

COST BENEFIT ANALYSIS

Name of Project- Construction of Shamshar Panai road km 0/000 to 9/390 in the state of Himachal Pradesh

Nature of proposal Diversion of Forest Land Under FCA,1980- Construction of Shamshar Panai road km 0/000 to 9/390 in the state of Himachal Pradesh

Purpose -This cost benefit is being undertaken for Proposed Diversion of Forest Land Being affected due to Construction of Shamshar Panai road km 0/000 to 9/390

A) Case under which a cost benefit analysis for diversion is required

Sr. No	Nature of Proposal	Applicable or Not applicable	Remarks
1	All Other proposals involving forest land more than 20 hectare in plain and more than 5 hectare in hills including roads , transmission lines , minor , medium and major irrigation projects ,hydro project ,mining activity ,railway lines ,location of installation like Micro-waves station ,auto repeater centers , TV tower etc	Applicable	These are the cases where a cost Benefit analysis is necessary to determine when diverting the forest land to non forest use in the overall public interest

B) Parameters for evaluation of loss of forest

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

S.No.	Parameters	Description
1	Ecosystem services losses due to proposal forest diversion	Total nos of Trees 659 (615 in proposal and 44 in dumping site)will be affected due to the project in the forest land area . The total NPV stands to be 37,11,690/- (37.11 lacs) . No livelihood of people will be affected due to proposed diversion of forest land
2	Loss of animal husbandry productivity including loss of fodder	There will be Negligible effect on the animal husbandry and fodder as such 3,71,169/- (3.71 lacs) is estimated
3	Cost of human re-settlement	No re-settlement is involved in land proposal for diversion in forest areas
4	Loss of public facilities and administrative infrastructure (roads, buildings, schools, dispensaries, electric line, railway, etc) on forest land or which would require forest land if these facilities were diverted due to this project.	No Loss of public facilities is involved in the proposed project
5	Possession value of forest land diverted	Forest land being diverted for the construction of the project is 5.27 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 0.30 , the cost of environmental losses is Rs 38.02 lakhs
	Cost of Suffering of ousters .	Nil
	Habitate Fragmentation cost	The Habitate Fragmentation cost has been estimated to Rs 18,55,845/- (50 % of NPV)
	Cost of Compensatory afforestation and soil and moisture conservation cost	The Cost of Compensatory afforestation has been calculated Rs 26,34,196/-


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C) Parameter for evaluation of benefits, not withstanding loss of forests
 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

S. No.	Parameters	Description
1	Increasing of productivity attributed to specific project.	The Road is being Constructed to provide motor link to villages which are unconnected by road .The road will cater to the needs of population. It will facilitate the transportation of agriculture and horticulture produce like apples ,almonds, potatoes and other cereal crops to the market . As such due to road the approximate value of agri produce which will be marketed is 245.00 lakhs
2	Benefit of economy	Improving the accessibility shall help in regional economic development by way of marketing of Agri products and also due to opening up of eco-tourism the economy of area will be benefited by approximately 205.00 lacs
	Nos of Population benefited	Entire Population of surrounding area of project will be benefited directly . Hence total nos of 600 will be benefited by the proposed road
4	Economic benefits due to direct and indirect employment due to the project	direct and indirect employment will be generated during the construction and after the construction period . Whereas 96000 man days will be required for construction of road as such with the average rate @350/day labour Rs 336.00 lacs will be earned as wages through indirect employment
5	Economic benefits due to Compensatory afforestation	Approximately 210.00 lacs of revenue is estimated over the span of 50 years by way of fuel timber and fodder due to Compensatory afforestation

As such after considering the above figures of cost of the diversion of the project comes to Rs 123.70 lacs and benefits to the economy comes to RS 996.00 lacs thus the benefits are much more than the cost incurred which makes the project viable .Whereas the ratio is concerned it works out to be 8:1


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