

COST BENEFIT ANALYSIS

Nature of Project : CONSTRUCTION OF Slapper To Tatapani Road KM 8/500 to 61/600 in the state of Himachal Pradesh	
Nature of Proposal Division of Forest Land Under FCA, 1980: CONSTRUCTION OF Slapper To TataPanl Road KM 8/500 to 61/600 in the state of Himachal Pradesh	
Purpose-	This Cost benefit Analysis is being undertaken for Proposed Division of Forest Land Being affected Due to C/O Slapper To Tatapani Road Km 8/500 to 61/600 in the state of Himachal Pradesh.

Table-A

Case under which a cost-benefit analysis for diversion is required				
Sr. No.	Nature of Proposal	Applicable /Not Applicable	Remarks	
1	All Categories of proposal involong 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 the value judgement.	
2	Proposal for defense installation purpose and oil prospecting(prospecting only).	Not applicable		
3	Haitation,establishment of industrial units,tourist lodges, complex and other building construction.	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 irigation projects, hydro projects, mining activity,railway lines,location specific installations like micro-waves stations,auto repeater centers, TV towers etc.	Applicable	These are the cases where a cost-benefit analysis is necessary to determine when divereting the forest land to non forestr use in the overall public interest.	

Table -B			
Parameters for evaluation of loss of Forest			
C/O Slapper To Tatapani Road Km 8/500 to 61/600			
The parameters for the evaluation of 'costs' incurred due to a project for which a cost benefit analysis must be done is provided in the guidelines to this Act, issued by the MoEF.			
Sr. No.	Parameters	Descriptions	Remarks
1	Ecosystem services losses due to proposed forest diversion	Total nos of Trees 207 will be affected due to the project in the forest land area. The total NPV stands to be 3,37,88,325/-. No livelihood of people will be affected due to proposed diversion of forest land.	Economic value of loss of ecosystem services due to diversion of forest shall be the net present value(NPV) of the forest land being diverted as prescribed by the Central Government.(MOEF&CC)
2	Loss of animal husbandry productivity. Including loss of fodder	33,78,832.50	To be quantified and expressed in monetary terms or 10% of NPV applicable whichever is maximum.
3	Cost of human resettlement	No Resettlement in the Forest Land that are diverted for the Project	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. Or which would require forest land if these facilities were diverted due to the project.	NIL	To be quantified and expressed in monetary terms on actual cost basis at the time of diversion
5	Possession value of Forest Land Diverted	Forests land being diverted for the construction of the project is Forest case of C/O Slapper To Tatapani Road Km 8/500 to 61/600 - 41.815 hectare. (As per Forest Conservation Act 1980 the environmental loss for density 1.0 is 126.74 lakhs per hectare for 50 years. Considering density of 0.0034, and 30% cost of NPV the Possession value is 11,26,27,750	30% of Environment 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 which ever is maximum.
6	Suffering to oustees	NIL	The social cost of rehabilitation of oustee 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 oustee should have earned in two years had he not been shifted.
7	Habitat Fragmentation Cost	The Habitat Fragmentation Cost has been estimated to Rs. 6,75,76,650/-	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.
8	Compensatory afforestation and soil & moisture conservation cost.	The cost of compensatory afforestation has been calculated at Rs.3,24,03,068/-	The actual cost of compensatory afforestation and soil moisture conservation and its maintenance in future at present discounted value.

Table-C			
Parameters for Evaluation of benefits , not with standing loss of forests.			
The parameters for the evaluation of benefits provided by a project for which a cost-benefit analysis must be done is provided in the guidelines to this Act, issued by the MoEF.			
Sr. No.	Parameters	Descriptions	
1	Increase in productivity attributable to the specific project	The project road will improve accessibility to the region. This will help in both economic & social development.as such due to road the approximate value of agri produce which will be marketed is Rs.800.57 lac.and the transport expenditure will be saved to the tune of 600.28	To be quantified and expressed in monetary terms
2	Benefits to economy	Improving the accessibility shall help in regional economic development.by the way of marketing of Agri products and also due to opening up of eco- tourism the economy of the area will be benifited by approximate 1200.75/- lac.	The incremental economic benefit in monetary terms due to the activities attributed to the specific project.
3	No. of population benefitted	Entire Population of surrounding area of project will be benefitted directly hence total nos. of 3894. will be benefitted by the proposed Road.	As per detailed Project Report
4	Economic benefits due to of direct and indirect employment due to the project.	Induced development of economy will help in generation of employment as well. Where as 100000 mandays will be required for construction of roads.as such with the average rate@235/ per day labour. Rs.200.35/- lac will be earned as wages through indirect employment	As per detailed Project Report
5	Economic benefits due to Compensatory Afforestation.	Approximately Rs. 430.75 Lac of revenue is estimated over the span of 50 years by the way of fuel timber and fodder due the Compensatory Afforestation.	Benefit from such compensatory Afforestation accruing over next 50 ears monetized and discounted to the present value as benefits of CA.

As such after considering the above figures of Cost of the diversion of the project comes to Rs.21,59,86,300. and benefits to the economy come to Rs.32,32,70,000/- thus the benefits are much more than the cost incurred which makes the Project Viable.where as the ratio is concerned it works out to be 1:17

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