

**Estimate for Compensatory Aforestation in 4.48 HA Block against diversion proposal of 2.24 Ha Forest Land for
ONGC Exploratory Drilling Location -KHDD**

1	AREA (HA)	4.48	Dimensions of the Block in m		
2			129	293	169
3	PERIMETER	897	306		
4	SPACING	2 X 2	Name of Speceis to be planted: Holak, Holong, Mekai, Khokan, Morhal, Hingori, Titachopa, Panchopa, Gahorichopa, Shyamkothal, Bandardima, Nahar, Moz, Kadam, Hilikha.		
5	NUMBER OF SAPLINGS / HA	2500			
6	LENGTH OF FENCE (RM)	897			
7	WAGE RATE FOR FIRST YEAR	240			
8	Increase in wage rate for subsequent year by a factor	1.1			
9	Appreciation of material cost by a factor	1.1			
10	Compartment Number	11			
11	Location of plantation : Upper Dehing Reserved Forest (EB)				
12	GPS: Co-ordinates: : 27° 26' 31.20" N ; 95° 44' 35.95" E 27° 26' 33.40" N ; 95° 44' 39.95" E 27° 26' 42.22" N ; 95° 44' 35.99" E 27° 26' 39.89" N ; 95° 44' 30.43" E				
13	Name of Range: Digboi Range				

Sl. No.	Particulars of works`	Units	Qty/ ha	Total Qty.	Rate Rs	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-cost RCC pillars* at 1.8 mt. apart including transportation of fencing materials to site for 4330 RM @ Rs. 800 per RM as per estimate	RM		897	800	717600
	(b) Wages oF DLS for carrying, fitting, fixing etc. of fencing materials @ 20 DLS/100 RM	DL		179.4	240	43056
	Sub-total					760656
B	INFRASTRUCTURE IN PLANTATION AREA					
	Construction of camp hut as per estimate.	Nos.		1	150000	150000
	Installation of ring/tube well	Nos.		1	50000	100000
	Irrigation facility with Diesel generation and hose pipes for watering the nursery and plantation (during dry spells)	Nos.		1	50000	50000
	Cost of tools & implements	Nos		1	10000	10000
	Cost of RCC signboard & Gate including fitting and fixing of the same	Nos		1	60000	60000
	Camp accessories @ Rs. 10,000/- per camp	Nos		1	10000	10000
	Construction of Inspection Path @ Rs. 50/- RM	RM		422	50	21100
	Construction of Staff quarters as per estimate.	No.		0	800000	0
	Provision of Solar energy for staff quarters including installation.	No.		1	70000	70000
	Sub-total					471100
C	ADVANCE WORK					
	Site selection, surveying, demarcation, jungle cutting, burning etc.20 DLS/ha	DLS	20	89.6	240	21504
	Preparation and acquisition of polypot sapling in the field nursery for planting 2500 Nos. Seedling/ha @ Rs. 6/- per polypot	No.	2500	11200	6	67200
	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.	No.	625	2800	6.5	18200
	b)20% mortality expected during 2nd year (to be planted in the field during the 3rd year), i.e., 500 Seedlings/ha @ 7/- per polypot.	No.	500	2240	7	15680
	c) 15% mortality expected during 3rd year (to be planted in the field during the 4th year).i.e., 375 Seedlings/ha @ 7.5/- per polypot.	No.	375	1680	7.5	12600
	d) 10% mortality expected during 4th year (to be planted in the field during the 5th year).i.e., 250 Seedlings/ha @ 8/- per polypot.	No.	250	1120	8	8960
	Cost of Bamboo, making of stacking & transportation etc.	-No.	625	2800	1	2800
	Line alignment,carriage of stacking materials and fixing the satacking @ 5 DLS/ha	DLS	5	22.4	240	5376
	Supervision and Monitoring.	LS				10000
	Sub-total					162320

Sl. No.	Particulars of works	Units	Qty/ha	Total Qty.	Rate Rs	Amount Rs
D	CREATION & 1st YEAR MAINTENANCE	Wage Rate		240		
	Soil working, carriage of stumps, popypot seedlings and planting ar the plantation site including, dibbling of seeds wherever necessary to complete raising of plantation with all necessary operation @ 40 DLs/ha	DLS	40	179.2	240	43008
	5 weedings, mulching and fire protection works @ 18 DLs/ha/weeding	DLS	90	403.2	240	96768
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha.	DLS	5	22.4	240	5376
	Maintenance and protection of field nursery for 1 DLs for 365 days	DLs		365	240	87600
	Watch and ward for the plantation area for 365 days	DLs		0	152	0
	Maintenance of camp huts, implements, ring/tube-well, upkeepment of plantation, signboard, documentation, upkeepment of records and other mise. work.	LS				10000
	Awareness & Monitoring @ Rs.800/ha	DLs		4.48	800	3584
	Sub total					246336
E	2nd YEAR MAINTENANCE	Wage Rate		264		
	5 weedings, fire protection woks @15 DLs/ha weeding	DLs	75	336	264	88704
	25% Vacancy filling by 1 year old seedlings from nursery @ 10 DLs/ha	DLs	10	44.8	264	11827.2
	Upkeepment of plantation, and making of inspection path, repariring of fence etc on day to day basis @ 5 DLs/ha	DLs	5	22.4	264	5913.6
	Maintenance and protection of field nursery for 1 DLs for 365 days	DLs		365	264	96360
	Watch and ward for the plantation area for 365 days	DLS		0	264	0
	Maintenance of camp hut, implements, ring/tube-well upkeepment of plantation, signboard, documentation, upkeepment of records etc.	LS				11000
	Supervision Cost	LS				3584
	Contingency L.S.	LS				2500
	Sub total					219889
F	3rd YEAR MAINTENANCE	Wage Rate		290		
	4 weedings, fire protection works @ 15 DLs/ha/weeding	DLs	60	268.8	290	77952
	20% Vacancy filling by 2 year old seedlings from nursery @ 8DLs/ha	DLs	8	35.84	290	10393.6
	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	22.4	290	6496
	Maintenance and protection of field nursery for 1 DLs for 365 days	DLs		365	290	105850
	Watch and ward for the plantation area for 365 days	DLs		0	290	0
	Maintenance of camp hut, implements, ring/tube-well upkeepment of plantation, signboard, documentation, upkeepment of records.	LS				12100
	Supervision Cost	LS				3584
	Contingency @ 15% over previous year	LS	0.15			2875
	Sub total					219251
G	4th YEAR MAINTENANCE	Wage Rate		319		
	4 weedings, fire protection woks @ 15 dls/ha/weeding	DLs	60	268.8	319	85747.2
	15% Vacancy filling by 2 year old seedlings from nursery @ 6DLs/ha	DLs	6	26.88	319	8574.72
	Upkeepment of plantation, and making of inspection path,repairing of fence etc. on day to day basis @ 5 DLs/ha	DLs	5	22.4	319	7145.6
	Maintenance and protection of field nursery for 1 DLs for 365 days	DLS		365	319	116435
	Watch and ward for the plantation area for 365 days	DLs		0	319	0
	Maintenance of camp hut, implements, ring/tube-well upkepmnt of plantation, signboard, documentation, upkeepment of records etc.	LS				13310
	Supervision Cost	LS				3584
	Contingency @ 15% over previous year.	LS	0.15			3306.25
	Sub total					238103

Sl. No.	Particulars of works`	Units	Qty/ ha	Total Qty.	Rate Rs	Amount Rs
H	5th YEAR MAINTENANCE	Wage Rate		351		
	Climber cutting, weeding & other silvicultural works and fire protection works @ 15DLs/ha	DLs	15	67.2	351	23587.2
	10% Vacancy filling by 2 year old seedlings from nursery @ 4 DLs/ha	DLs	4	17.92	351	6289.92
	Maintenance & fencing post replacement @ 3% initial cost of material.		0.03	717600		21528
	Upkeepment of plantation and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs/ha.	DLs	4	17.92	351	6289.92
	Watch and ward for the plantation area for 365 days	DLs		0	351	0
	Maintenance of camp hut, implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				14641
	Supervision Cost	LS				3584
	Contingency @ 15% over previous year.	LS	0.15			3802.1875
	Sub total					79722
I	6th YEAR MAINTENANCE	Wage Rate		386		
	Climber cutting, other silvicultural works and fire protection works @ 15DLs/ha	DLs	15	67.2	386	25939.2
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs/ha.	DLs	4	17.92	386	6917.12
	Watch and ward for the plantation area for 365 days	DLs		0	386	0
	Maintenance of camp hut, implements, ring/tube-well upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				16105.1
	Supervision Cost	LS				3584
	Contingency @ 15% over previous year.	LS	0.15			4372.5156
	Sub total					56918
J	7th YEAR MAINTENANCE	Wage Rate		425		
	Climber cutting, other silvicultural works and fire protection works @ 12DLs/ha.	DLs	12	53.76	425	22848
	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	22.4	425	9520
	Maintenance of camp hut implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				17715.61
	Supervision Cost					3584
	Contingency @ 15% over previous year.	LS	0.15			5028.393
	Sub total					58696
K	8th YEAR MAINTENANCE	Wage Rate		468		
	Climber cutting, other silvicultural works and fire protection works @ 8DLs/ha.	DLs	8	35.84	468	16773.12
	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	22.4	468	10483.2
	Maintenance of camp hut implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				19487.171
	Supervision Cost	LS				3584
	Contingency @ 15% over previous year.	LS	0.15			5782.6519
	Sub total					56110
L	9th YEAR MAINTENANCE	Wage Rate		515		
	Climber cutting, other silvicultural works and fire protection works @ 7DLs/ha.	DLs	7	31.36	515	16150.4
	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	22.4	515	11536
	Maintenance of camp hut implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				21435.888
	Supervision Cost	LS				3584
	Contingency @ 15% over previous year.	LS	0.15			6650.0497
	Sub total					59356

Sl. No.	Particulars of works [*]	Units	Qty/ha	Total Qty.	Rate Rs	Amount Rs
M	10th YEAR MAINTENANCE	Wage Rate		567		
	Climber cutting, other silvicultural works and fire protection works @ 6DLs/ha.	DLs	6	26.88	567	15240.96
	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	17.92	567	10160.64
	Maintenance of camp hut implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				23579.477
	Supervision Cost	LS				3584
	Contingency @ 15% over previous year.	LS	0.15			7647.5572
	Sub total					60213
	Total					2688670

Compensatory Afforestation Scheme for 10 Years in

4.48

Ha Block

Particulars of Works	Amount (Rs.)
Erection pf Fencing	760656
Infrastructure in Plantation Area	471100
Advance Work	162320
Creation & 1 st Year Maintenance	246336
2 nd Year Maintenance	219889
3 rd Year Maintenance	219251
4 th Year Maintenance	238103
5 th Year Maintenance	79722
6 th Year Maintenance	56918
7th Year Maintenance	58696
8th Year Maintenance	56110
9th Year Maintenance	59356
10th Year Maintenance	60213
Total	2688670
Overhead cost @ 50% on total cost	1344335
Grand Total	4033005
Rate Per Ha Plantation	900224

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 ft height (1.5 ft below ground & 4.5 ft above ground) with

Technically Approved



Chief Conservator of Forests
Eastern Assam Circle, Jorhat

Submitted



Divisional Forest Officer
Digboi Forest Division