

COST BENEFIT ANALYSIS

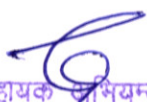
(As per MoEF & CC guideline No. 7-69/2011-FC (Pt.) dated 1st August, 2017)

NAME OF PROJECT:- Construction of Sarkot-Devsari Motor Road.

Table B: Estimaiton of cost of Forests Diversion.

SL. No	Parameters	Estimated Cost
1	Ecosystem services losses due to proposed forest diversion	The estimated NPV (Economic value of loss of ecosystem services) of the 5.964 Ha. forest land is Rs. 50.40 Lac
2	Loss of animals husbandry productivity including loss of fodder	10% of NPV = 5.04 Lac
3	Cost of human resettlement	There is no displacement due to the project. Therefore the cost of human settlement is Rs. 0.00
4	Loss of public facilities and administrative infrastructure (Roads, Buildings, Schools, Dispensaries, Electric lines, Railways etc.) on which would require forest land if these facilities were diverted due to the project.	No loss of public facilities and administrative infrastructure due to the project. Therefore loss is Rs. 0.00
5	Possession value of forest land diverted	30% of NPV = 15.12 lac
6	Cost of Suffering to oustees	No suffering of oustees. Therefore the cost of suffering to oustees is Rs. 0.00
7	Habitat Fragmentation cost	50% of the NPV = Rs. 25.20 Lac
8	Compensatory afforestation and soil & moisture conservation cost.	The estimated cost of raising the CA in 11.928 Ha is Rs. 24.04 Lac for 10 Years. Considering discounting rate 12% for future 100 years, the present value is Rs. 74.66 Lac
	Total Environmental Loss	Rs. 160.42 Lac


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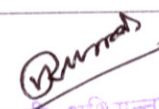

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Table C: Estimaiton of cost of Forests Diversion.


Sl.no.	Parameters	Estimated Cost.
1	Increase in productivity attributable to the specific project.	Saving in cartage of material by Vehicle instead of head load Rs. 1000 per person / per Year (638 x 1000)/100000 = Rs. 6.38 Lac. Saving in 100 Year = Rs. 638.00 Lac.
2	Benefits to economy due to the specific project	Agricultural production @ 4000 per person / Per Year (638x4000)/100000 = Rs. 25.52 Lac. cost of Agriculture Production for 100 year = Rs. 2552.00 Lac.
3	No. of population benefited due to specific project	About 638 people will be benefited directly from this construction.
4	Economic benefits due to of direct and indirect employment due to the project.	Employment 20% population will get employed for 200 days @ 400 per day (0.20x638x200x400) = Rs. 102.08 Lac
5	Economic benefits due to Compensatory afforestation.	30% of NPV = 15.12 lac considering discounting rate 4% for future 100 years the present value For One Year Rs. 15.12 x 4% = 0.60Lac For 100 Year Rs. 0.60 x 100 = Rs. 6.00 Lac
	Total Benefits derived from the Project	R.s 3298.08 Lac

Benefit Cost Ratio = R.s 3298.08 Lac / Rs. 160.42 Lac = 20.56 : 1

It is clear from above analysis that construction of above project is more beneficial than Environmental losses.


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