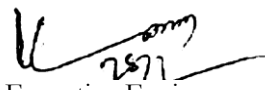
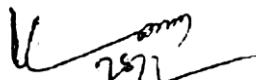


PARAMETERS FOR EVALUATION OF LOSS OF FORESTS				
FOR USE OF FOREST LAND FOR NON FOREST PURPOSE FOR ' CONSTRUCTION OF 4-LANE DEDICATED COAL CORRIDOR ROAD FROM BANKIBAHAL TO BHEDABAHAL ROAD FROM 0/0KM TO 30/811KM				
Sl.N o.	Particulars			Amount
1	a) Loss of Timber and Fire wood=6480 nos of different species and girth will be specified for which the total no. of units comes to 4218.45 unit and rate per unit for the year 2014-15 is 2765/unit			11664014.00
	b)Loss of fire wood: for 6480 nos of trees= 13.5mt. @ Rs 4300/MT			58050.00
	c) Loss of minor forest products			
	MFP	YIELD	MARKET VALUE	
	Mahul ( 753 ) nos	1 qtl per tree	Rs 800.00per 1 qtl	1108000.00
	Jamu ( 131 ) nos	1 qtl per tree	Rs 800.00per 1 qtl	
	Mango ( 501 ) nos	1 qtl per tree	Rs 800.00per 1 qtl	
d) Loss of man power approximately 600 mandays @ Rs 213.5 per mandays			128100.00	
2	Loss of animal husbandary productivity including loss of fodders			
	(a )Loss of animal husbandary			
	( b ) Loss of Fodder ( ( 26.99 ) hectare @ rs 4000/hectare Taking 50% of area			364365.00
2( b)	Loss of animal husbandary productivity including loss of fodders			
	Losss of fodder= 4 cattle@ 2.02 hect. Of forest land per cattle required for fodder @ Rs 0.75x365x4=(over 6.93 hect.) @ Rs 3000 per ha.			20790.00
3	Cost of human resettlement			0.00
4	Loss of Public utilities and administrative infrastructure ( Roads, Buildings, School, Dispensaries,Electric Line,Railway etc. ) which would require forest land if these facilities were diverted due to the forest			0.00
5	Enviornment loss ( Soil erosion, affect of hydrological cycle, wild life habitat,microclimate upsetting of ecological balance ) as per thumb rule prescribed enviornmental loss due to loss of forest over 26.99 hect, area of forest density 0.2 of accrud over a period of 50 years 181 lakhsx.2x26.99/50			1954076.00
6	Suffering of Out set			0.00
7	NPV cost ( 26.99x1.35 lakh )			3643650.00
TOTAL				18941045.00

  
 Executive Engineer  
 Sundargarh ( R&B) Division

**PARAMETER FOR EVALUATION OF BENEFIT NOT WITHSTANDING LOSS OF FOREST**

SL. NO.	PARAMETER	SOCIAL AND ECONOMICAL DEVELOPMENT AFTER EXPANSION OF
1	Industrial Growth	This Road will connect The Coal mines at Bankibahal to Bhedabahal S.H. 10 facilitating the transportation of coal and it generate maximum revenue for the state government. Expansion of this road will attract private company to set industries as this road will connect coal corridor road and it will improve the revenue generation and development of the state.
2	Tribal Zone	The district is a tribal district and this road passes through the tribal areas. Expansion of this road will provide a improve and safe connecting to local villages which expand the scope of work and will improve the life style
3	Small and Medium scale industry	Expansion of this road will provide connectivity to the other parts of the state as this road will be connected to the SH 10 the express way . There fore this road will attract small and medium scale industries to develop and grow which improve the growth rate of state.
4	Employment	Expansion of this road generate employment for Local people resulting improve of Life Cycle of people.
5	Reduce Accidental Zone	Widenng of this road will decrease the number of accidents happened
6	Saving of Fuel Consumption	Widenng of this road will provide safe,one way and smooth ride availability of vehicles. It will lead to saving of fuel consumption.
7	Income of Traffic	This road will connect to the Jharsuguda district as well as to the other industrial town and subsequently to other state, the traffic may increase in many folds which will lead to employment generation and other revenue generation to the state.



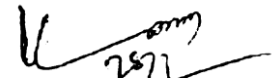
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Sundargarh ( R&B) Division



## SUMMARY OF COST BENEFIT ANALYSIS (RATIO )

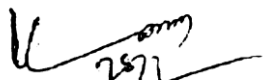
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|---|--|--------|-------|
| 1 | Total Loss per annum due to loss of timber, fire wood, minor forest product and environmental loss | 1.89   | crore |
| 2 | Total benefit per annum to the economy due to the four lanning of the existing 2- lane road        | 391.09 | crore |

Hence the cost benefit ratio of this project is 1.:206



Executive Engineer  
Sundargarh ( R&B) Division

PARAMETERS FOR EVALUATION OF BENEFIT NOT WITHSTANDING LOSS OF FOREST		
Sl.No.	Parameters	Amount
1	Benefit to economy and royalty towards production and transportation of coals ie $65 \times 100,00,000 \text{ tons} = 65 \text{ crore}$ B. Employment Generation ie 4000 nos $4000 \times 213.5 \times 360 = 30.74 \text{ crore}$	95.74 crore
2	Constructon cost of road from bankibahal to Bhedabahal from 0/0km to 30/811km	236.41 crore
3	Operation and Maintenance Cost of the Road per year = $11.82/3 \text{ crore}$	3.94 crore
4	Revenue generation from other state due to good connectivity = 20 crore	20 crore
5	Revenue generation from setting up of Industry, employment generation	20 crore
6	Saving of Fuel, Reduce accident	5 crore
7	Revenue from natural materials for the construction of the road = 10 crore	10 crore
		391.09 crore

  
 Executive Engineer  
 Sundargarh ( R&B) Division