Annexure-XXVIII

SCHEME FOR SITE SPECIFIC

COMPENSATORY AFFORESTATION OVER

AN AREA OF Ac. 17.00 (6.90Ha.)

NON FOREST GOVT.LAND IDENTIFIED IN VILLAGE ANJIRA

UNDER DHARMASALA TEHSIL OF

JAJPUR DISTRICT

UNDER CUTTACK FOREST DIVISION

AGAINST DIVERSION PROPOSAL FOR

SARUABIL CHROMITE MINES

IN VILLAGE SARUABIL

IN JAJPUR DISTRICT BY

M/S MISRILALL MINES (P) LTD.

Prepared By

Divisional Forest Officer

Cuttack Forest Division

Site specific compensatory Afforestation scheme over 6.90 Ha. of Non-Forest Govt. Land identified in village Anjira under Dharmasala Tahasil (Jajpur Dist.) of Dalijora Forest Range in lieu of forest land to be diverted for Saruabil Chromite Mines of M/s Misrilall Mines (P) Ltd.

INTRODUCTION

Saruabil Chromite Mines of M/s Misrilall Mines (P) Ltd. over an area of 246.858 Ha. is held by M/s Misrilall Mines (P) Ltd. under mining lease with effect from 15.05.1954 for a period of 20 years for extraction of chrome ore and subsequently renewed for 20 years with effect from 15.05.1974. The 2nd renewal of lease was granted for period of 20 years with effect from 15.05.1994. In pursuance of guidelines dt.10.03.2015 of Govt. of India, MoEF & CC, forest land is appearing in the sabik records as on 25.10.1980,the same shall be diverted. Accordingly the total M.L area of 246.858 Ha comprises of.241.77 Ha forest land and 5.088 Ha non-forest land out of 241.77 Ha, 224.63 Ha has been diverted under F(C) Act. Hence the user Agency M/s Misrilall Mines (P) Ltd. has submitted the proposal for diversion of forest land over 17.14 Ha.(Including 0.46 Ha earmarked for safety zone). As such the requirement of non-forest Govt. land for Compensatory Afforestation comes to 6.90 Ha.(Forest area proposed for diversion 17.14 Ha - SZ area 0.46 Ha - broken up area prior to 1980, 9.90 Ha) which has been identified in village Anjira over 6.90 Ha. In accordance with the provision of F.C Act,1980, Compensatory Afforestation scheme over 6.90 Ha. of non-forest land has to be covered to compensate the loss of forest and Environment in general against the forest land proposed to be utilized for non-forestry activity pertaining to Saruabil Chromite Mines of M/s Mishrilall Mines (P) Ltd.

Therefore the present scheme aim at preparation of site specific compensatory afforestation scheme over 6.90 Ha. of non-forest land with suitable soil and water conservation measures for block plantation with suitable indigenous species to restore the biodiversity with participation and awareness of the local villagers.

DETAILS OF THE SITE SELECTED

Non-forest Govt. land to the extent 6.90 Ha. in a compact patch has been identified in village Anjira under Dharmasala Tehsil (Jajpur Dist.) in Dalijora range of Cuttack forest Division for Compensatory Afforestation in two patches. The details of plot wise land schedule are furnished below:

Land Schedule of the proposed Compensatory Afforestation area.

Name of the Tehsil	Name of the village	Khata No.	Plot No.	Area considered	Kissam
Dharmasala	Anjira	1729	5839	17.00 Acs	Pahada

The site is located on survey of India Topo sheet No. F45UI between latitude 20° 48'55.40174"N **to** 20° 49'01.27450"N Longitude 86° 00' 240.91218"E **to** 86° 01'39.65982"E (Enclosed as **Annexure-1)** and at a distance of about 24 km from Tehsil Headquarters. The proposed area is free from encroachment and encumbrances and suitable for plantation.

CROP COMPOSITION

The area having gentle slope of hill with morrum earth surface and associated with deep well drained soils. The land is having some pockets of rocky patches which need special treatment .The crop is having mainly small bushes covered with Pokasunga in scattered patches and the rest is purely invaded with weeds.

SOIL & TOPOGRAPHY

The topography of the area is having more than 30% slope of hill with morrum earth surface associated, well drained hard soil and stones. There is good depth of soil (morrum earth surface) i.e 1 ft to 4 ft found in the area.

RAINFALL AND TEMPERATURE

The average annual rainfall varies from 1100 mm to 1200 mm. The maximum rainfall is mostly received during the rainy season from July to September. The average minimum and maximum temperature varies from 13°c in December to 32°c in May.

CLIMATE

The climatic condition of this division is characterized by a hot dry summer which starts from the beginning of March and continues till second week of June. May is the hottest month of the year with mean daily maximum temperature of about 44°c and the mean daily

minimum temperature of about 27°c.The rainy season starts from mid of June to second week of September where July being the month with the heaviest shower. Relative humidity is the heaviest shower. Relative humidity is high in south-west monsoon season. The rainfall is fairly uniform throughout the Division. Storms and depressions from the Bay of Bengal during the monsoon season pass across the Division causing heavy rainfall. The winter starts from last part of November & continues up to end of February.

Main Objective of the scheme

(i) Restock the degraded non-forest area by taking up plantation.

(ii) Artificial regeneration through plantation to compensate the loss of forests due to mining activities.

(iii) To generate employment opportunity to the villages living around the area.

(iv) To conserve the soil and moisture of the area for recharging of ground water table and better agricultural productivity to fulfill the food and water scarcity demand of the area.

(v) To improve the habitat of the wildlife found in the area for the wildlife management point of view.

(vi) To control environmental pollution and global warming.

(vii) Above all checking soil erosion and run off which will go in combination for enrichment of the vegetation and soil and building up ecosystem.

ITEMS OF WORKS TO BE TAKEN UP

In order 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 peoples.

1. SURVEY AND DEMARCATION OF BOUNDARY

The identified non-forest land proposed for compensatory afforestation shall be surveyed and demarcated in the field with the help of chain and prismatic compass by posting of R.C.C pillars of 4' height which shall be embedded at every corner/turning points of the boundary line. The R.C.C pillars shall be embedded 0.625 mtr deep into the ground with a foundation of 50c.mX40c.m in C.C. Numbering should be done by the user agency at their cost in a clock wise direction.

FENCING

In order to protect the plantation and regeneration from grazing and other biotic interferences, fencing shall be taken up around the entire Compensatory Afforestation. Since the area is a big in nature and identified in two patches and adjacent to village area, there is every possibility of grazing by local domestic animals. Hence it would be wise to propose for bamboo twigs and bamboo thorns fencing with vegetative /green fencing by planting thorny species like prosopis, Agave and non-browsing species around 6.90 Ha.

PLANTATION MODEL

The identified area for compensatory afforestation shall be covered under BLOCK PLANTATION with indigenous, hardy and light demander species at the rate of 1600 saplings per Ha with a spacing of 2.5mX2.5m over 6.90 Ha. Hence 11,040 nos. of seedlings will be required for planting over the entire area. The topography of the area being hard soil and stones having more than 30% slope partly with completely devoid of vegetation it is proposed to take up plantation over 6.90 Ha. in the approved cost norm for 1600 plants per ha. for Bald Hill Plantation norm with 10 years maintenance. Accordingly the Compensatory Afforestation scheme over 6.90 Ha. has been prepared with Bald Hill Plantation norm and enclosed with the diversion proposal.

PLANTING OF SEEDLINGS

Suitable indigenous and other species will be selected and planted. In the peripheral areas of the site, susceptible to grazing may be planted with non-browsable species like Teak, karanja etc.. While taking up plantation, the species like Mahula, Bahada, Amala, Karanja, Neem, Asan, Teak etc. will be selected.

1. Amla (Emblica officinalis)
2. Bahada (Terminalia belerica)
3. Karanja (Pongamia pinnata)
4. Neem (Azadirachta indica)
5. Sisoo (Dalbergia sisoo)
6. Gambhar (Gmelina arborea)
7. Teak (Tectona grandis)
8. Mahul (Madhuca indica)
9. Acacia (Acacia auriculiformis)
10. Chakundi (Caccia siamea)
11. Sirisha (Albizia lebbck)

12. Chhatian (Alstonia scholaris)
13. Chakunda (Samania saman)
14. Asan (Terminalia tomentosa)
15. Arjuna (Teminalia arjuna)
16. Mango (Mangifera indica)
17. Jamun (Syzyium cumini)
18. Khaira (Acacia catechu)

RAISING OF NURSERY

A good nursery is the pre-requisite for a successful plantation. Therefore all care should taken to healthy and sound seedlings of required sizes before they are put to plantation site. Temporary nursery will be raised for 1 year old seedlings during the pre-planting year. All care as per the guideline of the plantation manual should be taken up at all stages of nursery operation so that a good stock of healthy seedlings should be raised to cover the short fall due to causality in the nursery stage. Nursery site should be selected, preferably near to the plantation site and in a well drained locality having perennial water source.

ALIGNMENT, STACKING & DIGGING OF PITS

A treatment map will be prepared for the area. Pit of size 45cmX45cmX45cm will be dug with spacing of 2.5mts.X2.5mts. for the bald hill plantation during November-December which will help in weathering of pits. The area shall be demarcated and shown on the treatment map.

PLANTING

The best time of planting of the potted seedling is soon after the on-set 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 alluvia soil and farmyard manure. Chemical fertilizer (N.P.K) will be applied as basal dose@ 50gms per plant at the time of planting. In order to save the planted seedlings from termite attack, some effective insecticides will be applied at the time of planting. Vermi Compost is also to be applied to the pits during June-July. The excavated earth from the pits, already weathered and free from stones should be filled in the pits. Planting should be taken up on rainy/cloudy days by adopting all standard techniques of planting during the mid – June after the onset of monsoon. The soil and water conservation works will be taken up before the rains.

WEEDING, MANURING, SOIL WORKING & CASUALITY REPLACEMENT

To improve and enhance the growth of plants, it is necessary to see that the plants get as much nutrients as far as possible and that no other wild plants are contesting for space, light and nutrients. Therefore 1st weeding and soil working will be undertaken during 1st week of August or just after establishment of newly planted seedlings. Soil working at 0.5m radius around the seedlings planted will be taken up. Care should be taken to see that the root system of the planted seedlings is not damaged. Weeds within a radius of 0.5 meters around the plant should be removed.

2nd weeding will be done during 2nd week of September or 1st week of October. The best time for application of fertilizer is at the time of soil working and weeding. In organic fertilizer like N.P.K @50gm/plant shall be applied at the time of soil working. Chemical fertilizer should not be placed too close to the plant as it may burn the roots and kill the plants. It is advisable to apply fertilizer on a rainy day soon after the weeding has been completed.

FIRE LINE TRACING & CONTROL

In order to reduce fire hazards by lessening the chance of ground fire, fire lines are to be made in lines of 1.5mtr. width around the plantation.

WATCH & WORD

Daily wage watchers shall be engaged for watch and ward of the plantation against biotic interference, fire hazards etc, throughout the year as per the approved cost norm.

MULCHING

Mulching is an operation where cut vegetative materials are placed around planted seedlings covering the soil around it. This help soil climate to considerable extent from desiccation. Mulching affects soil temperature, help condensation and prevent soil erosion and loss of soil moisture through evaporation. Further, it is to be carried out at the time 2nd weeding. Weeds which have not lowered may be pulled out from around the planted seedlings and may be used as mulches around the seedlings. Pruning of lower branches of the seedlings planted should be done in the third & subsequent years.

SOIL AND MOISTURE CONSERVATION

The slope of the identified area varies from gentle to moderate slopes and therefore soil conservation measures are indispensable and are to be appropriately addressed. In order to enhance soil moisture, check run off and arrest carrying of silt in the flow water, it is required to have staggered trenches of 2.5m long X 0.50m width X 0.5m deep along the contour and the excavated earth be piled on the downhill side to form a bund.

The staggered contour bunds should be stabilized with plantation on it. The staggered contour trenches will act as place of deposit of eroded soil and will check soil erosion. It will retard the velocity of run-off and will be helpful in feeding ground water to the plants planted below it. Check dams are proposed to be constructed with dry rubble stone across small nallahs specially to be given on the upper reaches of the nallahs.

MONITORING AND EXECUTION

The detail year wise item of works/operation of the present Compensatory Afforestation scheme including preparatory operation (0^{th} year) to 10^{th} year operation are furnished below. The cost estimate of various operations to be taken up in block plantation mode has been furnished in Annexure-

The scheme will be executed by the Forest department and shall be monitored from time to time by responsible officers including DFO. Nursery, plantation journal and other relevant documents shall be maintained as per the provision of the plantation manual.

TOTAL COST OF THE PROJECT

The total cost of the will be **Rs. 18,68,664.00 (Rupees Eighteen Lakh Sixty Eight Thousand Six Hundred Sixty Four) only** as detailed furnished herewith which will be deposited after due approval of the scheme.

PLANTATION YEAR/PREPARATORY OPERATION (0^{TH} YEAR)

(i) Survey demarcation and pillar posting.
(ii) Fencing
(iii) Site preparation
(iv) Digging of Pits
(v) Soil & water conservation measures.
(vi) Raising of Nursery

2ND YEAR OPERATION

During the second year operation the following works will be taken up.

(i) **1st Weeding, causality replacement and application of chemical fertilizer.:-**

Weeding will be taken up during 1st week of August. Soil working with 0.5 mtr. radius will be done along with the replacement of 10% causalities and application of chemical fertilizer@50 gms per plant in crow bar holes. Precaution should be taken up for conservation of soil and water at the time of soil working.

(ii) **2nd Weeding and Mulching**: 2nd weeding will be done during 1st week of October.

Mulching of the plant sides will be done for conservation of moistures.

(iii) **Fire line tracing and Control**: Fire tracing will be done during January and February like previous year.

(iv) **Watch & Ward**: Daily wage watchers to be engaged for the whole year as like previous year.

3RD YEAR OPERATION.

(i) **Weeding, soil working &maintenance of plantation:** weeding and deep soil working will be taken up during July and August. Maintenance of fencing, SMC measure and maintenance of plantation will be done during April-March(Next year)

(ii) **Fire line tracing and Control:** Fire tracing will be done during January and February like previous year.

(iii) **Watch and Ward:** Daily wage watchers shall be engaged for the whole year as in previous years.

4TH YEAR OPERATION.

(i) **Maintenance of plantation:** Repair and maintenance of fencing, SMC measure and maintenance of plantation with watch and ward will be taken up after April-March.

(ii) **Fire line tracing and Control:** Fire tracing will be done during January and February like previous year.

(iii) **Watch and Ward:** Daily wage watchers shall be engaged for the whole year as like previous years.

5TH YEAR OPERATION.

(i) **Maintenance of plantation:** Repair and maintenance of fencing, SMC measure and maintenance of plantation with watch and ward will be taken up after April-March.

(ii) **Fire line tracing and Control:** Fire tracing will be done during January and February like previous year.

(iii) **Watch and Ward:** Daily wage watchers shall be engaged for the whole year as like previous years.

6TH YEAR OPERATION.

(i) **Maintenance of plantation:** SMC measure and maintenance of plantation with watch and ward will be taken up after April-March.

(ii) **Fire line tracing and Control:** Fire tracing will be done during January and February like previous year.

(iii) **Watch and Ward:** Daily wage watchers shall be engaged for the whole year as like previous years.

7TH YEAR OPERATION.

(i) **Maintenance of plantation:** SMC measure and maintenance of plantation with watch and ward will be taken up after April-March.

(ii) **Fire line tracing and Control:** Fire tracing will be done during January and February like previous year.

(iii) **Watch and Ward:** Daily wage watchers shall be engaged for the whole year as like previous years.

8TH YEAR OPERATION.

(i) **Maintenance of plantation:** SMC measure and maintenance of plantation with watch and ward will be taken up after April-March.

(ii) **Fire line tracing and Control:** Fire tracing will be done during January and February like previous year.

(iii) **Watch and Ward:** Daily wage watchers shall be engaged for the whole year as like previous years.

9TH YEAR OPERATION

(i) **Maintenance of plantation:** SMC measure and maintenance of plantation with watch and ward will be taken up after April-March.

(ii) **Fire line tracing and Control:** Fire tracing will be done during January and February like previous year.

(iii) **Watch and Ward:** Daily wage watchers shall be engaged for the whole year as like previous years.

10TH YEAR OPERATION

(i) **Maintenance of plantation:** SMC measure and maintenance of plantation with watch and ward will be taken up after April-March.

(ii) **Fire line tracing and Control:** Fire tracing will be done during January and February like previous year.

(iii) **Watch and Ward:** Daily wage watchers shall be engaged for the whole year as like previous years.

SCHEME FOR BALD HILL PLANTATION OVER 6.90 HA IN VILLAGE ANJIRA OF DALIJORA RANGE OF CUTTACK FOREST DIVISION UNDER CUTTACK DISTRICT

Name of the Scheme :-	COMPENSATORY AFFORESTATION (BALD HILL)
Name of the Project :-	Proposal for C.A. over 6.90 Ha of Govt. Non-Forest land in Anjira Village of Dharmasala Tahasil under Jajpur District in respect of diversion of Forest land over 17.14 Ha of Saruabil Chromite Mines of M/S. Misrilal Mines(P) Ltd.
Name of Implementing Agency:-	Divisional Forest Officer,Cuttack Forest Division

1. MODEL	BLOCK
2. NO. OF PLANTS PER HA.	1600
3. TOTAL AREA TO BE PLANTED(In HA.)	6.90
4. TOTAL NOS. OF PLANTS TO BE PLANTED	11000
5. SPACING TO BE ADOPTED	2.5MtrX2.5 Mtr
6. ONE HA.	126 RMT.
7. Wage Rate [Per MD]	200.00

Sl. N	Item of Works	Period of execution	Mandays	Labour Cost @ Rs.200.00	Material cost	Total in Rs.
1	2	3	4	5	6	7
	Preparatory Operation (0^{th} Year)					
1	Survery & Demarcation	June	2	400.00	0.00	400.00
2	Fencing:-					
	(i) For an average of 126 meters /ha. @ Rs.56.57 per meter(Rs.8080 per ha.) for bamboo twigs and bamboo thorn fencing(L:M=40:60)	June-September	19	3800.00	4280.00	8080.00
	(ii)To be strengthened by planting of bamboo and other seedings in two rows. Bamboo to be planted at 2 meter spacing in staggered manner on the two rows, and the rest of the species to be planted at 1/2 meter spacing along the two rows, the rows being 2 m apart. Thus 500 plant(125 bamboo & 375 others) to be planted in two rows to cover 126 meter of periphery by the vegetative fence(L:M=40:60).	June-September	11	2200.00	2493.00	4693.00

Sl. N	Item of Works	Period of execution	Mandays	Labour Cost @ Rs.200.00	Material cost	Total in Rs.
1	2	3	4	5	6	7
3	**Pitting (1600 plants per Ha.) each pit 45cm3 (40 X 3.2 = 128)**	Nov-Dec	128	25600.00	0.00	25600.00
4	**Soil and water conservation measures**					
	(a)Staggered contour trench @300 per ha. (2.5mX0.5mX0.5m);gully plugging and drainage line treatment, digging of Percolation Pits @600 per ha in lieu of staggered trenches, half moon trench on the uphill side of planting pit (40X3.25=130)	Sept-November	130	26000.00	0.00	26000.00
	(b)Site clearance(8),alignment of contour line on ground(2),staking of planting pits, and contour trenches/percolation pits, check dam sites etc.	July-August	10	2000.00	0.00	2000.00
5	Raising of seedlings in poly bags(minimum 60 cm high)@Rs.9.45/ seedlings(Rs.6.67 in 0th year + Rs.2.78 in 1st year)(1760 saplings to be raised for 1 Ha. from October-March @11739/-	October-March	44	8800.00	2939.00	11739.00
	Total of 0th Year :-		**344**	**68800.00**	**9712.00**	**78512.00**

Planting Operation (1st Year)

1	Cost of seedlings(balance) from April-June/July @2.78/- per seedling for 1760 seedlings = Rs.4893/-	April-July	21.5	4300.00	593.00	4893.00
2	Freshening of pits(64), filling with fertile soil & Farm Yard Manure (FYM)(24), vermi-compost application and planting of 60 cm tall saplings including carriage of plants(21 MD)	June-July	109	21800.00	0.00	21800.00
3	Cost of Fertile Soil 0.25 Cft @Rs.8/- per Cft / FYM 0.25 Cft @Rs.15/- per cft Per Pit		0	0.00	9200.00	9200.00
4	Sowing of seeds on dugout earth of trench	June	6	1200.00	200.00	1400.00
5	Carriage (5 MD), Planting including Casualty Replacement (6 MD), Fertilizer (5 MD), 1st Weeding (7 MD), 2nd Weeding (5 MD), Soil working (7 MD)	July-August	36	7200.00	0.00	7200.00
6	Cost of Fertilizer & Insecticide (granular insecticides @ 5 gm per plant @Rs.80/- per Kg = 640/-, NPK 100 gms/plant in two doses @Rs.24/- per Kg = Rs.3840/-				4480.00	4480.00
7	Repair and maintenance of Bamboo fence including material cost	August - October	15	3000.00	2540.00	5540.00

Sl. N	Item of Works	Period of execution	Mandays	Labour Cost @ Rs.200.00	Material cost	Total in Rs.
1	2	3	4	5	6	7
8	Maintenance of soil and Moisture Conservation measures (20% cost)	October-December	26	5200.00	0.00	5200.00
9	Closure to grazing, fire & other biotic interference by engaging watch and ward.	April-March	30	6000.00	0.00	6000.00
10	Fire tracing and control, Display board construction, painting/writing and other miscellaneous cost	April-March	10	2000.00	360.00	2360.00
	Total of 1st Year		**253.5**	**50700.00**	**17373.00**	**68073.00**

Maintenance Operation (2nd Year)

1	Casualty replacement(6 MD) including cost @Rs.9.45 per seedlings and its transportation	June-July	10	2000.00	1512.00	3512.00
2	Soil working(7 MD), 1 st weeding(6 MD), 2nd weeding (6 MD) & fertiliser application(4 Md)	August - October	23	4600.00	0.00	4600.00
3	Cost of Fertilizer @ 50 gm NPK per plant @ Rs.24/- per Kg for 1600 plants = Rs.1920/-, Insecticide (granular insecticides @ 5 gm per plant for 160 nos of plants @Rs.80/- per Kg = 40/-				1984.00	1984.00
4	Repair and maintenance of Bamboo fence including material cost	August - October	15	3000.00	2540.00	5540.00
5	Maintenance of Soil and Moisture Conservation measures (20% cost)	August - October	26	5200.00	0.00	5200.00
6	Fire tracing and control, other miscellaneous cost	April-March	10	2000.00	0.00	2000.00
7	Closure to grazing, fire & other biotic interference by engaging watch and ward.	April-March	30	6000.00	0.00	6000.00
	Total of 2nd Year:-		**114**	**22800.00**	**6036.00**	**28836.00**

Maintenance Operation (3rd Year)

1	Repair and maintenance of fence-15 MD / (in case of Barbed wire fencing Rs.9,000/- for repair), SMC measures(Renovation)-26 MD and maintenance of plantation-14 MD as per requirement	April-March	55	11000.00	500.00	11500.00
2	Closure to grazing, fire & other biotic interference by engaging watch and ward.	April-March	18	3600.00	0.00	3600.00
	Total of 3rd Year:-		**73**	**14600.00**	**500.00**	**15100.00**

Sl. No	Item of Works	Period of execution	Mandays	Labour Cost @ Rs.200.00	Material cost	Total in Rs.
1	2	3	4	5	6	7
	Maintenance Operation (4th Year)					
1	Repair and maintenance of fence-13 MD / (no maintenance in case of Barbed wire fencing), SMC measures-21 MD and maintenance of plantation-14 MD as per requirement	April-March	48	9600.00	500.00	10100.00
2	Closure to grazing, fire & other biotic interference by engaging watch and ward.	April-March	18	3600.00	0.00	3600.00
	Total of 4th Year:-		**66**	**13200.00**	**500.00**	**13700.00**
	Maintenance Operation (5th Year)					
1	SMC measures and maintenance of plantation	April-March	35	7000.00	500.00	7500.00
2	Closure to grazing, fire & other biotic interference by engaging watch and ward.	April-March	18	3600.00	0.00	3600.00
	Total of 5th Year:-		**53**	**10600.00**	**500.00**	**11100.00**
	Maintenance Operation (6th Year)					
1	SMC measures and maintenance of plantation	April-March	35	7000.00	500.00	7500.00
2	Closure to grazing, fire & other biotic interference by engaging watch and ward.	April-March	18	3600.00	0.00	3600.00
	Total of 6th Year:-		**53**	**10600.00**	**500.00**	**11100.00**
	Maintenance Operation (7th Year)					
1	SMC measures and maintenance of plantation	April-March	35	7000.00	500.00	7500.00
2	Closure to grazing, fire & other biotic interference by engaging watch and ward.	April-March	18	3600.00	0.00	3600.00
	Total of 7th Year:-		**53**	**10600.00**	**500.00**	**11100.00**
	Maintenance Operation (8th Year)					
1	SMC measures and maintenance of plantation	April-March	35	7000.00	500.00	7500.00
2	Closure to grazing, fire & other biotic interference by engaging watch and ward.	April-March	18	3600.00	0.00	3600.00
	Total of 8th Year:-		**53**	**10600.00**	**500.00**	**11100.00**
	Maintenance Operation (9th Year)					
1	SMC measures and maintenance of plantation	April-March	35	7000.00	500.00	7500.00
2	Closure to grazing, fire & other biotic interference by engaging watch and ward.	April-March	18	3600.00	0.00	3600.00
	Total of 9th Year:-		**53**	**10600.00**	**500.00**	**11100.00**

Sl. N	Item of Works	Period of execution	Mandays	Labour Cost @ Rs.200.00	Material cost	Total in Rs.
1	2	3	4	5	6	7
	Maintenance Operation (10th Year)					
1	SMC measures and maintenance of plantation	April-March	35	7000.00	500.00	7500.00
2	Closure to grazing, fire & other biotic interference by engaging watch and ward.	April-March	18	3600.00	0.00	3600.00
	Total of 10th Year:-		**53**	**10600.00**	**500.00**	**11100.00**
		G.Total:-	**1103**	**220600.00**	**50221.00**	**270821.00**

TOTAL COST FOR 1 HA.

Year	No. of MD	Labour Cost	Material Cost	Total
0th Year	344	68,800.00	9,712.00	78,512.00
1st Year	253.5	50,700.00	17,373.00	68,073.00
2nd Year	114	22,800.00	6,036.00	28,836.00
3rd Year	73	14,600.00	500.00	15,100.00
4th Year	66	13,200.00	500.00	13,700.00
5th Year	53	10,600.00	500.00	11,100.00
6th Year	53	10,600.00	500.00	11,100.00
7th Year	53	10,600.00	500.00	11,100.00
8th Year	53	10,600.00	500.00	11,100.00
9th Year	53	10,600.00	500.00	11,100.00
10th Year	53	10,600.00	500.00	11,100.00
TOTAL:-	1168.5	233700.00	37121.00	270,821.00

TOTAL PROJECT COST FOR 6.90 HA.

Year	No. of MD	Labour Cost	Material Cost	Total
0th Year	2373.6	474,720.00	67,012.80	541,732.80
1st Year	1749.15	349,830.00	119,873.70	469,703.70
2nd Year	787	157,320.00	41,648.40	198,968.40
3rd Year	504	100,740.00	3,450.00	104,190.00
4th Year	455	91,080.00	3,450.00	94,530.00
5th Year	366	73,140.00	3,450.00	76,590.00
6th Year	366	73,140.00	3,450.00	76,590.00
7th Year	366	73,140.00	3,450.00	76,590.00
8th Year	366	73,140.00	3,450.00	76,590.00
9th Year	366	73,140.00	3,450.00	76,590.00
10th Year	366	73,140.00	3,450.00	76,590.00
TOTAL:-	8064.75	1,612,530.00	256,134.90	1,868,664.90
			OR	1868665.00

(Rupees Eighteen Lakh Sixty Eight Thousand Six Hundred Sixty Five)only

Divisional Forest Officer
Cuttack Forest Division

Range Officer
DALIJORA RANGE