

COST BENEFIT ANALYSIS AS PER GOI GUIDELINES 06-01-2022


Name of the Project: Diversion of 21.00 Ha protected forest land for laying of 33 KV line Saleha to Kalda in favour of Executive Engineer, Madhya Pradesh, M.P.P.K.V.V.Co.Ltd. in Panna District of M.P. (6-MPC007/2020-BHO)

Table-A: cases under which cost- Benefit Analysis for forest Diversion are required

No.	Nature of Proposal	Applicable/ Not Applicable	Remarks
1	All categories of proposals involving forest land up to 20 hectares in plains and up to 5 hectares in hills	Not Applicable	
2	Proposal for defense installation purpose and oil prospecting (prospecting only)	Not Applicable	
3	Habitation, establishment of industrial units, tourist lodge Complex and other building construction	Not Applicable	
4	All other proposals involving forest land more than 20 hectares in plains and more than 5 hectares in hills including roads, transmission line, minor, medium and major irrigation project, hydro project, mining activities, Railway lines, location specific installation like microwave station auto repeater centers TV tower etc.	Applicable	

Table- B Estimation of cost of forest diversion


SN	Parameters	Remark	Response
1	Ecosystem services losses due to proposed forest diversion	Economic value of loss of ecosystem services due to diversion of forests shall be the net present value of the forest land being diverted as prescribed by the central government (MoEF& CC). Note-In case of national parks the NPV shall be 10 times the normal and TV and in case of wildlife sanctuary the NPV shall be 5 times the normal NPV or otherwise prescribed by the Ministry of any other competent authority	Forest under project site area are Tropical dry deciduous Forests (Eco Class 1), and Forest canopy cover is between 40-70% of moderate forest (MDF) NPV – 957780 X Forest area (21 Ha.) = 20113380/- INR
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	NIL


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3	cost of human resettlement	To be quantified and expressed in monetary terms as per provided R& R plan	No resettlement is required as it is along the existing road.
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	Nil
5	Possession value of forest land diverted	30 percent of environmental cost (NPV) due to losses of forest or Circle rate of adjoining area in the district should be added as a cost component as possession value of forest land whichever is maximum	Yes – INR (30% of NPV) 30% of 20113380 /- i.e INR 6034014/-
6	cost of suffering to oustees	The social cost of rehabilitation of out in addition to the cost likely to be included in providing in residence occupation and social service as per R&R plan be worked out as 1.5 times of what oustees should have earned in two had he not been shifted.	NIL
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 (50% OF NPV) i.e. 10056690/-
8	Compensatory afforestation and soil & moisture conservation cost	The actual cost of compensatory afforestation and soil and moisture conservation and its maintenance in future at present discounted value	Yes, cost of Compensatory afforestation : INR 14210000/- Yes , Medicinal plantation project below the proposed electric line. INR (968115.66/- per hectare.) i.e.. 20330429/-

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

SN	Parameters	Remark	Response
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1	Increase in productivity attribute to the specific project	To be quantified & expressed in monetary terms avoiding double counting	This project is desirable from society point of view. Found to be economic for NPV & Economic Internal Rate of return (EIRR) - 7.47%
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	Due to the above project, economic activities are expected to be boost up in the area such as local industries and allied agricultural activities including mushroom farming and processing. Irrigated land would be increased.
3	No. of population benefited due to specific project	as per the detailed project report	Approx. 30000
4	Economic benefits due to of direct and indirect employment due to the project	as per the detailed project report	As the above project includes both civil construction and erection of 33 KV line and substation, approx. skilled and semiskilled mandays generated will be 5500.
5	Economic benefits due to compensatory afforestation	<p>Benefits from such compensatory forestation accruing over next 50 years monetized 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>Economic benefits of Compensatory Afforestation:-</p> <ol style="list-style-type: none"> 1. Preservation of Soil. 2. Conservation of Water via ground water recharge. 3. Carbon sequestration leading to reduction in CO₂ in air and converting into biomass of economic benefit leading to revenue for govt. 4. Economically valuable trees like Teak will be planted which will give many fold returns to govt. treasury by the end of 50 years. 5. Species of economic value to villagers like Amla, Harra, Baheda, Mahua will be planted which will add atleast 20000 per household per year by the end of 5 years of plantation.


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