



Prakash Industries Limited

(MINING DIVISION)

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चेक लिस्ट क्रमांक- 13

कास्ट / बेनिफिट एनालिसिस

मेसर्स प्रकाश इण्डस्ट्रीज लिमिटेड का आबंटित भास्करपारा कोयला खनन परियोजना में प्रभावित वन भूमि का वन संरक्षण अधिनियम 1980 के अंतर्गत वन प्रत्यावर्तन प्रस्ताव हेतु जिला- सूरजपुर, वनमण्डल- सूरजपुर, वनपरिक्षेत्र- कुदरगढ़ के अंतर्गत संरक्षित वनभूमि 148.795 हे. एवं तहसील भैयाथान अंतर्गत राजस्व वनभूमि (छोटे बड़े झाड़ का जंगल) 366.786 हे. कुल वन भूमि रकबा 515.581 हे. का समावेश है।

वन प्रत्यावर्तन प्रस्ताव हेतु प्रस्तावित भास्करपारा कोयला खनन परियोजना अंतर्गत भारत सरकार, पर्यावरण वन एवं जलवायु परिवर्तन, मंत्रालय के दिशानिर्देश क्र.7-69/2011-FC (Pt.) दिनांक 01.08.2017 के आधार पर कास्ट बेनिफिट एनालिसिस तैयार की गयी है जिसकी प्रति परिशिष्ट क्रमांक 13/1 में संलग्न है।

कृते प्रकाश इंडस्ट्रीज लिमिटेड

(ए.के.चतुर्वेदी)

निदेशक (कंपनी मामले)

CHECK LIST NO. 13

COST BENEFIT ANALYSIS

For

Diversion of Forest Land over an Area of 515.581 Ha.

**(PF-113.246Ha., Orange Area- 35.549 Ha. and
Revenue Forest-366.786Ha.)**

For

BHASKARPARA COAL MINES

For Prakash Industries Ltd.


(A. K. Chaturvedi)
Director (Corp. Affairs)

The Composition of Forest Land

Total Applied area is 515.581 Ha., out of which 113.246 Ha. of PF, compartment no. P1619 & P1620, Orange area (Village-Badsara)- 35.549 Ha. of Kudargarh Forest Range in Surajpur Forest Division and 366.786 Ha. of Revenue Forest of Village- Badsara, Baskarpara, Khadapara, Kurridih, Kewara, Danouli-Khurd & Kusmusi of Bhaiyathan Tehsil, District Surajpur, Chhattisgarh. The details of applied area are as under :-

Sl. No.	Type of Forest	Total Area (in Ha.)	Required Area (in Ha.)	All Rights Area (in Ha.)	Mining Rights Area (in Ha.)
1	PF Compartment No. : P1619 & P1620	499.700	113.246	69.308	43.938
2	Revenue Forest : (Badsara, Khadapara, Baskarpara, Kurridih, Kewara, Danouli-khurd & Kusmusi)	426.020	366.786	242.612	124.174
3	Orange Area (Village-Badsara):	-	35.549	1.855	33.694
Total		925.720	515.581	313.775	201.806

For Prakash Industries Ltd.


(A. K. Chaturvedi)
Director (Corp. Affairs)

TABLE : A**Cases under which a cost-benefit analysis for
Forest Diversion is required**

Sl. No.	Nature of proposal	Applicable/ Not applicable	Remarks
1	All categories of proposals involving forest land up to 20 hectares in plain and up to 5 hectare in hills.	Not applicable	These proposals may be considered on a case to case basis and value judgment.
2	Proposal for defense 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 forest land 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 microwave stations, auto repeater centre TV tower 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.


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Director (Corp. Affairs)

TABLE : B
Estimation of cost of Forest diversion

SI. No.	Parameters	Remarks
1	Ecosystem services losses due to proposed Forest Diversion	<p>Economic value of loss of eco-system services due to diversion of forests at proposed villages in Badsara, Baskarpara, Khadapar, Kurridih, Kewara, Danouli Khurd & Kusmusi (366.786 Ha) of Bhaiyathan Tehsil, District Surajpur, Chhattisgarh shall " be Rs. 6,70,140 Lacs/Ha (NPV rate as per ECO Value of Forest Class IV as per Guideline of MoEF & CC, Gol dated 06 January, 2022).</p> <p>1. Total Forest area : 515.581 Ha. 1a. All Right Area : 313.775 Ha 1b. Mining Right Area : 201.806 Ha. 2. Environmental Loss : 313.775 Ha. x Rs.6,70,140 = Rs. 2102.731 Lacs.</p>
2	Loss of animal husbandry productivity, including loss of fodder	<p>10% of the NPV (as per the cost benefit guideline) = 10% X Rs. 2102.73 Lacs. = Rs. 210.273 Lacs.</p>
3	Cost of human resettlement	Shifting Cost of 301 Houses @Rs.6.50 L per house= 1956.50 Lacs
4	Loss of public facilities and administrative infrastructure (roads, building, schools dispensaries electric line, railways etc,) on forest land if these facilities were diverted due to the project	<p>There are no Roads, Schools, Buildings, Dispensaries & Railways on Forest land, so no loss of these public facilities.</p> <p>One 400 KV High Tension Korba Vindhyaachal Tower line is passing through proposed diverted forest land, where in 07 Towers are to be shifted on non-coal bearing area in consultation with Power Grid Corporation of India.</p> <p>Since these 07 towers are to be diverted at the cost of Project Proponent, therefore there will be no public loss as there will be no interruption in power supply.</p>
5	Possession value of forest land diverted	<p>The possession value of forest land diverted is taken as 30% of NPV due to loss of forest.</p> <p>All Right Area = 30% X Rs 6,70,140 X 313.775 = Rs. 630.819 Lacs Mining Right Area=30% X Rs 3,35,070 X 201.806=Rs. 204.171 Lacs Total possession value of Forest land = Rs. 834.990 Lacs.</p>
6	Cost of suffering to oustees	<p>Total 245.024 Ha private land is to be taken under Surface Right Act for Mining activities. Total cost to be paid for land as per govt. norms comes:</p> <p>245.024 Ha.x Rs.32.570 Lacs = 7980.431 Lacs (Avg Rate 32.570 Lacs Per Ha.)</p>
7	Habitat Fragmentation Cost	<p>It is calculated @ 50% of NPV.</p> <p>Total NPV =313.775 Ha. x Rs.6,70,140 = Rs. 2102.732 Lacs 50% of NPV = Rs. 1051.366 Lacs.</p>
8	Compensatory afforestation and soil & moisture conservation cost	<p>Cost @ Rs.8,78,787/- per Ha. is taken for compensatory afforestation and soil moisture conservation. Hence amount will be = 313.775 Ha. x Rs.8,78,787 = Rs. 2757.414 Lacs</p>

Total cost due to diversion of Forest land : Rs. 2102.731 + Rs. 210.273 +Rs.1956.50+ Rs.834.990+Rs 7980.431+ Rs.1051.366 + Rs. 2757.414 Lacs = **Rs. 16893.705 Lacs.**

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TABLE : C
Existing guideline for estimating benefits of Forest Diversion

SI. No.	Parameters	Remarks
1	Increase in productively attribute to the specific project	Total quantity of coal to be produced is approx – 469.10 Lacs Tonne @ Rs 4721/Tonne (As per Representative price of May 2022)= Rs. 2214621 Lacs for entire period of 30 years.
2	Benefits to economy due to the specific project	Royalty, DMF, NMET, TCS etc. amounts to Rs. 3957.62 per Tonne=469.10(Total Reserve)x 3957.62= Rs. 1856519.542 Lacs for entire period of 30 years.
3	No. of population benefited due to specific project	As per Mine plan benefit to the population : 1. Employment to be generated on non forest land for afforestation programme. 2. Residence of local village/ area will have income opportunity in various ancillary works like Hotel/ Garage/ Tea shops and income generating activity through JFMC of the proposed area. 3. We will provide Direct employment to 79 person of managerial/ staff / statutory requirements and 400 nos. employment through contractor.
4	Economic benefits due to of direct and indirect employment due to the Specific project .	Direct and Indirect employment wages & salary – @ Rs. 70 Per Tonne. 469.10 Tnonne X Rs. 70 = Rs. 32837.00 Lacs for Total 30 years.
5	Economic benefits due to compensatory afforestation	Compensatory afforestation of 313.775 Ha. of land @ 1100 nos of sapling per Ha. @ 90% of survival rate = 310637 nos of trees. Economic benefit of one tree accruing over next 30 years monetized in terms of providing oxygen, water, soil, moisture conservation etc. +timber & firewood = Rs. 23.50 Lacs. Future benefits of 310637 nos. of trees @ Rs. 23.50 Lacs = Rs. 7299969.50 Lacs. The Compensatory afforestation will also sequester Carbon and earn Carbon Credits due to Carbon Sequestration and locking of wood. This is additional tangible benefit which will accrue to the Project.

Total benefit due to diversion of Forest Land for non-forest activity = Rs. 2214621.10 Lacs +
Rs. 1856519.542 Lacs +Rs. 32837.00 Lacs +Rs. 7299969.50 Lacs = **Rs. 11403947.142 Lacs.**

For Prakash Industries Ltd.

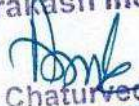
(A. K. Chaturvedi)
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COST BENEFIT ANALYSIS

Based on value of products:

A)	Total Benefit to the Society	=	Rs. 11403947.142 Lacs
B)	Total Cost to the Society	=	Rs. 16893.705 Lacs
	Cost Benefit Ratio	=	$\frac{\text{Total Benefit}}{\text{Total Cost}}$
		=	$\frac{11403947.142}{16893.705}$
		=	675.041 Lacs
		=	6.75 Cr.
	Cost Benefit Ratio	=	1:7

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