

Name of Project:- 126 Km Rishikesh-Karnaprayag New BG Rail Line in the state of Uttarakhand.

### Cost Benefit Ratio Chart


Block:- Doiwala

District:- Dehradun

SL. No.	Particulars	Amount in Lakhs (Rs.)	Remark
1	<b>Total cost (Investment incurred)</b>		
(A)	Construction Cost of the Project	17000	Dehradun Forest Division
(B)	N.P.V. amount to be deposited @ 9.2 lakh /Ha - for 63.422 Ha.	583.48	Dehradun Forest Division
(D)	Substitute/Alternative plantation cost to be deposited – for 63.422 Ha.@ 1.3 lakh/ Ha.	82.45	Dehradun Forest Division
	<b>Total</b>	<b>17665.93</b>	
2	<b>Benefits:-</b> Benefits from 6.0 Km (taking age of Railroad as 50 Years).		
(A)	<b>Economic Benefits- Market Development</b> taking 40 shops are established after construction Taking minimum benefit for per shop per day = Rs. 1000 Benefit for 40 shop per month=40X30X1000= Rs. 12,00,000 Benefit for 1 year = 12X12 lakh = Rs.144 lakh Benefit for 50 years = 50X144 = Rs.7200 lakhs	7200.00	For Rishikesh Railway Station
(B)	<b>Direct Employment of Labours-</b> Benefit of employing labours (permanent) for annual maintenance and operation staff. Manpower employed = 50 nos @ Rs. 20,000 per month (average) Amount = 50X0.2X12X50 = Rs. 6000 lakhs	6000.00	For Dehradun Forest Division
(C)	<b>Employment Generation due to other activities</b> like transportation, market development, etc Benefit of employment generated after development of the project. Employment generated = 160 nos @ Rs. 10,000 per month (average) Amount = 160X0.1X12X50 = Rs. 9600 lakhs	9600.00	For Dehradun Forest Division
	<b>Total</b>	<b>22800.00</b>	
(D)	<b>Cost-Benefit Ratio = Benefits/Investment =</b> 22800/17665.93 = 1.29	<b>1.29</b>	
(E)	<b>Therefore, construction is economically viable and social beneficial.</b>		

  
कन्सलटेन्ट (वन)  
रेल विकास निगम लि०  
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उप महाप्रबंधक (पी-1)  
रेल विकास निगम लि०

  
महाप्रबंधक (पी-1)  
रेल विकास निगम लि०  
(भा.वी.प. रेल की ओर से)

Name of Project:- 126 Km Rishikesh-Karnaprayag New BG Rail Line in the state of Uttarakhand.

**Parameter for Evaluation of loss of Forests:-**

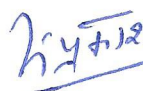
The parameters for the evaluation of 'costs' incurred due to a project for which a cost-benefit analysis must be done is provided in the guidelines to this Act, issued by MoEF.

Nature of Proposal: - Linear Diversion of Forest Land for Railway Project.

Sl. No.	Parameters	Roads, Tr. lines & Railway line
1	Loss of Value of timber, fuelwood and minor forest produce on an annual basis, including loss of man hours per annum of people who derived there livelihood and wage from the harvest of these commodities.	There would be loss of timber to some extent but compensatory afforestation shall be done as decided by the forest department.
2	Loss of animals husbandry productivity Including loss of fodder	Nil
3	Cost of human resettlement	NA
4	Loss of public facilities and administrative infrastructure (Roads, Buildings, Schools, Dispensaries, Electric lines, Railways etc.) on forest land. Or which would require forest land if these facilities were diverted due to the project.	There would not be any loss of facilities falling along the proposed alignment. Flyovers have been proposed across the road crossings. Any other like electric lines or HT lines shall be relocated. Additional 26 Hectares (approx.) land will be required for relocation of HT wires and such request will be processed by the State Government department.
5	Environmental losses; (Soil erosion, effect on hydrological cycle, wildlife habitat, microclimate upsetting of ecological balance.)	Density of forest area = 0.6. Value per hectare = 76.044 lakhs (@126.74 lakh per hectare for density 1.0) Forest land= 63.422 ha Environmental loss = 4830.16 lakhs
6	Suffering to oustees	Nil

  
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Name of Project:- 126 Km Rishikesh-Karnaprayag New BG Rail Line in the state of Uttarakhand.

**Parameter for Evaluation of Benefit, notwithstanding 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 MoEF.

Nature of Proposal: - Linear Diversion of Forest Land for Railway Project.

Sl. No.	Parameters	Roads, Tr. lines & Railway line
1	Increase in productivity attributable to the specific project.	Mobility is difficult and time taking in mountainous regions. The new rail link from Rishikesh to Karnaprayag will thus save time, fuel and people's energy. Saving of time and fuel itself shall help indirectly in increasing the productivity of the commercial and industrial activities for which transportation shall take place along the Railway line.
2	Benefits to economy	Improving the accessibility shall help in regional economic development.
3	No. of population benefited	All those travelling by the rail can save on fuel and time, reducing pollution and carbon emission. For those residing on the region will be less exposed to air pollution than if a road would have been built.
4	Employment potential	Thousands of people would get employment during construction and hundreds of peoples would be recruited after commissioning of the project directly and indirectly.
5	Cost of acquisition of facility on non-forest land wherever feasible.	Nil
6	Loss of (a) agricultural & (b) animal husbandry production due to diversion of forest land.	Nil
7	Cost of rehabilitating the displaced Persons as different from compensatory amounts given for displacement.	Nil
8	Cost of supply of free fuel-wood to workers residing in or near forest area during the period of construction.	Construction period - 7 years Number of labours at peak time - 1000 Per head cost of fuel - Rs.20 Total cost - Rs. 1,40,000

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