

**COST BENEFIT ANALYSIS**

Cost benefit analysis in respect of diversion of 206.826 Ha. Forest land underground coal mining in Tandsi UG Mine, WCL.

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

S.NO.	Nature of proposal	Applicable/ not applicable	Remarks
1	All categories of proposals involving forest land up to 20 hectares in plains and up to 5 hectares in hills.	Not applicable	
2	Proposal for defence installation purposes and oil prospecting (prospecting only).	Not applicable	
3	Habitation, establishment of industrial units, tourist lodges complex and other building construction.	Not applicable	
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 micro-waves stations, auto repeater centers, TV towers etc.	Applicable	The proposed project is for diversion of 206.826 Ha. Forest Land (protected forest ) for Underground coal mining at Tandsi Mine, Kanhan Area , Western Coalfields Limited, Tehsil Junnardeo , Dist. Chhindwara , Madhyapradesh, 480555

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Table B : Estimation of cost of forest diversion.

S.NO.	Parameters	Remarks.	Cost in Rs.
1	Ecosystems services losses due to proposed forest diversion.	Economic value of loss of ecosystem services due to proposed diversion of Forest NPV amount of forest land being diverted as prescribed by Central Government ( MOEF&CC)	Economic Value of loss of ecosystem Services due to proposed diversion of Forest shall be Rs. 12,28,590/- Ha. ( NPV rate as per ECO value of forest as per Handbook Guideline of MOEF & CC , Gov dated 06/01/2022) as prescribed by Central Government ( MOEF & CC) Since the project is for Underground Mining hence NPV value is considered at <del>25%</del> 25% Total forest area = 206.826 ha. Environment loss = 206.826x Rs. 12,28,590 X 25 % = <b>Rs. 6,35,26,088.80/- (Approx)</b> The cost will be decided by Forest Dept., User agency is committed to deposit the same amount as per direction of Forest Dept.
2	Loss of animal husbandry productivity, including loss of fodder.	It is Underground so no loss of animal husbandry productivity.	Nil
3	Cost of human resettlement.	no human resettlement is involved.	Nil
4	Loss of public facilities and administrative infrastructure (Roads, buildings, schools, dispensaries, electric lines railways, etc.) on forest land, which would require forest land if these facilities were diverted due to the project.	No such diversion is involved.	





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		remarks	Cost	
5	Possession value of forest land diverted.	The project is an underground mine whole forest land will be handed to forest dept.	Nil	
6	Cost of suffering to oustees.	No rehabilitation or shifting is involved in this project	Nil	
7	Habitat Fragmentation Cost.	No fragmentation is involved	Nil	
8	Compensatory Afforestation and soil & moisture conservation cost.	not applicable	Nil	
Total cost sl no 01 to 08 Rs. 6,35,26,088.80/-				

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

S.NO.	Parameters	Remarks	Benefits ( in Rs.)
1	Increase in productively attribute to the specific project.	total 3.36 MT coal expected.	33,36,000 Tes @ Rs 3396.00/T.e. (WG-IV) = Rs. 1132,90,56,000/-
2	Benefits to economy due to the specific project.	various statutory levies have been considered	APPROXIMATE 15 % sale value = 1699358400
3	No. of population benefited due to specific project.		Direct = 682 Nos. Indirect = 200 Nos. Employment generated on non forest land in Afforestation programme. Local people will have income opportunity in various ancillary work & other activities.
4	Economic benefits due to of direct and indirect employment due to the project.		Direct = 682x Rs. 191972.82 x 120 (month) = Rs. 15711055588.80/- Indirect = 1500x Rs. 20000 x (120 month) = Rs. 3,00,00,000/- Total = Rs. 15741055588.8/-
5	Economic benefits due to Compensatory Afforestation.	Benefits from such compensatory Afforestation accruing over next 50years monetized and discounted to the present value should be included as benefits of compensator Afforestation.	This is underground mine No need of compensatory afforestation.

Total benefits due to diversion of forest land for non forest activity = 28769469989.00- COST BENEFIT ANALYSIS

1- Total benefit to the society :	Rs. 28769469989/- 2- Total cost to the society :
Rs.63526088.80/-	
3- Cost Benefit Ratio	Rs. 28769469989/- ÷ Rs.63526088.80/-
452.876	

*[Signature]*  
25/10/23  
Surveyor  
Tonder Mine

*[Signature]*  
26/10/22  
Agent  
TSA

*[Signature]*  
26/10/23  
Area Planning officer  
Kanhau Area

*[Signature]*  
26.10.23  
Area General Manager  
W.C.L. Kanhau Area