ANNEXURE XIX

SCHEME FOR

COMPENSATORY AFFORESTATION AGAINST

KARAPANI IRRIGATION PROJECT

Karmabahal – (Non-Forest land) 23.116 ha @ 1000 (23,116 Plants)

Dumangdiri– (Non-Forest land)91.898 ha @ 400 (36,759 Plants)

Total NFL 115.014

Harapali– (Reserve Forest)143.92 ha @ 400 (57,568 Plants)

Total area:258.934ha (Total = 1,17,443 Plants)

UNDER

BONAI FOREST DIVISION OF SUNDERGARH DISTRICT, ODISHA

USER AGENCY: - EXECUTIVE ENGINEER,
IB INVESTIGATION DIVISION,
SUNDERGARH.

PREPARED BY

DIVISIONAL FORESTOFFICER
ROURKELA FORESTDIVISION.

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CHAPTER- I

SCHEME FOR COMPENSATORY AFFORESTATION FOR KARAPANI IRRIGATION PROJECT.

A proposal for diversion of 113.075 ha. of forest land has been submitted by the Executive Engineer, IB Investigation, Sundargarh in Bonai Forest Division under Sundargarh District of Odisha, for which an area of 115.014 ha. of non- forest land has been identified in Village Karmabhal of Biramitrapur range and Village Dumangdiri of Kuarmunda range under Kuarmunda Tahasil.

As per recent guideline issued by the MoEF & CC, the CA scheme shall be prepared for minimum of 1000 saplings per hectare of the identified CA land. The total nos. of plants required to be planted comes to 1,13,075 nos. (113.075 ha. X 1000). But as per the report of Range officer, Kuarmunda and Biramitrapur **59,875** nos. of plants can be planted in the identified non- forest land.

Accordingly, an additional area 143.92 ha. @ 400 seedlings/ha (i.e., **57,568** nos. seedlings total) of degraded forest land has been identified in Harapali RF under Kuarmunda Range in order to achieve 1000 plants per hectare required CA.

The cost estimate for this plantation has been calculated as per recent cost norm and Rs. 298/MDs which is enclosed vide **Annexure-1**.

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1. DETAIL NOTE ON KARAPANI IRRIGATION PROJECT:

Karapani irrigation project envisages construction of a reservoir scheme across the Nalah Karapani, a tributary in the left tank of river Brahmani. This medium irrigation project shall provide irrigation to 3500 Ha. CCA. This will provide irrigation to 3185 Ha. of land in kharif and 1470 Ha. in rabi respectively. The annual intensity of irrigation comes to 133 %.

The dam, reservoir and ayacut area comes under Lahunipara Block of Sundargarh District. The agricultural yields in this area completely depend on the natural rainfall, which is erratic in nature since last decade. The inhabitants consisting of more than, 75 % as marginal farmers suffer year as agriculture is the only source of income for them. As such, the financial status every of the people is getting dilapidated year by year. So, development of water resources and providing assured, irrigation is absolutely necessary to improve the agriculture output and economy of the region to mitigate the misery of sizeable weaker section of the people. Moreover, the majority group of the population belongs to the Scheduled Cast and Scheduled Tribe group

The project is located in Lahunipada Block of Sundargarh District near village Barghat at Lat 21°44 15" N and Long 85°02'42" E. The project area is covered in toposheet No F45N1 & F45N2. The location of the project is enclosed in the diversion proposal over the toposheet. The dam site is about 35 Kms. from Lahunipara Block Headquarters. The nearest railway station is Rourkela which is about 85 Kms. from the proposed dam site. The length of road connecting from dam site to NH 23 is about 40 Kms

River & Basin

The nallah Karapani, a left tributary to river Brahmani originates from Kumrital Pahar at an elevation of 1000 M. It flows toward south direction for a length of about 4.00 Km at the beginning, then flows towards south west direction for a length of about 6.00 Km. Then it flows in west direction for a length of 10 Km. up to proposed dam site and run through an additional length of about 8.50 Km. before merging with the river Brahmani.

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Catchment

The catchment area up to proposed dam site is 121.00 Sq. Km

Population

The catchment area is very thinly populated as the area lies in the hilly terrain. But the ayacut is moderately populated and the fast-growing population demands for some sort of protection to the cereal crops and an additional crop productivity to meet the needs. The population suffers from chronic drought condition every year resulting them to cry for their livelihood. If constructed this project will serve the population by transforming the area from rain fed to irrigable and thereby making them self-sufficient.

Mineral Resources

Though forest and water resources are in abundance, subsurface mineral deposits are found to be absent as revealed from Topo study. Hence the area is very much underdeveloped so far Industrial growth is concerned and fully depend on agriculture to earn their livelihood.

Socio-Economic Aspects

The ayacut area of the project is in the hilly areas of Lahunipara Block which has very little scope of development so far as activities other than agriculture is concerned. The people of the proposed ayacut consisting of tribal families depend on agriculture which is subjected to ravages of nature due to erratic and uneven rainfall. The land holding of families being considerably low the per capita agricultural income is negligible and hence people are economically poor and backward the present land use practice and the traditional farming in the command area is also primitive since generation together. The modern methods of cultivation & use of technology as well as manures & fertilizers in cropping pattern is yet to be practiced. The potentiality of this project, when developed shall no doubt, accelerate the growth of economy in general and improve socio-economic status specially of the backward classes in the society. In absence of irrigation facility, the crop yield solely depends on the rainfall, which is unevenly distributed. Failure of crop is a common phenomenon in this area. Apart from drought, due to unevenly distributed rain fall, the crop output also suffers very badly. For this, the only solution is to provide irrigation from a storage reservoir and there by uplift the economy of the weaker sections of the society.

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On completion of the project, the local people will immediately enjoy the facility of assured irrigation and thereby add to the socio-economic growth of the area.

2. INTRODUCTION OF THE IDENTIFIED CA LAND

As per Para 3.2.(ix)(a) of Guideline to F (c) Act, for Govt. of India, Compensatory Afforestation will be raised in equal amount of non-forest land. Therefore,113.075 ha of Non forest is required for compensatory Afforestation. Accordingly, non-forest forest land over 115.014 ha. has been identified in 2 no. patches in Kuarmunda and Biramitrapur Range of Rourkela Forest Division as below. The non-forest forest land identified in Rourkela Forest Division will accommodate 1000 and 400 no's of plants per Ha. As per the MoEF & CC Guideline No F. No. 11-423/2011-FC Dated 08.11.2017, if the requisite no of plants @1000/ha cannot be planted on the identified non-forest land for taking up CA, then the balance no of plants will be planted in the degraded forest land as per the provisions of the working plans. The required amount of additional degraded forest land has been identified in Hirapali RF of Kuarmunda Range. The details of the area have been communicated by the Range Officer, Kuarmunda and Biramitrapur vide their letter no. 3621 dated 19.12.2019 and 3621 dated 19.12.2019 to this office respectably. The details of CA land identified is as follows:

Sl No.	RI Circle	Mouza	Kahata No.	Kissam	Plot No.	Patch No	Area as Per DGPS Survey (in Ha)
	Kacharu (Kuarmunda Tahasil)	Karmabahal	88	Dunguri	1	1	23.116
		Dumangdiri	72	Pahad	1	1	11.251
			72	Pahad	113	1	20.073
			72	Pahad	262	2	20.364
			72	Pahad	263	2	2.970
			72	Tunguri	264	2	3.335
			72	Tunguri	663	3	13.092
			72	Tunguri	666	3	12.954
			72	Tunguri	668	3	7.859

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	HarapaliRF					143.92

3. IDENTIFICATION OF NON-FOREST AND DEGRADED FOREST AREA:

An area of 115.014 ha. of non-forest land has been identified in Karmabahal and Dumangdiri village of Kuarmunda Tahasil which was jointly verified by the Range officer and the staffs of Revenue department. The land is free from encroachment and suitable for plantation in management point of view. The degraded forest land has been identified in Harapali RF of Kuarmunda Range for taking up Compensatory Afforestation. This area is coming under Selection Working Circle, Rehabilitation Working Circle as per Working Plan of Rourkela Forest Division. The area has been inspected by the Range Officer, Kuarmunda Range and are found to be suitable for Compensatory Afforestation and free from encroachment and encumbrances. **The location map of the above sites is enclosed in the diversion proposal.**

4. TOPOGRAPHY AND SOIL:

The above degraded forest land identified for this purpose is almost hilly. The soil is mostly sandy loam to clayey with morrum and stony patches. The portion taken for CA consists of rocks, gullies. The area experiences tropical climate with monsoon rainfall which varies from 780 to 1880 mm and temperature varies from 10°C to 45°C.

5. CLIMATE

The study area lies in tropical region where climate is characterized by very hot summers and cool winters. The Summer season usually starts from March and continue up to June during which monthly temperature ranges from a maximum of 45°C during daytime to a minimum of 8°C at night. Winter usually starts from November and continue up to February during which the maximum temperature goes up to 35°C during daytime and goes down to 10°C during night-time. The average annual rainfall as recorded is 1500 mm.

6. EXISTING VEGETATION:

The above degraded forest land identified for raising Compensatory Afforestation contains Kendu, Char, Jamu, Siddha, Gambhari, Dhaura, Mahul, Rohini, Karada etc.

7. OBJECTIVE OF THE SCHEME:

The aims of the proposed scheme are as follows:

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i) To restock the degraded forest land by planting suitable species.

ii) To improve the micro-edaphic conditions by undertaking suitable soil and moisture conservation measures.

iii) To protect the area against encroachment, illicit felling, fire occurrence, grazing etc., so as to check further degradation of the area.

iv) To provide gainful employment to the local people mainly involving SC/ST population.

v) To create awareness among the local villagers on protection and maintenance of plantation and forest.

8. PROPOSED TECHNIQUE:

To achieve the above aims andobjectives, basing on field survey, it has been proposed to take up Block plantation @ 1000 plants / ha. and ANR gap Plantation @ 400 witha spacing of 2.5 mtr X 2.5 mtr.in the identified area. The Plantation work will be done in the 1st year followed by maintenance during 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th and 10th year. The detailed expenditure statement of Block Plantation @1000 and ANR Plantation @400plants per hectare is enclosed as **Annexure-1**.

9. SURVEY AND DEMARCATION:

The area has been surveyed and demarcated in the field with the help of DGPS. Cement concrete pillar of usual size will be constructed and erected at visible distance along the boundary line. This operation will be helpful in future maintenance and management.

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10. REGENERATION, CLEANING AND TENDING OPERATION:

The operation aims at tending the existing crop silvicultural for better growth. It involves removal of inferior and diseased tree growth. During this operation, weeds, climber and other unwanted species which interferes with the growth of the existing crop are to be cut. This operation helps saplings to grow better and faster. The site clearance is to be done by cutting of high stumps and singling of shots.

The following operation will be carried out during the operation.

i) Cutting back of individual inferior poles interfering with the growth of better ones.
ii) Cutting back of malformed and diseased individuals.
iii) Singling of coppice shoots & retaining healthier ones.
iv) Cutting of climbers.
v) Cutting back of high live stumps flush to the ground.
vi) Pruning the branches of the promising poles up to hand reach height.

During 1st year operation, climber cutting, high stump cutting and cutting back of malformed and diseased plants will be done. In the next two years, cutting back of unwanted individuals and singling of economically important species will be done as per cost norm enclosed.

11. PLANTATION:

BLOCK AND ANR Plantation: - The area will be stocked by way of raising plantations @ 1000 & 400 plants per hectare. Taking into consideration of the soil condition and the local habitation, the following species has been selected.

1. Pongamiapinata (Karanja)
2. Azadiractaindica (Neem)
3. Acacia catechhe (khaira)
4. Terminaliabelerica (Bahada)
5. Gmelinaarborea (Gambhar)
6. Terminaliatomentasa (Asan)
7. Terminalia arjuna (Arjun)
8. Cassia fistula (Sunari)
9. Dendrocalamiusstrictus (Salia Bamboo)
10. Dalbergialatifolia (PahadiSissoo)
11. Bombaxceiba (Simuli)

The different operations that will be taken up for plantation are as follows;

12. RAISING OF NURSERY:

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Seedlings required for plantation shall be raised in a temporary nursery nearer to the planting site and water sources. Nursery work will be started six months prior to the year of plantation so that quality and healthy seedlings will be available for plantation. The seedlings shall be raised 20% extra besides the actual requirement to compensate the casualties. Seedlings will be raised in polythene bags of 9" x 5" size following standard nursery practice.

13. ALIGNMENT AND PITTING:

Alignment and pitting will be taken up in the month of March-April, Pits of size 30cm x 30cm x 30cm will be dug maintaining a spacing of 2.5mtr x 2.5mtr @1000and 400 seedlings per ha for BLOCK and ANR Plantation. It is proposed to take up Plantation in the identified gap of minimum 0.4 ha or wherever gap is available.

14. ACTUAL PLANTING:

The seedlings will be planted@1000 and 400 seedlings per ha in the dugout pits of size 30cm x 30cm x 30cm with a spacing of 2.5mtr x 2.5mtr. Plantation shall be taken up after first regular shower of monsoon and completed by the end of July. Species would be planted as per suitability of the soil condition. NPK Fertilizer @30gms per plant shall be applied as basal dosage. Anti-termite insecticide shall also be applied to each pit while planting. Casualties, if any noticed, shall be replaced with the excess seedlings raised for the purpose.Duringsecond year also, casualty replacement will be done for which seedlings shall be raised.

15. APPLICATION OF INSECTICIDES:

The plantation site, after planting good healthy seedlings, may cause influx of insects, which usually eat and damage the tender leaves and shoots of the plants. To get rid of such insect attack, application of insecticides will be taken up in required doses at desired intervals. Spraying of insecticides shall be done preferably on a sunny day in the forenoon as per requirement.

16. FIRELINE TRACING AND MAINTENANCE

Fire causes heavy loss to the forest and plantation during fire season. To prevent incidence of fire, the area shall be divided into suitable blocks by tracing fire lines. Boundaries of the plantation patches and these block lines will be scrapped off the growth to a width of 3.0mtr during February-March and the cut back materials and the dry leaves stacked along these lines will be burnt under strict supervision. This operation shall be carried out for 3 years. Provision has been made in the cost norm for the purpose

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17. SOIL AND MOISTURE CONSERVATION MEASURE:

The site selected for Compensatory Afforestation in degraded forest land; undulating, and gullies have been formed due to erosion. So, the following special type of Soil Conservation Measures are proposed to improve the site.Furtherit is proposedto take up the maintenance of the structures during the next year to have better result. 4 MD per ha is proposed for the purpose. Half-moon trench on the seedlings planted, Staggered trench @ 60 no's per ha and LBCDstructure of 2mtr span 100 nos. and 3mtr span 100 nos.

18. FENCING:

To protect the area against grazing and other biotic interference, it is proposed for barbed fencing over 20.03 km.

Sl NO	Name of Range	Name of Site	Area in Ha.	Barbed Wire Fencing in KM
1	Kuarmunda and Biramitrapur	Karmabahal and Dumangdiri	115.014	13.48
2	Kuarmunda	Harapali RF	143.92	6.55

19. WATCH AND WARD:

To protect the area against grazing, fire accident and other biotic interference, there is provision for watch and ward for 10 years in the enclosed plantation norm.

20. MOTIVATION OF PEOPLE:

As per Govt. resolution of 1993 and 2011, the villagers of the adjoining villagesare to be involved in protection and management of plantation. Before execution of the work, a meeting will be conducted in the respective villages and resolution regarding support to plantation activities will be made. To motivate the people in this direction, they will be provided with incentives in shape of different community articles, buildings, and different community amenities of fixed and movable type through entry point activities (EPA). Health camps shall also be organized in the villages. Thus, 15% of the plantation cost has been earmarked for expenditure on this score.

21. INSPECTION, MONITORING &EVALUATION:

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In order to make the plantation under this Scheme successful, intensive inspection of the plantation by the field staff of Forest Department, and the Officers

at the Divisional level is necessary. Moreover, frequent monitoring and evaluation shall have to be done at different stages.The User Agency will provide necessary logistic support for the purpose. For this purpose, 5% of the cost incurred in each year remains included in the cost norm.

22. EXECUTING AGENCY:

The Divisional Forest Officer, Rourkela Division on behalf of State Forest Department shall execute the work by involving the local VSS.

23. MONITORING AND EVALUATION:

The scheme shall be executed and monitored by the Divisional Forest Officer, Rourkela Forest Division from time to time. To facilitate this, the user agency shall bear the cost of monitoring and evaluation.

24. TOTAL COST OF THE SCHEME:

The total cost of the Scheme will be **Rs.4,87,73,154.00/- (Rupees Four crore Eighty seven lakhs Seventy Three Thousand One Hundred Fifty Four Only)** which will be deposited by the User agency in the State CAMPA account as per the demand notice issued by the Divisional Forest officer, Rourkela Forest Division.

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Rourkela Division

Divisional Forest Officer
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07/02/2020

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Annexure-I

Cost Norms for AIDED NATURAL REGENERATION (ANR) @ 400 Plants per Hectare Wage rate Rs. 298.00/day						
Sl. No.	**Item of Work**	**Preferable period of Execution**	**Person days**	**Labour (Rs)**	**Material (Rs)**	**Total (Rs)**
			0th Year			
1	Survey, Demarcation and Pillar Posting, GPS Reading with mapping	Nov/Dec	2	596	0	596
2	Site Preparation	Nov/Dec	2	596	0	596
3	Silvicultural Operation including clearance of weed, climber cutting, high stump cutting, singling of shoots etc	Jan/Feb	5	1490	0	1490
4	Nursery cost (6 months old seedling) part @ Rs 9.45/- seedling (Rs. 6.67 in 0th year + Rs. 2.78 in 1st year) for 440 seedling (400 + 40)	Jan-Mar	11	3278	735	4013
5	Contingency and Unforeseen Expenditures		0	0	165	165
		Sub Total	20	5960	900	6860
6	Monitoring & supervision charge 5% of the total cost					343
		Grand Total	**20**	**5960**	**900**	**7203**
			1st Year			
1	Nursery cost (6 months old seedling) balance @ Rs. 2.78 for 440 seedlings.	Apr-Jul	5	1490	255	1745
2	Pitting 30 cm cube size	Feb/Mar	12	3576	0	3576
3	Carriage and planting including casualty replacement	Jul/Aug	10	2980	0	2980
4	Complete weeding, Soil working, manuring	Aug/Sep	12	3576	0	3576
5	Cost of Vermi compost 200 gms/plant @ Rs 20/- per kg = Rs 1600.00 and Granular Insecticide 5 gms/ plant @ Rs 80/- per kg = Rs 160.00	Aug/Sep	0	0	1760	1760
6	Cost of Chemical Fertiliser Urea 70 gms/plant in two		0	0	648	648

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	subsequent doses @ Rs 6/- per kg = Rs 168.00 NPK 50 gms/ plant @ Rs 24/- per kg = Rs 480.00 as basal dose					
7	Silvicultural Operation involving clearance of weeds, cutting of climbers, singling of shoot etc.	Sep/Oct	15	4470	0	4470
8	Soil conservation measures (staggered trenches of dimension 2m X 0.5m X0.5m @ 60 nos per ha) or its equivalent	Sep/Oct	20	5960	0	5960
9	Fire line tracing and inspection path	Feb/Mar	3	894	0	894
10	Watch & Ward	Aug-Mar	7	2086	0	2086
11	Contingency and unforeseen expenditure		0	0	319	319
		Sub Total	84	25032	2982	28014
Monitoring & supervision charge 5% of the total cost						1401
		Grand Total	**84**	25032	**2982**	**29415**
2nd Year						
1	Casualty Replacement including cost of seedling, carriage and planting.	Jul/Aug	2	596	497.2	1093.2
2	Complete weeding and cultural operations	Sep/Oct	4	1192	0	1192
3	Soil working and manuring	Sep/Oct	4	1192	0	1192
4	Cost of fertilizers and Insecticide Vermicompost 200gms/ plant @ Rs 20/- per kg = Rs. 1600.00 Granular Insecticides 5 gms/ Plant for 40 plants 200 gms @ Rs 80/- per kg = Rs.16.00	Sep/Oct	0	0	1616	1616
5	Fire line tracing and inspection path	Feb/Mar	1	298	0	298
6	Soil conservation measures (Renovation of staggered trenches etc)	Sep/Oct	8	2384	0	2384
7	Watch & Ward (Whole Year)	Apr-Mar	7	2086	0	2086

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8	Contingency and unforeseen expenditure		0	0	362	362
		Sub Total	**26**	**7748**	**2475**	**10223**
		Monitoring & supervision charge 5% of the total cost				512
		Grand Total	**26**	**7748**	**2475**	**10735**
		3rd Year				
1	Compete weeding and cultural operations	Aug/Sep	2	596	0	596
2	Soil working	Aug/Sep	2	596	0	596
3	Fire line tracing and inspection path	Feb/Mar	1	298	0	298
4	Watch & Ward (Whole Year)	Apr-Mar	7	2086	0	2086
		Sub Total	12	3576	0	3576
		Monitoring & supervision charge 5% of the total cost				179
		4th Year				
		Grand Total	**12**	**3576**	**0**	**3755**
1	Fire line tracing and inspection path	Feb/Mar	1	298	0	298
2	Watch, Ward & Cultural Operations	Apr-Mar	2	596	0	596
		Sub Total	3	894	0	894
		Monitoring & supervision charge 5% of the total cost				45
		Grand Total	**3**	894	**0**	**939**
		5th Year				
1	Fire line tracing and inspection path		1	298	0	298
2	Watch, Ward & Cultural Operations		2	596	0	596
		Sub Total	3	894	0	894
		Monitoring & supervision charge 5% of the total cost				45
		Grand Total	**3**	894	**0**	**939**
		6th Year				
1	Fire line tracing and inspection path		1	298	0	298
2	Watch, Ward & Cultural Operations		2	596	0	596
		Sub Total	3	894	0	894
		Monitoring & supervision charge 5% of the total cost				45
		Grand Total	**3**	894	**0**	**939**
		7th Year				
1	Fire line tracing and inspection path		1	298	0	298

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2	Watch, Ward & Cultural Operations		2	596	0	596
	Sub Total		3	894	0	894
Monitoring & supervision charge 5% of the total cost						45
Grand Total			**3**	894	**0**	**939**
8th Year						
1	Fire line tracing and inspection path		1	298	0	298
2	Watch, Ward & Cultural Operations		2	596	0	596
	Sub Total		3	894	0	894
Monitoring & supervision charge 5% of the total cost						**45**
Grand Total			**3**	**858.9**	**0**	**901.89**
9th Year						
1	Fire line tracing and inspection path		1	298	0	298
2	Watch, Ward & Cultural Operations		2	596	0	596
Sub Total			3	894	0	894
Monitoring & supervision charge 5% of the total cost						45
Grand Total			**3**	894	**0**	**939**

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10th Year						
1	Fire line tracing and inspection path		1	298	0	298
2	Watch, Ward & Cultural Operations		2	596	0	596
		Sub Total	3	894	0	894
		Monitoring & supervision charge 5% of the total cost				45
		Grand Total	**3**	894	**0**	**939**

Abstract @400 seedlings

Year	Person Days	Labour (Rs)	Material (Rs.)	Monitoring & supervision charge 5% of the total cost	Total Cost (Rs)
0th Year	20	5960	900	343	7203
1st Year	84	25032	2982	1401	29415
2nd Year	26	7748	2475	512	10735
3rd Year	12	3576	0	179	3755
4th Year	3	894	0	45	939
5th Year	3	894	0	45	939
6th Year	3	894	0	45	939
7th Year	3	894	0	45	939
8th Year	3	894	0	45	939
9th Year	3	894	0	45	939
10th Year	3	894	0	45	939
TOTAL	**163**	**48574**	**6357**	**2750**	**57681**

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COST NORM FOR BLOCK PLANTATION @ 1000 PLANTS PER HECTARE IN CURRENT WAGE RATE OF RS. 298 PER MANDAY.

Sl. No	Items of Work	Preferable period of execution	Labour in Mandays	Labour cost @ Rs 298/- 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	596	0	596
2	Site preparation	Nov/Dec	8	2384	0	2384
3	Alignment and stacking of pits	Jan/Feb	2	596	0	596
4	Digging of pits	Feb/Mar	25	7450	0	7450
5	Nursery cost (6 months old seedling) part @ Rs.12.43/- per seedling (rs.8.67 in 0th year + Rs.3.76 in 1st year) for 1100 seedlings (1000+100)	Jan-Mar	27.5	8195	1837	10032
	Total		**64.5**	**19221**	**1837**	**21058**
6	Monitoring & Supervision charge 5% of the total cost					1053
	Grand Total		**64.5**	**19221**	**1837**	**22111**
	1ST YEAR / PLANTING YEAR					
1	Nursery cost (6 months old seedling) balance @ Rs.3.08 for 1100 seedlings	Apr-Jul	13	3874	496	4370
2	Fencing for an average of 250 meters/ha @ Rs.76.80/- per meter for bamboo twigs and bamboo thorne fencing	Jan/Feb	38	11324	8560	19884
3	Carriage and planting, Casualty Replacement and application of insecticides, manure etc.	Jul/Aug	13	3874	0	3874
4	Cost of insecticide and fertilizer (a) NPK @ 50 gms/plant as basi dose = 50kg @ Rs.24/- per kg = Rs.1200.00 (b) Urea @ 70 gms/plant in two susequent doses @ rs.6/- per kg = Rs.420.00 (c) Granular Insecticide (themet, Ferate etc.) @ 5 gms/plant @ rs.80/- per kg = Rs.400.00		0	0	2020	2020
5	1st weeding (complete weeding)	Aug/Sep	5	1490	0	1490
6	Manuring Urea 35 gm	Aug/Sep	4	1192	0	1192
7	2nd weeding (complete weeding)	Sep/Oct	4	1192	0	1192
8	Soil working (50 cms. Radius around plants) & manuring Urea 35 gms per plant	Sep/Oct	5	1490	0	1490
9	Soil Conservation Measures in the form of staggered trenches of size 2 m × 0.5 m × 0.5 m @ 30 nos per ha	Sep/Oct	10	2980	0	2980
10	Fire line tracing & Inspection path	Aug-Mar	3	894	0	894
11	Watch & Ward		7	2086	0	2086
	Sub-Total		**102**	**30396**	**11076**	**41472**
12	Monitoring & Supervision charge 5% of the total cost					2074
	Grand Total		**102**	**30396**	**11076**	**43546**
	2ND YEAR MAINTENANCE					
1	Casualty replacement (10%) with Nursery cost	Jul/Aug	2.5	745	1036	1781
2	Weeding (complete weeding)	Sep/Oct	4	1192	0	1192
3	Repair and maintenance of Bamboo fence including material cost	Sep/Oct	20	5960	5080	11040
4	Cost of fertilizer (NPK @ 70 gms/plant for 1000 plants) (Rs.24/- per kg & Insecticide @ 5 gms/plant for 100 plants 500 gms @ Rs.80/- per kg)	Oct/Nov	0	0	1720	1720

Executive Engineer
Ib Investigation Division
Sundargarh

Sl. No	Items of Work	Preferable period of execution	Labour in Mandays	Labour cost @ Rs 286.30/- per day	Material cost per hectare in Rs	Total cost per hectare in Rs.
1	2	3	4	5	6	7
5	Soil working (50 cms. Radius around plants)	Oct/Nov	5	1490	0	1490
6	Application of fertilizer & insecticide	Sep/Oct	2.5	745	0	745
7	Fire line tracing (2 m. wide fire line over 400 m long)	Feb/Mar	3	894	0	894
8	Watch & Ward	Apr-Mar	15	4470	0	4470
	Total		52	15496	7836	23332
9	Monitoring & Supervision charge 5% of the total cost					1167
	Grand Total		52	15496	7836	24499
	3RD YEAR MAINTENANCE					
1	Weeding and application of fertilizer	Aug/Sep	5	1490	0	1490
2	Cost of fertilizer (NPK @ gms/plant) @ Rs.24/- per kg		0	0	1200	1200
3	Repair and maintenance of Bamboo fence including material cost	Sep/Oct	20	5960	1000	6960
4	Soil working (50 cms. Radius around plants) & application of fertilizer	Oct/Nov	5	1490	0	1490
5	Fire line tracing (2 m. wide fire line over 400 m length) & cultural operation	Feb/Mar	3	894	0	894
6	Watch & Ward	Apr-Mar	15	4470	0	4470
	Total		48	14304	2200	16504
7	Monitoring & Supervision charge 5% of the total cost					825
	Grand Total		48	14304	2200	17329
	4TH YEAR MAINTENANCE					
1	Fire line tracing (2 m. wide fire line over 400 m length) & cultural operation	Feb/Mar	3	894	0	894
2	Watch & Ward	Apr-Mar	15	4470	0	4470
	Total		18	5364	0	5364
3	Monitoring & Supervision charge 5% of the total cost					268
	Grand Total		18	5364	0	5632
	5TH YEAR MAINTENANCE					
1	Fire line tracing (2 m. wide fire line over 400 m length) & cultural operation	Feb/Mar	3	894	0	894
2	Watch & Ward	Apr Mar	15	4470	0	4470
	Total		18	5364	0	5364
3	Monitoring & Supervision charge 5% of the total cost					268
	Grand Total		18	5364	0	5632
	6TH YEAR MAINTENANCE					
1	Fire line tracing (2 m. wide fire line over 400 m length) & cultural operation	Feb/Mar	3	894	0	894
2	Watch & Ward	Apr-Mar	15	4470	0	4470
	Total		18	5364	0	5364
3	Monitoring & Supervision charge 5% of the total cost					268
	Grand Total		18	5364	0	5632

Executive Engineer
Ib Investigation Division
Sundargarh

	7TH YEAR MAINTENANCE					
1	Fire line tracing (2 m. wide fire line over 400 m length) & cultural operation	Feb/Mar	3	894	0	894
2	Watch & Ward	Apr-Mar	15	4470	0	4470
	Total		**18**	**5364**	**0**	**5364**
3	Monitoring & Supervision charge 5% of the total cost					268
	Grand Total		**18**	**5364**	**0**	**5632**
	8TH YEAR MAINTENANCE					
1	Fire line tracing (2 m. wide fire line over 400 m length) & cultural operation	Feb/Mar	3	894	0	894
2	Watch & Ward	Apr-Mar	15	4470	0	4470
	Total		**18**	**5364**	**0**	**5364**
3	Monitoring & Supervision charge 5% of the total cost					268
	Grand Total		**18**	**5364**	**0**	**5632**
	9TH YEAR MAINTENANCE					
1	Fire line tracing (2 m. wide fire line over 400 m length) & cultural operation	Feb/Mar	3	894	0	894
2	Watch & Ward	Apr-Mar	15	4470	0	4470
	Total		**18**	**5364**	**0**	**5364**
3	Monitoring & Supervision charge 5% of the total cost					268
	Grand Total		18	5364	0	5632
	10TH YEAR MAINTENANCE					
1	Fire line tracing (2 m. wide fire line over 400 m length) & cultural operation	Feb/Mar	3	894	0	894
2	Watch & Ward	Apr-Mar	15	4470	0	4470
	Total		**18**	**5364**	**0**	**5364**
3	Monitoring & Supervision charge 5% of the total cost					268
	Grand Total		**18**	**5364**	**0**	**5632**

Executive Engineer
Ib Investigation Division
Sundargarh

Abstract @1000 seedlings

Year	Person Days	Labour Cost @298/- per day (Rs)	Material Cost (Rs.)	Monitoring & supervision charge 5% of the total cost	Total Cost (Rs)
0th Year	64.5	19221	1837	1053	22111
1st Year	102	30396	11076	2074	43546
2nd Year	52	15496	7836	1167	24499
3rd Year	48	14304	2200	825	17329
4th Year	18	5364	0	268	5632
5th Year	18	5364	0	268	5632
6th Year	18	5364	0	268	5632
7th Year	18	5364	0	268	5632
8th Year	18	5364	0	268	5632
9th Year	18	5364	0	268	5632
10th Year	18	5364	0	268	5632
TOTAL	**392.5**	**116965**	**22949**	**6995**	**146909**

Executive Engineer
Ib Investigation Division
Sundargarh

A. ESTIMATE OF COST FOR LOOSE BOULDER STRUCTURE

(i) Span of 2 mtr. Size:-

Sl. No.	Item of activity	Cost for unit(RS.)	Total unit (No/ cum)	Total cost in Rs.
1	Leveling the unshaped surface of the selected site & layout the structure foundation L.S 1 MD	298	1	298
2	Excavation of foundation in hard soil within in tial lead of 50 meter including rough dressing and breaking of clods to maximum size 5cm to 7 cm laying in layer not exceeding 0.3 m depth to strengthening both sides U/S approx. bund loose boulder structure. = 2.0*4.60*0.60= 5.52 cum @ Rs. 167.81 per cum.	167.81	5.52	926.31
3	Rough stone dry packing upto GL 2.0*4.60*0.60=5.50 cum above GL Cross sectional area * span= 2.60m*2.0m=5.20 cum For Apron 1.0*0.6*0.6*1.0=0.36cum			
	Total = 5.52 + 5.20 + 0.36 = 11.08 @ Rs. 837.79 per cum	837.79	11.08	9282.71
	GRAND TOTAL		10507.02	

Executive Engineer
Ib Investigation Division
Sundargarh

(ii) Span of 3 mtr. Size:-

Sl. No.	Item of activity	Cost for unit(RS.)	Total unit (No/ cum)	Total cost in Rs.
1	Leveling the unshaped surface of the selected site & layout the structure foundation L.S..1 MD	298	1	298 .00
2	Excavation of foundation in hard soil within initial lead of 50 meter including rough dressing and breaking of clods to maximun size 5cm to 7 cm laying in layer not exceeding 0.3 in depth to strengthening both sides U/S approx. bund loose boulder structure. = 3.0*4.60*0.60 = 8.28 cum @ Rs. 167.81 per cum.	167.81	8.28	1389.47
3	Rough stone dry packing upto GL 3.0*4.60*0.60=8.28 cum above GL Cross sectional area * span= 2.60m*3.0m=7.80 cum For Apron 1.0*0.6*0.6*1.0=0.36cum			
	Total = 8.28 + 7.80 + 0.36 = 16.44 @ Rs. 837.79 per cum	837.79	16.44	13773.26
	GRAND TOTAL			15460.73

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Ib Investigation Division
Sundargarh

ESTIMATE FOR BARBED WIRE FENCING

01). 02 ply barbed wire (5 Rmt per kg)
7 straight strand x 1000 Mt =7000Mt
2 Diagonal strand = $2 \times \sqrt{(6.5')^2 + (8.2')^2} = 2 \times 10.50$ ft
=21.00 ft x 400 nos=8400 ft or =2560Mt
=9560Mt

Requirement of Barbed wire per Km
Cost per KM=9560/5=1912 Kg @ Rs.80/Kg Rs.1,52,960.00

02). Construction of RCC pillars of size-
Length—8ft. Bottom width 6"x6", Top width-4"x4"
Reinforced with 6mm rods with proper curing

$$\left\{ 8' \times \frac{6"+4"}{2} \right\} \times \frac{6"+4}{2} = 1.34 \text{ cft or } 0.038 \text{ cum}$$

i) Cost of c.c. work 1:2:4=0.038 cum @**5356.35**/cum = 203.54
ii) Cost of rod including cutting, bending & binding
0.038x0.9qtl=0.0342 qtl@ **Rs. 10,843.05**/qtl. = 370.83
iv) Contingency (15%) including = 86.15
Curing, stacking, provision of hooks etc.
Rs.660.52 or Rs. 661/-

Requirement of pillars per KM-
Spacing=2.5mtx2.5mt
Requirement=1000mt/2.5mt = 400
Strut pillar in every 10th pillar=(400/10)x2 = 80
480 Nos

Cost of pillars per Kilometer= 480@ 661/- Rs.3,17,280.00

03).Fitting fixing of RCC pillars in position with hbg metal (4cm) in C.M (1:4:8)
i) Digging of pits 1.5'x1.5'x1.5'=3.375cft/pit
for 480 pits, 480x3, 375=1620 cft or 45.86 cum @ **Rs. 12,814.00**/100cum = 5876.50
ii) Fixing of pillars with 4cm hbg metals in C.M 1:4:8
pit size-1.5'x1.5'x1.5' =3.375 cft
Deduct 1/3rd of butt of pillar i.e.3.375/3 =(-) 1.125 cft
Total c.c. work per pillar
2.25cft
For 480 pillars=480x2.25=1080cft or 30.577 cum @ Rs. **3702.95**/cum Rs.1,13,225.00

04). Labour for straightening the barbed wire and fixing & clipping with pillars
70M.d per km@298/- = Rs.20,860.00
05). Carriage of Barbed wire & pillars to work site
@Rs.1000/tl. and cost of loading & unloading within 5 km distance
Approximately 10 tlc @ 800/tld = Rs.18,000.00
06). Provision of one Iron Gate of size (4' x 5') on LS = Rs. 7,500.00

Total = Rs.6,35,702.00
Labour Cess 1% = Rs. 6,357.00
Expenditure per 1 km of barbed wire fencing Rs.6,42,059.00
Or say, Rs.643.06/- or Rs.643/- per meter

Executive Engineer
Ib Investigation Division
Sundargarh

Annexure-3

Estimate for digging of Staggered Trench alongwith Plantation of Agave on the mound

Earth Work in Ordinary Soil of Staggered Trench of Size 2mt x 0.5mt x0.5mt

Male Mulia	16no	@	298.00/- per MD	= Rs 4768/-
Female Mulia	16no	@	298.00/- per MD	= Rs4768/-

Rs 9536 /- per cum

Size of Staggered Trench = 2mt x 0.5mt x0.5mt = 0.5 cum

For 100 cum earth work required = Rs 9536/-

For 0.5 cum earth work required = Rs 9536 x 0.5/100 = Rs 47.68/- or Rs 48/-

Abstract

Estimate for digging of Abstract one staggered trench of size 2mt x 0.5mt x0.5mt

Along with plantation of Agave on the mound in Ordinary soil.

Sl. No.	Description of Work	Amount in Rs.
1	Earth Work in excavation of staggered trench in Ordinary soil including rough dressing and levelling the beds and heaping the dugout soil at the downhill side of the trench and leveling the same Size of trench= 2mt x 0.5mt x0.5mt = 0.5 cum @9536 /- per 100 cum	Rs. 48.00
2	Cost of Agave planting on the dugout soil and its maintenance including weeding, cost of fertilizer etc. for seven years 3 nos. of average plants per trench @ Rs 31.00 per plant	Rs. 93.00
	Total	Rs 141.00

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Ib Investigation Division
Sundargarh

TOTAL COST OF PROJECT

1	Cost of ANR Plantation @400 plants/Ha in non-forest land over 91.898ha @ Rs.57,681per ha with 10 years maintenance	**53,00,768.54**
2	Cost of ANR Plantation @400 plants/Ha in Degraded forest land over 143.92ha @ Rs.57,681 per ha with 10 years maintenance	**83,01,449.52**
3	Cost of Block Plantation @1000 plants/Ha in non-forest land over 23.116 ha @ Rs.1,46,909 per ha with 10 years maintenance	**33,95,948.44**
4	SMC measures-LBCD structure of 2mtr span @ Rs 10507.02/- for 100 structures	**10,50,702**
5	SMC measures-LBCD structure of 3mtr span @ Rs 15460.73/- for 100 structures	**15,46,073**
6	Cost of Barbed- wire fencing in non-forest land over 13.48 RKM @ Rs. 6,80,583.00 per RKM	**91,74,258.84**
	Cost of Barbed- wire fencing in degraded forest land over 6.55 RKM @ Rs. 6,80,583.00 per RKM	**44,57,818.65**
7	Staggered trenches 2.5 mts x 0.5 mt. to the tune of 60 nos. per ha @Rs. 8460/ha.	**21,15,846**
8	Sub Total	**3,53,42,864.99**
9	15% of the total plantation cost towards Entry Point Activity/incentive to VSS	**53,01,429.749**
10	Total	**4,06,44,294.74**
11	Add 20% escalation	**81,28,858.948**
12	Grand Total	**4,87,73,153.69**
		Or
		4,87,73,154.00

(Rupees Four crore Eighty-seven lakhs Seventy-Three Thousand One Hundred Fifty-Four Only)

Executive Engineer
Ib Investigation Division
Sundargarh

07/2/2020
Divisional Forest Officer
Rourkela Division

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25. PROVISION OF FUNDS AND FUND UTILIZATION:

Rs.4,87,73,154.00 (Rupees Four crore Eighty seven lakhs Seventy Three Thousand One Hundred Fifty Four) only shall be deposited by the User Agency IB Investigation Division, Sundergarh on approval of the scheme to the Ad-hoc CAMPA Account and the funds will be utilized for raising of Compensatory Afforestation by the Divisional Forest Officer,Rourkela Division on allotment by the Principal Chief Conservator of Forests, Odisha, Bhubaneswar.

Divisional Forest Officer,
Rourkela Division

Divisional Forest Officer
Rourkela Division

Executive Engineer
Ib Investigation Division
Sundargarh

LAND SUITABALITY CERTIFICATE

This is to certify that **23.116 ha** of Non Forest Land in Karmabahal village, **91.898 ha** of Non Forest Land in Dumangdiri Village of Biramitrapur Forest Range and **143.92 ha** of Reserve Forest Land (DFL) in Harapali RF of Kuarmunda Forest Range under Rourkela Forest Division identified for Compensatory Afforestation (CA) is suitable for block plantation @1000 and ANR plantation @400 seedlings and ANR plantation @400 seedling per ha respectively.

Place - Rourkela

Date -

Divisional Forest Officer
Rourkela

07/02/2020

Divisional Forest Officer
Rourkela Division

FOREST RANGE OFFICER
BIRMITRAPUR RANGE

Forest Range Officer
KUARMUNDA RANGE

Executive Engineer
Ib Investigation Division
Sundargarh

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Joint Verification Report on Non-Forest Government Land Identified for Compensatory Afforestation in Karmabahal Village under Kuarmunda Tahasil of Sundergarh District in lieu of Forest Land Diverted for Korapani Irrigation Project.

In pursuance to letter No. 3575 dated 27-10-18 of o/o the Addl. Dist. Magistrate, Sundergarh and letter No. 6555 dated 06-11-18 of o/o the Divisional Forest officer, Rourkela, a joint verification was taken up in presence of the staffs of Revenue, Forest & Water Resource Department for identification of 102.958 ha of Non- Forest Govt. land in Karmabhal village under Kuarmunda Tahasil on dated 19-11-2018.

During the joint verification, the land so identified (detail land schedule given below) is in one patch and found free from encroachment and encumbrance. Though the kissam is Dungri, still the land is suitable for raising Block Plantation @ 1000 seedlings/ha.

Details of the land

Villages: Karmabahal

Tahasil: Kuarmunda,

Dist: Sundargarh.

Name of the village	Khata No.	Plot No.	Kisam	Total area in acre	Area identified for CA in acre
Karmabahal	88	1	Dungri	57.12	57.12
				Total	**57.12**

Revenue Inspector
Kacharu

14.12.18
Forest Range Officer
Kuarmunda,Range

14.12.18
Tahasildar
Panposh, Kuarmunda

Executive Officer
In Investigation Division
Sundergarh

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Joint Verification Report on Non-Forest Government Land Identified for Compensatory Afforestation in Dumangdiri Villages under Kuarmunda Tahasil of Sundergarh District in lieu of Forest Land Diverted for Karapani Irrigation Project.

In pursuance to letter No. 3575 dated 27-10-18 of o/o the Addl. Dist. Magistrate, Sundergarh and letter No. 6555 dated 06-11-18 of o/o the Divisional Forest officer, Rourkela, a joint verification was taken up in presence of the staffs of Revenue, Forest & Water Resource Department for identification of 102.958 ha of Non- Forest Govt. land in Dumangdiri village under Kuarmunda Tahasil on dated 6-12-2018

During the joint verification, the land so identified (detail land schedule given below) was found free from encroachment and encumbrance. Out of the 263.97 acres of land verified in three patches, 205.25 acres land has been taken up for raising plantation. Though some patches kissam are pahad and some patches kissam are dunguri, still the lands are suitable for raising ANR Plantation @ 400 seedlings/ha.

Details of the land

Villages – Dumangdiri

Tahasil – Kuarmunda

Dist: Sundargarh.

Name of the village	Khata No.	Plot No.	Kisam	Total area in acre	Area identified for CA in acre
Dumangdiri	72	1	Pahad	56.78	27.80
	72	113	Pahad	56.61	49.60
	72	262	Pahad	50.32	50.32
	72	263	Pahad	7.34	7.34
	72	264	Tunguri	8.24	8.24
	72	663	Tunguri	33.25	32.35
	72	666	Tunguri	32.01	32.01
	72	668	Tunguri	19.42	19.42
			Total	**263.97**	**227.08**

Revenue Inspector
Kacharu

Executive Engineer
Investigation Division
Sundergarh

14.12.18
Tahasildar
Panposh, Kuarmunda

Dy. Ranger
I/C Range Officer
Birmitrapur

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OFFICE OF THE RANGE OFFICER, KUARMUNDA

No. 3891 / Date: 19.12.2019

To

The Divisional Forest Officer

Rourkela Forest Division, Rourkela

Sub: Identification of additional degraded forest land for plantation of balance seedlings in lieu of diversion of forest land for Karapani Irrigation Project.

Ref: your letter no. 6706/4F Dt. 23.11.2019

Sir,

In Inviting a kind reference to the letter on the subject cited above, as per your instruction a suitable patch of degraded forest land over an of 143.32ha has been identified in Harapali Reserve Forest for plantation of balance 55730 no of seedlings for the above said project. The identified patch is suitable for ANR plantation @400 per ha. and land is free from all sort of encroachment and encumbrance from management point of view.

Herewith I am attaching the GPS, TOPO maps of the identified degraded forest patch in 6 sets for your kind information and necessary action.

Encl: 1.GPS maps of the Identified CA land (6 copy)
2.Identified CA Area over SOI (6 copy)

19.12.19

Yours faithfully

Range Officer
Kuarmunda
Forest
KUARMUNDA

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ବନଖଣ୍ଡ ଅଧିକାରୀ ତଥା ବନ୍ୟପ୍ରାଣୀ ତତ୍ତ୍ୱାବଧାରକଙ୍କ କାର୍ଯ୍ୟାଳୟ, ରାଉରକେଲା

OFFICE OF THE DIVISIONAL FOREST OFFICER CUM WILDLIFE WARDEN
ROURKELA FOREST DIVISION, ROURKELA, SUNDARGARH, ODISHA
Phone No. 0661-2664637, Fax No. 0661-2664638, e mail- dforourkela.od@gov.in

Memo No. 3941
Rourkela Dtd. the 9th July, "2020"

To

The Divisional Forest Officer,
Bonai Forest Division.

Sub: Proposal for diversion of 113.075ha. of forest land for construction of Karapani Irrigation Project under Bonai Forest Division of Sundargarh District.

Ref: Your memo no.6131 dt.07.07.2020.

With reference to your memo no. of the subject cited above this is to inform you that, an area of 115.014 ha of non-forest land identified at village Karmabahal 23.116 ha and Dumangiri 91.898 ha for Compensatory Afforestation (C.A) have not been included in DLC report.

This is for your information and taking further course of action at your end.

Divisional Forest Officer
Rourkela Forest Division.
09/7/2020

Memo No. 3942 Dt. 9/7/20

Copy submitted to Regional Chief Conservator of Forests, Rourkela for favour of his kind information and necessary action with reference to his memo no.1614 dt.4.7.2020 addressed to DFO, Bonai.

Divisional Forest Officer
Rourkela Forest Division.
09/7/2020

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By E-mail

ବନଖଣ୍ଡ ଅଧୀକାରୀଙ୍କ କାର୍ଯ୍ୟାଳୟ: ବଣାଇଁ ବନଖଣ୍ଡ ।

OFFICE OF THE DIVISIONAL FOREST OFFICER: BONAI DIVISION.

Phone / Fax – 06626-244434: E-mail
At- dfobonai.od@gov.in

Memo No. 6288 /6F-(Mg.)Dt: 10.7 .2020

To

The Regional Chief Conservator of Forests,
Rourkela Circle, Rourkela.

Sub:- Proposal for diversion of 113.075 ha. of forest land for construction of **Karapani Irrigation Project** under Bonai Forest Division of Sundargarh District.

Ref:-
1. Proposal No.FP/OR/IRRIG/27702/2017 SL. No.OR/01/2019 dt.14.1.2019.
2. Your Memo No.1614 dt.4.7.2020.
3. Memo No.3941 dt.9.7.2020 of the DFO, Rourkela Division.

With reference to above, as desired by you in your Memo under reference (2), the Divisional Forest Officer, Rourkela Division was requested vide this office Memo No.6131 dt.7.7.2020 to furnish report whether the 115.014 ha. of non-forest land identified for Compensatory Afforestation in lieu of above said diversion proposal has been included in the DLC report or not. In response to this Office Memo, the DFO, Rourkela Division has intimated vide his Memo No.3941 dt.9.7.2020 **(Copy enclosed)** that the aforesaid non-forest land over 115.014 ha. has not included in the DLC report.

Accordingly, the Site Inspection Report has been revised and **enclosed herewith in 5 set**.

Encl :- As above.

Divisional Forest Officer,
Bonai Division.

Memo No. 6289 /6F-Dt: 10.7 .2020

Copy forwarded to the Principal Chief Conservator of Forests, Forest Diversion & Nodal Officer, F.C. Act' O/O the P.C.C.F., Odisha Bhubaneswar for favour of kind information and necessary action with reference to Memo No.1615 dt.4.7.2020 of the RCCF, Rourkela.

Divisional Forest Officer,
Bonai Division.

Memo No. 6290 /6F-Dt: 10.7 .2020

Copy forwarded to the Executive Engineer, IB Investigation Division, Sundargarh for information and necessary action with reference to Memo No.1616 dt.4.7.2020 of the RCCF, Rourkela Circle.

Divisional Forest Officer,
Bonai Division.

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