

COST BENEFIT ANALYSIS

A. PARAMETERS FOR EVALUATION OF LOSS OF FORESTS

Sl No	PARAMETERS	MEDIUM & MAJOR IRRIGATION, HYDRO ELECTRIC, LARGE MINING & OTHER MISC., PROJECTS
1	Loss of value of timber, fuel wood and minor forest produce on annual basis including loss of man hours per annum of people who livelihood and wages form the harvest of these commodities.	The loss fuel wood to a tune of 3t/Ha @ Rs. 300/ton. For 50.29 Ha, i.e., $50.29 \times 3 \times 300 \times 20$ years = Rs. 905,220 /- No loss of Man Hours as no one depends for livelihood on this land.
2	Loss of animal husbandry productivity including loss of fodder.	The loss of fodder estimated for 50.29 Ha will be (Hill grass cost @ 5t / Ha @ Rs. 100/ ton.) $50.29 \times 5 \times 100 \times 20$ yrs= Rs. 502,900 / annum
3	Cost of human resettlement	No resettlement
4	Loss of public facilities and administrative infrastructure on forest land, or which would require forest land if these were diverted due to project.	Not applicable
5	Environmental losses : (Soil erosion, effect on hydrological cycle, Wild Life habitat, Microclimate, upsetting of Ecological balance).	The estimated loss as per the guidelines, for a tree density of 1.0 will be Rs.126.74 lakhs to accrue over a 50 yr. Period. Therefore, the environmental loss for 50.29 ha. for a density of 0.1 over a period of 20 yrs (life of mine) would be $50.29 \times 126.74 \times 0.1 \times 20 / 50$ = Rs. 254.95 lakhs
6	Surffering to oustees	No one is ousted as nobody stays in the applied area.

B. PARAMETERS FOR EVALUATION OF BENEFITS, NOTWITHSTANDING LOSS OF FORESTS

	PARAMETERS	NATURE OF PROPOSAL: MINING PROJECT
1	Increase in productivity attributable to the specific project	The area has a good Mn ore proved deposit amounting to 9.66 lakh tonnes. This area can produce 9.66 lakh tons @0.14 lakh tons / annum (average)
2	Benefits to Economy	Every year a quantity of 0.14 lakh tons (maximum) could be produced fetching 2.80 crore rupees
3	No. of population benefited	100 people could be benefited.
4	Employment potential.	33 workers and staff could be employed.
5	Cost of acquisition of facility on non-forest land wherever feasible.	Not applicable as the Ore deposit is in Forest area.
6	Loss of (a) agricultural & (b) animal husbandary production due to diversion of forest land.	There will be no loss of agriculture. Only fodder to a tune of Rs.502,900 is expected to be lost.
7	Cost of rehabilitating the displaced persons as different from compensation amounts given for displacement.	Not applicable
8	Cost of supply of free fuel-wood to workers residing in or near forest area during the period of construction.	As the ore body is already exposed on the surface, extraction of ore will be underway without any gestation period. Hence, no construction period.

C. SUMMARY OF COST BENEFIT ANALYSIS FOR THE PROJECT OVER A PERIOD OF MINES LIFE

LOSS (A)	Rs. In Lakhs	BENEFIT (B)	Rs. In Lakhs
1. Environment Loss	254.95	Profit from mining after	19,320
2. Loss of Fuel Wood	9.05	deducting the expenses	
3. Loss of Fodder	5.03	(@ Rs.2000 / tonne)	
4. Supply of fuel wood	NIL	i.e., 9.66 lakhs x 2000	
TOTAL	269.03		19,320

Net benefit from the project over 20 years period = 19320-269.03
= Rs. 19051 lakhs (approx)
or Rs. 190.51 Crores

Hence, Cost benefit Ratio = 1 : 71