

INDORE- DAHOD NEW BG LINE PROJECT
Parameters for evaluation of Benefit, Not withstanding Loss

- A.** Total cost due to forest land (Rs Lacks) - **724.14 cr**
B. Total benefit due to project Rs. **1136.9 cr**
C. Benefit ratio (B/A) **1.57**

(On the basis of Guidelines for forest land diversion 2017)

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

No	Nature of proposal	Applicable/not applicable	Remark
1	All categories of proposals involving forest up to 20 hectares in plains and up to 5 hectare in hills.	Not applicable	
2	Proposal for defense installation purposes and oil prospecting (prospecting only)	Not applicable	
3	Habitation, establishment of industrial units, tourist lodges complex and other building construction.	Not applicable	
4	All other proposals involving forest land more than 20 hectares in plains and more than 5 hectare in hills including roads, transmission lines, minor, medium and major irrigation projects, hydro projects, mining activity, Railway lines, location specific installations like micro-wave station, auto repeater centers, TV towers etc.	Applicable	New Railway line project.

Table - B Estimation of cost of forest diversion

No	Parameters	Remarks
1	Ecosystem services losses due to proposed forest diversion.	Ecosystem services due to diversion of forest land in INDORI- DAHOD new BG line project falls in Tropical dry deciduous forest with category iii forest. N.P.V. Rs 6.26 Lakh/Ha. Cost of Land =360.79 Lakhs. Detail calculation attached in Sheet -I
2	Loss of animal husbandry productivity including cost of fodder	As per the cost benefit guideline i.e. 10% of N.P.V. 0.626 Lakh per Ha. Cost = 36.08 Lakhs. Detail calculation attached in Sheet -I
3	Cost of human resettlement	There is no human settlement from forest land due to proposed INDORI- DAHOD new BG line project; hence cost of Human resettlement is Nil.
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.	There is no loss of public facilities and administrative infrastructures on forest land due to construction of INDORI- DAHOD new BG line project; no cost has been added on this account.

5.	Possession value of forest land diverted.	The possession value of forest land diverted is taken 30% of the N.P.V. due to loss of forest i.e. 1 878 Lakh/Ha. Cost = 108.23 Lakhs detail calculation attached in sheet-1.
6.	Cost of suffering to oustees.	Not applicable.
7.	Habitat Fragmentation Cost.	Forest land is being acquired for construction of Railway track, bridges etc. of INDORI- DAHOD new BG line project. There is no amount is taken under this account.
8.	Compensatory afforestation and soil & moisture conservation cost.	The cost @ Rs.3.80 Lakh per Ha. Is taken for compensatory afforestation and soil moistures conservation, hence amount will be: 57.64 x 3.80 = Rs.219.03 Lakhs.
9.	Total cost due to forest land diversion	Total cost due to forest land diversion for INDORE- DAHOD new BG line project will be : 360.79 + 36.08 + 108.23 + 219.03 Lakhs = 724.14 Lakhs

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

No	Parameters	Remarks
1	Increase in productivity attributed to the specific project	The benefit due to INDORE- DAHOD new BG line project will be Rs. 1136.9 Lakhs per year & tribal area will be developed.
2	Benefits to economy due to specific project	INDORE- DAHOD new BG line project will trigger economy development and also facilitate direct link of special economic zone of Indore at Pithampur with ports, thereby reduce cost of transportation. It will also increase development of Dhar, Jhabua districts of MP & Dahod district of Gujrat.
3	No of population benefited due to specific project	Project is located in backward area of the Dhar, Jhabua of MP & Dahod of Gujrat. After completion of project 23.16 Lack population will be benefited. It will provide alternate route between Indore and Vadodara and decongest Nagda- Dahod Rajdhani route.
4	Economic benefits due to direct and indirect employment due to the project	The project will provide Approximately 1,00,000 temporary man-days and 1,500 nos. permanent employment.
5	Economic benefits due to compensatory afforestation	An economic benefit due to compensatory afforestation has been considered as per benefit of C.A. guidelines of ministry for N.P.V.

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Sheet - I

S No	Compartment	Eco zone	Cat egor y	Densi ty	NPV lack /Ha	Area in Ha	Cost in lacks	Compens atory afforest ation land in Ha	Compensator y afforestation, soil & moisture conservation cost in lacks (@ 3.8 lacks/Ha)	Loss of animal husbandary productivity in lacks i/c cost of fodder 10% of NPV	Possession value in lacks. 30% of NPV	Total cost in lacks
1	2	3	4	5	6	7	8	9	10	11	12	13= (8+10+11+12)
JHABUA												
1	247	Tropical dry deciduous	iii	<0.40	6.26	0.46	2.88	57.64	219.03	0.29	0.86	223.06
2	P200	Tropical dry deciduous	iii	<0.40	6.26	4.29	26.86			2.69	8.06	37.61
3	244	Tropical dry deciduous	iii	<0.40	6.26	15.9	99.53			9.95	29.86	139.34
4	P259	Tropical dry deciduous	iii	<0.40	6.26	1.69	10.58			1.06	3.17	14.81
5	P255	Tropical dry deciduous	iii	<0.40	6.26	2.245	14.05			1.41	4.22	19.68
6	249	Tropical dry deciduous	iii	<0.40	6.26	1.25	7.83			0.78	2.35	10.96
7	P222	Tropical dry deciduous	iii	<0.40	6.26	3.43	21.47			2.15	6.44	30.06
8	P256	Tropical dry deciduous	iii	<0.40	6.26	2.38	14.9			1.49	4.47	20.86
9	245	Tropical dry deciduous	iii	<0.40	6.26	8.05	50.39			5.04	15.12	70.55
10	P223	Tropical dry deciduous	iii	<0.40	6.26	1.93	12.08			1.21	3.62	16.91
11	276	Tropical dry deciduous	iii	<0.40	6.26	2.11	13.21			1.32	3.96	18.49
12	277	Tropical dry deciduous	iii	<0.40	6.26	5.34	33.43			3.34	10.03	46.8
13	P224	Tropical dry deciduous	iii	<0.40	6.26	2.43	15.21			1.52	4.56	21.29
14	246	Tropical dry deciduous	iii	<0.40	6.26	6.13	38.37			3.84	11.51	53.72
Total						57.64	360.79	57.64	219.03	36.08	108.23	724.14
Benefit of project												1136.9
Cost of forest on the basis of NPV												724.14
B/C												1.57

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