

COST BENEFIT ANALYSIS

PARAMETER FOR EVALUATION LOSS OF FOREST HAS BEEN ACCORDED FOR A PERIOD OF 50 YEARS AS PER GOVERNMENT DIRECTIVES

Quantum of Forest : 190.42 Hectare for Mining of Limestone
Land applied for

Name of Project : Manikgarh Cement, Gadchandur

Life of Project : About 50 years

Division : Chandrapur Division, Chandrapur.(MS.)

Sl No	Parameter & Description	Evaluation of losses (Amount Rs. In Lakh)
1.	Forest loss calculations	
	Present NPV for 1 Ha of Forest land	6.26Lakh/Ha
	Present NPV for 190.42 Ha forest land	1192.029 Lakh
	Rate of CA for 1 Ha forest land	4.1035 Lakh/Ha(2015-16)
	Value for CA for 190.42 Ha forest land	781.3885 Lakh
	Double the amount of C.A.	Not Applicable
	Total Loss	1973.418 Lakh
2	Loss of animal husbandry productivity including loss of Fodder	There is no loss of animal husbandry productivity.
3	Loss of human resettlement	No village and no population is affected due to this project. There will be no loss involved on account of human resettlement.
4	Loss of public facilities and administrative infrastructure (Roads, Building, Schools, dispensaries, Electric line, Railway line, etc) on forest land for which would require forest land if these facilities were diverted due to the project.	No public facilities and administrative infrastructure such as roads, buildings, schools, dispensaries, electric line, railways etc is affected by this project. There will be no loss involved on this account

5.	Environmental Losses (Soil erosion, effect on hydrological cycle, wildlife habitat, Microclimate upsetting of ecological balance)	The details of Environmental losses are determined as per given thumb rule for the loss of forest area required for the project are as follows: 1) Density of the forest :0.3 2) Average density for the forest area proposed to be acquired for the project is -0.3 3) Environmental value per Hectare for density 1.0 (Rs. In Lakh)- 126.74 Lakh 4) Environmental loss per hectare for forest density to be acquired $0.3 \times 126.74 = 38.022$ Lakh/Hectare 5) Total forest area required for the Project -190.42 Hectare 6) Total environmental losses for the Forest area to be acquired – $190.42 \times 38.022 = 7240.149$ Lakh Rs.
6.	Suffering of an oustees	No population is affected due to construction of this project and hence there will be no losses on this account.
7.	Total Forest Loss	<u>9213.567 Lakh</u>



EXECUTIVE PRESIDENT (MINES)
MANIKGARH CEMENT

COST BENEFIT ANALYSIS

I – CALCULATION OF COST

PARAMETERS FOR EVALUATION OF LOSS OF FOREST

Name of Mine : Manikgarh Cement

Quantum of forest land applied for : 190.42 Ha.

Life of project : 50 Years

Division : Central Chanda Division, Chandrapur (MS.)

Particulars	Evaluation of losses	Annual losses (Rs.Lakh)	Qualified in monitory terms for a period of 50 years (Rs. In Lakh)
<u>PARAMETER NO.1</u> Loss of value of Timber, fuel wood and minor forest produce on an annual basis including loss of Man hours per annum of people who drive livelihood and wages from harvest of these commodities (to be quantified and expressed in Monitoring terms)	The details of loss of timber, fuel wood and minor forest produce etc. for the forest land required for Manikgarh Limestone mines project :- A) Timber, fuel wood & bamboo B) Minor forest produce- Tendu leaves (Annually) C) Loss of mandays of the employment to the people dependent on this forest patch for livelihood (Annually). (Due to no trees available in the proposed land)	122.63+50.00	5098.88+2500
			Total 7598.88
<u>PARAMETER NO.2</u> Loss of animal husbandry productivity including loss of fodder	There is no any loss of animal husbandry productivity	NIL	NIL
<u>PARAMETER NO.3</u> Loss due to human resettlement	As there is no human resettlement due to diversion of forest land ,hence there will not be any loss on this account	NIL	NIL

<u>PARAMETER</u> <u>NO.4</u> Loss of public facilities and administrative infrastructure	No public facility and administrative infrastructure like road etc. exists on forest land which is proposed to be diverted in this project	NIL	NIL
<u>PARAMETER</u> <u>NO.5</u> Environmental losses	Average density of forest area proposed to be acquired for the project is 0.30 Environmental value per HA for average density (0.3) considering @ Rs. 126.74 Lakh per HA for 1.0 forest density.	190.42x126.74x0.3= 7240.149 Lakh Rs/Year.	7240.149x50 years= 362007.50 Lakh Rs
<u>PARAMETER</u> <u>NO.6</u> Suffering to oustees	No human habitation exist on forest land proposed to be diverted, hence no loss on account of suffering to oustees from forest land	NIL	NIL
Grand Total			Rs.369606.38 Lakh



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MANIKGARH CEMENT

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II – CALCULATION OF BENEFITS

PARAMETERS FOR EVALUATION OF BENEFIT (NOTWITHSTANDING LOSS OF FOREST)

Mining Project : Manikgarh Cement
(A Divn. of Century Tex. & Ind. Ltd)

Quantity of Forest land applied for : 190.42 Hectare for Mining of Limestone.

Life of Project : 50 Years

Sl No	Parameter	Evaluation benefit	Qualified in Monitory terms per annum	Qualification of benefit in Monitory terms connected to the period (50 years evaluation of Cement Plant)
1.	Increasing of productivity attri-buted to Specific Project	Additional 2.8 Million Tons/annum Cement will be produced average sale value @Rs.4350 per Ton , Lime stone consumption 4.2 million tons per annum	121800 Lakh	6090000 Lakh
2.	Benefit to the Government	a) Royalty to the State Govt. @ Rs 80/MT b) Sale Tax @ Rs 14.5% /ton of sale value c) Welfare Cess to Central Govt. @ Rs 1/MT d) Excise duty of Cement @ 400/MT e) Education Cess of Cement @ Rs 8/MT f) Pollution Fee	3360 lakhs 17661 Lakhs 42.00 Lakhs 11200 lakhs 224Lakhs 120 Lakhs	168000 Lakhs 529830 Lakhs* 2100 lakhs 560000 Lakhs 11200Lakhs 6000 Lakhs
			Total	127130 Lakh
3.	Population benefit	1. Population benefit within this project. 2. Population indirectly benefited.	Not expressed in Monitory terms	
4.	Employment Potential	260 workforce including workmen and staff will be additionally employed.	459 Lakhs	22945 Lakhs
5.	Cost of acquisition of facility on non forest land wherever feasible	Occurrence of limestone is a natural phenomena and alternate site is not feasible	NIL	NIL
6.	Loss of (a) agricultural & (b) husbandry production the to diver-sion of forest land	(a) Agriculture – Nil (b) Animal – Nil	NIL	NIL

7.	Cost of rehabilitation displaced persons as different from compensatory amount given for displacement.	Forest land applied for is devoid of human habitation.		NIL
8.	Cost of supply of tree fuel wood to workers residing in or near forest area during the period of construction	Project is giving Fuel Allowance to the workers for domestic use as such supply of fuel wood does not arise.		NIL
			Total :	7390075

**Considered 30 years only as Sales Tax as exemption is available for 20 years.*

Place: Gadchandur

Date:



EXECUTIVE PRESIDENT (MINES)
MANIKGARH CEMENT

MANIKGARH CEMENT, GADCHANDUR
COST BENEFIT ANALYSIS

ABSTRACT

Total area of forest land involved : 190.42 Hect.

Life of Project : 50 ears

A) TOTAL FOREST LOSSES

Parameter 1	:	7598.88
Parameter 2	:	NIL
Parameter 3	:	NIL
Parameter 4	:	NIL
Parameter 5	:	362007.50
Parameter 6	:	NIL

Total : : **369606.38**

Total Forest Area Required for the Project : 190.42 Hect.

Loss per Hect. for Forest Area : 1941.006 1Lakh/Hect.

B) TOTAL BENEFITS TO THE GOVERNMENT & SOCIETY FROM THE PROJECT TO BE ACQUIRED IN 50 YEARS

Parameter 1	:	6090000 Lakh
Parameter 2	:	1277130 Lakh
Parameter 3	:	Intangible gain
Parameter 4	:	22945 Lakh
Parameter 5	:	NIL
Parameter 6	:	NIL
Parameter 7	:	NIL
Parameter 8	:	NIL

Total : : **7390075 Lakh**

Benefit per Hect. of the Forest Land to be acquired : **38809.34 Lakh/ Ha**

Loss per Hect. of the Forest Land to be acquired : 1941.0061 Lakh/Ha

C NET BENEFIT FROM THE PROJECT : 7390075 Lakh

D ENVIRONMENTAL LOSSES. : 369606.38 Lakh

BENEFIT COST RATIO C:D : 19.19:1

Looking to the cost benefit ratio, the Project is very much instrumental in the growth of national economy and hence requested for an early clearance from environmental angle.



EXECUTIVE PRESIDENT (MINES)
MANIKGARH CEMENT

DY CONSERVATOR OF FORESTS,
CENTRAL CHANDA DIVN, CHANDRAPUR