


**CATEGORY OF PROPOSALS FOR WHICH COST BENEFIT ANALYSIS ARE APPLICABLE AT  
BARAIBURU TATIBA IRON & MANGANESE MINES OF M/S THE RAMESHWARA JUTE MILLS LTD. IN  
SARANDA FOREST DIVISION, NUAMUNDI BLOCK, DISTRICT WEST SINGHBHUM, JHARKHAND.**

**Table A**

<b>Sr.</b>	<b>Nature of proposal</b>	<b>Applicable/ Not applicable</b>	<b>Remarks</b>
<b>1</b>	All categories of proposals involving forest land up to 20 Ha in Plains and up to 5 Ha in hills.	Not applicable	Nil
<b>2</b>	Proposals for defense installation purposes and oil prospecting(Prospecting only)	Not applicable	Nil
<b>3</b>	Habitation, establishment of industrial units, tourist lodges/ complex and other building constructions.	Not applicable	Nil
<b>4</b>	All other proposals involving forest land more than 20 Ha in plain and more than 5 Ha in hills including roads, transmission lines, minor medium and major irrigation projects, hydel projects, mining activities, Railway lines, location specific installation like Micro-wave station, auto repeater center, TV towers, etc.	Applicable	These are cases where a cost benefit analysis is necessary to determine whether diverting the forestland to non-forest use is in the overall public interests.
<b>5</b>	Proposal for renewal of Mining Lease for forest land.	Not applicable	Nil

For The Rameshwara Jute Mills Ltd

  
**Krishna Kant Dubey**  
 Sr. Vice President & Head BUM (Mines)

### PARAMETERS FOR EVALUATION OF COST

Mining of Mine : Baraiburu Tatiba Iron & Manganese Mines  
 Forest land applied for : 14.50 Ha  
 Life of Project : 3 years  
 Parameters for calculation : Total Mineable Reserve 33.680 million Ton.

**TABLE - B**

Sl. No.	Parameters	Medium and Major Irrigation Hydroelectric, Large Mining and Other Miscellaneous Projects	Loss
1	Ecosystem service losses due to proposed forest diversion	This is a case of forest diversion proposal of requirement of virgin forest land over 14.5 ha. The value of the timber in the virgin forest is very negligible because the area proposed have surrounded by already broken forest (prior to 1980) Quarries. However, tentative cost of loss of eco-system service as per Divisional Forest Office (i.e Dense forest & Eco Class I) @Rs9,39,000/ha	Rs. 136.15500 Lakh or 45.38500 lakh p.a.
2	Loss of animal husbandry productivity including loss of fodder.	No loss of animal husbandry productivity including loss of fodder. As per guideline 10% of NPV applicable i.e Rs 13.62 Lakh	Rs 13.62 Lakh
3	Cost of human resettlement.	No re-settlement required	Nil
4	Loss of public facilities and administrative infrastructure(roads, buildings, schools, dispensaries, electric lines, railway, etc.) on forest land or which would require forest land if these facilities are diverted due to the project	Not applicable. There is no roads, buildings, schools, dispensaries, electric lines, railway, etc	Nil
5	Possession of Value of Forest Land diverted	@30% of NPV	Rs 40.85 Lakh
6	Cost of Suffering to Outees	No re-settlement required	
7	Habitat Fragmentation Cost	@50% of NPV	Rs 68.08 Lakh
8	Compensatory afforestation and soil & moisture conservation	Compensatory afforestation and soil & moisture conservation and its Maintenance is appx	Rs 50.00 Lakh
		<b>Total Losses</b>	<b>Rs 308.7 Lakh</b>

For The Rameshwara Jute Mills Ltd

  
 Sr- Krishna Kant Dubey  
 Vice President & Head RJM (Mines)



### PARAMETERS FOR EVALUATION OF BENEFIT

Mining of Mine : Baraiburu Tatiba Iron & Manganese Mines  
 Quantum of forest land : 14.50 Ha  
 applied for  
 Life of Project : 3 years  
 Parameters for calculation : Total Mineable Reserve 33.680 million Ton.

TABLE - C

Sl. No.	Parameters	Mining Projects	Benefit
1	Increase in productivity attributable to the specific project.	<ul style="list-style-type: none"> <li>• Production of 5.57 mt Iron and 0.004 mt Mn Ore is envisaged, which means production of 5.57 mt of Iron Ore &amp; 0.012 mt Mn Ore over a period of next 3 years .</li> <li>• Considering the average value of Iron Ore @Rs. 2500 per ton, value of Iron Ore in the area is estimated to be Rs. 13925 Lakh.</li> <li>• Considering the average value of Mn Ore @Rs. 4000 per ton, value of Mn Ore in the area is estimated to be Rs. 3840 Lakh.</li> </ul>	Rs.139250 Lakh Or 46417 Lakh p.a.  Rs.480 Lakh Or 160 Lakh p.a
2	Benefits to economy due to the specific project	Direct benefit in Royalty @15%	Rs. 20960 Lakh Or 3561 Lakh p.a.
	Benefits to District Development	DMF fund @ 5%	Rs. 6987 Lakh Or 3561 Lakh p.a.
3	Number of population benefited due to specific project	About 250 families are expected to be benefited by way of employment (Direct or indirect) to one two person from each family and also some Business contract to Baraiburu Tatiba Samiti.	
4	Employment Benefit due to of Direct and Indirect employment due to the Project	About 100 workers including skilled, semi-skilled and un-skilled category shall be Direct and Indirect employed in this mine. Most of them will be from local Adivasi Tribes. Estimated Salary and Wages avg @Rs 400/day X 300 day per is @120 Lakhs annum for the next 3 years. Employment potential is likely to increase in proportion to increase in production.	Rs.360 Lakh Or Rs.120 Lakh p.a.
5	Economic benefits due to Compensatory afforestation		
		Total:	Rs. 28307 lakhs Or 9435.66 Lakh p.a.

For The Rameshwara Jute Mills Ltd

  
 Sr. Krishna Kant Dubeey  
 Vice President & Head R&D (Mines)

### **COST BENEFIT ANALYSIS.**

#### **CALCULATION OF BENEFIT/ COST RATIO**

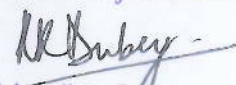
Benefit to Economy (Royalty)	20960.00
Benefit to the District	6987.00
<u>Employment Benefit</u>	<u>360.00</u>
Total Benefit	28307.00
Ecosystem service losses	136.16
Loss of animal husbandry	13.62
Possession of Value of Forest Land	40.85
Habitat Fragmentation Cost	68.08
<u>Compensatory afforestation</u>	<u>50.00</u>
Total Loss	308.71

**Hence, Benefit/ Cost Ratio = 28307/308.71 = 91.69**

**BENEFIT/ COST RATIO = 91.69: 1**

Thus, the project gives positive Benefit/ Cost Ratio. The monetary returns of the project are positive over the environmental losses.

For The Rameshwara Jute Mills Ltd

  
S. Krishna Kant Dubey  
Vice President & Head RJM (Mines)