

Annexure - IV

ANNEXURE VIII

COST - BENEFIT ANALYSIS FOR PROJECTS INVOLVING FOREST LAND

APPLICATION FOR DIVERSION OF 929.29 Ha. (914.11 Ha UG Rights & 15.18 Ha Surface Rights) OF FOREST LAND FOR INDARAM MINING LEASE

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

No.	Nature of Proposal	Applicable / Not Applicable	Remarks	Applicability of present proposal
1	All categories of proposals involving forest land upto 20 hectares in plains and upto 5 hectares in hills	Not Applicable	These proposals may be considered on a case to case basis and value judgement.	Not Applicable
2	Proposal for defence installation purposes and oil prospecting (prospecting only)	Not Applicable	In view of the 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	Not Applicable
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.	Not Applicable
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.	Applicable

Forest Division Officer  
Mancherial Division  
Mancherial

General Manager  
Srirampur Area  
Sringenti Collieries Company limited,

General Manager  
Srirampur Area,  
The Singareni Collieries Company Limited  
PO: Srirampur Colony,  
Dist: Mancherial- 504 303  
Telangana State.

**COST - BENEFIT ANALYSIS FOR PROJECTS INVOLVING FOREST LAND**  
 APPLICATION FOR DIVERSION OF 929.29 Ha. (914.11 Ha UG Rights & 15.18 Ha Surface Rights) OF FOREST LAND FOR INDARAM MINING LEASE

Sl No.	Parameters	Value in Rs Lakhs	Description of Estimation	Guidelines for Estimation
1	Ecosystem Services losses due to proposed forest diversion	2861.16	NPV OF 914.11 Ha. OF FOREST LAND @ Rs 3.13 Lakhs/Ha	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&C).
2	Loss of Animal Husbandry productivity, including loss of fodder	123.41	NPV OF 15.18 Ha. OF FOREST LAND @ Rs 8.13 Lakhs/Ha	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.
3	Cost of Human Resettlement	298.46	10% of NPV	To be quantified and expressed in monetary terms or 10% of NPV applicable whichever is maximum
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.	0.00	There is no R&R involved in this Forest Land	To be quantified and expressed in monetary terms as per approved R&R Plan
5	Possession Value of forest land diverted	895.37	30% of NPV	To be quantified and expressed in monetary terms on actual cost basis at the time of diversion.
6	Cost of Suffering to Oustees	0.00	There is no involvement of R&R	30% of environmental costs (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
7	Habitat Fragmentation Cost	1492.29	50% of NPV	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 1.50 times of what oustees should have earned in two years had he /she not been shifted.
8	Compensatory afforestation and soil & moisture conservation cost	121.44	Cost of compensatory afforestation and soil & moisture conservation @ Rs 4 Lakhs per Ha for twice the forest land involved	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.
TOTAL COSTS		5792.14		The actual cost of compensatory afforestation and soil and moisture conservation and its maintenance in future at present discounted value.

Forest Division Officer  
 Mahanagar

General Manager  
 Srirampur Area,  
 The Singareni Collieries Company Limited  
 33, Srirampur Colony,

ANNEXURE X

COST - BENEFIT ANALYSIS FOR PROJECTS INVOLVING FOREST LAND

APPLICATION FOR DIVERSION OF 9.29.29 Ha. (9.14.11 Ha UG Rights & 15.18 Ha Surface Rights) OF FOREST LAND FOR INDARAM MINING LEASE

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

Sl No.	Parameters	Value in Rs lakhs	Remarks	Guidelines for Estimation
1	Increase in productivity attributable to the specific project	0.00	NPV of Project net cashflow at 100% performance level @ 10% discount rate	To be quantified & expressed in monetary terms avoiding double counting
2	Benefits to economy due to the specific project	42004.27	NPV of benefits to economy over project life @ 10% discount rate Royalty @ 14% of Basic ROM Price 2% on Royalty for National Mineral Exploration Trust 30% on Royalty for District Mineral Foundation Trust GST Compensation Cess @ Rs 400/T GST 5%	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	4701 Nos	Project Manpower (Departmental + Outsourcing if any)	As per Detailed Project Report
4	Economic benefits due to the direct and indirect employment due to the project	346058.42	NPV of estimated Wages for Project manpower and indirect benefits calculated for 5 times project manpower with prevailing unskilled wage rate of Telangana State.	As per Detailed Project Report
5	Economic benefits due to compensatory afforestation	9.87	Calculated as per Standard Compensatory Afforestation Restoration Factor (SCARF) Adjustment Rate of Rs 0.65 Lakhs per ha for Dry Deciduous Forest Land for the proposed forest area to be diverted based on Study Report by IIFM Bhopal	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 the Ministry for NPV estimation may be consulted.
TOTAL BENEFITS		388072.56		

TOTAL BENEFITS  
TOTAL LOSSES  
COST : BENEFIT RATIO

388072.56
5792.14
1 : 67.00

Forest Division Officer  
Mancherial

Srirampur Area  
General Manager  
Sringarani Collieries Company Limited,  
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