

Cost Benefit Analysis, Whether the area is more than 5.00 Ha.  
Area is 9.33 Ha.

### Financial and Social Benefits

### COST-BENEFIT ANALYSIS

As per cost (Conservation) Rules 2003, Rules 6, Form 'A'S. No. 1 (v) and guidelines – application of Forest Act 1980, Chapter II (2.6) and Revised Guidellines issued by MoEFF. vide no 7-69/2011-Fc(pt.) dated 1<sup>st</sup> August, 2017.

### Evaluation of loss of forest

Table-B: Estimation of cost of forest diversion

Sr. No.	Parameters	Remarks
1	Ecosystem services losses due to proposed forest diversion	NPV for 9.33 Ha Rs. 5840580/- (As calculated by Forest Department)
2	Loss of animal husbandry productivity, including loss of fodder.	10% of NPV Rs. 584058/-
3	Cost of human resettlement.	Since there is no displacement of persons due to the diversion of forest land, the cost of 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.	Public facilities and administrative infrastructure like Roads, building, schools, dispensaries, electric lines, railways, etc. are not going to be affected due to the Diversion of forest land therefore the loss on this account will be NIL.
5	Possession value of forest land diverted.	30% of NPV Rs. 17,52,174
6	Cost of suffering to ousters.	The cost of rehabilitation is NIL.
7	Habitat fragmentation cost.	50% of NPV Rs. 29,20,290
8	Compensatory Afforestation and soil & moisture conservation cost.	@ Rs. 485142.29 Per Ha for 9.33 Ha. = Rs. 5045375.78

Therefore, the total loss of forest, as per the approved parameters, works out to as under:

Parameters	Description	Loss (in Rs.)
	Environmental losses	1,61,42,477.78

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

Sr. No.	Parameters	Remarks
1	Increase in productivity attribute to the specific project.	Implementation of entire project will insure the irrigation for 322 Ha. Agricultural land and 2.48 MM <sup>3</sup> of water will be available for agriculture and drinking purpose.
2	Benefits to economy due to the specific project.	Irrigation Benefits = Rs 2,19,13,900 Drinking Benefits = Rs 45,600 Fisheries Benefits = Rs 14,500 <b>Total Benefits = Rs 2,19,74,000</b>
3	No. of population benefited due to specific project.	Total Population of patiya village will be direct beneficiary. Total population getting will be 1724.
4	Economic benefits due to off direct and indirect employment due to the project.	A) During Construction of project = Rs 11,47,000 B) After Completion of project = Rs 10,62,000 <b>Total Benefits = Rs 22,09,000</b>
5	Economic benefits due to Compensatory Afforestation.	Compensatory Afforestation in land transferred to forest department– 9.33 Ha Total environmental loss (except CA) for 9.33 ha. Calculated as per guidelines provided by Forest Department = Rs 1,10,97,102 /- Assuming 30% of environmental loss as Benefit occurring through compensatory Afforestation, for 9.33 Ha benefits = <b>Rs 3329131</b>

Therefore, the total benefit due to project, works out to as under:

Parameters	Description	Benefit (in Rs.)
	Benefit due to irrigation, employment generation and compensatory Afforestation.	2,75,12,131 /-

Therefore Benefits/Cost ratio works out at under:

**Benefits/Cost** = 2,75,12,131 / 1,61,42,477.78 = **1.704**

**Cost Benefit Ratio** = **1:1.704**

Place :-  
Date :-

*B.C. Ratio is calculated based on the NPV and other required data given by the forest department.*

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