

## COST BENEFIT ANALYSIS

Development of Economic Corridors, Feeder Routes and Coastal Roads to improve the efficiency of freight movement in India (Lot-3/KN/Package-2) Phase III of Chitradurga – Mangalore Intercorridor of NH 173 – From Mudigere Hand Post at Junction of NH 73 to Nellyadi Junction at Km 270.600 of NH 75 (Old NH 48) (Design chainage from Km. 163+300 to Km. 230+020) of length 66.72 Km

**Table- B Estimation of cost of forest diversion**

SN	Parameters	Remarks	Response
1.	Ecosystem services losses due to proposed forest diversion	<p>Economic value of loss of eco-system services due to diversion of forests shall be the net present value (NPV) of the forest land being diverted as prescribed by the Central Government (MoEF&amp; CC).</p> <p><i>Note: In case of National Parks the NPV shall be ten (10) times the normal NPV and in case of Wildlife Sanctuary the NPV shall be five (5) times the normal NPV or otherwise prescribed by the ministry or any other competent authority</i></p>	<p>The forest area under diversion is protected forest falling within PROW. The plantation has been done by the forest department.</p> <p>Tropical thorn forest and tropical Dry Evergreen Forests (Eco Class -I), and Forest canopy cover is more than 70% of Very Dense Forest (VDF) Cost has been considered for NPV:</p> <p><b>NPV- 10,43,000 X Forest area (60.13Ha.) = INR 6,27,15,590/- (Source: F.No.5-3/2007 –FC dated 05.02.2009)</b></p>
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	<b>Yes : INR 62,71,559</b>
3.	Cost of human resettlement	To be quantified and expressed in monetary terms as per approved R&R plan	<b>Yes: INR – 47.08 Crore</b>
4.	Loss of public facilities and administrative infrastructure (Roads, building, schools, dispensaries, 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	N.A
5.	possession value of forest land diverted	30% of environmental costs (NPV) due to loss of forests or circle rate of adjoining area in the district should be added as a cost component as possession value of forestland whichever is maximum	<b>Yes: INR- 1,88,14,677</b>

  
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SN	Parameters	Remarks	Response
6.	Cost of suffering to oustees	The social cost of rehabilitation of oustees (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 oustees should have earned in two years had he not been shifted.	No
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 a thumb rule.	Yes , INR- 3,13,57,795
8.	Compensatory afforestation and soil & moisture conservation cost	The actual cost of compensatory afforestation and soil & moisture conservation and its maintenance in future at present discounted value	Yes, Cost of compensatory afforestation:27,05,85,000INR /- Yes soil & Moisture conservation cost – 29,21,716 Lakh

**Table-C - Existing guidelines for estimating benefits of forest-diversion in CBA**

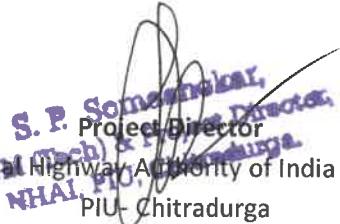
SN	Parameters	Remarks	Response
1.	Increase in productivity attribute to the specific project	To be quantified & expressed in monetary terms avoiding double counting	All the freight movement from Mangalore port tends to follow existing NH 75 to reach the Golder Quadrilateral (NH4). The development of the proposed link will shorten the distance for all freight movement by 196km. The Fuel saving will be tremendous. It will also boost the local economy at regional level. The area of Chikmagaluru is having coffee estates. Non-existence of road lead to loss to farmers annually in crore. The existing road is fair whether roads and during monsoon or when its rain the movement is hampered, leading to crop loss.
2.	Benefits to economy due to the specific project	The incremental economic benefit in monetary terms due to the activities attributed to the specific project	The proposed NH-173 from Mudigere hand post at junction of NH 73 to Nellyadi Junction at km 270.600 of NH 75 (Old NH 48) Design Chainage from km 163+300 to 230+020) will provide uninterrupted free flow of traffic and shall result in: <ol style="list-style-type: none"> <li>1. Will result in proper utilization of Mangalore Port.</li> <li>2. Saving in travel Time &amp; Cost. Development of the proposed link will shorten the distance for all freight movement by 196 Km.</li> <li>3. Saving in foreign exchange due to less consumption of fuel.</li> <li>4. Increase in income of truck, bus, taxi, etc. Owner as they will be</li> </ol>

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			<p>able to communicate maximum distance in short time.</p> <p>5. Reduction in accidents as it will provide safe travel,</p> <p>6. Will act as catalyst to the industrial development.</p> <p>7. Will increase the local tourism</p>
3.	No. of population benefited due to specific project	As per the Detailed project report.	<p>It is expected that at least people from whole of the district will be benefited due to proposed road. The proposed road will pass through three district having about 55,52,223 Lakhs population (Census: 2011) who will be directly benefitted. The indirect benefit population is unaccountable.</p>
4.	Economic benefits due to of direct and indirect employment due to the project	As per the Detailed project report.	<p>Project Shall directly give employment to around 250-300 people during construction phase of project (four year)</p>
5.	Economic benefits due to Compensatory afforestation	<p>Benefits from such compensatory forestation accruing over next 50 years monetised and discounted to the present value should be included as benefits' of compensatory afforestation.</p> <p>*For benefits of CA the guideline of the Ministry for NPV estimation may be consulted.</p>	<p><b>Yes, INR: 76.044 crore</b></p>

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Place: Chitradurga

  
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