JEYPUR-MALKANGIRI BG RAILWAY LINE OF EAST COAST RAILWAY

FOREST AREA 452.705 HA

Proposal Name:

Diversion of Forest Land of 452.705 Ha for construction of new DG railway line in between Jeypore to Malkanagri

COST-BENEFIT ANALYSIS

As per Handbook of guidelines for effective and transparent implementation of the provisions of Forest (Conservation) Act, I980_t Dated: 01th Nov, 2023

A. ESTIMATION OF COST OF FIREST DIVERSION (452.705Ha)

SI no	Parameters	Amount in Rs	Remark
I	Ecosystem services losses due to proposed forest diversion	455063593.00	As per the Guideline dated 31st March, 2020, Net Present Value (NPV) of Rs 45,50,63,593/-has been paid for the total forest area located within the project area at the rate lump sum amount of
2	Loss of animal husbandry productivity, including loss of fodder.	45506359.00	To be quantified and expressed in monetary terms or 10% of NPV applicable.
	Cost of human resettlement	0.00	There is no settlement inside project area hence this cost is not envisaged.
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.	0.00	There is no public facilities & infrastructures over the land, hence this cost is not envisaged.
5	Possession value of forest land diverted.	136519078.00	30% of environmental costs (NPV) due to loss of forests.
6	Cost of suffering to oustees	0.00	There is no settlement inside project area hence this cost is not envisaged.
7	Habitat Fragmentation Cost.	227531797.00	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.
8	Compensatory Afforestation and soil & moisture conservation cost	380951138.00	The actual cost of compensatory afforestation and soil & moisture conservation and its maintenance in future at present discounted Value.
Total Cost		1245571965.00	

B. ESTIMATION OF BENEFIT

SI. No.	Parameters	Amount in Rs	Remark
1	Increase in productively attribute to the specific project.	1,843,600,000.00	Based on expected annual transport of good
2	Benefits to economy due to the specific project	1,171,900,000.00	Due to project economic benefit to country will be social infrastructure.
	No. of population benefited due to specific project.	10,800,000,000.00	2000 nos, calculated considering benefit of each person Rs 9000/month
4	Economic benefits due to of direct and indirect employment due to the project.	540,000,000.00	3000 nos of person shall be benefitted directly due to project.
5	Economic benefits due to Compensatory afforestation.	1,428,566,768.00	Benefits from such Compensatory Afforestation accruing over next 50 years monetized and discounted to the present value should be included as benefits of Compensatory Afforestation. *For benefits of CA the guideline of the Ministry for NPV estimation may be consulted
Total Benefit		15,784,066,768.00	

पण पुराम अभियंता (निर्माण)-हि पूर्व तट रंसने, कोरापुट Dy. Chief Engineer (Con.)-हि

C.COST BENEFIT RATIO

SLNO	DESCRIPTION	AMOUNT(in Rs)
1	Total Cost	1245571965.00
2	Total Benefit	15784066768.00
3	Cost Benefit Ratio	1:12.672

प्रवास अभियंता (निर्माण)-I पूर्व.तट.रेलवे. कोरापुट Dy. Chief Engineer (Con.)-I East Coast Railway, Korapur