

Cost Benefit Analysis

Name of The Project - Collection of minor mineral (Bolder, Bajri, Sand etc.) from the Chandarbhaga River of Shivpuri Rang, Narendaranagar Forest Division for 10 years.

Table A

No.	Nature of proposal	Remarks
1	All Categories of proposals involving forest land upto 20 hectares in plains and upto 5 hectare in hills.	No applicable
2	Proposal for defence installation purposes and oil prospecting (prospecting only)	No applicable
3	Habitation, establishment of industrial units, tourist lodges complex other building construction,	No applicable
4	All other proposal involving forest land more than 20 hectares in plains and more than 5 hectares in hill including road, transmission lines, minor medium and major irrigation projects, hydro projects, mining activity railway lines, location specific installations like microwave stations, auto repeater centres, tv towers etc.	Applicable and details are assessment is given in table B.

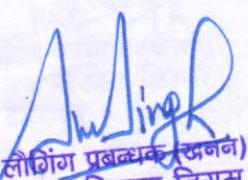

 प्रभागीय लोडिंग प्रबन्धक (द्वन्द्व)
 उत्तराखण्ड वन विकास निगम
 देहरादून

Table B Estimation of cost of forest land diversion

Parameters	Remarks
1 Ecosystem Services losses due to proposed forest diversion.	12,48,30,000
2 Loss of animal husbandry productivity, including loss of fodder.	1,24,83,000
3 Cost of human resettlement	NA
4 Loss of public facilities and administrative infrastructure (Road, buildings, Schools, dispensaries electric lines, railways, ect.) on forest land, if this facilities were diverted due to the project.	NA
5 Possession value of forest land diverted.	3,74,49,000
6 Cost of suffering to oustees.	NA
7 Habitat Fragmentation Cost.	62415000
8 Compensatory Afforestation and soil & moisture conservation Cost.	Cost of Compensatory Afforestation is 128129920
Total	36,53,06,920

प्रभागीय सीलिंग प्रबन्धक (जनन)
उत्तराखण्ड वन विकास निगम
देहरादून

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

No.	Parameters	Remarks
1	Increase in productively attribute to the specific project.	Production Target is 1425000 m ³ or 31350000 Quintal per year @ Rs. 7.0/ Qtl.= $21,94,50,000 \times 10 \text{ Yrs.} = 219,45,00,000$
2	Benefits to economy due to the specific project.	$219,45,00,000 - 36,53,06,920 = 182,91,93,080$
3	No. of population benefited due to specific project.	1000 Person
4	Economic benefits due to of direct and indirect employment due to the project.	<p>1000 Person will get engaged at the rate of Rs. 330 per day for 9 month in a year up to 10 years.</p> $1000 \times 330 \times 270 \text{ day} \times 10 \text{ Years}$ $\text{Rs } 89,10,00,000$ <p>Assuming Rs. 100 per day expenditure of one labourer for their daily need of food etc. = $1000 \times 100 \times 270 \text{ days} \times 10 \text{ years} = 27,00,00,000.00$</p> <p>Hence, economic benefits = $89,10,00,000 - 27,00,00,000 = 62,10,00,000.00$</p>
5	Economic benefits due to compensatory afforestation.	(Present NPV Rate of Dense Forest – Cost of C.A.) $32,11,00,000 - 12,81,29,920 = 19,29,70,080$