

**CHECK LIST SERIAL NUMBER: - 12**  
**JSW UTKAL STEEL LTD.**

**COST BENEFITS ANALYSIS (CBA) REPORT**

[AS PER MoEFCC GUIDELINE No. 7-69/2011-FC (Pt), DATED 01<sup>ST</sup> AUGUST, 2017]

❖ **PURPOSE FOR COST BENEFIT ANALYSIS:**

Cost Benefit report is required for making online application in Part-I, G.I.a. The report has been prepared on the basis of MoEFCC Guideline No. 7-69/2011-FC (Pt), dated 01<sup>ST</sup> August, 2017.

❖ **NAME OF PROJECT:**

- (I) Iron Ore Grinding & De-Sliming/Beneficiation Plants and Slurry Pumping Station &  
 (II) Water Intake System

❖ **BREAK UP OF TOTAL LAND (In Ha) REQUIRED FOR THE PROJECTS:**

Project	Land Allotment Status	Total Area	Non Forest Land considered as Forest as on 25.10.1980 (SABIK RECORD)	Revenue Forest land (HAL RECORD)	Total Forest Land	Total Non-Forest Land
(1)	(2)	(3)	(4)	(5)	(6)=(4)+(5)	(7)
(a) (Grinding Unit)	Leased out land by IDCO	74.366	20.269	0.00	20.269	54.097
	Under process of Acquisition through IDCO	3.811	0.316	1.045	1.361	2.450
	<b>Sub-Total -(a)</b>	<b>78.177</b>	<b>20.585</b>	<b>1.045</b>	<b>21.630</b>	<b>56.547</b>
(b) (Water Intake System)	Under process of Acquisition through IDCO	2.328	1.041	0.00	1.041	1.287
	<b>Sub-Total-(b)</b>	<b>2.328</b>	<b>1.041</b>	<b>0.00</b>	<b>1.041</b>	<b>1.287</b>
<b>Grand Total</b>		<b>80.505</b>	<b>21.626</b>	<b>1.045</b>	<b>22.671</b>	<b>57.834</b>

❖ **BASIS OF CALCULATION:**

S. No.	Item	Unit	Details
1	Total forest area to be diverted	Ha	22.671
2	Net Present Value (NPV) [Class-III Forest, Canopy Density below 0.4]	Rs. Lakh	Rs. 6.26 Lakh per Ha



❖ **TABLE-COST: ESTIMATION OF COST OF FOREST DIVERSION**

SN	Parameters	Amount (Rs. In Lakh)	Basis of Calculation
1	Ecosystem services losses due to proposed forest diversion	141.92	NPV= Rs. 6.26 per Ha x 22,671
2	Loss of animal husbandry productivity, including loss of fodder.	14.19	10% of NPV
3	Cost of human resettlement	NIL	Not Applicable, as there is no PAF displacement within the project area.
4	Loss of public facilities and administrative infrastructure (Roads, building, schools, dispensaries, electric lines, railways, etc) on forest land, which would require forest land if these facilities were diverted due to the project.	NIL	Not Applicable, as there is no public facility exists with the project area.
5	Possession value of forest land diverted	42.58	30% of NPV
6	Cost of suffering to oustees	NIL	Not Applicable, No. of PAFs: NIL
7	Habitat Fragmentation Cost	70.96	50% of NPV
8	Compensatory afforestation and soil & moisture conservation cost	17.90	Plantation cost: Rs.78,830.20 per Ha (As per approved norms by PCCF, Odisha)
<b>TOTAL COST (1 to 8)</b>		<b>287.55</b> Say <b>288.00</b>	

❖ **TABLE-BENEFITS: EXISTING GUIDLEINES FOR ESTIMATING BENEFITS OF FOREST DIVERSION IN CBA**

**(PARAMETERS FOR EVALUATION OF BENFITS NOT WITHSTANDING LOSS OF FOREST)**

SN	Parameters	Amount (Rs. In Lakh)	Nature of Proposals/Basis of Calculation
1	Increase in productivity attribute to the specific project	NIL	Iron ore will be procured from nearby mines/local sources & will be processed in Grinding & De-Sliming Plants to upgrade the Fe content in the iron ore & further, iron ore slurry concentrate will be produced to use in our proposed Integrated Steel Plant in Jagatsingpur District. Since iron ore concentrate will be used in our own plant so productivity enhancement has been considered as NIL.
2	Benefits to economy due to the specific project	93424.87	Per Annum
3	No. of population benefited due to specific project	25,000	Including dependent
4	Economic benefits due to of direct & indirect employment due to the project	4390.00	Direct: 200 Indirect: 300
5	Economic befits due to Compensatory Affrestation	127.21	The estimated cost of NPV for present value is taken as benefit by CA i.e. Present value x $(1+i)^N = 17.90 \times (1+0.04)^{50}$ (i=interest, N=Time)
<b>TOTAL BENEFITS (1 to 5)</b>		<b>97,942.08</b>	

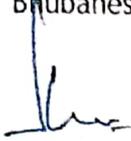


❖ COST BENEFIT ANALYSIS:

Benefit - Cost Ratio =  $TB / TC = 1: 340.08$  [It is inferred that the project is economically feasible]

Date: -08.03.2019

Place: Bhubaneswar



AUTHORIZED SIGNATORY  
For JSW UTKAL STEEL LTD.

DIVISIONAL FOREST OFFICER  
KEONJHAR DIVISION