

## APPENDIX (See Rule 6)

### FORM-'A'

Form for seeking prior approval under section 2 of the proposals by the State Governments and other authorities

#### PART-I

(to be filled up by user agency)

#### 1. Project Details

(i) Short narrative of the proposal and project/scheme for which the forest land is required

KD Hesalong Opencast Mine is situated in the North Karanpura Coalfield of Jharkhand. Presently, it is a part of North Karanpura Area of CCL. The mine was nationalised in 1973.

KD Hesalong coal mining open cast project require extension in lease area without increase in nominal coal production capacity of 4.50 MTPA. The total requirement of land for 4.50 MTPA nominal capacity and 5.00 MTPA peak capacity has been estimated as 710.70 Ha which include 126.72 ha forest land of the current application. The life of the project will increase by additional 25 years.

ii) Map showing the required forest land, boundary of adjoining forest on a 1:50,000 scale map.: Enclosed

iii) Cost of Project: Rs 5021.7 lakh

iv) Justification for locating the project in forest area: the project has no site alternative as the coal reserves are present beneath the forest area in the lease hold area of KDH OCP

v) Cost- benefit analysis( to be enclosed): Copy of Cost- Benefit Analysis enclosed

#### 2. Purpose wise break -up of the total land required:

Component wise breakup			
S.no	Component	Forest Land (ha.)	Non-Forest Land (ha.)
1	Quarry	124.95	30.38
2	Safety Zone	1.77	0
3	Green Belt	0	1.12
Total		126.72	31.5

Project Officer  
K.D.H. Project

3. details of displacement of people due to the project, if any

(i) Number of families: 455

(ii) Number of Scheduled Castes/ Scheduled Tribes Families: 66/32

(iii) Rehabilitation plan ( to be enclosed): Copy of Rehabilitation plan enclosed

4. Whether clearance under Environment (Protection) Act, 1986 required? (Yes/No)

YES

5. Undertaking to bear cost of raising and maintenance of compensatory afforestation and or penal compensatory afforestation as well as cost for protection and regeneration of Safety zone , etc as per the scheme prepared by the State Government (undertaking to be enclosed)

Enclosed

6. Details of certificates/ documents enclosed as required under the instructions. : NA

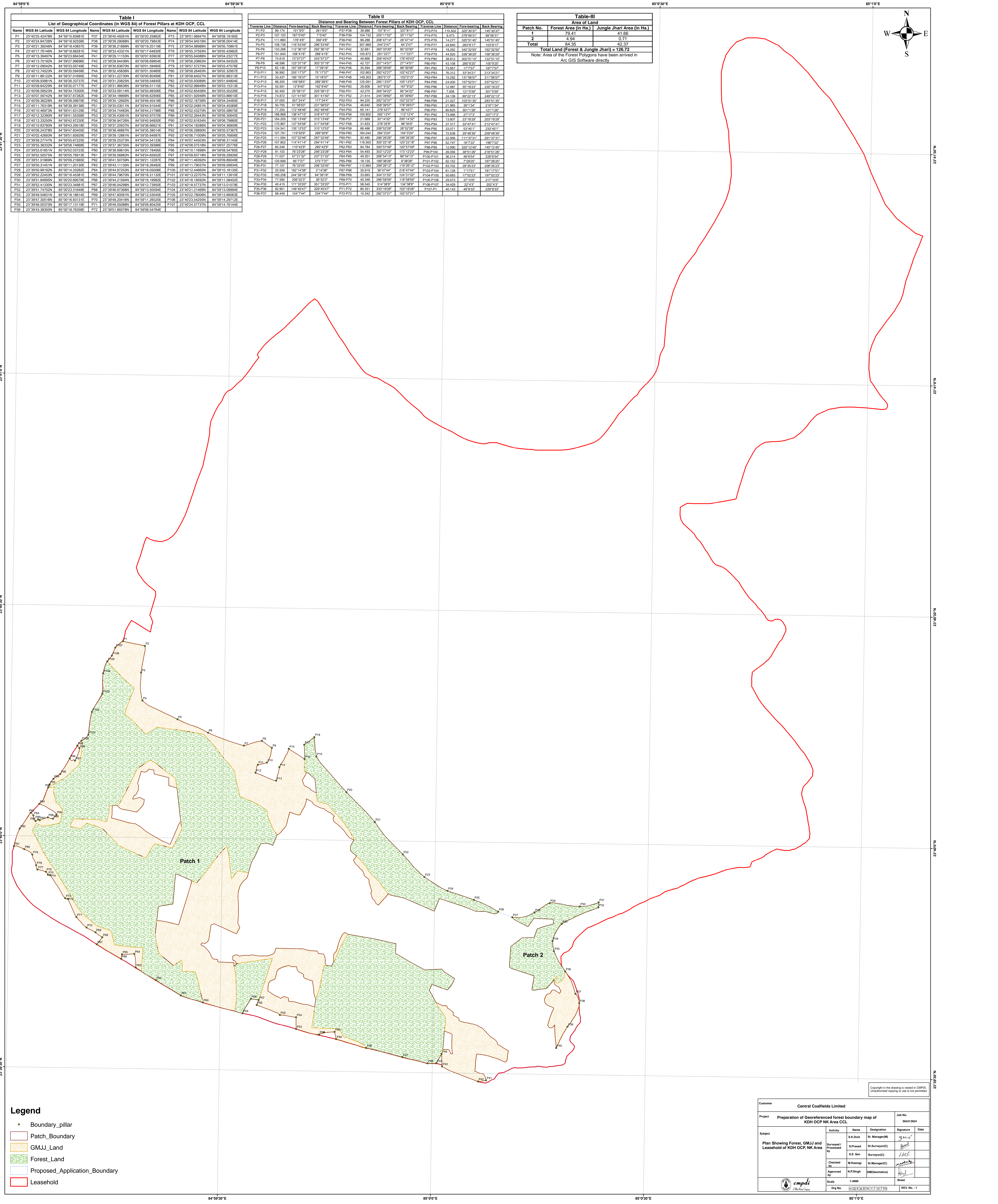
(JUMMIDI ABRAHAM)

GENERAL MANAGER (MINING) /  
PROJECT OFFICER, KDH OCP

OFFICE OF THE PROJECT OFFICER  
KDH OCP, NK AREA  
DAKRA, RANCHI 829210

Date :

Place:

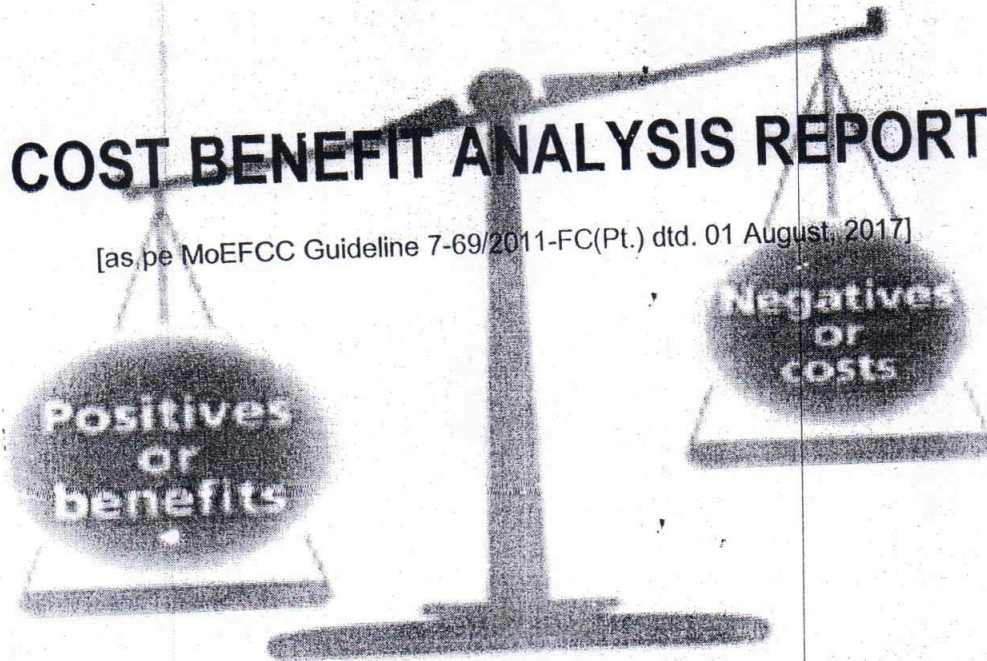


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Customer Central Coalfields Limited			
Project Preparation of Georeferenced forest boundary map of KDH OCP NK Area CCL		Job No. 566313024	
Subject Plan Showing Forest, GMJJ and Leasehold of KDH OCP, NK Area	Activity	Name	Designation
	Surveyed / Processed by	S.K.Dutta	Sr. Manager(M)
	Checked by	S.Prasad	Sr. Surveyor(C)
	Approved by	M.Rasangi	Sr. Manager(C)
		N.P.Singh	GM(Geomatics)
Scale	1:4000	Sheet	REV. No. - 1
Scale No.		Dwg No.	

# COST BENEFIT ANALYSIS REPORT

[as per MoEFCC Guideline 7-69/2011-FC(Pt.) dtd. 01 August, 2017]



## KDH OCP (126.72 Ha Forest Land)



KDH Open Cast project  
NK Area

Central Coalfields Limited  
(A Miniratna Company)

*[Signature]*  
G.M. (M)/Project Officer  
KDH Project

*[Signature]*  
G.M. (M)/Project Officer  
KDH Project

## Cost Benefit Analysis Report

Name of Forest Proposal      Area  
KDH (126.72 Ha)      N K Area

### Introduction:

Karanpura Dewankhand(KD) Hesalong OCP Mine is situated in the North karanpura Coalfield of Bihar. Presently, it is a part of North Karanpura area of CCL. The nearest railway station is Khalaria which is about 3Km away from this mine, on the Gomoh-Dehri-on-sone loop line of Eastern Railway. The mine is about 65 km away from Ranchi. The proposal of In-Principle Approval of Extension Project Report of KDH OCP (Normative capacity. 4.5 MTY) was approved in the 370th meeting of Board of Directors of CCL held on 19.08.2010.

### 2.0 Purpose for Cost benefit analysis:

Cost benefit report is required for making online application in Part 1, G.i.a. The report has been prepared on the basis of MoEFCC circular no. 7-69/2011-FC(Pt.) dated. 01 August, 2017. (copy Attached as Annexure A).

Table 1(a): Breakup of Land

Area	Name of Project	Forest Land as per Application	Notified Forest as per Application	GMK/JJ/Revenue Forest as per Application
N K Area	KDH (126.72 Ha)	126.72	84.35	42.37

### 3.0 Details of Project Affected Family (PAF):

Table 1(b): Detail of Household shifting

No. of villages. to be rehabilitated	Name of village to be Rehabilitated	No. of Project affected person	No. of PAF to be shifted at R&R site	No. of tribal amongst PAF	No. of Tribal PAF opting for shifting within District
2	Bishrampur and Karkatta	455	0	32	32

Table 2 (a) : Current Different Rates Eco Value Class : Class III Forest type group : Tropical dry deciduous forest					
Sl no.	Different Rates	VDF(very dense forest)	MDF(moderately dense forest)	OF( open forest)	LDF (Low Density Forest)
1	NPV Rates in Rs./Ha	8,87,000	8,03,000	6,26,000	
2.	Rates of Compensatory Afforestation in Rs. / Ha	1,76,009	1,76,009	1,76,009	1,76,009
3.	Economic value of carbon storage in Rs./Ha	3,00,064	2,70,040	95,721	95,721
4.	Rate of moisture conservation cost Rs/ Ha/Year	1,951	1,269	527	103
5.	Economic value of carbon storage in Rs./Ha	13,947	9,024	4,101	823
Source: Revision of rates of npv applicable for different class/category of forests published by centre for ecological services management (CESM), Indian Institute of Forest Management (IIFM)), Bhopal in collaboration with Forest Survey of India (FSI), Dehradun, Nov. 2014					

4.0 The details of nature of forest land for which application for diversion of forest land applied are as under:

**Table 2 (b) : Rates of Net Present Value, Compensatory Afforestation, Carbon StorageS, Soil Conservation, Moisture Conservation applicable to forest application**

Area	Name of Project	Economy Class of Forest	Type of Forest	Rate of NPV in Rs/Ha	rate of CA in Rs/ha	Rate of Soil conservation in Rs/Ha/Yr	Rate of Moisture conservation in Rs/Ha/Yr	Rate of gain in Forest Cover due to CA in Rs/Ha	Rate of increase in Carbon Storage Cap due to CA in Rs/Ha
N K Area	KDH (126.72 Ha)	III	MDF	626000	176009	4101	527	177000	174319

**Table 2(C) : Amount in Rs. Lakhs as per Table 2 (b) above for the forest application**

Area	Name of Project	Amount of NPV	10 % NPV Amount	30 % NPV Amount	50% NPV Amount	Loss due to CA	Loss due to Soil & Moisture Conservation	Benefits due increase in Forest cover due to CA	Benefits of Carbon Storage due to CA
N K Area	KDH (126.72 Ha)	793.26	79.32	237.98	396.63	356.86	117.29	358.87	353.43

Cost Benefit Analysis KDH OCP(126.72 Ha)

*C.M. (M)/Project Officer  
KDH Project*

Page 3

*(M)/Project Officer  
KDH Project*

**Table 3 : Cost of Land as per Prevailing Circle Rate**

Name of Village	Type of Land in Vicinity	Cost of Land as per Circle Rate in Rs. Lakhs
Bishrampur and Karkatta	Agriculture	Rs 4696.95

**Table 4 : Cost of human resettlement in Rs Lakhs  
(As per R&R Policy)**

Monetary Compensation to PAFs	Compensation to homestead for Alternate housing	Compensation to Homestead as Subsistence Allowance	Compensation to landless Tribal family	Cost of human settlement
932.43	1365	326.23	48	2671.66

#### 5.0 Taxes levied and collected by Government

These taxes collected are used for the people and is thus directly related to benefits to economy / society.

**Table 5 : Taxes collected by Government in Rs. Lakhs**

CSR - 2% of Retained Profit	Royalty 15 of sales value	District Mining Fund	National Mineral Fund	Taxes levied as Coal Cess	GST collected for Expenditures (Capital/Revenue)	Stowing Cess	Other taxes if any
10190.89	100311.34	30093.40	2006.22	299808	45.52	0	0

Benefits due CSR activities as per Company's Act 2012.

Royalty Reference : (I) Extraordinary gazette , part II – Sec 3(i), MoC Notification New Delhi , the 10th May 2012

(II) Extraordinary gazette , part II – Sec 3(i), MoC Notification New Delhi , the 31st Aug 2016

*[Signature]*  
C.M. (M)/Project Officer  
KDH Project

*[Signature]*  
C.M. (M)/Project Officer  
KDH Project

**CALCULATION AS PER MOEFCC CIRCULAR NO. 7-69/2011FC(PT.) Ddt.  
01 AUGUST, 2017.**

**I. Estimation of cost of forest diversion ,**

**1. Ecosystem services losses due to proposed forest diversion**

Economic value of loss of ecosystem services due to diversion of forest = Net present value (NPV) of the forest land being diverted as per prescribed by the Central Government (MoEF&CC). As the Forest land proposed does not fall in National park & Wild life sanctuary

Therefore Ecosystem Service Lossess due to proposed diversion in Rs. lakhs= 793.26

[ (Ref Table - 2 (c))

**2. Loss of animal husbandry productivity, including loss of fodder**

As per guidelines issued by MoEFCC, Loss of animal husbandry productivity, including loss of fodder is to be quantified and expressed in monetary terms or 10% of NPV applicable which ever is maximum.

Assuming no. of husbandry as 4 per family and factor of husbandry as 60 then,

No. of Project affected person in Rs. lakhs	Loss of animal husbandry etc as per calculation in Rs. lakhs	Loss of animal husbandry etc as per NPV in Rs. lakhs
455	398.58	79.32

Since 10% NPV is more than calculated value.

Thus as per guideline Loss of animal husbandry productivity, including loss of fodder in Rs. lakhs =  
**Rs 79.32lakhs**

**3. Cost of human resettlement**


As per MoEFCC guidelines the cost of human settlement is to be quantified and expressed in monetary terms. For expressing the cost of human settlement the R&R policy of Coal India has been taken into consideration. The different components that has been considered are as follows:

(As per R&R Policy)

Monetary Compensation to PAFs - Monetary compensation @ Rs.5.0 Lakh per acre subject to a minimum of Rs.0.50 Lakh. The compensation can be paid in form of annuity also on monthly, quarterly, annually etc. upto 60 years of age or life of project, whichever is earlier,

Note : A person receiving employment forgoes all claims to monetary compensation and a person

  
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KDH Project

  
J. M. (M)/Project Officer  
KDH Project

receiving monetary compensation forgoes all claims to employment.  
Compensation to homestead for Alternate housing - Compensation for homestead building as per standard valuation method under LA Act. Payment of Rs 3.0 Lakh in lieu of alternate housing site, assistance in designing & shifting, compensation for construction cattle shed and working shed etc.

Compensation to Homestead as Subsistence Allowance - Subsistence allowance to each affected family @ 25 days Minimum Agricultural Wages per month for one year.  
Compensation to landless Tribal family - Affected landless tribal families will be provided one time financial assistance equivalent to 500 days MAWs as a compensation for loss of customary rights.  
Cost of human resettlement as per R&R Plan (in Rs. Lakhs)=Rs. 2671.66 Lakhs  
(Ref Table - 4)

#### 4. Loss of public facilities and administrative infrastructure:

As per MoEF guidelines the loss of public facilities and administrative infrastructure is to be expressed in monetary term which would require forest land if these facilities were diverted due to the project. The facilities may include roads, buildings, schools, dispensaries, electric line, railways, etc. On forest land.

Loss of public facilities and administrative infrastructure=Rs0

#### 5. Possession value of forest land diverted:

As per MoEFCC guideline 30% of environmental cost (NPV) due to loss of forest or circle rate of adjoining area in the district should be added as a cost component as possession value of forest land whichever is maximum. The Circle rate and 30% NPV calculated are as follows:

Possession value of Forest Land diverted as per Circle Rate in Rs. lakhs	Possession value of Forest Land diverted as per NPV in Rs. lakhs
4696.95	237.98

Ref Table - 2 (c) & Table - 3

The Cost of land as per circle rate is more than the 30 % NPV Value as such the

Possession value of forest land diverted in Rs. lakhs=4696.95

6. Cost of suffering of oustees As per MoEFCC guideline the social cost of rehabilitation of oustees (in addition to the cost likely to be incurred in providing residence, occupation and social services as per R&R plan) be worked out out as 1.5 times of what oustees should have earned in two years has he not been shifted. Accordingly, Cost of suffering of oustees in Rs. Lakhs =9893.52

7. Habitat Fragmentation cost As per MoEFCC guideline while the relationship between fragmentation and forest goods and services is complex, for the sake of simplicity the cost due to

S.M. (M) Project Officer  
KDH Project

Cost Benefit Analysis KDH OCP(126.72 Ha)

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fragmentation has been pegged at 50% of NPV applicable as a thumb rule. Accordingly, Habitat Fragmentation cost in Rs. lakhs = 396.63 (Ref Table - 2 (c))

8. Compensatory afforestation and soil & moisture conservation cost As per MoEFCC guideline the actual cost of compensatory afforestation and soil & moisture conservation and its maintenance in future at present discounted value. Accordingly, Compensatory afforestation and soil & moisture conservation cost in Rs. lakhs = 474.15 [Ref Table - 2 (b), Table - 2 (c)]

Thus as per MoEFCC guideline the estimated cost for the diversion of forest land is the sum total of Ecosystem services losses due to proposed forest diversion, Loss of animal husbandry productivity, including loss of fodder, Cost of human resettlement, Loss of public facilities and administrative infrastructure (Roads, buildings, schools, dispensaries, electric line, railways, etc.), On forest land, which would require forest land if these facilities were diverted due to the project, Possession value of forest land diverted, Cost of suffering of oustees, Habitat Fragmentation cost and Compensatory afforestation and soil & moisture conservation cost. Accordingly, Total estimated Cost due to diversion of forest in Rs. lakhs = 19005.52

## II. Estimation of Benefits of forest diversion

1. Increase in productively attribute to the specific project

These are to be quantified & expressed in monetary terms avoiding double counting. The productivity part is included in the other heads to follow and as such not included in estimating the benefits, though the productivity has been calculated and tabulated as under :

Increase in productively attribute to the specific project in Rs. Lakhs = 636930.80

2. **Benefits to economy due to specific project :**

As per MoEFCC guidelines the these befits are incremental economic benefit in monetary terms due to activities attributed to specific projects. These benefits may include benefits due to expenditure made on account of CSR activities as per company's Act 2012, Royalty to the exchequer, contribution to District Mining Fund (DMF), contribution to National Mineral fund, amount collected as Coal cess, Stowing cess where ever applicable and any other benefits. Accordingly, Benefits to economy due to specific project = Rs 442455.38

3. **No. of population benefitted due to specific project**

As per MoEFCC guide lines no. of population benefitted due to specific project is to be worked out on the basis of project report. As such no. of population benefitted for this project has been worked out as under:

No. of population benefitted due to specific project = 35010

[Ref Table - 1(b)]

4. Economic benefits due to direct and indirect employment due to project:

As per MoEFCC guidelines economic benefits due to direct and indirect employment due to project is to be worked out on the basis of project report. As such no. of economic benefits is as under :

Economic benefits due to direct due to project in Rs. Lakhs	Economic benefits due to indirect employment due to project in Rs. Lakhs
7514.50014	2789.13

[Ref Table - 1 (b)]

Economic benefits due to direct and indirect employment due to project in Rs. Lakhs =10,303.63

5. Economic benefits due to Compensatory afforestation:

As per MoEFCC guidelines these benefits are the benefits from such compensatory afforestation accruing over next 50 years monetised and discounted to the present value\*should be included as benefits of compensatory afforestation - For benefits of CA the guidelines of Ministry for NPV estimation may be consulted accordingly these benefits have been calculated on two heads namely benefits to CA & Benefits due to carbon storage by the afforestation done on CA land. The results are as under:

Economic benefits due to Compensatory afforestation only in Rs. Lakhs	Economic benefits due to Carbon Storage due to CA in Rs. Lakhs
358.87	353.43

[Ref Table - 2 (b) & Table 2- (c) ]

From the above figure the total Economic benefits due to Compensatory afforestation can be estimated as sum of benefits due to CA & increase in carbon storage for the CA land. Thus the benefits is as follows:

Economic benefits due to Compensatory afforestation in Rs. Lakhs =712.30[Ref Table - 3]

Thus as per MoEFCC guideline the estimated Benefits for the diversion of forest land is the sum total of benefits to economy due to specific project ,Economic benefits due to of direct and indirect employment due to project and Economic benefits due to compensatory afforestation.

Accordingly, Estimated benefits due to project in Rs. Lakhs=453471.32

[Ref Table - 3].

These estimated Costs & estimated benefits are tabulated at table 7 & table 8 respectively.

Table 7 : Estimated Cost in Rs. Lakhs

Area	Name of Project	Ecosystem Service Losses due to proposed diversion	Loss of Animal Husbandry Productivity, including loss of fodder	Cost of Human Settlement	Loss of Public facilities and administrative infrastructure	Possession Value	Cost of suffering outstees	Habitat Fragmentation cost	Compensatory afforestation and Soil & Moisture Conservation Cost
N K Area	KDH (126.72 Ha)	793.26	79.32	2671.66	0	4696.95	9893.52	396.63	474.15


Table 8 : Estimated Benefits in Rs. Lakhs

Area	Name of Project	Increase in Productivity Attribute to the specific Project	Benefits to Eco due to Specific Projects	No. of Population benefitted due to specific Projects	Economic benefits due to direct and Indirect employment due to Project	Economic benefits due to compensatory afforestation
N K Area	KDH (126.72 Ha)	636930.80	442455.38	35010	10303.63	712.30

The Cost to benefit ratio is the ratio of estimated cost (table 7) and estimated benefits (Table 8). The cost to benefit ratio for this forest proposal comes out as under:

Total estimated Cost due to diversion of forest in Rs. lakhs	Estimated benefits due to project in Rs. Lakhs	Cost to benefit Ratio
19005.52	453471.32	23.86

  
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KDH Project

  
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KDH Project

Annexure – A


Copy of

MoEFCC circular no.

7-69/2011-FC(Pt.)

Dtd. 01 August, 2017.

  
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KDH Project

  
C.M. (M)/Project Officer  
KDH Project

No. 7-69/2011-FC(Pt.)  
Government of India  
Ministry of Environment, Forest & Climate Change  
(Forest Conservation Division)

Indira Paryavaran Bhawan,  
Jorbagh Road, Aliganj,  
New Delhi-110003.  
Dated: 01<sup>st</sup> August, 2017.

To

The Principal Secretary (Forests)  
All States / Union Territories Governments.

Sub: **Guidelines for conducting Cost Benefit Analysis for projects involving diversion of forest land under the provisions of the Forest (Conservation) Act, 1980.**

Sir,

I am directed to inform that in supersession of all earlier orders / guidelines including that referred to at 2.6 of the Handbook of Forest (Conservation) Act, 1980 for conducting Cost Benefit Analysis of projects involving forest diversion, a revised set of guidelines has been prepared by the Ministry and shall be applicable for all projects involving diversion of forest land under the provisions of the Forest (Conservation) Act, 1980, which are required to be undertaken as per Table A of the new guidelines, from the date of issue of this letter. These guidelines will be applicable for all such projects which are yet to be recommended by the State Government on the date of issue of this guideline.

The guidelines for conducting Cost Benefit Analysis for projects involving forest diversion areas is enclosed herewith for further action.

This issues with the approval of competent authority.

Yours faithfully,

Encl: As above.

(Nishaeth Saxena)

Sr. Assistant Inspector General of Forests

Copy to:-

1. Prime Minister's Office (PMO)
2. Secretary, Ministry of Mines, Government of India
3. Secretary, Ministry of Coal, Government of India.
4. Secretary, Ministry of Steel, Government of India
5. Principal Chief Conservator of Forests, all States/UTs.

*[Signature]*  
O.M. (M) Project Officer  
KDH Project  
Cost Benefit Analysis KDH OCP(126.72 Ha)

6. Nodal Officer, the Forest (Conservation) Act, 1980, all States/UTs.
7. All Regional Offices, Ministry of Environment, Forest and Climate Change (MoEF&C)
8. Joint Secretary, In-charge, Impact Assessment Division, MoEF&CC.
9. PS to the Hon'ble Minister of State (Independent Charge) for Environment, Forest and Climate Change.
10. Chairman, State Environment Impact Assessment Authority, all States/UTs.
11. Member-Secretary, State Environment Impact Assessment Authority, all States/UTs.
12. All Directors/Assistant Inspector General of Forests in Forest Conservation Division, MoEF&CC.
13. All Advisors/Directors/Dy. Directors in the Impact Assessment Division, MoEF&CC.
14. Director, Regional Office (Headquarters), MoEF&CC.
15. Sr. Director (Technical), NIC, MoEF&CC with a request to place a copy of this letter on website of this Ministry.
16. Sr. PPS to the Secretary, Ministry of Environment, Forest and Climate Change.
17. Sr. PPS to Director General of Forests and Special Secretary, Ministry of Environment, Forest and Climate Change.
18. Sr. PPS to Addl. Director General of Forests (Forest Conservation), Ministry of Environment, Forest and Climate Change.
19. PPS to IGF(FC), MoEF&CC.
20. Guard File.

(Nisheet Saxena)  
Sr. Assistant Inspector General of Forests


*G.M. (M) Project Officer  
KDH Project*


*(M) Project Officer  
KDH Project*

Cost Benefit Analysis Guidelines for forest land diversion -2017

**Guidelines for conducting cost-benefit analysis for projects involving forest diversion**

- (i) While considering proposal for diversion of forest land for non-forestry use, it is essential that ecological and environmental losses and eco-economic distress caused to the people who are displaced are weighted against economic and social gains.
- (ii) Whenever the forest land is involved in the development projects, the cost of ecosystem services and fragmentation of habitat of wildlife and economic distress caused to people dependent on forests and the cost of settlement of people dependent on forest should also be added as the cost of forest diversion in addition to the standard project cost which would have been incurred by the user agencies without involvement of forest land while conducting the cost benefit analysis of the project. Similarly the benefits from the project accruing due to diversion of forest land and used in the project should also be accounted for in the benefits component in addition to the standard benefits of the project which would have been accrued without involvement of forest land while conducting the cost benefit analysis and determining the benefit and cost ratio (BC ratio).
- (iii) The cost of compensatory afforestation and its maintenance in future and soil & moisture conservation at present discounted value and future benefits from such compensatory forestation accruing over next 50 years monetised and discounted to the present value should be included as cost and benefits respectively of compensatory afforestation while conducting the cost benefit analysis and determining the benefit and cost ratio (BC ratio).
- (iv) **Table-A** lists the details the types of projects involving forest land for which cost-benefit analysis will be required. **Table-B** lists the parameters according to which the cost aspect of forest land diverted for the development projects will be determined, while **Table-C** lists the parameters for assessing the benefits accruing to the project using of forest land.
- (v) A cost-benefit analysis as above should accompany the proposals sent to the Central Government for forest clearance under the Forest Conservation Act.

  
Sd/- (M)/Project Officer  
KDH Project  
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KDH Project

Cost Benefit Analysis Guidelines for forest land diversion -2017

**Table-A : Cases under which a cost-benefit analysis for forest diversion are required**

No	Nature of proposal	Applicable/ not applicable	Remarks
1	All categories of proposals involving forest land upto 20 hectares in plains and upto 5 hectare in hills	Not applicable	These proposals may be considered on a case to case basis and value judgement
2	Proposal for defence installation purposes and oil prospecting (prospecting only)	Not applicable	In view of national Priority accorded to these sectors, the proposals would be critically assessed to help ascertain that the utmost minimum forest land is diverted for non-forest use
3	Habitation, establishment of industrial units, tourist lodges complex and other building construction.	Not applicable	These activities being detrimental to protection and conservation of forest, as a matter of policy, such proposals would be rarely entertained.
4	All other proposals involving forestland more than 20 hectares in plains and more than 5 hectares in hills including roads, transmission lines, minor, medium and major irrigation projects, hydro projects, mining activity, railway lines, location specific installations like micro-wave stations, auto repeater centres, TV towers etc.	Applicable	These are cases where a cost-benefit analysis is necessary to determine when diverting the forest land to non-forest use in the overall public interest.

**Table-B: Estimation of cost of forest diversion**

SN	Parameters	Remarks
1	Ecosystem services losses due to proposed forest diversion	Economic value of loss of eco-system services due to diversion of forests shall be the net present value (NPV) of the forest land being diverted as prescribed by the Central Government (MoEF& CC). <i>Note: In case of National Parks the NPV shall be ten (10) times the normal NPV and in case of Wildlife Sanctuary the NPV shall be five (5) times the normal NPV or otherwise prescribed by the ministry or any other competent authority</i>
2	Loss of animal husbandry productivity, including loss of fodder	To be quantified and expressed in monetary terms or 10% of NPV applicable whichever is maximum
3	Cost of human resettlement	To be quantified and expressed in monetary terms as per approved R&R plan
4	Loss of public facilities and administrative infrastructure (Roads, building, schools, dispensaries, electric lines, railways, etc.) on forest land, which would require forest land if these facilities were diverted due to the project	To be quantified and expressed in monetary terms on actual cost basis at the time of diversion

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# Cost Benefit Analysis Guideline for forest land diversion -2017

5	possession value of forest land diverted	30% of environmental costs (NPV) due to loss of forests or circle rate of adjoining area in the district should be added as a cost component as possession value of forestland whichever is maximum
6	Cost of suffering to oustees	The social cost of rehabilitation of oustees (in addition to the cost likely to be incurred in providing residence, occupation and social services as per R&R plan) be worked out as 1.5 times of what oustees should have earned in two years had he not been shifted.
8	Habitat Fragmentation Cost	While the relationship between fragmentation and forest goods and services is complex, for the sake of simplicity the cost due to fragmentation has been pegged at 50% of NPV applicable as a thumb rule.
	Compensatory afforestation and soil & moisture conservation cost	The actual cost of compensatory afforestation and soil & moisture conservation and its maintenance in future at present discounted value

**Table-C - Existing guidelines for estimating benefits of forest-diversion in CBA**

Sr. No.	Parameters	Remarks
1	Increase in productivity attribute to the specific project	To be quantified & expressed in monetary terms avoiding double counting
2	Benefits to economy due to the specific project	The incremental economic benefit in monetary terms due to the activities attributed to the specific project
3	No. of population benefited due to specific project	As per the Detailed project report
4	Economic benefits due to of direct and indirect employment due to the project	As per the Detailed project report.
5	Economic benefits due to Compensatory afforestation	Benefits from such compensatory forestation accruing over next 50 years monetised and discounted to the present value should be included as benefits of compensatory afforestation. *For benefits of CA the guideline of the Ministry for NPV estimation may be consulted.

## **Note-1: Net Present value (NPV) of environment and ecosystem services loss:**

The concept of Net Present value of the forest land diverted is a scientific method of calculating the environmental cost and other losses caused due to diversion of forest land for non-forestry purposes. The NPV represents the net value of various ecosystem services and other environmental services in monetary terms which the forest would have provided if the forest would not have been diverted.

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*[Signature]*  
C. M. (M) Project Officer  
KDH Project

*[Signature]*  
S. M. (M) Project Officer  
KDH Project


**Note-2: Possession value of forest land diverted:**

The forest land diverted for the project such as irrigation, hydropower, railways, roads, wind, and transmission lines and mining etc are unlikely to be returned and remains in possession of the user agencies. Therefore 30% of the net present value (NPV) of forest land diverted or market rate of adjoining area in the district should be added as a cost component as "possession value of forest land" in addition to the environmental costs due to loss of forests.

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MODIFIED

# RESETTLEMENT AND REHABILITATION POLICY



May-08

## RESETTLEMENT AND REHABILITATION POLICY OF COAL INDIA LTD.

### Preamble

1. The location and quality of coal reserves, and their distance from major consumers determine to a great extent the selection of mine sites. For reserves that are close to the surface, opencast mining has proven to be the most efficient mining method. While relatively inexpensive, opencast mines require large areas of land. Population growth, particularly in India's eastern region, make it increasingly difficult for the subsidiary coal companies (subsidiaries) to acquire the land they need for expanding their operations.

2. In the past, subsidiaries found it relatively easy to acquire land, if they were able to offer jobs. Partly because of this practice, subsidiaries have built up their labour force beyond their needs. This has contributed to the heavy losses many mines incur and eroded the competitiveness of the coal industry. The subsidiaries may still need to hire people in selected locations and continue to give preference to those whose livelihood will be affected by coal mining operations. However, increasingly subsidiaries will need to develop other ways and means to compensate land owners and others adversely affected by their projects. Only proper resettlement and rehabilitation will elicit the cooperation of project affected people, and make it possible for Coal India to acquire the land it needs.

3. The purpose of this statement is to set out the basic principles for the resettlement and rehabilitation of people affected by coal mining projects (PAPs). As such, this statement attempts to streamline the different resettlement and rehabilitation practices that are being followed by subsidiaries and to modify them in a way that allows subsidiaries to deal more effectively with resettlement and rehabilitation issues.

4. While Coal India's basic philosophy for compensating land-losers and other project-affected people remains substantially unchanged, the statement emphasizes the need to cultivate and maintain good relationships with the people affected by Coal India's projects starting as early as possible; it also underscores that the subsidiaries have a responsibility towards the landless, whose livelihood is often taken away. On the other hand, subsidiaries need to protect themselves more effectively against unjustified claims. To this end, the statement proposes that subsidiaries prepare detailed resettlement and rehabilitation action plans (RAPs) that clearly identify, at an early stage, the entitlements of the people affected by coal projects.

5. The resettlement and rehabilitation policies followed by the subsidiaries have evolved over time and undergone numerous changes in response to changing circumstances. As and when the Central or State Governments issue new guidelines for resettlement and rehabilitation, Coal India will review and modify its resettlement and rehabilitation policy taking into account the changing conditions in coal producing areas. However, as a matter of principle, the

compensation and benefits offered to the people affected by coal projects of Coal India will be at least equal to and not less than those prescribed by the laws and guidelines of the Central and State Governments.

### Objective of Coal India's Resettlement and Rehabilitation Policy

6. In light of the growing difficulties many subsidiaries face in land acquisition highest priority will be given to avoiding or minimizing disturbance of the local population. In their decisions to open new mines or expand existing ones, subsidiaries will explore alternative sites and project designs in order to minimize the need for resettlement. Wherever people are likely to be adversely affected by a project, the subsidiaries will prepare resettlement and rehabilitation action plans for the project.
  7. Through the preparation of resettlement and rehabilitation action plans subsidiaries will safeguard that project-affected people improve, or at least regain, their former standard of living and earning capacity after a reasonable transition period. The transition period is to be kept to a minimum. However, the involvement of subsidiaries in resettlement and rehabilitation activities will continue until all the actions specified in the rehabilitation plan have been completed.
  8. Involuntary resettlement is conceived and executed as a development programme with project-affected people being provided sufficient resources and opportunities to share in a project's benefits. The efforts of subsidiaries are complementary to government schemes in rural development. To the extent that this is necessary, the concurrence, approvals and support from concerned Government authorities will be sought. In parallel, subsidiaries will work closely with non-governmental organizations, which are legally recognized and constituted and also have the confidence of the project-affected people, in the preparation and implementation of rehabilitation plans.
  9. Corporate Social Responsibility (CSR) : Apart from the above, CSR activities shall be intensified in and around the villages where land is being acquired. A separate provision shall be made and a separate institution created to closely monitor such activities. Possibility of creating a Foundation with branches in all the subsidiaries may also be considered.
- While taking up CSR projects, overriding priority should be given to villagers being displaced as a result of acquisition of land by coal companies. It is absolutely essential that involvement of project affected people, particularly land losers, be ensured in the process of making decisions for utilization of the allocated funds.
10. Actual implementation of R&R package must follow a detailed survey of the project-affected villages to formulate the list of persons/families affected by the project, nature of the affect, the likely loss of income, etc. For this purpose, if necessary, the services of a reputed NGO with an impressive record of integrity and performance may be engaged.

## 11. Definition of Project Affected Family; (PAF)

"affected family" means:

- (i) a family whose primary place of residence or other property or source of livelihood is adversely affected by the acquisition of land for a project or involuntary displacement for any other reason; or
- (ii) any tenure holder, tenant, lessee or owner of other property, who on account of acquisition of land (including plot in the *abadi* or other property) in the affected area or other wise, has been involuntarily displaced from such land or other property; or
- (iii) any agricultural or non-agricultural labourer, landless person (not having homestead land, agricultural land, or either homestead or agricultural land), rural artisan, small trader or self-employed person, who has been residing or engaged in any trade, business, occupation or vocation continuously for a period of not less than three years preceding the date of declaration of the affected area, and who has been deprived of earning his livelihood or alienated wholly or substantially from the main source of his trade, business, occupation or vocation because of the acquisition of land in the affected area or being involuntarily displaced for any other reason.

"family" includes a person, his or her spouse, minor sons, unmarried daughters, minor brothers, unmarried sisters, father, mother and other relatives residing with him or here and dependent on him or her for their livelihood; and includes "nuclear family" consisting of a person, his or her spouse and minor children;

12. It is Coal India's policy to recognize adult individuals as the unit of entitlement. In their rehabilitation efforts subsidiaries deal with a wide range of project-affected people. They fall into the following categories as shown in the table below:

Recommended eligibility criteria
<p><b>1. Eligibility Criteria for Economic Rehabilitation Benefits.</b></p> <p>This benefit shall accrue only to Entitled Project Affected Person. Entitled Project Affected Person shall be one from the following categories.</p> <ul style="list-style-type: none"> <li>(i) Persons from whom land is acquired including tribals cultivating land under traditional rights.</li> <li>(ii) Persons whose homestead is acquired</li> <li>(iii) Sharecroppers, land lessees, tenants &amp; day labourers.</li> <li>(iv) Tribal dependent on forest produce</li> </ul>

## 2. Eligibility Criteria for Resettlement Benefits:

2.1 Only a 'Displaced' family/person shall be eligible for resettlement benefits.

2.2 A family/person shall be termed 'displaced' and hence eligible for resettlement benefits if such family/person has been a permanent resident and ordinarily residing in the project area on the date of publication of notification U/S 4(1) of LA Act, 1894 or notification U/S 7(1) of C.B.A. (Acquisition and Development) Act, 1957. Or both and

(a) on account of acquisition of his/her homestead land / structure is displaced from such areas or

(b) He/she is a homesteadless or landless family/person who has been/is required to be displaced

### NOTE:

(i) The 'project area' means the land which is acquired for the mining projects.

(ii) The person/family who does not ordinarily reside in the homestead land acquired for the project can be termed "Displaced" but he will be eligible for compensation only for homestead land / structure.

## 3. Census & Identification of displaced families:

3.1 Within two months of publication of notice U/S 4(1) of the Land Acquisition Act or U/S 7(1) of CBA (A.D) Act 1957 for acquisition of land for the project a census would be undertaken in the manner to be decided by the Collector / project authority for identification of displaced families and for preparing their socio-economic profile.

3.2 A photo Identity card to each Entitled Project Affected Person shall be issued under the signature of the Collector / project authority concerned indicating the following particulars:

- (a) Name of the village/GP/PS :
- (b) Name, Father's name and address of the head of the family :
- (c) Category of entitlement :
- (d) Whether S.C./S.T./O.B.C./General :
- (e) Age, Sex, educational qualification of the members of the family :

## Eligibility and Compensation

13. The table below shows the compensation and rehabilitation efforts subsidiaries will offer for each person or family affected by one of their projects. Evidence to the effect that a person is a legitimate PAP will need to be provided in the form of a written legal document, or reference to a record, such as a revenue officer certificate, electoral roll, ration card or school record.

Category of Persons affected by the Project	Compensation and Rehabilitation entitlement option
(i) Persons (including tribals cultivating land under traditional rights) from whom land is acquired.	<p data-bbox="997 376 1133 403" style="text-align: center;"><b>Provisions</b></p> <p data-bbox="665 407 1412 640">All land owners with titles will receive monetary compensation for the land acquired from them. The value of the land is determined on the basis of prevailing legal norms. <i>In respect of tribals cultivating land under traditional rights, authentication of land held under traditional rights by state authorities will be necessary.</i> In addition to above the following shall apply.</p> <p data-bbox="665 672 1412 1196">(i) Subject to suitability and availability of vacancies and further subject to approval of the Board of Directors of the subsidiary company concerned, coal companies shall offer employment at the rate of one employment for every two acres of land acquired. The employment shall be released to actual land losers or their dependant as prescribed in R&amp;R Policy notified by Ministry of Rural Development (MORD). The dependants shall be taken in at a consolidated stipend of Rs.5550/- per month for a period of two years. The list of persons to be given employment shall be vetted and concurred by all land losers in presence of the District officials and officials of the coal companies. Actual land losers or their dependants as prescribed in the R.R.Policy notified by MORD shall either take employment or a cash compensation as prescribed below:-</p> <ol style="list-style-type: none"> <li data-bbox="665 1227 1412 1330">1. The subsidiary companies shall offer monetary compensation/one time cash grant/financial package as announced by the concerned State Government.</li> <li data-bbox="665 1361 1412 1491">2. In case there is no policy of the State Government for monetary compensation/financial package in lieu of employment against land, the monetary compensation shall be paid on the following basis:               <ol style="list-style-type: none"> <li data-bbox="714 1523 1412 1626">i) Rs.200000/- (two lakhs) only for first acre of land on pro-rata basis subject to a minimum Rs.50000/- only.</li> <li data-bbox="714 1657 1412 1733">ii) Rs.150000/- (One and half lakhs) only on pro-rata basis for 2<sup>nd</sup> and 3<sup>rd</sup> acre of land.</li> <li data-bbox="714 1765 1412 1823">iii) Rs.100000/- (one lakh) only on pro-rata basis for land beyond 3 acres.</li> </ol> </li> </ol>

Category of Persons affected by the Project	Compensation and Rehabilitation entitlement option
	<p style="text-align: center;"><b>Provisions</b></p> <p><u>Note:</u> A person receiving a job forgoes all claims to above compensation and a person receiving above compensation forgoes all claims to employment.</p> <p>(i) Priority for release of employment to land losers shall be based, normally, on the quantity of land lost. In other words, the list of land losers should be prepared in the descending order of land lost and employment released in that order upto the cut-off determined on the basis of availability of vacancy, suitability of candidate and the package concept of 1 employment for every 2 acres of land acquired. Any deviation in the priority for release of employment can be made only with full justification to be recorded in writing and accepted by Company Officials, District Officials as well as the concerned local leaders and specially the person(s) whose claim is superseded.</p> <p>(ii) Post employment, the employee shall be posted where the need is, including underground duties. Land losers not eligible for employment shall be offered cash compensation at the rates prescribed in the new R&amp;R Policy notified by MORD.</p> <p>(iii) In case of direct recruitment from outside, the project affected persons shall be encouraged to apply and they shall be entitled to a preference. The project affected persons, who are not land losers, shall be entitled to preference vis-à-vis outsiders - other things being equal. In case of land losers not considered for employment, preference shall be given by allowing him/her the advantage of 5 marks out of 100 in the overall marking system. This preference shall apply over and above the cash compensation offered to such land losers.</p>
(ii) Person whose homestead is acquired.	<p>A. alternate house site measuring 100 Sq. mtr per family(ii) assistance in designing the new house if so desired by the Displaced family and</p> <p>Compensation for shifting etc. shall be as per the rate prescribed in the new R&amp;R Policy notified by MORD as below:-</p> <p>- Each affected family that is displaced and has cattle, shall get financial assistance of fifteen thousand rupees, for construction of cattle shed.</p>

Category of Persons affected by the Project	Compensation and Rehabilitation entitlement option
	<p style="text-align: center;"><b>Provisions</b></p> <ul style="list-style-type: none"> <li>- Each affected family that is displaced shall get a one-time financial assistance of ten thousand rupees, for shifting of the family, building materials, belongings and cattle.</li> <li>- Each affected person who is a rural artisan, small trader or self-employed person and who has been displaced shall get a one-time financial assistance of twenty-five thousand rupees, for construction of working shed or shop.</li> <li>- Each affected displaced family will get subsistence allowance 25 days MAW per month for one year.</li> </ul> <p style="text-align: center;"><b>OR</b></p> <p>A. One time lump sum payment of Rs.100,000/- (one lakh)</p>
(iii) Sharecroppers, land lessees, tenants and day labourers	<p>The subsidiary will assist PAP to establish non farm self employment through the provision of infrastructure, petty contracts or formation of cooperatives</p> <p style="text-align: center;"><b>OR</b></p> <p>Jobs with contractors. Contractors will be persuaded to give job to eligible PAPs on a preferential basis, where feasible.</p>
(iv) Landless tribals, Tribal dependent on forest produce	<p>The subsidiary will assist PAP to establish non farm self employment through the provision of infrastructure, petty contracts or formation of cooperatives.</p> <p style="text-align: center;"><b>OR</b></p> <p>Jobs with contractors. Contractors will be persuaded to give jobs to eligible PAPs on preferential basis, where feasible.</p> <ul style="list-style-type: none"> <li>- In addition, the subsidiaries will shift the tribal community as a unit and provide facilities to meet the specific needs of the tribal community that will allow them to maintain their unique cultural identity.</li> <li>- Tribal affected family will be given one time financial assistance of 500 days of MAW for loss of customary right or usages of forest produce. Loss of customary rights needs to be authenticated by the district authority.</li> <li>- Tribal affected families resettled out of the district shall be given 25% higher rehabilitation and resettlement benefit.</li> </ul>

#### Rehabilitation Efforts

14. During the last 13 years of operation of CIL's earlier R & R policy enunciated in 1994, it has been CIL's experience that the dependence of PAFs on CIL for mine jobs continues unabated irrespective of land being surrendered. This pressure on job is further aggravated due to different minimum requirement of land being surrendered for provision of job. This makes possession of acquired land very difficult and projects get held up. This waiting for mine jobs also kills whatever little drive or initiative PAFs possess.

15. To mitigate if not eliminate PAFs' dependence on CIL for provision of mine jobs a provision of monetary compensation additional to the value of land has been conceived to be offered to those PAFs who forego any claim - perceived or otherwise - on mine job. Besides, as a policy, mine job would be offered only in exceptional circumstances with the approval of subsidiaries' Board and PAPs getting jobs under such circumstances would not get such additional monetary compensation in lieu of employment.

16. A PAP choosing this option i.e. additional monetary compensation in lieu of employment or getting employment in exceptional circumstances will not be entitled to any other rehabilitation benefit.

17. Jobs with contractors/ Non farm self employment : - This provision is open to only those who are sharecroppers, land lessees, tenants, day labourers or landless tribals or tribals dependant on forest produce.

18. Resettlement Benefits :- Compensation for homestead whether in the category of land owner or landless category is same and provides for one time lump sum payment in lieu of (i) alternate house site measuring 100 sq.m. per family, (ii) assistance in designing the new house if so desired by the displaced family and (iii) shifting allowance to cover cost of transporting PAFs belongings to relocation site, (iv) assistance for construction of cattle shed, working shed, and (v) substance allowance for one year.

19. Women:- Special attempts will be made to ensure that women will be given adequate access to income generating opportunities offered under this policy.

#### Community Facilities

20. The subsidiary will provide at the resettlement site a school, road with street light, pucca drain, pond, dugwell and/or tubewell for drinking water supply, community center, place of worship, dispensary, grazing land for cattle and play ground. Similar infrastructural facility, if necessary, will be extended to the host locality. The community facilities and services would be available to all residents of the area, including PAPs and the host population.

21. The approach for operation of community facilities would be flexible and all efforts will be made to involve the State and local self Government/Panchayat for operating the facilities. To achieve this, subsidiaries will pursue with these agencies to ensure the same. The planning of the community facilities and their construction should be undertaken in consultation with the affected community.

### Implementation, Monitoring and Evaluation, Dispute Mechanism

22. The rehabilitation action plan will address the following:

- i) The project design, including an analysis of alternative designs aimed at avoiding or minimizing resettlement;
- ii) socio-economic survey and activities to ensure restoration of incomes of PAPs in line with Coal India's resettlement and rehabilitation policy;
- iii) description of the institutional and other mechanisms for provision of entitlements;
- iv) time table for the acquisition and preparation of the resettlement site(s);
- v) the cost and budgets for the resettlement and rehabilitation of PAPs;
- vi) project-specific arrangements to deal with grievances of PAPs; and
- vii) time tables, benchmarks and arrangements for monitoring the resettlement and rehabilitation effort.

### Socio-Economic Survey

23. A baseline socioeconomic survey will be carried out to identify the PAPs to ensure restoration of incomes of PAPs in line with Coal India's Resettlement and Rehabilitation Policy. This survey will be conducted, within two months of notification under the relevant land acquisition Acts, by the subsidiaries with the help of reputed outside independent institutional agencies, who are well versed with the social matrix of the area.

24. The basic objective of the socio-economic study will be to generate baseline data on the social and economic status of the population who are likely to lose their means of livelihood or homestead due to the acquisition of the land for the project. The data base will be used to formulate a viable and practical RAP for the affected persons in line with their entitlements.

### Schedule of the Census and Formulation of the Resettlement and Rehabilitation Action Plan (RAP)

25. Once the demographic and socio-economic data is available, the RAP will be formulated in consultation with the PAPs and the State Government. The RAP will be formulated as a simultaneous activity with the land acquisition process.

### Monitoring and Evaluation

26. The RAP will be monitored and evaluated periodically after the completion of the land acquisition process.

- i) The resettlement and rehabilitation activities are the responsibility of a separate group, both at the projects and corporate level, which will be constituted for planning, implementation, monitoring and evaluation of the RAP. At the corporate level the group will be headed by a senior manager, whereas at the project, an executive of the rank of manager will head the group. The project group should have at least one member with social science experience and/or skills.

ii) The project group will closely interact with the state authorities during the implementation of the RAP. Although the subsidiaries will develop the plots and infrastructural facilities in the resettlement colony and actively implement the RAP, assistance of State authorities will be taken for administrative services such as allotment of land. Implementation will be planned, monitored and corrective measures will be incorporated in the RAP, if needed. In addition to the State Government, the PAPs, the village leaders including the Pradhans and NGOs will be consulted and associated with the implementation of the RAP.

iii) The Resettlement and Rehabilitation Cell at the corporate level will evaluate the implementation of the RAP after its completion.

#### **Mechanism for dealing with disputes**

27. A committee comprising nominee(s) of the State Government, nominee(s) of the project general manager of the subsidiaries, a representative of the PAP and an independent party, such as a respected community leader, a retired judge or principal of a reputed local institution of higher education, will be constituted to examine the grievances of the PAP and propose corrective actions as required. The subsidiaries will make arrangements for establishing the Committee and bear the cost.

#### **28. Corporate Social Responsibility (CSR)**

(i) Budgetary provision shall be created to intensify CSR activities in and around the villages where land is being acquired. Initially a provision @ of 1% of retained earnings of CIL shall be created as corpus to support intensification of CSR activities in ECL and BCCL. In other companies a provision varying from 1 to 2.5% of retained earnings be made initially depending upon the requirement.

(ii) While taking up the CSR projects, overriding priority be given to the persons displaced as a result of acquisition of land by coal companies. Involvement of project affected people, particularly the land losers, in the process of making decision for utilisation of allocated fund must be ensured. The funds should be utilised to offer facilities such as -

(a) Creation of social assets such as Community Centre, Educational Institution, Medicare facilities, arrangement for drinking water etc.

(b) Developing infrastructure for better quality of life such as roads, sewerage system, rain-water harvesting.

(c) Creating institutions to impart vocational training for acquiring and upgrading technical skills with a view to enhance employability.



**CENTRAL COAL FIELDS LIMITED**  
(A subsidiary of Coal India Limited)  
Office of Project Officer, KDH OCP  
North Karanpura Area,




Ref no : PO/KDH/2021-22/109

Date 07.08.2021

**Undertaking**

This is to State that the project Undertakes to bear cost of raising and maintenance of compensatory afforestation and or penal compensatory afforestation as well as cost for protection and regeneration of Safety zone , etc as per the scheme prepared by the State Government

  
Project Officer  
KDH OCP

Project Officer  
K.D.H. Project