

COST BENEFIT ANALYSIS

(A) Evaluation of Loss of Forest

Sr. No.	Parameters	Description	Amount (Rs. In Lakh)
1	Loss of value of timber, Fuel wood and minor forest produce on an annual basis including loss of man-hours per annum of people who derived livelihood and wages from the harvest of these commodities.	Loss of total 8407 nos. of trees mainly Sal, Asan, Chara, Mahua, Amba and Misc species which will be compensated by compensatory afforestation and additional avenue plantation within the ROW of the Project road	209.67
		Loss of Timber and Fire wood = 8407 no. of trees rate per unit for the year 2016-17 is Rs.2494/Unit	
		Loss of fuel wood, NTFP, Fodder Rs.7.608 lakh / Ha for 64.094 ha	484.71
		Loss of man power approximately 300 man-days @ Rs.300 days	0.90
2	Loss of animal husbandry productivity including loss of fodder	Animal Husbandry - Nil	0
3	Cost of human resettlement	Nil	0
4	Loss of public facilities and administrative infrastrucutre (Roads, building, school dispensaries, electric lines, railway etc) on Forest land, or which would require forest land if these facilities were diverted due to the project	Nil	0
5	Environmental losses (Soil errosion, effect on hydrological cycle, wildlife habitat, microclimate upsetting of ecological balance	Approx 64.094 Hectare of forest are will be diverted for the construction of project road. Considering the density of forest in Reserve/ Protected forest and Revenue / village forest area to be 0.6 and 0.2 respectively and the cost of diversion of 1 hectare of forest land with density 1.0 to be Rs.126.74 lakhs.	8123.27
		NPV Cost of the forest area (64.094 X 7.30 lakh/ha) for 50 years	467.89
6	Construction of cost of the project - Brinjabahal-Teleibani Section of NH-6		92794
7	Operation and Maintenance cost of the project road per year		4175.73
Total (Rs.)			106256.17

B. Parameters for Evaluation of Benefit Not With standing Loss of Forest

Sl. No.	Parameters	Amount (Rs. In Lakh)
1	Employment generation i.e. 600 nos persons X Rs.500.00 X 900 days	2700
2	The project will give monetary returns worth Rs.219000 Lakhs per year from toll collection	219000
4	Revenue generation from the other state due to good connectivity	425
5	Revenue generation from setting up of industry, employment generation	4800
6	Saving fuel, reduce accident	525
7	Revenue from the natural materials for construction of road	3500
Total (Rs.)		230950

Summary of Cost Benefit Analysis

Total Loss per annum due to loss of timber, fire woods minor forest product and environmental loss	106256.17
Total Benefit per annum to the economy due to Construction Cost of the project - Brinjabahal-Teleibani Section of NH-6	230950
Hence cost benefit ratio of the project	1:2.17