

Name
of
Project

Construction of Ganga Expressway, an access controlled Greenfield Expressway in Meerut, Hapur, Bulandshahar, Amroha, Sambhal, Badanyu, Shahjhanpur, Hardoi, Unnao, Raibarely, Pratapgarh and Prayagraj Districts in the state of Uttar Pradesh (FP/UP/ROAD/144793/2021)

COST BENEFIT ANALYSIS

(As per MoEF&CC guidelines for conducting Cost Benefit Analysis
Vide no. 7-69/2011-FC (Pt.) dt.1st AUG,2017

Nature of Proposal: Diversion of 121.4716 ha. of Forest Land under FCA, 1980 for road construction.

Purpose: The Cost-Benefit Analysis is being undertaken for proposed Diversion of Forest Land being affected due to the development of project.

Table: A Details of Types of project involving Forest Land for which cost-benefit analysis will be required.

S. No.	Nature of proposal	Applicable/Not Applicable	Remark
1.	All categories of proposals involving Forest Land upto 20 Hectares in plains and upto 5 Hectares in hills.	Not Applicable	-
2.	Proposals for defense installation purposes and oil prospecting (Prospecting only)	Not Applicable	No such area is involved in the project.
3.	Habitation, establishment of industrial units tourist lodges/complex and other building construction.	Not Applicable	No such activities are involved in the project.
4.	All other proposals involving forest land more than 20 ha in plains and more than 5 ha in hills including roads, transmission lines, minor, medium and major irrigation projects, hydel projects, mining activities, railway lines, auto repeater controls, towers etc.	Not Applicable	The proposed project involves 121.4716 ha. of Forest Land. Hence, the CBA is applicable. Hill=Nil Plain=121.4716ha.

Table: B-Estimation of cost of forest diversion

S. No.	Parameters	Remarks
1.	Ecosystem service loss due to proposed diversion	The proposed Forest area to be diverted is mostly characterized by dry deciduous forest. Considering Open forest of Eco-Class III, an average value of NPV of INR 6.26 laes per

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(अरुण कुमार राय)
डिप्टी कलेक्टर/अधिकृत अधिकारी
गंगा एक्सप्रेसवे परियोजना
यूपीडा लखनऊ

		<p>hectare (as per MoEF&CC GO 5-3/2007-FC dt. 05-02-2019)</p> <p>Therefore, ecosystem services losses due to proposed diversion of 121.4716 ha. of forest land=Rs. 760.41 lacs, considered as total NPV.</p>
2.	Loss of animals husbandry productivity including loss of fodder	<p>There is, no loss in animal husbandry, productivity including loss of fodder due to the diversion of forest land.</p> <p>10% of NPV is maximum i.e. Rs. 76.04 lacs</p>
3.	Cost of human resettlement	<p>Nil.</p> <p>There is no displacement of people in the forest area proposed for diversion</p>
4.	Loss of public facilities and administrative infrastructure (Roads, Buildings, Schools, Dispensaries, Electrics lines, Railways etc.) on which would require forest land if these facilities were diverted due to the project.	<p>Nil.</p> <p>There are no loss in public facilities and administrative infrastructures (road, buildings, schools, dispensaries, electric lines, railways etc.) on proposed diverted forest land.</p>
5.	Possession value of forest land diverted	30% of NPV cost i.e. Rs. 228.12 lacs
6.	Cost of Suffering to oustees	<p>Nil.</p> <p>There are no oustees involved in the forest area.</p>
7.	Habitat Fragmentation Cost	50% of total NPV i.e. Rs. 380.20 lacs
8.	Compensatory afforestation and soil & moisture conservation cost	<p>The compensatory afforestation will be taken up in equivalent Non-Forest Land i.e. 121.4716 ha. of in lieu of proposed forest to be diverted.</p> <p>As per guidelines Standard Compensatory Afforestation, Restoration Factor (SCARF) assuming 4% discounted rate for Open forest for Tropical Dry Deciduous Forests is 5.81% of NPV and the proposed NPV rates is Rs. 11.17 lacs per ha. So the adjusted NPV rates will be $[11.17 - (0.0581 \times 11.17)] = \text{Rs. } 10.52$ lacs per ha.</p> <p>Therefore, the compensatory afforestation cost will be $121.4716 \text{ ha.} \times \text{Rs. } 10.52 \text{ lacs} = \text{Rs. } 1277.88 \text{ lacs}$</p>

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