

**Estimate for Compensatory Aforestation in 2.88 HA Block against diversion proposal of 1.44 Ha Forest Land for ONGC Exploratory Drilling Location -KSAG to KSAB**

for ONGC Exploratory Drilling Location -KSAG to KSAB					
1	AREA (HA)	2.88	Dimensions of the Block in m		
2			160	208	120
3	PERIMETER	705	217		
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)	705			
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	116			
11	Location of plantation : Upper Dehing Reserved Forest (WE)				
12	GPS: Co-ordinates: : 27° 26' 40.77" N ; 95° 44' 30.13" E 27° 26' 43.00" N ; 95° 44' 35.25" E 27° 26' 47.79" N ; 95° 44' 29.95" E 27° 26' 46.64" N ; 95° 44' 25.76" E				
13	Name of Range: Digboi Range				

Sl. No.	Particulars of works`	Units	Qty/ ha	Total Qty.	Rate Rs	Amount Rs
A	<b>ERECTION OF FENCING</b>					
	(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		705	800	564000
	(b) Wages of DLS for carrying, fitting, fixing etc. of fencing materials @ 20 DLS/100 RM	DL		141	240	33840
	Sub-total					597840
B	<b>INFRASTRUCTURE IN PLANTATION AREA</b>					
	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		368	50	18400
	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					468400
C	<b>ADVANCE WORK</b>					
	Site selection, surveying, demarcation, jungle cutting, burning etc.20 DLS/ha	DLS	20	57.6	240	13824
	Preparation and acquisition of polypot sapling in the field nursery for planting 2500 Nos. Seedling/ha @ Rs. 6/- per polypot	No.	2500	7200	6	43200
	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	1800	6.5	11700
	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	1440	7	10080
	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	1080	7.5	8100
	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	720	8	5760
	Cost of Bamboo, making of stacking & transportation etc.	No.	625	1800	1	1800
	Line alignment,carriage of stacking materials and fixing the satacking @ 5 DLS/ha	DLS	5	14.4	240	3456
	Supervision and Monitoring.	LS				10000
	Sub-total					107920



Sl. No.	Particulars of works`	Units	Qty/ ha	Total Qty.	Rate Rs	Amount Rs
D	<b>CREATION &amp; 1st YEAR MAINTENANCE</b>	<b>Wage Rate</b>		<b>240</b>		
	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	115.2	240	27648
	5 weedings, mulching and fire protection works @ 18 DLs/ha/weeding	DLS	90	259.2	240	62208
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha.	DLS	5	14.4	240	3456
	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		2.88	800	2304
	<b>Sub total</b>					<b>193216</b>
E	<b>2nd YEAR MAINTENANCE</b>	<b>Wage Rate</b>		<b>264</b>		
	5 weedings, fire protection woks @15 DLs/ha weeding	DLs	75	216	264	57024
	25% Vacancy filling by 1 year old seedlings from nursery @ 10 DLs/ha	DLs	10	28.8	264	7603.2
	Upkeepment of plantation, and making of inspection path, repariring of fence etc on day to day basis @ 5 DLs/ha	DLs	5	14.4	264	3801.6
	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				2304
	Contingency L.S.	LS				2500
	<b>Sub total</b>					<b>180593</b>
F	<b>3rd YEAR MAINTENANCE</b>	<b>Wage Rate</b>		<b>290</b>		
	4 weedings, fire protection works @ 15 DLs/ha/weeding	DLs	60	172.8	290	50112
	20% Vacancy filling by 2 year old seedlings from nursery @ 8DLs/ha	DLs	8	23.04	290	6681.6
	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	14.4	290	4176
	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				2304
	Contingency @ 15% over previous year	LS	0.15			2875
	<b>Sub total</b>					<b>184099</b>
G	<b>4th YEAR MAINTENANCE</b>	<b>Wage Rate</b>		<b>319</b>		
	4 weedings, fire protection woks @ 15 dls/ha/weeding	DLs	60	172.8	319	55123.2
	15% Vacancy filling by 2 year old seedlings from nursery @ 6DLs/ha	DLs	6	17.28	319	5512.32
	Upkeepment of plantation, and making of inspection path,repairing of fence etc. on day to day basis @ 5 DLs/ha	DLs	5	14.4	319	4593.6
	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				2304
	Contingency @ 15% over previous year.	LS	0.15			3306.25
	<b>Sub total</b>					<b>200584</b>



Sl. No.	Particulars of works`	Units	Qty/ ha	Total Qty.	Rate Rs	Amount Rs
H	<b>5th YEAR MAINTENANCE</b>	<b>Wage Rate</b>		<b>351</b>		
	Climber cutting, weeding & other silvicultural works and fire protection works @ 15DLs/ha	DLs	15	43.2	351	15163.2
	10% Vacancy filling by 2 year old seedlings from nursery @ 4 DLs/ha	DLs	4	11.52	351	4043.52
	Maintenance & fencing post replacement @ 3% initial cost of material.		0.03	564000		16920
	Upkeepment of plantation and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs/ha.	DLs	4	11.52	351	4043.52
	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				2304
	Contingency @ 15% over previous year.	LS	0.15			3802.188
	<b>Sub total</b>					<b>60917</b>
I	<b>6th YEAR MAINTENANCE</b>	<b>Wage Rate</b>		<b>386</b>		
	Climber cutting, other silvicultural works and fire protection works @ 15DLs/ha	DLs	15	43.2	386	16675.2
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs/ha.	DLs	4	11.52	386	4446.72
	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				2304
	Contingency @ 15% over previous year.	LS	0.15			4372.516
	<b>Sub total</b>					<b>43904</b>
J	<b>7th YEAR MAINTENANCE</b>	<b>Wage Rate</b>		<b>425</b>		
	Climber cutting, other silvicultural works and fire protection works @ 12DLs/ha.	DLs	12	34.56	425	14688
	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	14.4	425	6120
	Maintenance of camp hut implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				17715.61
	Supervision Cost					2304
	Contingency @ 15% over previous year.	LS	0.15			5028.393
	<b>Sub total</b>					<b>45856</b>
K	<b>8th YEAR MAINTENANCE</b>	<b>Wage Rate</b>		<b>468</b>		
	Climber cutting, other silvicultural works and fire protection works @ 8DLs/ha.	DLs	8	23.04	468	10782.72
	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	14.4	468	6739.2
	Maintenance of camp hut implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				19487.17
	Supervision Cost	LS				2304
	Contingency @ 15% over previous year.	LS	0.15			5782.652
	<b>Sub total</b>					<b>45096</b>
L	<b>9th YEAR MAINTENANCE</b>	<b>Wage Rate</b>		<b>515</b>		
	Climber cutting, other silvicultural works and fire protection works @ 7DLs/ha.	DLs	7	20.16	515	10382.4
	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	14.4	515	7416
	Maintenance of camp hut implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				21435.89
	Supervision Cost	LS				2304
	Contingency @ 15% over previous year.	LS	0.15			6650.05
	<b>Sub total</b>					<b>48188</b>

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	17.28	567	9797.76
	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	11.52	567	6531.84
	Maintenance of camp hut implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				23579.48
	Supervision Cost	LS				2304
	Contingency @ 15% over previous year.	LS	0.15			7647.557
	Sub total					49861
	Total					2226474

**Compensatory Afforestation Scheme for 10 Years in**

**2.88**

**Ha Block**

Particulars of Works	Amount (Rs.)
Erection pf Fencing	597840
Infrastructure in Plantation Area	468400
Advance Work	107920
Creation & 1 <sup>st</sup> Year Maintenance	193216
2 <sup>nd</sup> Year Maintenance	180593
3 <sup>rd</sup> Year Maintenance	184099
4 <sup>th</sup> Year Maintenance	200584
5 <sup>th</sup> Year Maintenance	60917
6 <sup>th</sup> Year Maintenance	43904
7th Year Maintenance	45856
8th Year Maintenance	45096
9th Year Maintenance	48188
10th Year Maintenance	49861
Total	2226474
Overhead cost @ 50% on total cost	1113237
Grand Total	3339711
Rate Per Ha Plantation	1159622

**NOTE:**

Cost escalation of 10% annually has been considered for wages

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

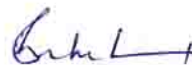
\*Pre-cast RCC pillar with 5"x5" cross-section of ft height (1.5 ft below ground & 4.5 ft above ground) with

Technically Approved



Chief Conservator of Forests  
Eastern Assam Circle, Jorhat

Submitted



Divisional Forest Officer  
Digboi Forest Division