

COST BENEFIT ANALYSIS

Full Title of the proposal: Construction of Link Road from Dadriara to Chakki km. 0/000 to 13/500.

DALHOUSIE FOREST DIVISION

Table A: Cases under which Cost-benefit Analysis for Forest Division are required.

Sr.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	These cases may be considered in a case to case basis and value judgment.
2.	Proposal for defense installation purpose 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 utmost minimum 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 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 centers, TV towers etc.	Applicable	These are cases where a cost-benefit analysis is necessary to determine when diverting the forest land to non-forest land use in over all public interest.

TABLE B : Estimation Cost of Forest Diversion

Sr. No.	Parameters	Remarks	Description	Amount in Lacs (Rs.)
1.	Ecosystem services losses due to forest diversion.	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) Note: In case of National Parks the NPV shall be ten (10) times the normal NPV and in case of Wild Life Sanctuary the NPV shall be five (5) times the normal NPV or otherwise prescribed by the Ministry or any other competent authority.	6.2455 hectare of forest land to be diverted NPV cost of the forest area (6.150 x 10.05 lacs/hectares) for 50 years. NPV obtained from HP Forest Department website as per revised rates by MoEF & CC vide letter dated 06.01.2022 for Class V open forest.	62.77
2.	Loss of animal husbandry productivity, including loss of fodder.	To be quantified and expressed in monetary terms or 10% of NPV applicable whichever is maximum.	10% of NPV = 10% 62.77	6.28
3.	Cost of Human resettlement	To be quantified in monetary terms as per approved R&R plan.	No resettlement in the forest land proposed for diversion of the project.	0.00
4.	Loss of public facilities and administrative infrastructure (roads, buildings, Schools, dispensary, electric lines, railways etc) on forest land, which would require forest land if these facilities were diverted due to the project.	To be quantified and expressed in monetary terms on actual cost basis at the time of diversion.	Nil	0.00

5.	Possession value of forest land diverted.	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 lands whichever is maximum.	30% of NPV = 30% x 62.77 Lacs.	18.83
6.	Cost of suffering to outsets.	The social cost of rehabilitation of outsets (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 outsets should have earned in two years had he not been shifted.	Nil	0.00
7.	Habitat fragmentation cost.	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 thumb rule.	50% of NPV = 50% x 62.77 Lacs	31.39
8.	Compensatory a forestation and soil and moisture conservation cost.	The actual cost of Compensatory a forestation and soil and moisture conservation and its maintenance in future at present discounted value	CA cost provided by the Forest Department as per CA scheme.	60.00
Total Estimated Cost				179.27

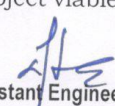
Table C :- Existing Guidelines for estimation benefits of forest diversion in CBA


Sr. No.	Parameters	Remarks	Description	
1.	Increase in productivity attributed to the specific project.	To be qualified and expressed in monetary terms avoiding double counting.	Benefits of the project to the economy are in terms of increase in economic activity around the project area increase in per capita income around the Project influence area etc.	
2.	Benefits to the economy due to specific project.	The incremental economic benefit in monetary terms due to activities attributed to the specific.	2861.60	
3.	No of population benefited due to the specific project.	As per detailed project report.	(Chamba District)	2.55 Lacs.
			Indirect Benefits (HP State)	25.50 Lcs.
4.	Economic benefits due to direct and indirect employment due to the project.	As per detailed project report.	Around 70 persons will be employed during the construction period which is two years.	
5.	Economic benefits due to the compensatory a forestation.	Benefits from such Compensatory a forestation accruing over next 50 years monetized and discounted to the present value should be included as benefits of compensatory afforestation for benefits of CA the guideline of the Ministry of NPV estimation may be consulted.	--	
Total estimated benefits			2861.60	
Ratio of Cost and benefits			01:15	

As such after considering the above figures of cost of the diversion of forest land and the benefits to the economy, the benefits are much more than the cost incurred which makes the project viable.

U.S.

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