

Name of the Project :	Four laning of Existing NH-17 from km475.040 to km 611.000 in the state of Goa on BOT (Toll) basis under NHDP – III (Patradevi to Pollem section on NH-17
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Cost Benefit Analysis

PARAMETERS FOR EVALUATION OF LOSSES OF FORESTS

ANNEXURE – VI (b)

S. No	Parameters	Roads
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 are deprived livelihood and wages from the harvest of these commodities	Since the number and density of road side trees to be cut and surrounding vegetation is not high, therefore the amount of timber loss will be insignificant.
2	Loss of animal husbandry productivity, including loss of fodder	Nil
3	Cost of human resettlement	Nil
4	Loss of public facilities and administrative infrastructure (Roads, building, schools, dispensaries, electric lines, railways etc,) on forest land or which would require forest land if these facilities were diverted due to the project.	Nil
5	Environmental Losses (Soil erosion, effect of hydrological cycle, wildlife habitat, micro-climate upsetting of ecological balance)	<p>Environmental value of 1 hectare of forest land with density 1.0 is estimated to be = Rs.126.74 lakh to accrue over a period of 50 years</p> <p>The Density of forest area to be diverted for the project road ranging from 0.6 to 0.8, hence it has been rounded to 0.7.</p> <p>To accrue over a period of 50 years, the value will reduce with density. Therefore if density is 0.7, a project which requires deforestation of 1 hectare of forest the value will work out at Rs. 88.718 lakh.</p> <p>Value per hectare = Rs. 88.718 Lakhs Forest are for diversion = 23 ha Environmental loss = Rs. 2040.514 lakh</p>
6	Suffering to oustees	Nil

PARAMETERS FOR EVALUATION OF BENEFITS, NOT WITHSTANDING LOSS OF FORESTS

ANNEXURE VI (c)

S.No	Parameters	Nature of proposal - Roads
1	Increase productivity attributable to the specific project	The project road will result in development of areas establishment of various small, medium and large scale industries due to better transport facilities of goods and materials.
2	Benefits to economy	Improving the accessibility will help in regional economic development
3	No of population benefited	All those who are traveling on the road can save on fuel and time, reducing pollution and carbon emissions. For those residing in the region will be less exposed to noise and air pollution
4	Employment Potential	Induced development of economy will help in generation of employment
5	Cost of acquisition of facility on non-forest land where feasible	Nil
6	Loss of (a) agricultural &(b) non-forest land wherever feasible	Nil
7	Cost of rehabilitating the displaced persons as different from compensatory amounts given for displacement	Nil
8	Cost of supply of free fuelwood to workers residing in or near forest area during the period of construction	Nil


Signature

(Ulhas Kerkar)
E.E.Div. VII
PWD (NH), Patto, Panjim

Place : Panjim
Date:

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