

COST BENEFIT ANALYSIS

Project: Diversion of unclassified State Forest area measuring 425.5 Hectares for limestone mining and approach road to mine in favor of Calcom Cement India Limited.

Table B – Estimation of Cost of forest diversion (as per guideline of MoEF&CC dated 1st August 2017)

Sl. No.	Parameters	Particulars/Remarks	Amount (Rs. in Lac)
1.	Ecosystem services losses due to proposed forest diversion	NPV for Open Forest Land 378.16 Ha @ Rs. 7,30,000 = Rs. 27,60,56,800/- NPV for very dense forest land 47.34 Ha @ Rs. 10,43,000/- = Rs. 4,93,75,620/-	3254.32
2.	Loss of animal husbandry productivity including loss of fodder	No animals in the area, nor any other animal's fodder depend on the diverted area. However, 10% of NPV is applicable i.e. 10% of Rs. 3254.32 Lakh.	32.5432
3	Cost of human resettlement	Not Applicable, since there is no displacement of people.	NIL
4.	Loss of public facilities and administrative infrastructure (Road, building, schools, dispensaries, electric lines, railways etc.) on forest land which would require forest land if these facilities were diverted due to the project.	Not Applicable, since these facilities/infrastructures are not available inside the proposed forest diversion area.	NIL
5	Possession value of forest land diverted.	30% of Environmental Costs (NPV) i.e 30% of Rs 3254.32 Lakh.	976.296
6	Cost of suffering of oustees.	Not Applicable, since there is no displacement of people.	NIL
7	Habitat Fragmentation Cost.	50% of NPV applicable as thumb rule i.e. 50% of Rs. 3254.32 Lakh.	1627.16
8	Compensatory Afforestation and soil & moisture conservation cost.	Cost of Compensatory Afforestation including soil & moisture conservation cost.	1812.319
		TOTAL	7702.6382

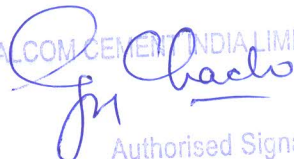

 CALCOM CEMENT INDIA LIMITED
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Table C – Estimation of Benefit for Forest Diversion in Cost Benefit Analysis (as per guideline of MoEF&CC dated 1st August 2017)

Sl. No.	Parameters	Particulars/Remarks	Amount (Rs. in Lac)
1.	Increase in Productively attribute to the specific project.	i. Mineable Reserve Quantity of limestone in ML Area of 417.5 Hectares = 162.54 Million Tons. ii. Limestone Value @ Rs. 425/ton (IBM 12 months Average Sale Price Value till March 2018) iii. Value of the Limestone Reserve = 162.54 Miln Ton x Rs.425/ton	690795.00
2.	Benefits to economy due to the specific project.	For detail computation please refer to the Note 1 bellow.	177021.96
3.	No. of population benefited due to the specific project.	There are 6 villages within a radius of 5Km having a total population of 21,060 persons. Considering 5 members in a family there will be 4216 families benefitted from the project. Assuming minimum benefit of Rs 1000/- to each family for 22 years of balance mining period will be Rs. 1000 x 4216 families x 22 years	927.52
4.	Economic benefits due to of direct and indirect employment due to the project.	The direct and indirect employment related with the mining project including management and workforce will be nearly 240 persons and taking average annual emoluments amount of Rs 5 lakh per person of 22 years. i.e Rs. 5 Lakh x 240 persons x 22 years.	26400.00
5	Economic benefits due to Compensatory Afforestation.	Rs. 4.86 lakh x 425.5 Ha (as per guideline issued by MoEF vide letter no. F. No. 5-3/2007/FC dtd. 05.02.2009.)	2067.93
		Total	897212.41


Cost Benefit Ratio i.e. Cost : Benefit = Rs. 7702.638 Lakh : Rs. 897212.41 Lakh i.e. 1: 116


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NOTE 1: Computation of Benefit to the Economy

The Social benefits arising from the project constitute royalty of limestone, taxes and duty which form the considerable component. It is calculated as under:

Sl. No.	Parameters	Particulars/Remarks	Amount (Rs. in Lac)
a.	Royalty on limestone	@ Rs. 80/ton i.e 162.54 Miln ton x Rs. 80	130032.00
b.	Cess Limestone payable to Welfare Commissioner @ Re 1.0 / Ton	@ Re. 1 /ton i.e 162.54 Miln ton x Re. 1	1625.40
c.	NPV to be paid on total forest land being diverted	NPV for Open Forest Land 378.16 Ha @ Rs. 7,30,000 = Rs. 27,60,56,800/- NPV for very dense forest land 47.34 Ha @ Rs. 10,43,000/- = Rs. 4,93,75,620/-	3254.32
d.	Deposit to District Mineral Fund @ Rs. 24 / ton	162.54 Mil Ton x Rs. 24	39009.60
e.	National Mineral Exploration Fund @ Rs. 1.6 / Ton	162.54 Mil Ton x Rs 1.60	2600.64
f.	Compensation consideration value of the Compensatory Afforestation land to Autonomous Council.	CA land value Rs. 5 Crore.	500.00
		TOTAL	177021.96


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