

**SCHEME FOR COMPENSATORY AFFORESTATION OVER AN AREA OF AC 58.58 OR 23.7064
HECT. IN AR MODULE (BLOCK PLANTATION) IN THE VILLAGE JAKA UNDER PARJANG TAHASIL
OF MAHABIROD RANGE IN DHENKANAL FOREST DIVISION.**

Introduction:

The IDCO, Bhubaneswar has submitted a forest diversion proposal to the Divisional Forest Officer, Dhenkanal Forest Division for expansion of existing plant of M/s GM Iron & Steel Company Ltd. in village- Kulei under Parjang Tahasil of Dhenkanal District for diversion of 11.853Ha. of forest land for non-forestry purpose.

Selection of Sites

As a matter of principle and as per guidelines of Forest (Conservation) Act, 1980 much efforts have been exerted to identify non-forest land for the purpose of Compensatory Afforestation. However, as per para 2.3 (iii) of guideline to the Forest (Conservation) Act, due to Kissam- Gramya Jungle, so twice extent of following land against the forest land proposed for diversion has been identified in Parjang Tahasil of Dhenkanal District. Hence, the Compensatory Afforestation Scheme is prepared in AR (Block Plantation) in village- Jaka. The land schedule has been furnished below. The following land is located in Mahabirod Range of Dhenkanal Division.

Tahasil	Village.	Khata No.	Plot No.	Area (in ha)	Kissam.
Parjang	Jaka	105	02	58.58	Gramya Jungle
Total				58.58 Ac or 23.7064 Ha.	

- **Description of the existing vegetation**

The existing vegetation is of miscellaneous type like only bushes.

- **Soil & Topography**

The topography of area is undulating. But the depth of the soil is good being a valley and the existing vegetation indicates the PH value to be above 07, hence the soil is basic.

- **Temperature**

The average temperature varies from 13.5° C minimum in December to 45°C maximum in May.

- **Rainfall**

The annual rainfall varies from 1200 mm to 1500 mm. The maximum rainfall is received during the rainy season from July to September.

- **Objective of the Scheme**

The main objective of the scheme is to re-stock the Gramya Jungle land identified with mostly indigenous species with admixture of fuel wood, small timber, N.T.F.P., medicinal plants, bamboo etc. It also aims at defining the boundaries of the Gramya Jungle land with Chain Link Fencing and enforcing protection measures of the plantations by involving people around under JFM. It further seeks to dovetail suitable soil conservation measures with the afforestation works, so as to conserve soil and water for enrichment of the eco-system.

- **Item of works to be taken up**

To achieve the above objectives, the following item of works is mainly prescribed to be taken up.

1. **Survey & Demarcation of boundary**

This work shall be taken up by the User Agency while arranging for advance possession/mutation of the Gramya Jungle land in favour of Forest Department.

The boundary shall be surveyed with reference to the Village map and demarcated by posting RCC pillars of size **1.25m x 20 cm x 20cm** which shall be embedded at every corner/turning of boundary line. The pillars shall be embedded 0.625 meter deep in the ground with a foundation of 50 cm x 40 cm. Top of the pillar shall be kept slanting with the lower side facing outer side of the area. Numbering shall be done in the same sequence as done in the map, which should start from the north-western corner and proceed in a clock-wise direction. The demarcation of the land shall be done in presence of the local Revenue Inspector and Range Officer or Forester to avoid future complication. As on date the land is free from encroachment and encumbrance and attempts will be kept in force to keep the land free from encroachment.

2. **Planting and post-planting**

AR (Block Plantation) Plantation over an area of 23.7064Ha. shall be taken up in blanks with 1000 plants per hect. at a spacing of 2.5m x 2.5m.

3. **Choice of species**

As far as possible, indigenous species like, Bamboo, Sisoo, Gambhar, Neem, Asana, Arjun, Simaruba, Mango, etc. shall be planted. In areas subjected to heavily grazing incidences, some mix of Chakunda, Simaruba may be given that to on the periphery only.

4. Points of importance

While taking up plantation, the following vital points shall be taken up for consideration.

- All cares be taken to raise healthy seedlings of minimum 2' height. 10% extra of the required stock shall be raised to accommodate casualties both at the nursery stage as well as transportation of seedling to the site for planting. Complete 1 year seedlings shall be used in case of Bamboo, Sisoo, Asan, Arjun, Neem, Simaruba, Gambhari etc.
- Pitting shall invariably be done during February – April, i.e. before onset of monsoon. In hilly areas, pits shall be dug along the contours.
- Planting shall be done on the onset of monsoon and should not be delayed.
- Basal dose of 50 grams of NPK and 10 grams of Aldrin be applied at the time of planting for the growth of the plant and to avoid insect attack respectively.
- Causality replacement, weeding and soil working, application of fertilizer and insecticides shall be taken up as per the provisions in the cost-norm at the proper time.
- Engaging requisite watchers as per norm will be done who shall also take up tracing of inspection path and fire line and maintenance of fence as and when required. A temporary watcher shed be constructed at suitable place for proper upkeep of the plantation and for the watcher to take shelter during rains.
- All out efforts shall be taken to keep the plantation free from grazing, fire and other biotic interference.
- The cost norm for Bald hill is given below.
- This Plantation shall be maintained for 10 years to achieve the better rate of survivalist.

5. Soil and moisture Conservation Measures

Soil Conservation measure structures 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.

6. Fencing.

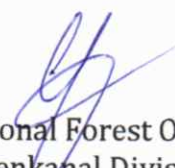
To protect the plantation from grazing and other biotic interference, fencing shall be taken up in and around whole area by Iron angle with Chain Link wire mesh.

7. Monitoring and Evaluation

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.

8. Total cost of the Project

The total cost of the project will be **Rs. 2,90,73,000/-**


Divisional Forest Officer,
Dhenkanal Division
Divisional Forest Officer
Dhenkanal Division

BASE COST NORM FOR COMPENSATORY AFFORESTATION (BLOCK PLANTATION) @ 1000 PLANTS PER HECTARE (18 MONTHS OLD SEEDLING) WAGE RATE Rs. 311/- PER MANDAY						
Sl. No.	Items of work	Preferable period of Execution	No of Men days	Labour Cost (In Rs.)	Material Cost (In Rs.)	Total Cost (In Rs.)
1	2	3	4	5	6	6
0th Year (Advance works) Per-Planting Operation						
1	Survey, Demarcation and Pillar Posting	Nov/Dec	2	622	0	622
2	Preparation of Treatment Map (Digital Map)	Nov/Dec	1	311	100	411
3	Site Preparation (Cleaning & removal of debris)	Nov/Dec	12	3732	0	3732
4	Creation of 4.00 mt. wide Inspection Path	Feb/Mar	1	311	0	311
5	Alignment and stacking of pits	Feb/Mar	1	311	0	311
6	Digging of pits (45 cm × 45 cm × 45 cm) in hard and gravelly soil	Feb/Mar	40	12440	0	12440
7	Construction of Temporary Labour Shed, Drinking Water facility and First-Aid etc.	Jan/Mar	0	0	3500	3500
Total			57	17727	3600	21327
1th 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	2332.50	5000	7332.50
2	Transportation of 18 months old Polythene bag seedling in hired truck/tractor from the Permanent/Mega nursery to planting site including loading & unloading.	Jul/Aug	0	0	6600	6600
3	Watering Polypot seedling at planting site	Jul/Aug	2	622	0	622
4	Conveyance of polypot seedling 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	6997.50	0	6997.50
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	777.5	0	777.5
7	1 st weeding & Manuring	Jul/Sept	12	3732	0	3732
8	2 nd Weeding. Soil working (1mt. diameter around the plants) & Manuring	Oct/Nov	15	4665	0	4665
9	Fire line tracing (2m. wide fire line over 400m long)including maintenance of inspection path	Feb/Mar	3	933	0	933
10	Watch & Ward including watering per requirement	Aug/Mar	12	3732	0	3732
Total			76.50	23791.50	14600.00	38391.50
2nd Year Maintenance						
1	Transportation of 100 seedling 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	777.5	0	777.5
3	Cost of Fertilizer & Insecticide (a) Cost of Insecticide/Bio-Fertilizer @ 5 gms/plant =0.5 kg@ Rs.150/-per kg=Rs.75/- (b)Urea/NPK/Bio-fertilizer/Vermicompost/Mo Khata/any other fertilizer in two subsequent doses @ Rs.2800/-	July/Aug	0	0	2875	2875
4	Weeding (Complete weeding). Manuring & soil working.(1mt. diameter around the plants)	Sep/Oct	15	4665	0	4665
5	Fire line tracing 92m.wide fire line over 400m long) including maintenance of inspection path	Feb/Mar	3	933	0	933
6	Watch & Ward including watering as per requirement	Feb/Mar	18	5598	0	5598
7	Maintenance of Temporary Labour Shed. Drinking water facility and First Aid etc.	Feb/Mar	-	0	1000	1000
Total			38.5	11973.5	4475	16448.5
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.(1mt. diameter around the plants)	Sep/Oct	15	4665	0	4665
3	Fire line tracing(2m.wide fire line over 400m long) including maintenance of inspection path	Feb/Mar	3	933	0	933
4	Watch & Ward including watering as per requirement	Apr/Mar	18	5598	0	5598
5	Maintenance of Temporary Labour Shed. Drinking water facility and First Aid etc.	Apr/Mar	0	0	1000	1000
Total			36.0	11196	3800	14996
4th Year Maintenance						
1	Fire line tracing(2m.wide fire line over 400m long) including maintenance of inspection path	Feb/Mar	3	933	0	933
2	Watch & Ward including maintenance of vegetative fencing	Apr/Mar	18	5598	0	5598
Total			21	6531	0	6531
5th Year Maintenance						
1	Fire line tracing(2m.wide fire line over 400m long) including maintenance of inspection path	Feb/Mar	3	933	0	933
2	Watch & Ward	Apr/Mar	18	5598	0	5598
Total			21	6531	0	6531
6th Year Maintenance						
1	Fire line tracing(2m.wide fire line over 400m long) including maintenance of inspection path	Feb/Mar	3	933	0	933
2	Pruning of branches, Singling out of multiple shoots	Jan/Mar	3	933	0	933
3	Watch & Ward	Apr/Mar	18	5598	0	5598
Total			24	7464	0	7464
7th Year Maintenance						
1	Fire line tracing(2m.wide fire line over 400m long) including maintenance of inspection path	Feb/Mar	3	933	0	933
2	Watch & Ward	Apr/Mar	18	5598	0	5598
Total			21	6531	0	6531
8th Year Maintenance						
1	Fire line tracing(2m.wide fire line over 400m long) including maintenance of inspection path	Feb/Mar	3	933	0	933
2	Watch & Ward	Apr/Mar	18	5598	0	5598
Total			21	6531	0	6531

9 th Year Maintenance						
1	Fire line tracing(2m.wide fire line over 400m long) including maintenance of inspection path	Feb/Mar	3	933	0	933
2	Watch & Ward	Apr/Mar	18	5598	0	5598
	Total		21	6531	0	6531
10 th Year Maintenance						
1	Fire line tracing(2m.wide fire line over 400m long) including maintenance of inspection path	Feb/Mar	3	933	0	933
2	Watch & Ward	Apr/Mar	18	5598	0	5598
	Total		21	6531	0	6531

Year wise Abstract of cost Norm (showing seedling cost separately)

SL. NO	Year	No of Mendays	Labour Cost (In Rs.)	Material Cost (In Rs.)	Monitoring,Evaluation, Learning, Documentation and Other Contingency (5%) of (4+5)	Cost of Seedlings @ Rs.50.31 pre seedlings	Total Cost (In Rs.)
1	2	3	4	5	6	7	8
1	0 th	57.0	17727.0	3600.0	973.00	0.00	22300.00
2	1 th	76.5	23791.5	14600.0	1918.50	55341.00	95651.00
3	2 th	38.5	11973.5	4475.0	821.50	5031.00	22301.00
4	3 th	36.0	11196.0	3800.0	749.00	0.00	15745.00
5	4 th	21.0	6531.0	0.0	326.00	0.00	6857.00
6	5 th	21.0	6531.0	0.0	326.00	0.00	6857.00
7	6 th	24.0	7464.0	0.0	373.00	0.00	7837.00
8	7 th	21.0	6531.0	0.0	326.00	0.00	6857.00
9	8 th	21.0	6531.0	0.0	326.00	0.00	6857.00
10	9 th	21.0	6531.0	0.0	326.00	0.00	6857.00
11	10 th	21.0	6531.0	0.0	326.00	0.00	6857.00
	Total	358.0	111338.0	26475.0	6791.0	60372.0	204976.0

Cost Norms for creation of Compensatory Afforestation with Stabilization of Soil & Conservation of Moisture (1000)			
WAGE RATE Rs.311/-per day			
Sl.No.	Item of Works	Preferable Peroid of Execution	Total Cost
0th Year (Pre-Planting Operation)			
1	Nil		0
1th Year			
2	Soil Conservation measure structures 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.	20,215
2th Year			
3	Maintenance of SMC structures @ 15 % of initial year cost	Apr/Jul	3,032
3rd Year			
4	Maintenance of SMC structures @ 15 % of initial year cost	Apr/Jul	3,032
4th Year			
5	Maintenance of SMC structures @ 15 % of initial year cost	Apr/Jul	3,032
5th Year			
6	Maintenance of SMC structures @ 15 % of initial year cost	Apr/Jul	3,032
Total			32,343,0

Abstract

Sl. No.	Year	No. Person Days	Labour Cost @ Rs.311/- per day	Material Cost	Total Cost (Rs.)
1	0 th	0.0	0.0	0.0	0.0
2	1 th	0.0	0.0	20,215.00	20,215.00
3	2 th	0.0	0.0	3,032.00	3,032.00
4	3 th	0.0	0.0	3,032.00	3,032.00
5	4 th	0.0	0.0	3,032.00	3,032.00
6	5 th	0.0	0.0	3,032.00	32,343.00
Total		0.00	0.00	32,343.00	32,343.00

Watering Model-W=II		
Watering Provision to CA Plantation		
Diesel pump set with Bore Well (1 pump set+ Bore Well for 5 Ha. Plantation), Wage rate @ Rs.311/-		
Year of Installation (0 th Year)		
1	Cost of Borewell	1,50,000
2	Cost of Diesel pump set 5HP	60,000
3	Diesel pump set & accessories like commander, Pipes, etc.	30,000
4	Water Storage	1,50,000
TOTAL		2,55,000
Cost of Water per plant (2,55,000/5000)=Rs.51/-		51,000
Cost of Water per Ha. =Rs.51,000/-		
1 st Year Watering		
1	Recurring expenditure i.e Diesel, Mobil, Engine Oil, etc.for pumping Water-21 × 1000=	21,000
2	Watering 1000 Plants (April-June & Nov-Mar-8 Months) @ 200 plants/MD with 7 days rotation 20 MD× 8 Months=160 MD×311=	31,100
Total		52,100
2 st Year Watering		
1	Recurring expenditure i.e. Diesel, Mobil, Engine Oil, etc. for pumping Water-21 × 1000=	21,000
	Maintenance Diesel pump set etc. @ 15 % of the installation cost.	7,650
2	Watering 1000 Plants (April-June & Nov-Mar-8 Months) @ 200 plants/MD with 7 days rotation 20 MD× 8 Months=160 MD×311=	49,760
Total		78,410
3 rd Year Watering		
1	Recurring expenditure i.e Diesel, Mobil, Engine Oil, etc. for pumping Water-21 × 1000=	21,000
	Maintenance Diesel pump set etc. @ 15 % of the installation cost.	7,650
2	Watering 1000 Plants (April-June & Nov-Mar-8 Months) @ 200 plants/MD with 7 days rotation 20 MD× 8 Months=160 MD×311=	49,760
Total		78,410
4 th Year Watering		
1	Recurring expenditure i.e Diesel, Mobil, Engine Oil, etc.for pumping Water-21 × 1000=	21,000
	Maintenance Diesel pump set etc. @ 15 % of the installation cost.	7,650
2	Watering 1000 Plants (April-June & Nov-Mar-8 Months) @ 200 plants/MD with 7 days rotation 20 MD× 8 Months=160 MD×311=	49,760
Total		78,410
5 th Year Watering		
1	Recurring expenditure i.e Diesel, Mobil, Engine Oil, etc. for pumping Water-21 × 1000=	21,000
	Maintenance Diesel pump set etc. @ 15 % of the installation cost.	7,650
2	Watering 1000 Plants (April-June & Nov-Mar-8 Months) @ 200 plants/MD with 7 days rotation 20 MD× 8 Months=160 MD×311=	49,760
Total		87,410

Abstract					
Sl. No	Year	No. Person days	Labour cost @ Rs. 311/-per day	Material Cost	Total Cost (Rs.)
1	0 th Year	0.0	0.00	51000.00	51000.00
2	1 st Year	100.0	31100.00	21000.00	52100.00
3	2 nd Year	160.0	49760.00	28650.00	78410.00
4	3 rd Year	160.0	49760.00	28650.00	78410.00
5	4 th Year	160.0	49760.00	28650.00	78410.00
6	5 th Year	160.0	49760.00	28650.00	78410.00
Total		740.0	230140.00	186600.00	4,16,740.00

Fencing Modal-F-II

Fencing for Compensatory Plantation raised outside the Forest Areas using Angle Iron & Chain Link Wire mesh (250 Rmt/Ha.)						
WAGE RATE Rs.311/-PER DAY						
Sl. No	Item of work	Preferable Period of Execution	Man days	Wages	Material Cost (Rs.)	Total Cost (Rs. Per Ha.)
0th Year (PPO)						
1	Earth work (Excavation of hole) in Hard soil at a distance 3mt. $0.40m \times 0.40m \times 0.40m = 0.064 \times 84 = 5.376$ cum @Rs.140/cum=Rs.753.		2.42	752.62	0.0	752.6
2	Cement concrete(1:4:8) using 40mm BHG metal $84 \times 0.40m \times 0.40m \times 0.10m = 1.344 @ 3755.94/cum$.		0	0	5,047.4	5,047.4
3	Angle Iron poli of size 50mm \times 50mm \times 6mm of height 2.40mt. $84 \times 2.40 = 201.60$ Sqmt. @ 4.50/ kg/ Sqmt.= 907.20kg @ 69.50 per kg.				63,050.0	63,050.0
4	Cement concrete(1:2:4)for fixing the Iron angle pole using 12mm BHG Chip $84 \times 0.40m \times 0.40m \times 0.30m = 4.032$ cum @ 5486.77/cum				22,123.0	22,123.0
5	Cost of Chain link mess using 4mm Dia GI Wire having gap size 50mm \times 50mm. 250 Rmt. \times 2.10mt.= 525sq.mt@331/Sqmt.=Rs.1,73,775				1,73,775.0	1,73,775.0
6	Double cost painting of Iron angle pole over a cost of primer using good quality enamale paint. $84 \times 2.10 \times 0.20 = 35.28$ Sqmt. @Rs.108.80 Sqmt.				3,838.0	3,838.0
7	Painting of GI chain link mess $250 \times 2.10 \times 2 = 1050/10 = 105$ Sqmt.@ Rs.108.80 Sqmt.				11,424.0	11,424.0
8	Transportation of Chain link mess, Iron angle, Straightening & teeing of chain link mess etc,@ 2% of the total cost.				5,600.0	5,600.0
Total			2.42	752.62	2,84,857.4	2,85,610.0
Rate per running mt. 2,85,610/250=Rs.1142/Rmt						
1th Year Maintenance						
1	No Maintenance is required	Sept./Oct	0	0	0	0
2nd Year Maintenance						
1	Maintenance od wire mess fence @ 1% per running mt. cost of installation in 1 st yr. $1142 \times 1\% = 11.42$ say Rs.11	Sept./Oct	0	0	11000	11000
3rd Year Maintenance						
1	Maintenance od wire mess fence @ 1% per running mt. cost of installation in 1 st yr. $1142 \times 1\% = 11.42$ say Rs.11	Sept./Oct	0	0	11000	11000
4th Year Maintenance						
1	Maintenance od wire mess fence @ 1% per running mt. cost of installation in 1 st yr. $1142 \times 1\% = 11.42$ say Rs.11	Sept./Oct	0	0	11000	11000

5 th Year Maintenance						
1	Maintenance od wire mess fence @ 1% per running mt. cost of installation in 1 st yr. $1142 \times 1\% = 11.42$ say Rs.11	Sept./Oct	0	0	11000	11000
6 th Year Maintenance						
1	Maintenance od wire mess fence @ 1% per running mt. cost of installation in 1 st yr. $1142 \times 1\% = 11.42$ say Rs.11	Sept./Oct	0	0	11000	11000
7 th Year Maintenance						
1	Maintenance od wire mess fence @ 1% per running mt. cost of installation in 1 st yr. $1142 \times 1\% = 11.42$ say Rs.11	Sept./Oct	0	0	11000	11000
8 th Year Maintenance						
1	Maintenance od wire mess fence @ 1% per running mt. cost of installation in 1 st yr. $1142 \times 1\% = 11.42$ say Rs.11	Sept./Oct	0	0	11000	11000
9 th Year Maintenance						
1	Maintenance od wire mess fence @ 1% per running mt. cost of installation in 1 st yr. $1142 \times 1\% = 11.42$ say Rs.11	Sept./Oct	0	0	11000	11000
10 th Year Maintenance						
1	Maintenance od wire mess fence @ 1% per running mt. cost of installation in 1 st yr. $1142 \times 1\% = 11.42$ say Rs.11	Sept./Oct	0	0	11000	11000

Abstract

Sl. No.	Year	No. Person days	Labour cost @ Rs. 311/-per day	Material Cost	Total Cost (Rs.)
1	0 th Year	2.42	752.62	284857.4	285610.0
2	1 st Year	0.0	0.0	0.0	0.0
3	2 nd Year	0.0	0.0	11000.0	11000.0
4	3 rd Year	0.0	0.0	11000.0	11000.0
5	4 th Year	0.0	0.0	11000.0	11000.0
6	5 th Year	0.0	0.0	11000.0	11000.0
7	6 th Year	0.0	0.0	11000.0	11000.0
8	7 st Year	0.0	0.0	11000.0	11000.0
9	8 nd Year	0.0	0.0	11000.0	11000.0
10	9 rd Year	0.0	0.0	11000.0	11000.0
11	10 th Year	0.0	0.0	11000.0	11000.0
Total		2.42	752.62	383857.4	3,84,610.0

Matrix for Model-I A Conventional CA Plantation (AR) 1000 PLANTS PER Ha.

Year→	2022-23 (Pre-Plantation Operation)	2023-24 (1 st Year Creation)	2024-25 (2 nd Year) Maintenance	2025-26 (3 rd Year) Maintenance	2026-27 (4 th Year) Maintenance	2027-28 (5 th Year) Maintenance	2028-29 (6 th Year) Maintenance	2029-30 (7 th Year) Maintenance	2030-31 (8 th Year) Maintenance	2031-32 (9 th Year) Maintenance	2032-33 (10 th Year) Maintenance	Total per Ha.
Cost of Plantation per Ha.	23415	105456	25814	19137	8752	9189	11027	10130	10638	11169	11727	246454

Matrix for (SMC)

Year→	2022-23 (Pre-Plantation Operation)	2023-24 (1 st Year Creation)	2024-25 (2 nd Year) Maintenance	2025-26 (3 rd Year) Maintenance	2026-27 (4 th Year) Maintenance	2027-28 (5 th Year) Maintenance	Total per Ha.
Cost of SMC per Ha.	0	22287	3509	3686	3869	4064	37415

Matrix for Fencing Model-F-II (Iron angle with Chain link wire mesh)

Year→	2022-23 (Pre-Plantation Operation)	2023-24 (1 st Year) Creation	2024-25 (2 nd Year) Maintenance	2025-26 (3 rd Year) Maintenance	2026-27 (4 th Year) Maintenance	2027-28 (5 th Year) Maintenance	2028-29 (6 th Year) Maintenance	2029-30 (7 th Year) Maintenance	2030-31 (8 th Year) Maintenance	2031-32 (9 th Year) Maintenance	2032-33 (10 th Year) Maintenance	Total per Ha.
Cost of Fencing per Ha.	299891	0	12732	13371	14039	14741	15477	16252	17065	17917	18814	440299


Matrix for Watering Model-W-II (Diesel Pump set Fitted with Bore well per Ha.

Year →	2022-23 (Pre-Plantation Operation)	2023-24 (1 st Year Creation)	2024-25 (2 nd Year) Maintenance	2025-26 (3 rd Year) Maintenance	2026-27 (4 th Year) Maintenance	2027-28 (5 th Year) Maintenance	Total per Ha.
Cost of Watering per Ha.	53550	57440	90761	95310	100072	105076	502209

**TOTAL FINANCIAL OUTLAY OF THE 10 YEARS PLANTATION PROGRAMME WITH
MAINTENANCE ONE TIME COST NORM**

ABSTRACT

Sl. No	Item	Base Cost Per Ha. (Rs.)	Total Cost Per Hectare for 10 years plantation from 2024-25 to 2034-35(Rs.)	Total cost of 23.7064 Ha. from 2024-25 to 2034-35 (Rs.)
1	Block Plantation	2,04,976/-	2,46,454/-	58,42,537/-
2	SMC	32,343/-	37,415/-	8,86,975/-
3	Fencing	3,84,610/-	4,40,299/-	1,04,37,904/-
4	Watering	4,16,740/-	5,02,209/-	1,19,05,567/-
Total		1,038,669/-	12,26,377/-	2,90,72,983/- or 2,90,73,000/-


Divisional Forest Officer,
Dhenkanal Division.
Divisional Forest Officer
Dhenkanal Division