

**COST BENEFIT ANALYSIS AS PER GOI GUIDELINES 01-8-2017**

**Name of the Project :** Erection & Commissioning of New 33 Kv Line from Village Chiriya to Titraniya for commissioning of new 33/11 kv Sub Station at Village Titraniya Under Distt. Khargone, M.P.

**Table - A : Cases under which Cost Benefit Analysis for Forest diversion are required.**

SN	Nature of Proposal	Applicable /Not Applicable	Remarks
1	All categories of proposals involving forest land upto 2 hectares in plains and upto 5 hectare in hills	Applicable	The proposal may be considered as the forest land is involved in only 24 Hac.
2	Proposal for defence installation purpose and oil prospecting (prospecting only)	Not Applicable	--
3	Habitation, establishment of industrial units, tourist lodges complex and other buildings construction.	Not Applicable	--
4	All other proposals involving forest land more than 20 hectares in plains and more than 5 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 microwave stations, auto repeater centers, TV towers etc.	Not Applicable	The forest land is involved in only 24 Hac. for erection & commissioning of new 33 KV Line for commissioning of new 33/11 KV Sub Station.

**Table - B Estimation of cost of Forest Diversion**

SN	Parameters	Remarks	Response
1.	Ecosystem services losses due to proposed Forest diversion	<p>Economic value of loss of eco-system services due to diversion of forest shall be the net present value (NPV) of the forest land being diverted as prescribed by the Central government (MoEF &amp; CC).</p> <p>Note : In case of National Parks the NPV shall be ten (10) times the normal NPV and in case of Wildlife Sanctuary the NPV and in case of Wildlife Sanctuary the NPV shall be five (5) times the normal NPV or otherwise prescribed by the ministry or any other competent authority.</p>	<p>NPV = 626000/- X 24 = Rs. 15024000 /-</p>



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	Rs. 1502400/-
3.	Cost of human resettlement	To be quantified and expressed in monetary terms as per approved R&R plan	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	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% of environmental cost (NPV) due to loss of forests 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	Rs. 4507200/-
6.	Cost of suffering to oustees	The social cost of rehabilitation of oustees (in addition to the cost likely to be incurred in providing in-residence, occupation and social services as per R&R plan) be worked out as 1.5 times of what oustees should have earned in two years 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.	Nil
8.	Compensatory afforestation and soil & moisture conservation cost	The actual cost of compensatory afforestation and soil & moisture conservation and its maintenance in future at present discounted value	Related from Forest Depott.




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

SN	Parameters	Remarks	Response
1.	Increase in productively attribute to the specific project	To be quantified & expressed in monetary terms avoiding low voltage problems.	The Project is desirable for avoiding low voltage problems.
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.	<ol style="list-style-type: none"> <li>1. Improvement in Voltage Regulation hence avoid low voltage problem in the area.</li> <li>2. Improvement in the human living standard.</li> <li>3. Increased employment.</li> <li>4. Increase agriculture areas hence former will be economy sound and that area also will be developed in all field such as Education agriculture, horticulture, Animal Husbandry, Small Industries etc.</li> </ol>
3.	No. of population benefited due to specific project	As per the Detailed project report.	<ol style="list-style-type: none"> <li>1. Improvement in Voltage Regulation hence avoid low voltage problem in the area.</li> <li>2. Improvement in the human living standard.</li> <li>3. Increased employment.</li> <li>4. Increase agriculture areas hence former will be economy sound and that area also will be developed in all field such as Education agriculture, horticulture, Animal Husbandry, Small Industries etc.</li> </ol>



4.	Economic benefits due to of direct and indirect employment due to the project	As per the Detailed project report.	Project shall give employment to 600-700 families after Commissioning of the project.
5.	Economic benefits due to compensatory afforestation	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.  * For benefits of CA the guideline the Ministry for NPV estimation may be consulted.	Nil

  
 21.12.18  
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