S.				23579
	Supervision Cost	L.S.				1553
	Contingency @ 15 % over previous year	L.S.				7648
	<i>sub total</i>					45277
	Grand Total					3533486

(Rupees Thirty Five Lakh Thirty Three Thousand Four Hundred Eighty 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"x5" cross-section- of 6 ft height (1.5 ft below ground & 4.5 ft above ground) with readymade concrete base of 1 ft width for fixing.

** Species: Leteku, Batgila, Kardoi, Amla

Technically Approved by,

Addl. Principal Chief Conservator of Forests
cum
CHD, Forests, BTC, Kokrajhar

Divisional Forest Officer
Haltugaon Division
Kokrajhar

