6/c

STATE FOREST HEADQUARTERS
OFFICE OF THE PRINCIPAL CHIEF CONSERVATOR OF FORESTS & HoFF, ODISHA,
ARANYA BHAWAN, CHANDRASEKHARPUR, BHUBANESWAR
E-mail-: nodal.pccfhoff@odisha.gov.in

GOVT. OF ODISHA
21 JAN 2022
FOREST, ENV. & C.C. DEPTT.

No . /9F (MG) – 80/2016
Dated, Bhubaneswar the January' 2022

From

Smt Pusazhule Mekro, IFS
Principal CCF (FD & NO, FC Act)
O/o the PCCF & HoFF, Odisha, Bhubaneswar

To

The Assistant Inspector General of Forests
Government of India, Ministry of Environment, Forests & Climate Change
(Forest Conservation Division), Indira Paryavaran Bhawan
Aliganj, Jorbagh Road, New Delhi-110510

Sub: **Proposal for non-forestry use of 63.30 ha Sabik Kisam forest land in addition to 371.192 ha of forest land already diverted located within the Mining Lease hold area over 767.284 ha in favour of M/s JSW Steel Ltd for Nuagaon Iron Ore Mines in Barbil Tahasil of District Keonjhar(Odisha) – regarding.**

Ref:- GoI, MoEF & CC, New Delhi Letter F.No. 8-17/2001-FC(Vol) dated 16.12.2021.

Sir,

In inviting a reference to the Government of India, MoEF & CC, New Delhi Letter cited above on the captioned subject, the compliance submitted by the RCCF, Rourkela Circle vide his Memo No. 104 dated 06.01.2022 alongwith its enclosures is sent herewith for favour of kind information and necessary action.

Encl – As above

Yours faithfully

19/01

Principal Chief Conservator of Forests
Forest Diversion & Nodal Officer, FC Act

Memo No. / Dt.

Copy along with one set of compliance forwarded to the Deputy Director General of Forests (Central), GoI, MoEF & CC, Integrated Regional Office, Chandrasekharpur, Bhubaneswar-751023 for information and necessary.

19/01

Principal Chief Conservator of Forests
Forest Diversion & Nodal Officer, FC Act

A.S.
Div.

Memo No. 1183 / Dt. 19.01.2022

Copy along with one set of compliance forwarded to the Special Secretary to Government, Forest, Environment & Climate Change Department, Odisha, Bhubaneswar for information and necessary action with reference to FE&CC Department Letter No. 23207/FE&CC dated 31.12.2021.

19/01

Principal Chief Conservator of Forests
Forest Diversion & Nodal Officer, FC Act

Memo No. /Dt.

Copy forwarded to the RCCF, Rourkela Circle for information and necessary action with reference to his Memo No. 104 dated 06.01.2022.

19/01

Principal Chief Conservator of Forests
Forest Diversion & Nodal Officer, FC Act

Memo No. /Dt.

Copy forwarded to the DFO, Keonjhar Forest Division for information and necessary action with reference to Memo No. 105 dated 06.01.2022 of RCCF, Rourkela Circle.

19/01

Principal Chief Conservator of Forests
Forest Diversion & Nodal Officer, FC Act

Memo No. /Dt.

Copy forwarded to the Authorised Signatory, M/s JSW Steel Ltd., Plot No. 3, Forest Park, Sishubhawan Square, Bhubaneswar-751009, Odisha for information and necessary action.

19/01

Principal Chief Conservator of Forests
Forest Diversion & Nodal Officer, FC Act

OFFICE OF THE REGIONAL CHIEF CONSERVATOR OF FORESTS, ROURKELA CIRCLE,
AT/P.O. PANPOSH, ROURKELA-769 004.

Memo No. 104 /3F-77/2021. Date: 06.01.2022

PRINCIPAL CHIEF CONSERVATOR OF FORESTS ODISHA, BHUBANESWAR
07 JAN 2022
Received No. 177 CF
Sec.

To

The Principal Chief Conservator of Forests
(Forest Diversion & Nodal Officer, FC Act),
O/o the Principal Chief Conservator of Forests,
Odisha, Bhubaneswar.

11/01/2022 ASO

Sub: Proposal for non-forestry use of 63.30 ha Sabik Kisam forest land in addition to 371.192 ha of forest land already diverted located within the Mining Lease hold area over 767.284 ha in favour of M/s JSW Steel Ltd for Nuagaon Iron Ore Mines in Barbi Tahasil of District Keonjhar(Odisha) – FAC observations of Govt. of India, MoEF & CC, New Delhi regarding.

Ref:-
1. F. No. 8-17/001-FC(Vol) dtd. 16.12.2021 of MoEF & CC, GoI
2. Your Memo No.21828 Dtd.17.12.2021
3. Memo No. 87 Dtd.05.01.2022 of DFO, Keonjhar Division.

With reference to above, the Divisional Forest Officer, Keonjhar Division vide his Memo No.86 Dtd.05.01.2022 with copy to you in the next Memo of even date has submitted the point wise compliance with the observations of the FAC in respect of Point No (i) to (iv) vide letter F.No.8-17/001-FC(Vol) dtd. 16.12.2021 of the MoEF & CC, GoI which is as follows:

i. **Action taken by the State Government on the violation of FC Act committed by the erstwhile lessee specifically about compensation of loss incurred to the surrounding forest due to illegal mining and restoration measures, if any, undertaken by the State.**

As reported by the DFO, Keonjhar Division, necessary action has been initiated against erstwhile lessee for violation of FC Act, 1980 & change of the land use of the forest land diverted without prior approval of the competent authority. The detailed action taken report is furnished below:-

Sl No.	Violation Committed by the user agency	Action Taken Report
1	1. Un-authorised extraction of mineral and subsequent dumping on the same site over 8.12 ha of virgin forest land. 2. Extension of broken up pit No. H & I over 4.86 ha. in VF. 3. Dislocation of all the broken up pillars in Block- J from their original position. 4. Non-grouting of ML pillars with cement concrete. 5. Seizure of 07 Nos. Sal log and 03 Nos. Siris log (0.6911 Cum) inside lease hold area (Bhuyan Barapada VF area) &Tipper bearing regd. No. OR-09J-9305.	Forest Offence case vide OR case No. 172BL of 2011-12 has been registered and prosecution sanctioned vide PR No. 02 of 2012-13 and submitted in the Hon'ble Court of JMFC, Barbil. The case is sub-judice.

2	1. Illegal dumping of sub-grade iron ore in safety zone area within ML pillar No. 95 to 97 of dimension 593 mtr X 7.5 mtr in forest kissam land in village Barapada. 2. Breaking of Safety zone from ML pillar No.106 to 110 over dimension 571 mtr x 36 mtr. x 15 mtr.	Forest Offence case vide OR case No. 67BL & 68BL of 2012-13 have been registered and prosecution sanctioned vide PR No. 15 of 2012-13 and PR No. 16 of 2012-13 and submitted in the Hon'ble Court of JMFC, Barbil. The case are sub-judice.

As per judgement dated 2.8.2017 of Hon'ble Supreme Court of India, the erstwhile lessee i.e. M/s KJS Ahluwalia has fully paid the compensation amount of Rs.1074,93,88,658/- for violation of E(P) Act, 1986 and FC Act, 1980 within the stipulated time i.e. 31.12.2017.

ii. **Status of details of penalty recovered from the erstwhile user agency in accordance with directions contained in the Hon'ble Supreme Court Judgement dated 02.09.2017.**

The DFO, Keonjhar has reported that in pursuance of judgement dated 2.8.2017 of Hon'ble Supreme Court of India in WP (C) No.114/2014 (common cause), the ex-lessee, M/s K.J.S Ahluwalia has fully paid the Compensation amount as demanded under section 21(5) of MMDR Act, 1957 for violation of E(P) Act, 1986 & FC Act, 1980 within the stipulated time i.e. 31.12.2017. In this regard, the Director of Mines, Odisha, Bhubaneswar has provided the detailed chart indicating compensation demanded and payments collected in respect of Nuagaon Iron Ore Mines of Ex-lessee which is enclosed vide **Annexure-4**.

iii. **Status of DFL identified for undertaking afforestation of surplus seedlings along with supporting details such as number of trees proposed to be planted, suitability of area, site-specific CA scheme, KML / shape files, etc.**

As reported by the DFO, Keonjhar Division, the scheme for compensatory afforestation over 65.00 ha (AR model @1000 nos. seedlings per ha & ANR without gap over 5.00 ha has been prepared at current wage rate @315/- per MD as per revised cost norm provided by the PCCF, Odisha vide his O.O. No.1109 dtd. 08.11.2021 which is enclosed herewith vide **Annexure-1**. The said degraded forest land over 65.00 ha has been identified in Kunar DPF under BJP Range of Keonjhar Division for undertaking Compensatory Afforestation of balance 50640 nos. (63300-12660) of seedlings. The identified degraded forest land is suitable for AR plantation @1000 seedlings per ha over 60.00 ha & over the remaining 5.00 ha ANR without gap. The DSS report of the identified site is as below:-

Area identified for CA plantation	MDF	Non-Forest	Open Forest
65.00	5.00	51.00	9.00

The suitability certificate given by Range Officer, BJP is enclosed vide **Annexure-1A** KML file / Shape file enclosed herewith in CD format.

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iv. Status of compliance of conditions stipulated in the approval granted in 2004, including present status of reclamation and rehabilitation of mined out areas.

As reported by the DFO, Keonjhar Division:

i) The compliance report of the conditions stipulated in the approval granted in 2004 is enclosed vide **Annexure-2**.

ii) The user agency has intimated that, the entire mining lease is fully mineralised and they will reclaim mined out pits in conformity with the approved mining plan. The User Agency will also stabilise the inactive dumps and rehabilitate the same by planting indigenous species. In this regards, the User Agency, M/s JSW Steel Ltd has submitted an undertaking which is enclosed vide **Annexure-3**.

This is for favour of kind information and necessary action.

6/1/2022

Encl:- As above.

Regional Chief Conservator of Forests
Rourkela Circle

Memo No. Date:

Copy forwarded to the Divisional Forest Officer, Keonjhar Division for information and necessary action with reference to his Memo No.86 dated 05.01.2022.

Regional Chief Conservator of Forests
Rourkela Circle

Memo No. Date:

Copy forwarded to Shri Baswaraj Mahadevppa Dalgade, Authorised Signatory, General Manager (Project), Nuagaon Iron Ore Block of M/s JSW Steel Limited, JSW Centre Bandra Kurla Complex, Bandra East, Mumbai, PIN-400051, E-mail: baswaraj.dalgade@jsw.in for information & necessary action with reference to Memo No.88 dated 05.01.2022 of the DFO, Keonjhar Division.

Regional Chief Conservator of Forests
Rourkela Circle

Annexure-1

SCHEME FOR COMPENSATORY AFFORESTATION OVER 65.00 ha OF FOREST LAND @Rs. 315/- PER MANDAYS IDENTIFIED IN KUNAR DPF UNDER BJP RANGE OF KEONJHAR FOREST DIVISION

IN RESPECT OF

NUAGAON IRON ORE MINES

by

M/s JSW STEEL LIMITED.

CHAPTER- I

BRIEF NOTE ON THE PROPOSED FOREST DIVERSION PROPOSAL

The Mines & Minerals (Development & Regulation) Act, 1957 and the Mineral (Auction) Rules, 2015. Govt. of Odisha issued the notice inviting tender dated 06.12.2019 for commencement of auction process to grant the mining lease in respect of Nuagaon Iron Ore Block over an area of 776.969 s per DGPS Survey (767.284 as per RoR). M/s JSW Steel Ltd was declared as the preferred bidder under Rule 9(A)(iii) of Mineral (Auction) Rules, 2015.

In para- 2.1 of the hand book of FC Act, 1980 CA is to compensate the loss of "land by land" and loss of "tree by tree".

The present scheme aims at preparation of a site-specific Compensatory Afforestation scheme over 65.00 ha of degraded forest land identified in Kunar DPF under BJP Forest Range of Keonjhar Division prepared at the prevailing wage rate @Rs. 315.00 per MD with a maintenance period of ten years regarding Nuagaon Iron Ore Mines of M/s JSW Steel Ltd under AR model @1000 seedlings/ ha x 60.00 ha and ANR without Gap model for 5.00 ha.

CHAPTER- II

DETAILS OF LAND IDENTIFIED FOR COMPENSATORY AFFORESTATION

IDENTIFICATION OF DEGRADED FOREST LAND

II(1)- Details of identified Forest land-

The identified Forest land for Compensatory Afforestation is situated in Kunar DPF of BJP Range in Keonjhar Forest Division.

II(2)- Character of existing vegetation of the identified site for Compensatory Afforestation-

The prevailing forest growth has been categorized under forest type- open jungle mainly sal in SoI Topo Sheet No. 73G/6 & 73G/7 The vegetation consists of Sal and its scattered associates like Jamu, Piasal, Asana, Sisoo, Kuruma, Karada, Dhaura, Khair, Sidha, Harida, Bahada and Ainla.

II(3)- Working Plan prescription for the identified site for Compensatory Afforestation-

The prescribed objectives of management for the identified forest block is depicted hereunder-

1. Regenerate of the degraded forest blocks including the areas once affected by shifting cultivation, by appropriate silvicultural inputs and protection measures with people's participation.
2. Improvement of the micro-climate and micro-edaphic conditions though soil and moisture conservation measures.
3. Encouragement of natural regeneration for increasing the biodiversity in forest crop.
4. Fulfillment of the bonafide needs of the local inhabitants for fuel wood, small timber, fodder and N.T.F.P. to the extent possible depending upon the productivity of the forests to ensure their participation.

II(4)- Suitability of the identified site for Compensatory Afforestation-

The identified site in Kunar DPF is a degraded patch with existing vegetation of Sal and Sal associates. Gaps are sporadically spread over the forest block. The topography of the area is mainly undulating hilly having good depth of red boulder mixed soil conducive for plantation under AR model @1000 seedling per ha for 60.00 ha and ANR without Gap model for 5.00 ha. The average maximum temperature is 40^0 to 45^0C and minimum 5^0 to 10^0 C and annual rainfall varies from 1100 mm to 1800 mm. The maximum rainfall is received during the rainy season from July to September. The identified site is situated in village Kunar. The site has been demarcated with 4 feet RCC pillars with erection of durable signboard depicting Scheme, Year, User Agency, Area etc. on it.

CHAPTER-III

DELINEATION OF PROPOSED AREA ON SUITABLE MAP

III(1)- GPS COORDINATES AND GPS MAP OF THE COMPENSATORY AFFORESTATION SITE

The area has been demarcated through GPS survey and GPS survey data showing latitude and longitude of each point and their chainage with bearing is also enclosed in the map prepared thereon (Maps enclosed).

III(2) DECISION SUPPORT SYSTEM- ANALYSIS OF FOREST COVER MAP

The map of the proposed CA land was processed using DSS for analysis of Forest cover over the area. The result obtained are depicted in the **Annexure- I.**

Decision Support System of degraded Forest land identified in Kunar DPF under BJP Range

In Sq. Km.

Name of the site	Area identified for plantation (in ha)	MDF	Non-Forest	Open Forest
Kunar DPF	65.00	0.05	0.51	0.09

CHAPTER- IV

AGENCY RESPONSIBLE FOR COMPENSATORY AFFORESTATION

IV(1)- AGENCY RESPONSIBLE FOR PLACEMENT OF FUNDS

The user agency shall provide funds for raising Compensatory Afforestation as per approved scheme.

IV(2)- AGENCY RESPONSIBLE FOR EXECUTION OF COMPENSATORY AFFORESTATION

The Territorial Wing of the Forest Department i.e. Divisional Forest Officer, Keonjhar Division will be assigned with the task for execution of the Compensatory Afforestation.

CHAPTER- V

DETAILS OF WORK SCHEDULE PROPOSED FOR COMPENSATORY AFFORESTATION

A. PLANTING PLAN

Planting Plan reflects the species-specific treatment of the identified site. Choice of species is based on the geo-morphology of the site, soil-texture, structure, fertility and depth, proneness of the site to water logging etc. Specific treatment of the site in terms of soil and moisture conservation intervention will be depicted in the treatment map. A treatment map will invariably be prepared for Species to be planted and treatments to be applied to the different patches shown in the treatment map and planting plan. This plan will be followed when actual planting is carried out.

Species to be planted: -

1. *Sizyzium cumini* (Jamu)
2. *Adina cardifolia* (Kuruma)
3. *Anogeissus latifolia* (Dhaura)
4. *Accacia catechu* (Khair)
5. *Dalbergia sissoo* (Sissoo)
6. *Azadirrachta indica* (Neem)
7. *Gmelina arborea* (Gambar)
8. *Terminalia belerica* (Bahada)
9. *Terminalia chebula* (Harida)
10. *Pongamia pinnata* (Karanja)
11. *Emblica officinalis* (Ainla)
12. *Shorea robusta* (Sal)

B.PRE-PLANTING OPERATION

B(I)-RAISING OF PLANTATION STOCK- NURSERY-

Nursery will be raised @1100 seedlings per ha including seedlings for 10% causality replacement for 60.00 ha.

B(II)- SURVEY, DEMARCATION & PILLAR POSTING, GPS READING WITH MAPPING-

The planting area has been surveyed and demarcated with four feet height RCC pillars at inter visible distance (as per the direction of the Forest Range officer, BJP Range) with GPS coordinates, forward and backward bearing, pillar No. and distance between pillars inscribed in it. A GPS map in the scale of 1:4000 has been prepared along with GPS co-ordinates, forward & backward bearing, pillar to pillar distance and pillar numbers reflected in the map. A sign board has been erected at a conspicuous location with name of the site, scheme, area etc. depicted on it.

B(III)- SITE PREPARATION AND SILVICULTURAL OPERATION INCLUDING CLEARANCE OF WEED, CLIMBER CUTTING, HIGH STUMP CUTTING, SINGLING OF SHOOTS-

The clearing of the site involving removal of invasive weeds, bushes, climbers, high stumps and singling of shoots will be taken up preferably by the end of February and latest by the end of March. Pits of the dimension 45 cm x 45 cm x 45 cm. will be dug @1000 per ha. in the available gaps preferably 2 months before or at least a month before planting of seedlings.

C. PLANTING OPERATION

Planting of seedlings will be taken up in the month of July. The polythene {(size 12 x 10) (300 gauge)} covering of the balls of earth will be carefully removed before planting. Care will be taken to see that the ball of earth is not broken while doing so. The seedling with the ball of earth will then be placed firmly in the pit and buried at such a depth that the root collar is well below the surface of the soil. The soil around the plant will be well compacted with the heal as a final step so that there is a proper bond between the ball and the surrounding soil. The earth close to the collar will be slightly elevated so that rain water does not accumulate very close to the plant.

D. POST PLANTING OPERATION

D(1)-CASUALTY REPLACEMENT

The entire area will be gone over in the same order as plantation was carried out and casualties, if any, will be replaced as soon as the main plantation operation is over.

D(2)-WEEDING AND SOIL WORKING

Regular and efficient weeding will start immediately after sprouting of the stumps is complete or after the seedlings have started throwing up new buds.

D(3)-MANURING AND INSECTICIDE APPLICATION

On degraded sites urban compost or farmyard manure, wherever available, will be added to the soil while refilling the pits. As regards artificial fertilizers, the minerals required and dosage @ 50 grammes of patent mixtures like 'Gromor' or N.P.K. (2:2:1) will be applied in two split doses one in August and the other in September.

D(4)-SOIL MOISTURE CONSERVATION MEASURES

Special Soil Moisture Conservation Measures will be taken up through construction of LBCD structures of dimension 10' x 10' x 5' to the tune of 65 nos. over the entire plantation site and excavation of one no waterbody of size 40mt x 30mt x 3mt in the plantation site.

D(5)-PROTECTION AGAINST FIRE AND BIOTIC INTERFERENCE

It is proposed to protect the CA plantation from grazing by domestic animals using GI Chain Link Mesh Fencing. The total length of such GI Chain Link Mesh Fencing for both the patches which comes to 3.48 Km (3480 M). Fire line tracing will be ensured to protect the plantation from fire and watch & ward will be provided as per the approved norm for protecting the plantation from grazing with involvement of Natagotha VSS.

CHAPTER- VI

Annexure- 2

Cost Norm for AR Plantation @1000 seedlings per ha (18 months old seedlings) @ 315.00/- Mandays as per revised wage rate by Labour Commissioner, Odisha, Bhubaneswar vide Notification No. 5639/LC dated 02.11.2021. The cost norm provided by the PCCF, Odisha, Bhubaneswar vide their O.O. No. 1109 dated 08.11.2021.

Sl. No	Items of work	Preferable Period of Execution	No. of Mandays	Labour Cost (Rs.)	Material Cost (Rs.)	Total Cost (Rs.)
1	2	3	4	5	6	7
	0th Year (Advance work)					
1	Survey, Demarcation and Pillar posting	Nov/Dec	2	630	0	630
2	Preparation of Treatment Map (Digital Map)	Nov/Dec	1	315	100	415
3	Site preparation (Cleaning & removal of debrises)	Nov/Dec	12	3780	0	3780
4	Creation of 4.00 mt wide Inspection Path	Feb/Mar	1	315	0	315
5	Alignment and stacking of pits	Feb/Mar	1	315	0	315
6	Digging of pits (45 cm x 45 cm X 45 cm) in hard & gravelly soil	Feb/Mar	40	12600	0	12600
7	Construction of Temporary Labour Shed, Drinking water facility and First Aid etc.		0	0	3500	3500
	Total		**57**	**17955**	**3600**	**21555**
8	Monitoring, Evaluation, Learning, Documentation & any other Contingency upto 5% of the total cost.					1078
	Grand Total					**22633**
	1st Year/Planting Year					
1	Refilling of pits by altering the dugout soil of the pits, application of organic compounds/ CDM/ FYM & mixing the same properly	Jun/Jul	7.5	2363	5000	7362.50
2	Transportation of 18 months old polypot seedlings in hired truck /tractor from the Permanent/Mega nursery to planting site including loading & unloading. (Average lead of 10 Rkm) & stacking the seedlings @ Rs.6/- per seedling. (1100 nos.)	Jul/Aug	0	0	6600	6600
3	Watering polypot seedlings at planting site	Jul/Aug	2	630	0	630
4	Conveyance of polypot seedlings on head load from the stacking site to individual dugout pits within the planting site, applying insecticide, fertilizers & planting after scooping the soil with other applied materials & pressing the soil properly around the planted seedlings.	Jul/Aug	22.5	7088	0	7087.50

5	Cost of Fertilizer & Insecticide (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-pescticide @ 5 gms/plant=5 kg @ Rs.150/- per kg = Rs. 750.00	Jul/Aug	0	0	3000	3000
6	Casualty Replacement @ 10% (100 nos.)	Jul/Aug	2.5	787.5	0	787.5
7	1st Weeding & Manuring	Aug/Sept	12	3780		3780
8	2nd Weeding, Soil working (1mt. diametre around the plants) & Manuring	Oct/Nov	15	4725	0	4725
9	Fire line tracing (2 m. wide fire line over 400 m long) including maintenance of inspection path	Feb/Mar	3	945	0	945
10	Watch & Ward including watering as per requirement	Aug-Mar	12	3780	0	3780
	Total		**76.50**	**24097.50**	**14600.00**	**38697.50**
11	Monitoring, Evaluation, Learning, Documentation & any other Contingency upto 5% of the total cost.					1935
	Grand Total					**40632**
	2nd Year Maintenance					
1	Transportation of 100 seedlings from Nursery to plantation site including loading, unloading & conveyance by Tractor @ Rs.6/- per seedling	Jul	0	0	600	600
2	Casuality replacement- 10%	Jul	2.5	787.5	0	787.5
3	Cost of Fertilizer & Insecticide- A) Cost of Insecticide/ Bio-pescticide @ 5 gms/plant = 0.5 Kg @ Rs.150/- per kg = Rs.75/- B)Urea/NPK/Bio-fertilizer/Vermicompost/ Mo Khata/any other fertilizer @Rs. 2800/-	July/Aug	0	0	2875	2875
4	Weeding (Complete weeding), Manuring & Soil working, (1mt. diametre around the plants)	Sep/Oct	15	4725	0	4725
5	Fire line tracing (2 m. wide fire line over 400 m long) including maintenance of inspection path	Feb/Mar	3	945	0	945
6	Watch & Ward including watering as per requirement	Apr-Mar	18	5670	0	5670
7	Maintenance of Temporary Labour Shed, Drinking water facility and First Aid etc.	Apr-Mar		0	1000	1000
	Total		**38.5**	**12127.5**	**4475**	**16602.5**
9	Monitoring, Evaluation, Learning, Documentation & any other Contingency upto 5% of the total cost.			0		830.13
	Grand Total					**17432.63**
10	Monitoring, Evaluation, Learning, Documentation & any other Contingency upto 5% of the total cost.					872
	Grand Total					**18304**

	3rd Year Maintenance					
1	Cost of fertilizer (Urea/NPK/Bio-fertilizer/Vermicompost/Mo Khata/any other fertilizer)	Sep/Oct	0	0	2800	2800
2	Weeding (Complete weeding), Manuring & Soil working, (1mt. diametre around the plants)	Sep/Oct	15	4725	0	4725
3	Fire line tracing (2 m. wide fire line over 400 m long) including maintenance of inspection path	Feb/Mar	3	945	0	945
4	Watch & Ward including watering as per requirement	Apr-Mar	18	5670	0	5670
5	Maintenance of Temporary Labour Shed, Drinking water facility and First Aid etc.	Apr-Mar	0	0	1000	1000
	Total		**36**	**11340**	**3800**	**15140**
6	Monitoring, Evaluation, Learning, Documentation & any other Contingency upto 5% of the total cost.					757
	Grand Total					**15897**
	4th Year Maintenance					
1	Fire line tracing (2 m. wide fire line over 400 m long) including maintenance of inspection path	Feb/Mar	3	945	0	945
2	Watch & Ward including maintenance of vegetative fencing	Apr-Mar	18	5670	0	5670
	Total		**21**	**6615**	**0**	**6615**
3	Monitoring, Evaluation, Learning, Documentation & any other Contingency upto 5% of the total cost.					331
	Grand Total					**6946**
	5th Year Maintenance					
1	Fire line tracing (2 m. wide fire line over 400 m long)	Feb/Mar	3	945	0	945
2	Watch & Ward	Apr-Mar	18	5670	0	5670
	Total		**21**	**6615**	**0**	**6615**
3	Monitoring, Evaluation, Learning, Documentation & any other Contingency upto 5% of the total cost.					331
	Grand Total					**6946**
	6th Year Maintenance					
1	Fire line tracing (2 m. wide fire line over 400 m long)	Feb/Mar	3	945	0	945
2	Puring of branches, Singlings out of multiple shoot	Jan/Mar	3	945	0	945
3	Watch & Ward	Apr-Mar	18	5670	0	5670
	Total		**24**	**7560**	**0**	**7560**
4	Monitoring, Evaluation, Learning, Documentation & any other Contingency upto 5% of the total cost.					378
	Grand Total					**7938**
	7th Year Maintenance					
1	Fire line tracing (2 m. wide fire line over 400 m long) including maintenance	Feb/Mar	3	945	0	945

	of inspection path					
2	Watch & Ward including maintenance of fencing	Apr-Mar	18	5670	0	5670
	Total		**21**	**6615**	**0**	**6615**
3	Monitoring, Evaluation, Learning, Documentation & any other Contingency upto 5% of the total cost.					331
	Grand Total					**6946**
	8th Year Maintenance					
1	Fire line tracing (2 m. wide fire line over 400 m long)	Feb/Mar	3	945	0	945
2	Watch & Ward	Apr-Mar	18	5670	0	5670
	Total		**21**	**6615**	**0**	**6615**
3	Monitoring, Evaluation, Learning, Documentation & any other Contingency upto 5% of the total cost.					331
	Grand Total					**6946**
	9th Year Maintenance					
1	Fire line tracing (2 m. wide fire line over 400 m long)	Feb/Mar	3	945	0	945
2	Watch & Ward	Apr-Mar	18	5670	0	5670
	Total		**21**	**6615**	**0**	**6615**
3	Monitoring, Evaluation, Learning, Documentation & any other Contingency upto 5% of the total cost.					331
	Grand Total					**6946**
	10th Year Maintenance					
1	Fire line tracing (2 m. wide fire line over 400 m long) including maintenance of inspection path	Feb/Mar	3	945	0	945
2	Watch & Ward including maintenance of fencing	Apr-Mar	18	5670	0	5670
	Total		**21**	**6615**	**0**	**6615**
3	Monitoring, Evaluation, Learning, Documentation & any other Contingency upto 5% of the total cost.					331
	Grand Total					**6946**

ABSTARCT (Showing Seedling Cost Separately)							
Sl. No	Year	No. of Mandays	Labour Cost (Rs.)	Material Cost (Rs.)	MELD & Other Contingency	Seedling Cost (Rs.)	Total Cost(Rs.)
1	0th year	57	17955	3600	1078	0	22633
2	1st year	76.5	24097.5	14600	1935	55341	95973
3	2nd year	38.5	12128	4475	830	5031	22464
4	3rd year	36	11340	3800	757	0	15897
5	4th year	21	6615	0	331	0	6946
6	4th year	24	7560	0	378	0	7938
5	4th year	21	6615	0	331	0	6946
8	4th year	21	6615	0	331	0	6946
9	4th year	21	6615	0	331	0	6946
10	4th year	21	6615	0	331	0	6946
11	4th year	21	6615	0	331	0	6946
Grand Total		**358**	**112770**	**26475**	**6962**	**60372**	**206579**
Total plantation cost (60.00 ha x Rs. 206579/-)							**12394740**

Annexure- 3

COST STRUCTURE OF PLANTATION, PROVISION OF FUNDS AND UTILIZATION

ESTIMATE OF COST FOR 1.00 HA. UNDER ANR WITHOUT GAP PLANTATION MODEL WAGE RATE Rs. 315/- PER 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	630	0	630
2	Site Preparation	Nov/Dec	2	630	0	630
3	Cutting of high stumps		5	1575	0	1575
	Sub Total		**9**	**2835**	**0**	**2835**
4	Monitoring & Supervision charge 5% of the total cost					141.75
	Grand Total		**9**	**2835**	**0**	**2976.75**
		1st year				
1	Silvicultural operation involving clearance of weeds, cutting of climbers, singling of shoots etc.	Sep/Oct	15	4725	0	4725
2	Soil Conservation Measures (Staggered trenches of dimension 2 m x o.5 mx 0.5 m@ 60 nos per ha) or its equivalent	Sep/Oct	20	6300	0	6300
3	Fireline Tracing and inspection path	Feb/Mar	3	945	0	945
4	Watch & ward	Aug-Mar	5	1575	0	1575
5	Contingency and unforeseen expenditure		0	0	500	500

	Sub Total		**43**	**13545**	**500**	**14045**
6	Monitoring & Supervision charge 5% of the total cost					702.25
	Grand Total		**43**	**13545**	**500**	**14747.25**
		2nd year				
1	Soil conservation Measures (Renovation of staggered trenches etc.)	Sep/Oct	8	2520	0	2520
2	Fireline Tracing and inspection path	Feb/Mar	1	315	0	315
3	Watch & ward (whole year)	Apr-Mar	7	2205	0	2205
4	Contingency and unforeseen expenditure		0	0	300	300
	Sub Total		**16**	**5040**	**300**	**5340**
5	Monitoring & Supervision charge 5% of the total cost					267
	Grand Total		**16**	**5040**	**300**	**5607**
		3rd Year				
1	Fireline Tracing and inspection path	Feb/Mar	1	315	0	315
2	Watch & ward (whole year)	Apr-Mar	7	2205	0	2205
3	Contingency and unforeseen expenditure		0	0	300	300
	Sub Total		**8**	**2520**	**300**	**2820**
4	Monitoring & Supervision charge 5% of the total cost					141
	Grand Total		**8**	**2520**	**300**	**2961**
		4th year				
1	Fireline Tracing and inspection path	Feb/Mar	1	315	0	315
2	Watch & ward and cultural operation	Apr-Mar	2	630	0	630
3	Contingency and unforeseen expenditure			0	100	100
	Sub-Total		**3**	**945**	**100**	**1045**
4	Monitoring & Supervision charge 5% of the total cost					52.25
	Grand Total		**3**	**945**	**100**	**1097.25**
		5th year				
1	Fireline Tracing and inspection path	Feb/Mar	1	315	0	315
2	Watch & ward and cultural operation	Apr-Mar	2	630	0	630
3	Contingency and unforeseen expenditure			0	100	100
	Sub-Total		**3**	**945**	**100**	**1045**
4	Monitoring & Supervision charge 5% of the total cost					52.25
	Grand Total.		**3**	**945**	**100**	**1097.25**
		6th year				
1	Fireline Tracing and inspection path	Feb/Mar	1	315	0	315
2	Watch & ward and cultural operation	Apr-Mar	2	630	0	630
3	Contingency and unforeseen expenditure			0	100	100
	Sub-Total		**3**	**945**	**100**	**1045**

4	Monitoring & Supervision charge 5% of the total cost					52.25
	Grand Total		3	945	100	1097.25
		7th year				
1	Fireline Tracing and inspection path	Feb/Mar	1	315	0	315
2	Watch & ward and cultural operation	Apr-Mar	2	630	0	630
3	Contingency and unforeseen expenditure			0	100	100
	Sub-Total		3	945	100	1045
4	Monitoring & Supervision charge 5% of the total cost					52.25
	Grand Total		3	945	100	1097.25
		8th year				
1	Fireline Tracing and inspection path	Feb/Mar	1	315	0	315
2	Watch & ward and cultural operation	Apr-Mar	2	630	0	630
3	Contingency and unforeseen expenditure				100	100
	Sub-Total		3	945	100	1045
4	Monitoring & Supervision charge 5% of the total cost					52.25
	Grand Total		3	945	100	1097.25
		9th year				
1	Fireline Tracing and inspection path	Feb/Mar	1	315	0	315
2	Watch & ward and cultural operation	Apr-Mar	2	630	0	630
3	Contingency and unforeseen expenditure			0	100	100
	Sub-Total		3	945	100	1045
4	Monitoring & Supervision charge 5% of the total cost					52.25
	Grand Total		3	945	100	1097.25
		10th year				
1	Fireline Tracing and inspection path	Feb/Mar	1	315	0	315
2	Watch & ward and cultural operation	Apr-Mar	2	630	0	630
3	Contingency and unforeseen expenditure			0	100	100
	Sub-Total		3	945	100	1045
4	Monitoring & Supervision charge 5% of the total cost					52.25
	Grand Total		3	945	100	1097.25

ABSTRACT

Sl No.	Year	Person days	Labour cost @315.00/- per manday (in Rs.)	Material cost (in Rs.)	Monitoring & Supervision charge 5% of the total cost in (Rs.)	Total cost (in Rs.)
1	0th Year	9	2835	0	141.75	2976.75
2	1st Year	43	13545	500	702.25	14747.25
3	2nd Year	16	5040	300	267	5607
4	3rd Year	8	2520	300	141	2961
5	4th Year	3	945	100	52.25	1097.25
6	5th Year	3	945	100	52.25	1097.25
7	6th Year	3	945	100	52.25	1097.25
8	7th Year	3	945	100	52.25	1097.25
9	8th Year	3	945	100	52.25	1097.25
10	9th Year	3	945	100	52.25	1097.25
11	10th Year	3	945	100	52.25	1097.25
	Total	**97**	**30555**	**1800**	**1617.75**	**33972.75**
	Total Cost (5.00 ha x Rs. 33972.75)					**169863.75**

ADDITIONAL COST PROPOSED

1	LBCD of sixe 10' x 10' x 5' @Rs. 15674/- per structure for 65 nos. structures.	15674 x 65 nos.	1018810.00
2	Cost of one no. waterbody of size 40mt x 30mt x 3mt in the plantation site	1 x 6,06,800	606800.00
3	Cost of GI Chain Link Mesh Fencing around the plantation site over length of 3.48 KM @Rs. 9,91,500/- per RKM with maintenance up to 3 years	9,91,500 x 3.48 KM	3450420.00
4	Construction of watcher shed for plantation	1 x 50000	50000.00
	Maintenance of watcher shed @5000/ year for nine year	9 x 5000	45000.00
	Sub-Total		**5171030.00**

TOTAL COST OF PROJECT

1	Nursery for 66000 no of seedlings including casualty replacement 10% for 60.00 ha @Rs. 315/- (66000 nos. x Rs. 50.81/- per seedlings) (Estimate in **Annexure-1**)	3353460.00
2	AR Plantation @1000 seedlings per ha over 60.00 ha @ Rs. 206579 per ha. (Estimate in **Annexure-2**)	12394740.00
3	ANR without Gap Plantation over 5.00 ha @ Rs. 33972.75 per ha. (Estimate in **Annexure-3**)	169863.75
	Total	**15918063.75**
4	15% of the total plantation cost towards Entry Point Activity/ Incentive to VSS etc.	2387709.56
	Total	**18305773.30**
5	Total additional cost	5171030.00
	Sub-Total	**23476803.30**
6	Add 20% escalation	4695360.66
	Grand Total	**28172164.00** **Or say** **2,81,72,200.00**

(Rupees two crore eighty-one lakh seventy-two thousand two hundred only)

A. PROVISION OF FUNDS AND FUND UTILIZATION

Rs. 2,81,72,200/- (Rupees two crore eighty-one lakh seventy-two thousand two hundred only) shall be deposited by the User Agency i.e. M/s JSW Utkal Steel Ltd 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, Keonjhar Division on allotment by the Principal Chief Conservator of Forests, Odisha, Bhubaneswar.

5/1/22

Divisional Forest Officer,
Keonjhar Division

CHAPTER- VII

DETAILS OF PROPOSED MONITORING MECHANISM

Compensatory Afforestation will be taken up in the identified site by the Range Officer, BJP Range of Keonjhar Division. The Range Forest Officer, BJP Range will undertake field checks of the works undertaken at the identified site and will be cross checked by the Asst. Conservator of Forests, (Affn.) and Divisional Forest Officer, Keonjhar Division. GPS co-ordinates along with other required informations of Compensatory Afforestation will be uploaded in the e-Green watch Portal of NIC, MoEF, Govt. of India for the purpose of online monitoring. Annual progress of plantation involving growth of planted seedlings, survival percentage etc. will be monitored and recorded in the plantation journal by the field staffs of BJP Range and reported to the Divisional Forest Officer for necessary action. The same thing will be reported to the Regional Chief Conservator of Forests, Rourkela Circle and Chief Conservator of Forests (PP&A), O/o the Pr. Chief Conservator of Forests, Odisha, Bhubaneswar and necessary corrective measures will be followed if required so.

05/01/22

Divisional Forest Officer,
Keonjhar Division

CERTIFICATE ON DSS ANALYSIS FOR CA/ACA/PCA

This is to certify that DSS Analysis of land identified for CA/ ACA/ PCA and subsequent ground truthing have been done. The outcome is as mentioned below-

Sl. No.	Name of Range	Name of the Forest Block (RF/PRF/PF/DPF/ Revenue Forest)	Area identified for CA/ ACA/ PCA (in ha)	Classification of identified land (in ha)							Area suitable for plantation (in ha)				Plantation model (AR/ANR)	Remark
				Very Dense Forest	Moderately Dense Forest	Open Forest	Non-forest	Scrub	Water	Total	Open Forest	Non-forest	Scrub	Total		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	BJP	Kunar DPF	CA	0.00	5.00	9.00	51.00	0.00	0.00	65.00	9.00	51.00	0.00	60.00	AR	

5/1/22

Divisional Forest Officer,
Keonjhar Division.

Countersigned

6/1/2022

Regional Chief Conservator of Forests
Rourkela Circle

Regional Chief Conservator of Forests,
Rourkela Circle