

Cost Benefit Analysis as per Guidelines for forest land diversion -2017

Table-A : Cases under which a cost-benefit analysis for forest diversion are required

Sl. No.	Nature of proposal	Applicable/not applicable	Remarks
1	All categories of proposals involving forest land upto 20 hectares in plains and upto 5 hectare in hills.	Not applicable	These proposals may be considered on a case to case basis and value judgement.
2	Proposal for defence installation purposes and oil prospecting (prospecting only).	Not applicable	In view of national Priority accorded to these sectors, the proposals would be critically assessed to help ascertain that the utmost minimum forest land is diverted for non-forest use.
3	Habitation, establishment of industrial units, tourist lodges complex and other building construction.	Not applicable	These activities being detrimental to protection and conservation of forest, as a matter of policy, such proposals would be rarely entertained.
4	All other proposals involving forestland more than 20 hectares in plains and more than 5 hectares in hills including roads, transmission lines, minor, medium and major irrigation projects, hydro projects, mining activity, railway lines, location specific installations like micro-wave stations, auto repeater centres, TV towers etc.	Applicable (Roads)	Diversion of 41.01 Ha PF land for Widening and strengthening work of existing Two Laning with paved shoulder of stretch from Bikramganj – Dawath – Maliyabagh – Nawanagar – Dumraon of NH- 120 (Ch. 201.665 to Ch 245.665) excluding Dawath (Ch. 210.830 to Ch.212.400) & Dumraon bypass (Ch 240.200 to 245.665) in the state of Bihar.

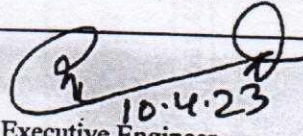
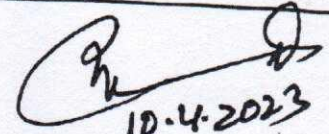

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Table-B : Estimation of Cost of forest Diversion

S.No.	Parameters	Quantity (Hectare)	Rate	Amount (Rs. Lakh.)	Remarks
1	Eco-system Services Losses Due to proposed forest Diversion	41.01	1357110	556.55	APCCF(Campa)-cum-Nodal Officer (Forest Conservation) letter No. 454 dt. 30.05.2022
2	Loss of animal husbandry productivity, including loss of fodder			55.66	To be Quantified and expressed in monetary terms or 10% of NPV applicable whichever is maximum
3	Cost of human resettlement.			0.00	The cost of Human resettlement for diversion of
4	Loss of public facilities and administrative Infrastructure (Roads, building School, dispensaries, electric lines, Railways etc.) on forest land, or which would require forest land if these facilities were diverted due to the project.			1171.01	Electric lines & poles, Water pipe lines, Water Tank etc. public facilities which are being affected have been considered in the budget. Also the budgets for affected CPRs have been considered.
5	Possession Value of forest Land Diverted	41.01	407133	166.97	30% of Npv
6	Suffering to oustees			0.00	The Widening and strengthening of the project road is to be undertaken on the adjoining land of the existing road. So there are no sufferings to oustees
7	Habitat Fragmentation Cost			278.28	Taken as 50% of NPV
8	Compensatory Afforestation	83		137.29	As per letter of DFO Rohtas, letter No- 525 dated- 07.02.2023
9	Project Cost (Civil & Project Clearance)			17863.00	Cost of Project includes Forest clearance, Tree cutting, Translocation of tree etc. Provision of amount of Rs. 5.36 crore is out of project cost of Rs. 178.63 crore.
Total				20229.00	Lakh
Say				202.29	Crore



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Table C :- Parameters for Evaluation of benefits notwithstanding loss of forests.

Benefits				
Sl.	Parameters	Quantity	Amount (Rs.Cr.)	Remark
1	Increase in Productivity and Economics		136.58	Due to Upgradation of existing highway to two lane with paved shoulder configuration there will be overall development of the project area there would be easy and fast movement of the traffic, so that it will save time save fuel and maintenance cost of the vehicle. This will also result in reduction in congestion on road, saving in travel time and reduction in accident. Due to widening of road will result in improved traffic condition and saving in travel time will result in economic benefit. Increase in Productivity and Economics will be 30% of NPV calculated from EIRR at 12% interest rate i.e. 30% x Rs. 455.28 crore = Rs 136.58 crore
2	Benefits to economy due to the specific project		318.70	Thr project usually contributes the growth of local economy by increased commercial, agricultural, Industrial and tourist activities due to improvement of highway Based on the economic analysis of the project benefits will be 70% of NPV calculated from EIRR at 12% interest rate i.e. 70% x Rs. 455.28 crore = Rs 318.70 crore
3	No. of Population benefitted due to specific project	4666270		This road project directly benefits the people of Rohtas and Buxar District ie 4666270(as per census 2011) .
4	Economic Benefits due to direct and indirect employment due to the project		4.82	Permanent employment of 25 people and temporry employment of 140 people for project duration of 548 days. (25x548xRs.1000 per day) + (140x548xrs.450 per day)= 4.82 crore
5	Benefit from Compensatory Afforestation	83 Hectare	1.37	As per letter of DFO Rohtas, letter No- 525 dated- 07.02.2023
Total			461.47	Crore
Benefit/Cost =			2.281	


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Executive Engineer