LAND SUITABILITY CERTIFICATE BY DFO CONCERNED (Plot -1: 71 ha)

This is to certify that 71 ha land bearing Survey No. / Compartment No. 3 of Phulkumari RF under Balapara Beat of Khoraghat Range under Parbatjhora Division, Suparighat in Kokrajhar district is identified for Compensatory Afforestation.

1. Details of degraded forest land

District: Kokrajhar Name of Division: Parbatjhora Division

Range: Khoraghat RF: Phulkumari Compartment No. 3

Area to be afforested: 71 ha

2. Description of Area

i. Topography: a. Plain land

b. Slope: Gentle (48-51 m elevation)

- ii. Vegetation: Barren land without any tall trees but ground cover includes grasses and Euphatorium sp. bushes
- iii. Vulnerability to erosion: As slope is gentle, chances of erosion will be minimum.
- iv. Soil structure & texture: Lateritic (red) soil formed by disintegration of metamorphic rocks without boulders or rocks.
- v. Accessibility of the site: The site is within the Reserved Forest Area and is well connected by all weather road
- vi. Feasibility for monitoring & supervision: The proposed site is within 2 km from beat office, 15km from Range Office and 30km from Divisional Office
- vii. Wildlife Importance: The area does not have any major wildlife and do not fall within wild animal corridor

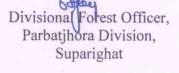
It is certified that proposed site is suitable for plantation from management point of view and is free from all sorts of encumbrances/encroachment.

Date:

07.12.2017

Place:

Suparighat





LAND SUITABILITY CERTIFICATE BY DFO CONCERNED (Plot -2: 45 ha)

This is to certify that 45 ha land bearing Survey No. / Compartment No.7 of Bhelakopa RF under Balapara Beat of Khoraghat Range under Parbatjhora Division, Suparighat in Kokrajhar district is identified for Compensatory Afforestation.

1. Details of degraded forest land

District: Kokrajhar Name of Division: Parbatjhora Division

Range: Khoraghat RF: Bhelakopa Beat: Balapara Compartment No. 7

Area to be afforested: 45 ha

2. Description of Area

i. Topography: a. Plain land

b. Slope: Moderate (39 to 47 m elevation)

- ii. Vegetation: Barren land without any tall trees but ground cover includes grasses and Euphatorium sp. bushes
- iii. Vulnerability to erosion: As slope is moderate, chances of erosion will be least.
- iv. Soil structure & texture: Lateritic (red) soil formed by disintegration of metamorphic rocks without boulders or rocks.
- v. Accessibility of the site: The site is within the Reserved Forest Area and has all weather village road
- vi. Feasibility for monitoring & supervision: The proposed site is within 8 km from Range Office and 22 km from Divisional Office
- vii. Wildlife Importance: The area does not have any major wildlife and do not fall within wild animal corridor

It is certified that proposed site is suitable for plantation from management point of view and is free from all sorts of encumbrances/encroachment.

Date:

07.12.2017

Place:

Suparighat



Divisional Forest Officer, Parbatjhora Division, Suparighat

LAND SUITABILITY CERTIFICATE BY DFO CONCERNED (Plot -3: 154 ha)

This is to certify that 154 ha land bearing Survey No. / Compartment No. 25 of Mahamaya RF under Khoraghat Beat of Khoraghat Range under Parbatjhora Division, Suparighat in Kokrajhar district is identified for Compensatory Afforestation.

1. Details of degraded forest land

District: Kokrajhar Name of Division: Parbatjhora Division

Range: Khoraghat RF: Mahamaya Beat: Khoraghat Compartment No. 25

Area to be afforested: 154 ha

2. Description of Area

i. Topography: a. Plain land

b. Slope: Moderate (45 to 52 M elevation)

- ii. Vegetation: Barren land without any tall trees but ground cover includes grasses and Euphatorium sp. bushes
- iii. Vulnerability to erosion: As slope is gentle, chances of erosion will be least.
- iv. Soil structure & texture: Lateritic (red) soil formed by disintegration of metamorphic rocks without boulders or rocks.
- v. Accessibility of the site: The site is within Reserved Forest Area and is 3 km from NH-31
- vi. *Feasibility for monitoring & supervision*: The proposed site is within 3 km from Range

 Office and 17 km from Divisional Office
- vii. Wildlife Importance: The area does not have any major wildlife and do not fall within wild animal corridor

It is certified that proposed site is suitable for plantation from management point of view and is free from all sorts of encumbrances/ encroachment.

Date:

07.12.2017

Place:

Suparighat



Divisional Forest Officer, Parbatjhora Division, Suparighat

ESTIMATE OF COMPENSATORY AFFORESTATION (CA)

<u>PROJECT DETAILS</u>:-Diversion of 208.807 Ha of Forest Land for construction of 400 KV Jigmellling-Alipurduar Transmission Line by PowerGrid Corporation of India Limited.

Due to unavailability of degraded forest land in Chirang Forest Division through which the subject mentioned Transmission Line passes(Forest area involved in Chirang Division is 134.588 hectare), alternate CA land of 270hectare has been identified in Parbatjhora Forest division in 3 patches as per Addl PCCF, Kokrajhar Letter No. FGW. 18/Diversion/PG/Trans/2017/1129, dtd. 25/09/2017

THE TOTAL ESTIMATE OF CA IS AS BELOW:

S.N	ITEM	AMOUNT in Rs.
1	CA + OVERHED (PLOT -1) 71 HA	3,54,56,294
2	CA + OVERHED (PLOT -2) 45 HA	2,33,50,058
3	CA + OVERHED (PLOT -3) 154 HA	7,18,06,972
TOT	AL (CA + OVERHEAD) COST FOR 270 HA	Rs. 13,06,13,324/-
		, , , , , ,

Technically Approved by

Addl. Principal Chief Conservator of Foreste Cum Council Head of Department, Foreste Bodoland Territorial Council Kokrajher DIVISIONAL FOREST OFFICER
PARBATJHORA DIVISION
SUPARIGHAT

Office seal:

CA Scheme for 71 ha Plantation (Plot-1) under PARBATJHORA Forest Division based on 50 ha BLOCK PLANTATION NORMS OF CAMPA

Area (ha)	=	71
Spacing (M x M)	=	2 X 2
Number of Saplings/ ha	=	2500
Length of Fence (RM)	=	5822
Wage rate for the 1st year (Rs.)	=	250
Increase in wage rate for subsequent years by a factor	=	1.1
Appreciation of material costs by a factor	=	1.1

S.No		Units	Qty.	Total Otv.	Rate / Unit	Amount (Rs.)
A	ERECTION OF FENCING			@Rs.	250	/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 5822 RM @ Rs. 800 per RM as per estimate	RMs		5822	800	4657600
H	(b) Wages of DLs for carrying, fitting, fixing etc. of fencing materials @ $20 \text{DLs}/100 \text{RM}$	DLs		1164	250	291100
	Sub-total		- 19	le me	ode a lite	4948700
В	INFRASTRUCTURE IN PLANTATION AREA			ET GO	- 14 4-7	131344
	Construction of camp hut (atleast one upto 25 ha & thereafter one per every 25 ha) as per estimate	nos.		3	150,000	450000
	Installation of ring/tube well (atleast one upto 10 ha & thereafter two per every 25 ha)	nos.		6	50,000	300000
	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.		3	10,000	30000
	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	180000
	Camp accessories @ Rs. 10,000/ per camp	nos.		3	10,000	30000
	Construction of Inspection Path 2911 RM @ Rs. 50/- RM	RMs		2911	50	145550
-	Construction of Staff quarters as per estimate (One unit for 10 to 50 ha & thereafter one unit per every 50 ha)	nos.		2	800,000	1600000
	Provision of Solar energy for staff quarters including installation	nos.		2	70,000	140000
0.0	sub total					2925550
C	ADVANCE WORK			@Rs.	250	
	Site selection, surveying, demarcation, jungle cutting, burning etc. 20 DLs/ha	DLs	.20	1420	250	355000
	Preparation and acquisition of polypot saplings in the field nursery for planting 2500 Nos. Seedlings/ ha @ Rs.6/- per polypot	nos.	2500	177500	6	1065000
	Preparation of polypot saplings in the field nursery for vacancy filling					
1	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	44375	6.5	288438
1	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	35500	7	248500
	2) 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	26625	7.5	199688
5	1) 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	17750	8	142000
(Cost of Bamboo, making of stacking & transportation etc	nos.	625	44375	1	44375
0 -	ine alignment, carriage of stacking materials and fixing the stacking @ 5 DLs/ha	DLs	5	355	250	88750
5	Supervision and Monitoring	L.S.				20000
	Sub total			< -		2451750

			@Rs.	250	/DL
CREATION & 1 st YEAR MAINTENANCE Soil working, carriage of stumps, polypot seedling and planting at the plantation site including, dibbling of seeds wherever necessary to complete raising of		40	2840	250	710000
plantation with all necessary operation @ 40 DLs/ ha					
5 weedings, mulching and fire protection works @ 18 DLs/ha/weeding	DLs	90	6390	250	1597500
Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha	DLs	5	355	250	88750
Maintenance and protection of field nursery (1 DL for 365 days) and watch and ward for the plantation area(2 DL for 365 days).	DLs		1095	250	273750
Maintenance of camp huts, implements, ring/tube- well, upkeepment of plantation, signboard, documentation, upkeepment of records and other misc. work					10000
Awareness & Monitoring @ Rs. 800/ha	L.S.		71	800	56800
Sub total					2736800
2 nd YEAR MAINTENANCE			@ Rs.	275	/DL ·
5 weedings, fire protection works @ 15 DLs/ha/weeding	DLs	75	5325	275	1464375
25% Vacancy filling by 1 year old seedlings from nursery@ 10DLs/ha	DLs	10	710	275	195250
Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha	DLs	5	355	275	97625
Maintenance and protection of field nursery (1 DL for 365 days) and watch and ward for the plantation area(2 DL for 365 days).	DLs		1095	275	301125
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		56800
Contingency L.S.	L.S.	Mary.			5000
sub total	1	1112		Mark of the	2131175
3 rd YEAR MAINTENANCE			a Rs.	303	/DL
4 weedings, fire protection works @15 DLs/ha/weeding	DLs	60	4260	303	1288650
20% Vacancy filling by 2 year old seedlings from nursery@ 8DLs/ha	DLs	8	568	303	171820
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	355	303	107388
	DLs		1095	303	331238
Maintenance and protection of field nursery (1 DL for 365 days) and watch and ward for the plantation area(2 DL for 365 days).	DLS				
Maintenance and protection of field nursery (1 DL for 365 days) and watch and	L.S.				12100
Maintenance and protection of field nursery (1 DL for 365 days) and watch and ward for the plantation area(2 DL for 365 days). Maintenance of camp hut, implements, ring/tube- well upkeepment of plantation,			1		
Maintenance and protection of field nursery (1 DL for 365 days) and watch and ward for the plantation area(2 DL for 365 days). Maintenance of camp hut, implements, ring/tube- well upkeepment of plantation, signboard, documentation, upkeepment of records Supervision Cost	L.S.		1		56800
Maintenance and protection of field nursery (1 DL for 365 days) and watch and ward for the plantation area(2 DL for 365 days). Maintenance of camp hut, implements, ring/tube- well upkeepment of plantation, signboard, documentation, upkeepment of records	L.S.		1		56800 5750
Maintenance and protection of field nursery (1 DL for 365 days) and watch and ward for the plantation area(2 DL for 365 days). Maintenance of camp hut, implements, ring/tube- well upkeepment of plantation, signboard, documentation, upkeepment of records Supervision Cost Contingency @ 15 % over previous year Sub total	L.S.		1 @ Rs.	333	56800 5750
Maintenance and protection of field nursery (1 DL for 365 days) and watch and ward for the plantation area(2 DL for 365 days). Maintenance of camp hut, implements, ring/tube- well upkeepment of plantation, signboard, documentation, upkeepment of records Supervision Cost Contingency @ 15 % over previous year Sub total	L.S.	60		333	56800 5750 1973745 /DL
Maintenance and protection of field nursery (1 DL for 365 days) and watch and ward for the plantation area(2 DL for 365 days). Maintenance of camp hut, implements, ring/tube- well upkeepment of plantation, signboard, documentation, upkeepment of records Supervision Cost Contingency @ 15 % over previous year Sub total 4th YEAR MAINTENANCE 4 weedings, fire protection works @15 dls/ha/weeding	L.S. L.S.	60	@ Rs.		56800 5750 1973745 /DL 1417515
Maintenance and protection of field nursery (1 DL for 365 days) and watch and ward for the plantation area(2 DL for 365 days). Maintenance of camp hut, implements, ring/tube- well upkeepment of plantation, signboard, documentation, upkeepment of records Supervision Cost Contingency @ 15 % over previous year Sub total 4th YEAR MAINTENANCE	L.S. L.S. L.S. DLs		@ Rs. 4260	333	56800 5750 1973745 /DL 1417515 141752
Maintenance and protection of field nursery (1 DL for 365 days) and watch and ward for the plantation area(2 DL for 365 days). Maintenance of camp hut, implements, ring/tube- well upkeepment of plantation, signboard, documentation, upkeepment of records Supervision Cost Contingency @ 15 % over previous year Sub total 4th YEAR MAINTENANCE 4 weedings, fire protection works @15 dls/ha/weeding 15% Vacancy filling by 2 year old seedlings from nursery@ 6DLs/ha Upkeepment of plantation, and making of inspection path, repairing of fence etc.	L.S. L.S. L.S. DLs DLs DLs	6	@ Rs. 4260 426	333 333	56800 5750 1973745 /DL 1417515 141752 118126
Maintenance and protection of field nursery (1 DL for 365 days) and watch and ward for the plantation area(2 DL for 365 days). Maintenance of camp hut, implements, ring/tube- well upkeepment of plantation, signboard, documentation, upkeepment of records Supervision Cost Contingency @ 15 % over previous year Sub total 4th YEAR MAINTENANCE 4 weedings, fire protection works @15 dls/ha/weeding 15% Vacancy filling by 2 year old seedlings from nursery@ 6DLs/ha Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha Maintenance and protection of field nursery (1 DL for 365 days) and watch and ward for the plantation area(2 DL for 365 days). Maintenance of camp hut, implements, ring/tube- well upkeepment of plantation,	L.S. L.S. L.S. DLs DLs DLs	6	@ Rs. 4260 426 355	333 333 333	56800 5750 1973745 /DL 1417515 141752 118126
Maintenance and protection of field nursery (1 DL for 365 days) and watch and ward for the plantation area(2 DL for 365 days). Maintenance of camp hut, implements, ring/tube- well upkeepment of plantation, signboard, documentation, upkeepment of records Supervision Cost Contingency @ 15 % over previous year Sub total 4th YEAR MAINTENANCE 4 weedings, fire protection works @15 dls/ha/weeding 15% Vacancy filling by 2 year old seedlings from nursery@ 6DLs/ha Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha Maintenance and protection of field nursery (1 DL for 365 days) and watch and ward for the plantation area(2 DL for 365 days). Maintenance of camp hut, implements, ring/tube- well upkeepment of plantation, signboard, documentation, upkeepment of records etc.	L.S. L.S. L.S. DLs DLs DLs	6	@ Rs. 4260 426 355	333 333 333	56800 5750 1973745 /DL 1417515 141752 118126 364361 13310
Maintenance and protection of field nursery (1 DL for 365 days) and watch and ward for the plantation area(2 DL for 365 days). Maintenance of camp hut, implements, ring/tube- well upkeepment of plantation, signboard, documentation, upkeepment of records Supervision Cost Contingency @ 15 % over previous year Sub total 4th YEAR MAINTENANCE 4 weedings, fire protection works @15 dls/ha/weeding 15% Vacancy filling by 2 year old seedlings from nursery@ 6DLs/ha Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha Maintenance and protection of field nursery (1 DL for 365 days) and watch and ward for the plantation area(2 DL for 365 days). Maintenance of camp hut, implements, ring/tube- well upkeepment of plantation,	L.S. L.S. L.S. DLs DLs DLs L.S.	6	@ Rs. 4260 426 355 1095	333 333 333	1417515 141752 118126

5	th YEAR MAINTENANCE			@ Rs.	366 /	DL
(Climber cutting, weeding & other silvicultural works and fire protection works @ 15DLs/ha	DLs	15	1420	366	519756
	10% Vacancy filling by 2 year old seedlings from nursery@ 4DLs/ha	DLs	4	284	366	103951
N	Maintenance & fencing post replacement @ 3% initial cost of material		No. I	0.03	4657600	139728
Ţ	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs/ha	DLs	4	284	366	103951
	Watch and ward for the plantation area(2 DL for 365 days).	DLs		730	366	. 267198
N	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		56800
-	Contingency @ 15 % over previous year	L.S.				7604
-	sub total		No market			1213629
+			-	a Rs.	403	/DL
- 1-	6 th YEAR MAINTENANCE Climber cutting, other silvicultural works and fire protection works @15 DLs/ha	DLs	15	1065	403	428798
-	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs/ha	DLs	4	284	403	114346
1	Watch and ward for the plantation area(2 DL for 365 days).	DLs		730	403	293918
1	Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S.	H			16105
	Supervision Cost	L.S.		I I mark		56800
- 1	Contingency @ 15 % over previous year	L.S.				8745
-	sub total		1	7 - 5 -		918713
	7 th YEAR MAINTENANCE			@ Rs.	443	/DL
- 1	Climber cutting, other silvicultural works and fire protection works @ 12 DLs/ha	DLs	12	852	443	377342
	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	355	443	157226
	Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S.				17716
	Supervision Cost	L.S.				56800
	Contingency @ 15 % over previous year	L.S.				1005
	sub total					61914
(8 th YEAR MAINTENANCE			@ Rs	. 487	/DL
	Climber cutting, other silvicultural works and fire protection works @ 8 DLs/ha	DLs	8	568	487	27671
	Protection work, cattle watching, upkeepment of plantation, and making o inspection path, repairing of fence etc. on day to day basis @ 5 DLs / ha		5	355	487	17294
	Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation signboard, documentation & upkeepment of records etc.					1948
	Supervision Cost	L.S.			L. C. Str. L.	5680
	Contingency @ 15 % over previous year	L.S.				1156
	sub total	1		1		53751

O th YEAR MAINTENANCE			@ Rs.	536	/DL
Climber cutting, other silvicultural works and fire protection works @ 7 DLs/ha	DLs	7	497	536	266341
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	355	536	190244
Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S.	r _E /			21436
Supervision Cost	L.S.				56800
Contingency @ 15 % over previous year	L.S.			THE PERSON NAMED IN	13300
sub total					548120
10 th YEAR MAINTENANCE	44.11.4		@ Rs.	589	/DL
Climber cutting, other silvicultural works, fire protection works @ 6 DLs/ha	DLs	6	426	589	251121
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	284	589	167414
Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S.				23579
Supervision Cost	L.S.				56800
Contingency @ 15 % over previous year	L.S.		100		15295
Sub-Total					514210
Total`=					23637529

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.

Grand Total '=

Submitted

35456294

Technically Approved by

Divisional Forest Officer Parbatjhora Division, Suparighat

Divisional Forest
Parbatjhora Forest Division
Suparighat

Addit. Principal Chief Conservator of Forests Cum Council Head of Department, Forests Bosoland Territorial Council

Kokrajhar

CA Scheme for 45 ha Plantation (Plot-2) under PARBATJHORA Forest Division <u>based on 50 ha BLOCK PLANTATION NORMS OF CAMPA</u>

Area (ha)	=	45
Spacing (M x M)	=	2 X 2
Number of Saplings/ ha	-	2500
Length of Fence (RM)		3690
Wage rate for the 1st year (Rs.)		250
Increase in wage rate for subsequent years by a factor	1100	1.1
Appreciation of material costs by a factor	-	1.1

S.No		Units	Qty./	Total Oty.	Rate / Unit	Amount (Rs.)
A	ERECTION OF FENCING			@Rs.	250	/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 3690 RM @ Rs. 800 per RM as per estimate	RMs		3690	800	2952000
	(b) Wages of DLs for carrying, fitting, fixing etc. of fencing materials @ 20 DLs/100 RM	DLs		738	250	184500
	Sub-total			4		3136500
B	INFRASTRUCTURE IN PLANTATION AREA					
	Construction of camp hut (atleast one upto 25 ha & thereafter one per every 25 ha) as per estimate	nos.		2	150,000	300000
	Installation of ring/tube well (atleast one upto 10 ha & thereafter two per every 25 ha)	nos.		4	50,000	200000
	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.		2	10,000	20000
	Cost of RCC signboard & Gate including fitting and fixing of the same (atleast one upto 25 ha & thereafter one per every 25 ha)	nos.	T.E	2	60,000	120000
	Camp accessories @ Rs. 10,000/ per camp	nos.	-	2	10,000	20000
	Construction of Inspection Path 1845 RM @ Rs. 50/- RM	RMs	100	1845	50	92250
	Construction of Staff quarters as per estimate (One unit for 10 to 50 ha & thereafter one unit per every 50 ha)	nos.		1	800,000	800000
	Provision of Solar energy for staff quarters including installation	nos.		1	70,000	70000
	sub total			n ita		1672250
C	ADVANCE WORK			@Rs.	250	/DL
	Site selection, surveying, demarcation, jungle cutting, burning etc. 20 DLs/ha	DLs	20	900	250	225000
	Preparation and acquisition of polypot saplings in the field nursery for planting 2500 Nos. Seedlings/ ha @ Rs.6/- per polypot	nos.	2500	112500	6	675000
	Preparation of polypot saplings in the field nursery for vacancy filling			and the		
	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	28125	6.5	182813
	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	22500	7	157500
	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	16875	7.5	12656.
	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	11250	8	90000
	Cost of Bamboo, making of stacking & transportation etc	nos.	625	28125	1	2812.
	Line alignment, carriage of stacking materials and fixing the stacking @ 5 DLs/ha	DLs	5	225	250	5625
	Supervision and Monitoring	L.S.				20000
	Sub total	1				156125

CRI	EATION & 1st YEAR MAINTENANCE	gd th		@Rs.	250	/DL
Soil site	working, carriage of stumps, polypot seedling and planting at the plantation including, dibbling of seeds wherever necessary to complete raising of	DLs	40	1800	250	450000
plan	tation with all necessary operation @ 40 DLs/ ha	DLs	90	4050	250	1012500
	eedings, mulching and fire protection works @ 18 DLs/ha/weeding	DES		4030	200	
on d	teepment of plantation, and making of inspection path, repairing of fence etc. lay to day basis @ 5 DLs/ha	DLs	5	225	250	56250
war	ntenance and protection of field nursery (1 DL for 365 days) and watch and d for the plantation area(2 DL for 365 days).	DLs		1095	250	273750
Mai plar wor	itation, signobard, documentation, upkeepment of records and	L.S.				10000
	areness & Monitoring @ Rs. 800/ha	L.S.		45	800	36000
-	Sub total					1838500
2 nd	YEAR MAINTENANCE			@ Rs.		/DL
	eedings, fire protection works @ 15 DLs/ha/weeding	DLs	75	3375	275	928125
25%	6 Vacancy filling by 1 year old seedlings from nursery@ 10DLs/ha	DLs	10	450	275	123750
Upl	keepment of plantation, and making of inspection path, repairing of fence etc. day to day basis @ 5 DLs/ha	DLs	5	225	275	61875
Ma	intenance and protection of field nursery (1 DL for 365 days) and watch and rd for the plantation area(2 DL for 365 days).	DLs		1095	275	301125
Ma	intenance of camp hut, implements, ring/tube- well upkeepment of plantation, aboard, documentation, upkeepment of records etc.	L.S.				11000
	pervision Cost	L.S.		1	311171	36000
	ntingency L.S.	L.S.				5000
001	sub total					1466875
3rd	YEAR MAINTENANCE		Total	@ Rs.	303	/DL
-	veedings, fire protection works @15 DLs/ha/weeding	DLs	60	2700	303	816750
209	% Vacancy filling by 2 year old seedlings from nursery@ 8DLs/ha	DLs	8	360	303	108900
Pro	otection work, cattle watching, upkeepment of plantation, and making of pection path, repairing of fence etc. on day to day basis @ 5 DLs/ha	DLs	5	225	303	68063
Ma	nintenance and protection of field nursery (1 DL for 365 days) and watch and rd for the plantation area(2 DL for 365 days).	DLs		1095	303	331238
Ma	nintenance of camp hut, implements, ring/tube- well upkeepment of plantation, nboard, documentation, upkeepment of records	L.S.		State May	Um as a	12100
-	pervision Cost	L.S.	7 111	1	Miller Pal	36000
	entingency @ 15 % over previous year	L.S.				5750
-	Sub total			- 4	CV TO	1378800
	YEAR MAINTENANCE			@ Rs	. 33.	3 /DL
G 4th		DLs	60	2700	333	898425
				270	333	89843
4 \	veedings, fire protection works @15 dls/ha/weeding	DLs	6	270	333	02015
4 v 15 Up	weedings, fire protection works @15 dls/ha/weeding % Vacancy filling by 2 year old seedlings from nursery@ 6DLs/ha bkeepment of plantation, and making of inspection path, repairing of fence etc	DLs		225	333	74869
4 v 15 Up on Ma	weedings, fire protection works @15 dls/ha/weeding % Vacancy filling by 2 year old seedlings from nursery@ 6DLs/ha bkeepment of plantation, and making of inspection path, repairing of fence etc day to day basis @ 5 DLs/ha aintenance and protection of field nursery (1 DL for 365 days) and watch and ard for the plantation area(2 DL for 365 days).	DLs DLs DLs	5	The second		
4 v 15 Up on Ma wa Ma	weedings, fire protection works @15 dls/ha/weeding % Vacancy filling by 2 year old seedlings from nursery@ 6DLs/ha bkeepment of plantation, and making of inspection path, repairing of fence etc day to day basis @ 5 DLs/ha aintenance and protection of field nursery (1 DL for 365 days) and watch and ard for the plantation area(2 DL for 365 days). aintenance of camp hut, implements, ring/tube- well upkeepment of plantation	DLs DLs DLs	5	225	333	74869 364361 13310
4 v 15 Up on Mi wa Mi	weedings, fire protection works @15 dls/ha/weeding % Vacancy filling by 2 year old seedlings from nursery@ 6DLs/ha bkeepment of plantation, and making of inspection path, repairing of fence etc day to day basis @ 5 DLs/ha aintenance and protection of field nursery (1 DL for 365 days) and watch and ard for the plantation area(2 DL for 365 days). aintenance of camp hut, implements, ring/tube- well upkeepment of plantation gnboard, documentation, upkeepment of records etc.	DLs DLs DLs	5	225	333	74869 364361
4 v 15 Up on Ma wa Ma sigg	weedings, fire protection works @15 dls/ha/weeding % Vacancy filling by 2 year old seedlings from nursery@ 6DLs/ha bkeepment of plantation, and making of inspection path, repairing of fence etc day to day basis @ 5 DLs/ha aintenance and protection of field nursery (1 DL for 365 days) and watch and ard for the plantation area(2 DL for 365 days). aintenance of camp hut, implements, ring/tube- well upkeepment of plantation	DLs DLs DLs L.S.	5	225 1095	333	74869 364361 13310

H	5 th YEAR MAINTENANCE			@ Rs.	366	/DL
	Climber cutting, weeding & other silvicultural works and fire protection works @ 15DLs/ha	DLs	15	900	366	32942
	10% Vacancy filling by 2 year old seedlings from nursery@ 4DLs/ha	DLs	4	180	366	6588
	Maintenance & fencing post replacement @ 3% initial cost of material		100	0.03	2952000	8856
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs/ha	DLs	4	180	366	6588.
	Watch and ward for the plantation area(2 DL for 365 days).	DLs		730	366	267198
	Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S.				1464.
	Supervision Cost	L.S.		1		36000
	Contingency @ 15 % over previous year	L.S.				7604
	sub total					875195
I	6 th YEAR MAINTENANCE			@ Rs.	403	DL
	Climber cutting, other silvicultural works and fire protection works @15 DLs/ha	DLs	15	675	403	271774
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs/ha	DLs	4	180	403	72473
	Watch and ward for the plantation area(2 DL for 365 days).	DLs		730	403	293918
	Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S.	ш,			16105
	Supervision Cost	L.S.	1			36000
	Contingency @ 15 % over previous year	L.S.		La lymas	Horizon	8745
	sub total		no. J	Stille is		699015
	7 th YEAR MAINTENANCE		1000 - 1	@ Rs.	443 /	DL
	Climber cutting, other silvicultural works and fire protection works @ 12 DLs/ha	DLs	12	540	443	239161
	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	225	443	99650
	Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S.				17716
	Supervision Cost	L.S.				36000
	Contingency @ 15 % over previous year	L.S.				10057
	sub total					402583
<	8 th YEAR MAINTENANCE			@ Rs.	487 /	DL
	Climber cutting, other silvicultural works and fire protection works @ 8 DLs/ha	DLs	8	360	487	175385
	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	225	487	109615
	Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S.				19487
	Supervision Cost	L.S.		L HELL		36000
	Contingency @ 15 % over previous year	L.S.				11565
	sub total					352052

9 th YEAR MAINTENANCE			@ Rs.	536	/DL
Climber cutting, other silvicultural works and fire protection works @ 7 DLs/ha	DLs	7	315	536	168808
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	225	536	120577
Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S.		i praime Marie	ng ng tidadi Kanilakilan	21436
Supervision Cost	L.S.				36000
	L.S.				13300
Contingency @ 15 % over previous year sub total	117,116	la indep	e milit	E 11871	36012
I 10 th YEAR MAINTENANCE			@ Rs.	589	/DL
Climber cutting, other silvicultural works, fire protection works @ 6 DLs/ha	DLs	6	270	589	15916
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	180	589	10610
Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S.			A Maria	2357
Supervision Cost	L.S.				3600
	L.S.	1			1529
Contingency @ 15 % over previous year Sub-Total					34014
Total `=	-		The state of		1556670
5 1 1 4 9 500% of Total CA Cost '=	_				778335

Over head cost @ 50% of Total CA Cost

Grand Total '=

23350058

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.

Submitted

Technically Approved by

Parbatjhora Division, Suparighat
Divisional Forest Office
Parbatjhora Forest Division
Parbatjhora Forest Division Divisional Poresi Officer

Suparighat

Addi. Principal Chief Conservator of Forests Cum Council Head of Department, Percents perioland Territorial Council

Kekrajber

CA Scheme for 154 ha Plantation (Plot-3) under PARBATJHORA Forest Division <u>based on 50 ha BLOCK PLANTATION NORMS OF CAMPA</u>

Area (ha)	=	154
Spacing (M x M)	=	2 X 2
Number of Saplings/ ha	=	2500
Length of Fence (RM)	= .	12628
Wage rate for the 1st year (Rs.)	ela F.	250
Increase in wage rate for subsequent years by a factor	him a field	1.1
Appreciation of material costs by a factor		-1.1

.No		Units	Qty./	Total Otv.	Rate / Unit	Amount (Rs.)			
A	ERECTION OF FENCING			@Rs.	250	/DL			
	(a) Cost of full Chain-linked Goat Proof fencing (4' ht. with 10 Gauge, 3" dia	RMs		12628	800	10102400			
	(b) Wages of DLs for carrying, fitting, fixing etc. of fencing materials @ 20 DLs/	DLs		2526	250	631400			
	Sub-total Sub-total					10733800			
В	INFRASTRUCTURE IN PLANTATION AREA								
	Construction of camp hut (atleast one upto 25 ha & thereafter one per every 25 ha) as per estimate	nos.		5	150,000	750000			
	Installation of ring/tube well (atleast one upto 10 ha & thereafter two per every 25 ha)	nos.		8	50,000	40000			
	Irrigation facility with Diesel generator and hose pipes for watering the nursery and plantation (during dry spells)	nos.		1	50,000	5000			
	Cost of tools & implements (One unit upto 25 ha & thereafter one unit per every 25 ha)	nos.		5	10,000	5000			
	Cost of RCC signboard & Gate including fitting and fixing of the same (atleast one upto 25 have thereafter one per every 25 ha)	nos.	andski mrzin	5	60,000	30000			
	Camp accessóries @ Rs. 10,000/ per camp	nos.		5	10,000	5000			
	Construction of Inspection Path 6314 RM @ Rs. 50/- RM	RMs		6314	50	31570			
	Construction of Staff quarters as per estimate (One unit for 10 to 50 ha & thereafter one unit per every 50 ha)	nos.		4	800,000	320000			
	Provision of Solar energy for staff quarters including installation	nos.		4	70,000	28000			
	sub total		Ind-11		in inves	539570			
C	ADVANCE WORK @Rs. 250 /DL								
	Site selection, surveying, demarcation, jungle cutting, burning etc. 20 DLs/ha	DLs	20	3080	250	77000			
	Preparation and acquisition of polypot saplings in the field nursery for planting 2500 Nos. Seedlings/ ha @ Rs.6/- per polypot	nos.	2500	385000	6	231000			
	Preparation of polypot saplings in the field nursery for vacancy filling			p(17.7%)	THE PART	I I I I I I			
	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	111/151	625	96250	6.5	62562			
	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		500	77000	7	5390			
	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	Lucisia.	375	57750	7.5	4331			
	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	38500		3080			
	Cost of Bamboo, making of stacking & transportation etc	nos.	625	96250	1	962			
	Line alignment, carriage of stacking materials and fixing the stacking @ 5 DLs/ha	-	5	770	250	1925			
	Supervision and Monitoring	L.S.	1			200			
	Sub total					52945			

)	CREATION & 1st YEAR MAINTENANCE		1	@Rs.	250	/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	6160	250	1540000
	5 weedings, mulching and fire protection works @ 18 DLs/ha/weeding	DLs	90	13860	250	3465000
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha	DLs	5	770	250	192500
	Maintenance and protection of field nursery (1 DL for 365 days) and watch and ward for the plantation area(2 DL for 365 days).	DLs	eroni.	1095	250	273750
	Maintenance of camp huts, implements, ring/tube- well, upkeepment of plantation, signboard, documentation, upkeepment of records and other misc. work	L.S.				10000
4	Awareness & Monitoring @ Rs. 800/ha	L.S.		154	800	123200
	Sub total					5604450
	2 nd YEAR MAINTENANCE			@ Rs.		/DL
A	5 weedings, fire protection works @ 15 DLs/ha/weeding	DLs	75	11550	275	3176250
	25% Vacancy filling by 1 year old seedlings from nursery@ 10DLs/ha	DLs	10	1540	275	423500
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha	DLs	5	770	275	211750
	Maintenance and protection of field nursery (1 DL for 365 days) and watch and ward for the plantation area(2 DL for 365 days).	DLs		1095	275	301125
	Maintenance of camp hut, implements, ring/tube- well upkeepment of plantation, signboard, documentation, upkeepment of records etc.	L.S.		Indi yang	b Ballion	11000
i	Supervision Cost	L.S.	land in	1	in in January	123200
H	Contingency L.S.	L.S.				5000
	sub total	Time I		10.51		4251825
	3 rd YEAR MAINTENANCE			@ Rs.	303	/DL
	4 weedings, fire protection works @15 DLs/ha/weeding	DLs	60	9240	303	2795100
	20% Vacancy filling by 2 year old seedlings from nursery@ 8DLs/ha	DLs	8	1232	303	372680
	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	770	303	232925
	Maintenance and protection of field nursery (1 DL for 365 days) and watch and ward for the plantation area(2 DL for 365 days).	DLs		1095	303	331238
	Maintenance of camp hut, implements, ring/tube- well upkeepment of plantation, signboard, documentation, upkeepment of records	L.S.			My Hydelly los Title (A)	12100
	Supervision Cost	L.S.		1	Page 11 - 1	123200
	Contingency @ 15 % over previous year	L.S.				5750
	Sub total				JUL IL JA	3872993
,	4 th YEAR MAINTENANCE			@ Rs.	333	/DL
	4 weedings, fire protection works @15 dls/ha/weeding	DLs	60	9240	333	3074610
	15% Vacancy filling by 2 year old seedlings from nursery@ 6DLs/ha	DLs	6	924	333	307461
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha	DLs	5	770	333	256218
	Maintenance and protection of field nursery (1 DL for 365 days) and watch and ward for the plantation area(2 DL for 365 days).	DLs		1095	333	364361
	Maintenance of camp hut, implements, ring/tube- well upkeepment of plantation,	L.S.		HIGH SEA		13310
	signboard, documentation, upkeepment of records etc.					
		L.S.		1	eloctique.	123200
	signboard, documentation, upkeepment of records etc.			1		123200 6613

Н	5 th YEAR MAINTENANCE		@ Rs. 366 /DL				
	Climber cutting, weeding & other silvicultural works and fire protection works @ 15DLs/ha	DLs	15	3080	366	1127357	
	10% Vacancy filling by 2 year old seedlings from nursery@ 4DLs/ha	DLs	4	616	366	225471	
	Maintenance & fencing post replacement @ 3% initial cost of material			0.03	10102400	303072	
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs/ha	DLs	4	616	366	225471	
	Watch and ward for the plantation area(2 DL for 365 days).	DLs		730	366	267198	
	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		123200	
	Contingency @ 15 % over previous year	L.S.				7604	
	sub total				Columnus	2294015	
I	6 th YEAR MAINTENANCE		@ Rs.				
	Climber cutting, other silvicultural works and fire protection works @15 DLs/ha	DLs	15	2310	403	930070	
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs/ha	DLs	4	616	403	248019	
	Watch and ward for the plantation area(2 DL for 365 days).	DLs		730	403	293918	
	Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S.				16105	
	Supervision Cost	L.S.		Marin.		123200	
	Contingency @ 15 % over previous year	L.S.		Ming sel		8745	
	sub total	i de la companya della companya della companya de la companya della companya dell		14/0 - 34	g .09 m	1620056	
J	7 th YEAR MAINTENANCE				. 443	/DL	
	Climber cutting, other silvicultural works and fire protection works @ 12 DLs/ha	DLs	12	1848	443	818461	
	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	770	443	341025	
	Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S.		16		17716	
	Supervision Cost	L.S.				123200	
	Contingency @ 15 % over previous year	L.S.				10057	
	sub total					1310459	
K	8 th YEAR MAINTENANCE			@ Rs.	. 487	/DL	
	Climber cutting, other silvicultural works and fire protection works @ 8 DLs/ha	DLs	8	1232	487	600205	
	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	770	487	375128	
	Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S.				19487	
	Supervision Cost	L.S.				123200	
	Contingency @ 15 % over previous year	L.S.		1 - 7	1 7.5	11565	
				+	_	1129585	

1	9 th YEAR MAINTENANCE				@ Rs. 536 /DL				
	Climber cutting, other silvicultural works and fire protection works @ 7 DLs/ha	DLs	7	1078	536	577697			
	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	770	536	412641			
	Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S.			Selection in	21436			
	Supervision Cost	L.S.				123200			
	Contingency @ 15 % over previous year	L.S.		The state of	TEN SE	13300			
	sub total	16 - 50	of pil		The same	1148274			
М	10 th YEAR MAINTENANCE	@ Rs. 5		589	589 /DL				
	Climber cutting, other silvicultural works, fire protection works @ 6 DLs/ha	DLs	6	924	589	544686			
	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	616	589	363124			
	Maintenance of camp hut, implements, ring/tube- well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	L.S.				23579			
	Supervision Cost	L.S.				123200			
	Contingency @ 15 % over previous year	L.S.	1 10	-		15295			
	Sub-Total					1069884			
	Total`=					47871314			

Over head cost @ 50% of Total CA Cost ' =

23935658

Grand Total '=

71806972

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.

Submitted

Technically Approved by

Divisional Forest Officer Parbatjhora Division, Suparighat

Divisional Forest Officer Parbatjhora Forest Division Suparighat

Addl. Principal Chief Conservator of Foresto Cum Council Head of Department, Fesselo Badoland Territorial Council Kokrajhan