

**SCHEME FOR COMPENSATORY
AFFORESTATION OVER AN AREA OF
387.332 HA. DEGRADED FOREST LAND IN
DOLIA RF-270.452 HA. AND ANANTAPUR
RF-116.88 HA OF MAHABIROD RANGE
UNDER DHENKANAL FOREST DIVISION.**

**AGAINST THE FOREST LAND USED BY-
MAHANANDI COAL FIELDS LTD.**

**FOR BALARAM OCP EXPANSION PROJECT OF
15 MTPA (NORMATIVE)/ 20 MTPA (PEAK)
HINGULA AREA, MCL IN ANGUL DIST. OF
UNDER ANGUL FOREST DIVISION**

Prepared by

**DHENKANAL FOREST DIVISION
DHENKANAL**

SL 10-4

TABLE OF CONTENTS

Sl. No.	Item	Page No.
01	Suitability certificate	1
02	Scheme write up	2-7
03	Cost norm for Block Plantation (1000 per Ha.)	8-12
04	Total Financial outlay	13
05	Surveyed map	Separate

63

~1~

LAND SUITABILITY CERTIFICATE BY DIVISIONAL FOREST OFFICER,
DHENKANAL FOREST DIVISION

This is to certify that, 387.332 ha. degraded Forest land is identified in Dolia RF- 270.452 Ha. and Anantapur RF-116.88 Ha. in two patches under Mahabirod Range of Dhenkanal Forest Division. Both the patches are suitable for the purpose of Compensatory Afforestation under **AR Plantation @1000Plants per Hectare** in lieu of Forest land 193.845 ha. in Angul Forest Division to be diverted for Balaram OCP Expansion project of 15 MTPA (normative)/ 20 MTPA (peak) Hingula Area, MCL.

Place: Dhenkanal
Date: 29th October, 2019

Divisional Forest Officer
Dhenkanal Division

Divisional Forest Officer
Dhenkanal Division

Official Seal.....

Compensatory Afforestation Scheme over 387.332 Ha. in degraded forest land in Dolia RF-270.452 Ha. and Anantapur RF-116.88 Ha in two patches under Mahabirod Range under Dhenkanal Division against diversion of Balaram OCP Expansion project of 15 MTPA (normative)/ 20 MTPA (peak) Hingula Area, MCL.

By

Mahanadi Coal Fields Limited.

1. INTRODUCTION:

The Mahanandi Coal Fields Limited, Hingula Area, At/P.O-NS Nagar, Dist-Angul, Odisha is process for submitting Forest Diversion proposal project for 193.845 Ha. of Forest Land for Balaram OCP Expansion project of 15 MTPA (normative)/ 20 MTPA (peak) Hingula Area, MCL under the administrative control of the Divisional Forest Officer, Angul Division. In this connection, the Addl. Principal Chief Conservator of Forests, Forest Angul has issued instructions vide Memo No.6543(3)/5F(MG)1/2015 dt.11.12.2018 to identify suitable Degraded Forest Land to be used for Compensatory Afforestation on the above project.

SCHEME FOR SITE SPECIFIC COMPENSATORY AFFORESTATION

As per Para 2.3(iii) of Guideline to Forest (Conservation) Act, 1980 for Govt. of India Projects Compensatory Afforestation will be raised in degraded forest twice in extent of the area being diverted. As per Para 2.8 (ii) of the said Guidelines, CA Scheme shall be prepared for minimum of 1000 saplings per hectare of identified CA Land with ten-year maintenance. The plantation in the identified Degraded Forest Land shall be done as per the site requirement. Accordingly, 387.332 Ha Degraded Forest Land has been identified in Dolia RF-270.452 Ha. and Anantapur RF-116.88 Ha. of Mahabirod Range under Dhenkanal Division. But the above identified Degraded Forest area is suitable for AR(Block) Plantation @ 1000 saplings per hectare. The CA Scheme for 387.332 Ha Degraded Forest Land has been prepared at the rate of 1000 saplings per hectare on AR (Block)Plantation in the current wage rate @ Rs.298/- per manday with ten-year maintenance.

3.1 Selection of Site

Accordingly Degraded Forest Land over 387.332 Ha (in two patches of 270.452 ha in Dolia RF and 116.88 ha in Anantapur RF) identified under Mahabirod Range in Dhenkanal Forest Division which will accommodate 1000 saplings per hectare on AR Plantation with ten-year maintenance.

The land particulars of the proposed Compensatory Afforestation area is depicted below

Patch	Division	Range	Section	Name of RF	Compartment No.	Area for Compensatory Afforestation
1	Dhenkanal	Mahabirod	Mahabirod	Dolia	01	270.452 Ha
2	Dhenkanal	Mahabirod	Mahabirod	Anantapur	23	116.88 Ha
Total						387.332 Ha.

The site is located on survey of India Topo Sheet No. F45N/8 between Latitude: 21° 06' 26.20800" - Longitude: 85° 24' 54.28800" to Latitude: 21° 06' 41.00580" - Longitude: 85° 25' 02.68176" in Dolia RF and Latitude: 21° 03' 31.60800" - Longitude: 85° 26' 32.38800" to Latitude: 21° 03' 16.48800" - Longitude: 85° 26' 20.29200" in Anantapur RF.

3.2 Description of the existing vegetation

Though there is no valuable tree growth in the land but some scrubs are found scattered all over the land.

3.3 Topography & Soil

The site Dolia RF and Anantapur RF are shown in Topo-sheet Number F45N/8. The soil type occurring in the area is shallow somewhat exclusively drained, calcareous soil on plane land with loamy surface, susceptible to erosion associated with deep and well drained.

3.4 Rainfall & Temperature

The annual rainfall varied from 75 cm to 100 cm. The maximum rainfall is received during the rainy season from July to September. The maximum temperature varied from 45°C. The summer season is from March to June, winter from November to February and rainy season is from July to September.

3.5 Objective of the scheme

The main objective of the present scheme is to (I) increase vegetation through taking up ANR plantation, (ii) clearly demarcating the area with posting up RCC pillars, (iii) enforcing protection measures by involving people around under JFM and (iv) above all checking soil erosion and run off which will go in combination for enrichment of the vegetation and soil and building up ecosystem. The total area i.e. 387.332 Ha for CA Scheme shall be covered under AR Plantation with 1000 plants per hectare.

3.6 Items of work to be taken up

To achieve the above objectives, the following items of work are mainly prescribed to be taken up with the full involvement and co-operation of local forest dwellers.

3.7 Survey and Demarcation

The boundary should be surveyed clearly with reference to the RF boundary and demarcated by posting pillars.

3.7.1 AR Plantation

The total allotted area shall be covered by AR Plantation. For protection of the plantation from grazing, green fencing will be provided around the plantation site. Care should be taken to select only indigenous species as far as possible keeping in view of the existing natural vegetation in and around the area and also the climatic and edaphic factors. The choices of species are as follows:

Common Name	Scientific Name	Suitable for
Simuli	Bombax Ceiba	ANR Plantation
Sisoo	Dalbergia Sisoo	-do-
Bija	Pterocarpus marsupium	-do-
Asana	Terminalia tomentosa	-do-
Neem	Azadirachta Indica	-do-
Karanja	Pongamia Pinnata	-do-
Jack Fruit	Atocarpus hetrophyllus	-do-
Bara	Ficus bengalensis	-do-
Bel	Aegal marmelos	-do-
Kaitha	Limoniaa acidissima	-do-
Mango	Mangifera indica	-do-
Jari	Ficus benjamins	-do-
Jamun	Syzigium cuminii	-do-

It is proposed to take up pitting with a pit size of 30cm x 30cm x 30cm during February / March for allowing weathering of the soil. The planting should be taken up only with two years old seedlings having height more than one meter. The size of P. bags will be 12 inch x 9 inch with desired quantity of inputs. The seedlings will be graded and sorted at regular intervals to make those healthy and sound and avoid root coiling.

3.8 Development of Nursery

- a) A good nursery is the pre-requisite for a successful plantation. All care should be taken to raise healthy & sound seedlings of required sizes before they are put to plantation size. Planting of one year old seedlings above species shall be taken up. Nursery programme must be planted out as per the Guidelines in the plantation manual so that a good stock of healthy seedlings can be raised. 10% extra seedlings be raised to cover the shortfall due to casualty in the nursery stage.
- b) The temporary nursery should be raised near the plantation site as far as practicable.
- c) A good variety of local seeds should be collected.
- d) Proper treatment of seeds should be done as per the manual.
- e) Shifting of polythene bags one seedlings is recommended not only to develop resistance for isolation but not allow the roots striking into the ground soil.

3.9 Planting

The best time of planting of the potted seedling is soon after the onset of regular monsoon or after a good shower of rain. Before planting, the pits are to be prepared by putting mixture of half cubic feet of alluvial soil and farmyard manure. Basal dose of 30 gram of NPK fertilizer and 5 gram of Aldrin dust or Phorate pesticide are to be applied to the pits before planting as basal dose. The excavated earth from the pits already weathered and free from stones should be filled in the pits. Before removal of the plants from the Nursery the following precaution should be taken:

Roots escaping from the container should be trimmed.

- i. Posts containing the plant are watered, if necessary.
- ii. Maximum care should be taken at the time of transportation and handling of seedling so that the ball of earth of the poly pots does not get disturbed and the primary leading shoots are broken. Manual transportation should be given priority.
- iii. Planting should be taken up on rainy/cloudy days by adopting all standard techniques of plantation.

Casualty of seedlings occurs due to various causes, like heavy rains, drought, fire, grazing etc. But in a well-managed plantation, where the planting stock consists of healthy and stout seedlings, say, about 5% may die during the period between planning and 1st weeding. Seedlings to be used for casualty replacement should be earmarked and kept reserved at the time of planting. Only healthy and stout seedlings slightly larger than those planted at the time of operation should be used. This is important because only such seedlings can catch up growth with those that have survived and are growing. Before planting for casualty replacement, the following operations are to be taken up:

- a. The failure pit is to be properly dug again.
- b. Another dose of fertilizer, and insecticide should be given to the pit.
- c. If the casualties are due to white ant attack. Little more quantity of phorate pesticide may be applied to the pit.
- d. If the casualties are due to water logging and wilting, care should be taken to drain out the pits by making small channels to downhill side.
- e. Watering is to be done generally directly after planting, if the planting is done on a dry day.

Casualty replacement can also be taken up in the 2nd year formation and this time should not exceed 20%.

Fencing.

To protect the plantation from grazing and other biotic interference, fencing has already been included in the Cost Norm of Block Plantation i.e Bamboo twigs and Bamboo throne.

3.10 Peoples participation


It is experienced that, no scheme shall be effective if the local villagers are not involved in the implementation of the scheme itself. The villagers who are having a right on the NTFP items in the adjoining forest area are to be associated with the implementation of the scheme at all different levels. For that, Van Samarakhyana Samittee (VSS) is proposed to the guidelines of the government of Odisha issued on 3rd July'1993, the villagers are to be motivated and inspired and above all, explained the benefits they will be getting if plantation is protected by them.

3.11 Monitoring and execution

The scheme shall be executed and monitored by the Divisional Forest Officer, Dhenkanal Division from time to time. To facilitate this, the User Agency shall bear the cost of infrastructure required and shall provide also the infrastructural facilities.

3.12 Total cost of the Scheme

Total cost of the project will be Rs.16,26,61,100.00/- to be deposited by User Agency in the State CAMPA Account. One Scorpio Vehicle worth of Rs.17,00,000/- to be provided to the Divisional Forest Officer, Dhenkanal Division and the cost of Fuel, Maintenance & Charge of Driver of Rs.30,00,000/- to be deposited by the User Agency in the savings Bank Account of Divisional Forest Officer, Dhenkanal Division on approval of Principal Chief Conservator of Forests, Odisha.


Divisional Forest Officer,
Dhenkanal Division
Divisional Forest Officer
Dhenkanal Division

**COST NORM FOR AR (BLOCK) PLANTATION @ 1000 PLANTS PER HECTARE IN CURRENT
WAGE RATE OF RS. 315 PER MANDAY.**

Sl. No	Items of Work	Preferable period of execution	Labour in Mandays	Labour cost @ Rs 315/- per day	Material cost per hectare in Rs	Total cost per hectare in Rs.
1	2	3	4	5	6	7
0TH YEAR (ADVANCE WORK) PRE-PLANTING OPERATION						
1	Survey, Demarcation and Pillar Posting.	Nov/Dec	2	630	0	630
2	Preparation of Treatment Map (Digital Map)	Nov/Dec	1	315	100	415
3	Site Preparation (Cleaning & removal of debris)	Nov/Dec	12	3780	0	3780
4	Creation of 4.00mt wide Inspection Path	Feb/Mar	1	315	0	315
5	Alignment and stacking of pits	Feb/Mar	1	315	0	315
6	Digging of pits(45cm×45cm×45cm) in hard and gravelly soil	Feb/Mar	40	12600	0	12600
7	Construction of Temporary Labour Shed, Drinking Water facility and First-Aid etc.	Jan/Mar	0	0	3500	3500
Total			57	17955	3600	21555
1ST YEAR / PLANTING YEAR						
1	Refilling of pits by altering the dugout soil of the pits application of organic compounds /CDM/FYM & mixing the same properly	Jun/Jul	7.5	2362.5	5000	7362.5
2	Transportation of 18 months old polythene bag seedlings in hired truck / tractor from the Permanent / Mega nursery to planting side including loading and unloading. (Average lead of 10 Rkm) & stacking the seedling @ Rs.6/- per seedlings(1100 nos.)	Jul/Aug	0	0	6600	6600
3	Watering polypot seedlings at planting site	Jul/Aug	2	630	0	630
4	Conveyance of polypot seedlings on head load from the stacking site to individual dugout pits within the planting site, applying insecticide, fertilizers & planting after scooping the soil with other applied materials & pressing the soil perfectly around the planted seedlings.	Jul/Aug	22.5	7087.50	0	7087.50
5	<u>Cost of Fertilizer & Insecticide</u> A. NPK/Bio-fertilizer @ 50 gms/plant as basal dose = 50kg @ Rs.30/-per kg =Rs.1500.00 B. Urea/Vermicompost/ Mo Khata/ any other fertilizer in two subsequent doses @ Rs.750.00 C. Insecticide /Bio-pesticide @ 5gms/plant = 5kg @ Rs.150/-per kg = Rs.750.00	Jul/Aug	0	0	3000	3000
6	Casualty Replacement @ 10% (100 nos.)	Jul/Aug	2.5	787.5	0	787.5
7	1 st weeding & Manuring	Aug/Sept	12	3780	0	3780
8	2 nd Weeding, Soil working (1mt. diameter around the plants) & Manuring	Oct/Nov	15	4725	0	4725
9	Fire Line tracing (2m. wide fire line over 400 m long) including maintenance of inspection path	Feb/mar	3	945	0	945
10	Watch & Ward including watering as per requirement	Aug-Mar	12	3780	0	3780
Total			76.50	24097.5	14600	38697.5

Sl. No	Items of Work	Preferable period of execution	Labour in Mandays	Labour cost @ Rs 315/- per day	Material cost per hectare in Rs	Total cost per hectare in Rs.
1	2	3	4	5	6	7
2ND YEAR MAINTENANCE						
1	Transportation of 100 seedlings from Nursery to plantation site including loading, unloading & conveyance by Tractor @ Rs.6/- per seedling	Jul	0	0	600	600
2	Casualty replacement 10%	Jul	2.5	787.5	0	787.5
3	<u>Cost of Fertilizer & Insecticide</u> A. Cost of Insecticide / Bio-pesticide @ 5 gms/plant = 0.5 Kg @ Rs.150/- per kg = Rs75/ B. Urea/NPK/Bio-fertilizer/Vermicompost / Mo Khata/ any other fertilizer @ Rs.2800/-	July/Aug	0	0	2875	2875
4	Weeding (complete weeding), Manuring & Soil working (1mt. diameter around the plants)	Sep/Oct	15	4725	0	4725
5	Fire line tracing (2 m. wide fire line over 400 m long) including maintenance of inspection path	Feb/Mar	3	945	0	945
6	Watch & Ward including Watering as per requirement	Apr-Mar	18	5670	0	5670
7	Maintenance of Temporary Labour Shed, Drinking Water facility and First Aid etc.	Apr-Mar	0	0	1000	1000
Total			38.5	12127.5	4475	16602.5
3RD YEAR MAINTENANCE						
1	Cost of Fertilizer (Urea/NPK/Bio-fertilizer/ Vermicompost / Mo Khata/ any other fertilizer)	July/Aug	0	0	2800	2800
2	Weeding (Complete weeding) Manuring & Soil working (1 mt. diameter around the plants)	Sep/Oct	15	4725	0	4725
3	Fire line tracing (2 m. wide fire line over 400 m long) including maintenance of inspection path	Feb/Mar	3	945	0	945
4	Watch & Ward including Watering as per requirement	Apr-Mar	18	5670	0	5670
5	Maintenance of Temporary Labour Shed, Drinking Water facility and First Aid etc.	Apr-Mar	0	0	1000	1000
Total			36	11340	3800	15140
4TH YEAR MAINTENANCE						
1	Fire line tracing (2 m. wide fire line over 400 m long) including maintenance of inspection path	Feb/Mar	3	945	0	945
2	Watch & Ward including maintenance of vegetative fencing	Apr-Mar	18	5670	0	5670
Total			21	6615	0	6615
5TH YEAR MAINTENANCE						
1	Fire line tracing (2m. wide fire line over 400 m length)	Feb/Mar	3	945	0	945
2	Watch & Ward	Apr/Mar	18	5670	0	5670
Total			21	6615	0	6615

Sl. No	Items of Work	Preferable period of execution	Labour in Mandays	Labour cost @ Rs 315/- per day	Material cost per hectare in Rs	Total cost per hectare in Rs.
1	2	3	4	5	6	7
6TH YEAR MAINTENANCE						
1	Fire line tracing (2m. wide fire line over 400 m length)	Feb/Mar	3	945	0	945
2	Pruning of branches, Singling out of multiple shoots	Jan/Mar	3	945	0	945
3	Watch & Ward	Apr/Mar	18	5670	0	5670
	Total		24	7560	0	7560
7TH YEAR MAINTENANCE						
1	Fire line tracing (2m. wide fire line over 400 m length)	Feb/Mar	3	945	0	945
2	Watch & Ward	Apr/Mar	18	5670	0	5670
	Total		21	6615	0	6615
8TH YEAR MAINTENANCE						
1	Fire line tracing (2m. wide fire line over 400 m length)	Feb/Mar	3	945	0	945
2	Watch & Ward	Apr/Mar	18	5670	0	5670
	Total		21	6615	0	6615
9TH YEAR MAINTENANCE						
1	Fire line tracing (2m. wide fire line over 400 m length)	Feb/Mar	3	945	0	945
2	Watch & Ward	Apr/Mar	18	5670	0	5670
	Total		21	6615	0	6615
10TH YEAR MAINTENANCE						
1	Fire line tracing (2m. wide fire line over 400 m length)	Feb/Mar	3	945	0	945
2	Watch & Ward	Apr/Mar	18	5670	0	5670
	Total		21	6615	0	6615

ABSTARCT

Sl. No	Year	No. of Mandays	Labour Cost (in Rs.)	Material Cost (Rs)	Monitoring, Evaluation, Learning, Documentation & Other Contingency (5%) of the (4+5)	Cost of Seedlings @Rs.50.31 per seedlings	Total Cost (in Rs.)
1	2	3	4	5	6	7	8
1	0th Year	57.0	17955.00	3600.00	1077.75	0.00	22632.75
2	1st Year	76.5	24097.50	14600.00	1934.88	55341.00	95973.38
3	2nd Year	38.5	12127.50	4475.00	830.13	5031.00	22463.63
4	3rd Year	36.0	11340.00	3800.00	757.00	0.00	15897.00
5	4th Year	21.0	6615.00	0.00	330.75	0.00	6945.75
6	5th Year	21.0	6615.00	0.00	330.75	0.00	6945.75
7	6th Year	24.0	7560.00	0.00	378.00	0.00	7938.00
8	7th Year	21.0	6615.00	0.00	330.75	0.00	6945.75
9	8th Year	21.0	6615.00	0.00	330.75	0.00	6945.75
10	9th Year	21.0	6615.00	0.00	330.75	0.00	6945.75
11	10th Year	21.0	6615.00	0.00	330.75	0.00	6945.75
Total		358.00	112770.00	26475.00	6962.25	60372.00	206579.25 or 2,06,579.00

TOTAL FINANCIAL OUTLAY

1	Cost of Block Plantation over 387.332 Ha. with 10 years maintenance	Rs.2,06,579 × 387.332 Ha.				8,00,14,657.00
2	Cost of SMC over 387.332 Ha.	Rs.32,759 × 387.332 Ha.				1,26,88,609.00
	Total					9,27,03,266.00
	15 % of total plantation cost towards EPA / Incentive to VSS					1,39,05,490.00
	Total					10,66,08,756.00
	Add Escalation Cost (20%)					2,13,21,751.00
	Total					12,79,30,507.00
	Cost of Bamboo Twigs & Throne Fencing	Rs.89,666 × 387.332 Ha.				3,47,30,511.00
	Grand Total					16,26,61,018.00 or 16,26,61,100.00


(Rupees Sixteen Crore Twenty Six Lakh Sixty One Thousand One Hundred) only.

INFRASTRUCTURE DEVELOPMENT.

	Cost of one Scorpio Vehicle to be used by DFO Dhenkanal Division for Supervision and protection work.					17,00,000.00
	Fuel, Maintenance & Charge of Driver Rs.25,000/- per month for 10 years i.e. Rs.25,000 × 12 × 10 =					30,00,000.00
	Total					47,00,000.00

ABSTRACT

- A. Cost of Plantation = Rs.16,26,61,100/- (To be deposited in State CAMPA by the User Agency.)
 B. Cost of Vehicle = Rs. 17,00,000/- (To be provided by the User Agency as mentioned above)
 & Others = Rs. 30,00,000/- (To be deposited by the User Agency in favour of DFO, Dhenkanal Division)


 Divisional Forest Officer,
 Dhenkanal Division
 Divisional Forest Officer
 Dhenkanal Division

Cost norm for creation of Compensatory Afforestation with Stabilization of Soil & Conservation of Moisture (1000)			
WAGE RATE RS.315/- PER DAY			
Sl. No	Item of Works	Preferable period of Execution	Total Cost
0th Year (Pre-Planting Operation)			
1	Nil		0
1st Year			
2	Soil Conservation measure structure like Staggered Trench, Percolation Pit, Contour trench, Graded earthen bund, LBCD, Wire mesh LBCD, Sub surface Dyke & WHS as per the slope & site requirement on LS	Apr/Sept.	20,475
2nd Year			
3	Maintenance of SMC structure @ 15 % of initial year cost	Apr/Jul	3,071
3rd Year			
4	Maintenance of SMC structure @ 15 % of initial year cost	Apr/Jul	3,071
4th Year			
5	Maintenance of SMC structure @ 15 % of initial year cost	Apr/Jul	3,071
5th Year			
6	Maintenance of SMC structure @ 15 % of initial year cost	Apr/Jul	3,071
Total			32,759.00

Abstract

Sl. No	Year	No. person days	Labour Cost @ Rs.315/- per Day	Material Cost	Total Cost (Rs)
1	0 th Year	0.00	0.00	0.00	0.00
2	1 st Year	0.00	0.00	20,475.00	20,475.00
3	2 nd Year	0.00	0.00	3,071.00	3,071.00
4	3 rd Year	0.00	0.00	3,071.00	3,071.00
5	4 th Year	0.00	0.00	3,071.00	3,071.00
6	5 th Year	0.00	0.00	3,071.00	3,071.00
Total		0.00	0.00	32,759.00	32,759.00

Fencing for Compensatory Plantation raised inside the Forest Areas using Bamboo Twigs & Thrones**Wage Rate Rs.315/per Day**

Sl. No	Items of Work	Preferable period of Execution	Man Days	Wages	Material cost (Rs.)	Total cost (Rs. Per Ha.)
0th Year Maintenance						
1	NIL		0	0	0	0
1st Year Maintenance						
1	Taking an average perimeter of 250 Rmt/Ha. @ 93.85/mt (Half bundle Bamboo Twigs/mt@120/Bundle) Labour:Material=40:60 (approx)	Sept./Oct	30	9450	14133	23583.00
2	Bamboo Poles of 8" height at a distance of 2mt spacing to be fixed (2" under soil & 2" above soil) 250/2 = 125+1 = 126 Nos. of Bamboo Poles 1 Bamboo (approx) 24" height = 3 poles 126/3 = 42 Bamboos @ 200/Bamboo	Sept./Oct		0	8400	8400.00
3	Preparation of Bamboo poles, Digging of holes of 2 ft. depth & fixing Bamboo poles @20 poles/MD	Sept./Oct	6.5	2047.50		2047.50
4	Cost of Bamboo for tying the Bamboo twigs row fence with double side two strand Bamboo batten (one 6" above ground and other one 4 ft" above ground) (250×2)/24= 21 Bamboo @ 200/Bamboo	Sept./Oct		0	4200	4200.00
5	Making Bamboo batten, Finishing the Batter & Tying the same on double strand on Coir rope etc.@Rs.11/Rmt.	Sept./Oct	9	2835		2835.00
6	Cost of Coir rope @ Rs.0.125 kg/ Rmt. 500×0.125 kg = 62.5 kg @ Rs.70/Kg	Sept./Oct		0	4375	4375.00
7	Making one Bamboo twigs gate with Bamboo frame	Sept./Oct		0	500.50	500.50
	Total		45.5	14332.50	31608.50	45941.00
Rate per running mt.45941/250 = 184/Rmt.						
2nd Year Maintenance						
1	Repair & Maintenance of Bamboo Twigs fence including Material cost	Feb/Mar	20	6300	1500	7800.00
Rate per running mt.7800/250 = 31.20 or say Rs.31-Rmt.						
3rd Year Maintenance						
1	Repair & Maintenance of Bamboo Twigs fence including Material cost	Feb/Mar	20	6300	5675	11975.00
Rate per running mt.11975/250 = 47.9 or say Rs.48-Rmt.						
4th Year Maintenance						
1	Repair & Maintenance of Bamboo Twigs fence including Material cost	Feb/Mar	20	6300	5675	11975.00
Rate per running mt.11975/250 = 47.9 or say Rs.48-Rmt.						
5th Year Maintenance						
1	Repair & Maintenance of Bamboo Twigs fence including Material cost	Feb/Mar	20	6300	5675	11975.00
Rate per running mt.11975/250 = 47.9 or say Rs.48-Rmt.						

ABSTRACT

Sl. No	Year	No. person days	Labour cost @315/- per day	Material Cost	Total Cost (Rs.)
1	0 th year	0.00	0.00	0.00	0.00
2	1 st year	45.50	14332.50	31608.50	45941.00
3	2 nd year	20.00	6300.00	1500.00	7800.00
4	3 rd year	20.00	6300.00	5675.00	11975.00
5	4 th year	20.00	6300.00	5675.00	11975.00
6	5 th year	20.00	6300.00	5675.00	11975.00
	Total	125.50	39532.50	50133.50	89666.00

TOTAL FINANCIAL OUTLAY

1	Cost of Block Plantation over 387.332 Ha. with 10 years maintenance	Rs.2,06,579 × 387.332 Ha.				8,00,14,657.00
2	Cost of SMC over 387.332 Ha.	Rs.32,759 × 387.332 Ha.				1,26,88,609.00
	Total					9,27,03,266.00
	15 % of total plantation cost towards EPA / Incentive to VSS					1,39,05,490.00
	Total					10,66,08,756.00
	Add Escalation Cost (20%)					2,13,21,751.00
	Total					12,79,30,507.00
	Cost of Bamboo Twigs & Throne Fencing	Rs.89,666 × 387.332 Ha.				3,47,30,511.00
	Grand Total					16,26,61,018.00 or 16,26,61,100.00

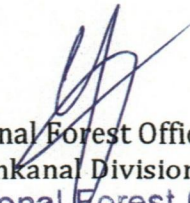
(Rupees Sixteen Crore Twenty Six Lakh Sixty One Thousand One Hundred) only.

INFRASTRUCTURE DEVELOPMENT.

	Cost of one Scorpio Vehicle to be used by DFO Dhenkanal Division for Supervision and protection work.	17,00,000.00
	Fuel, Maintenance & Charge of Driver Rs.25,000/- per month for 10 years i.e. Rs.25,000 × 12 × 10 =	30,00,000.00
	Total	47,00,000.00

ABSTRACT

- A. Cost of Plantation = Rs.16,26,61,100/- (To be deposited in State CAMPA by the User Agency.)
 B. Cost of Vehicle = Rs. 17,00,000/- (To be provided by the User Agency as mentioned above)
 & Others = Rs. 30,00,000/- (To be deposited by the User Agency in favour of DFO, Dhenkanal Division)


 Divisional Forest Officer,
 Dhenkanal Division
 Divisional Forest Officer
 Dhenkanal Division