

Annexure-XXVII

Cost Benefit analysis in respect of the proposal for diversion\re-diversion of 133.579 ha. of Revenue Forest Land (Gramya Jungle, Jungle) including 3.392 ha. of forest block-27 (Daitari PF & Tomka PF) under Sakinda & Tomka Range of Cuttack Forest Division for widening and strengthening of Tomka-Mangalpur Road in Sukinda & Danagadi Tahasil of Jajpur District.

Forest Block-27 (Daitari PF & Tomka PF) falls under Tropical moist deciduous forest type as per latest working plan. Therefore, taking the open revenue forests over 130.187 ha. and forest block-27 over 3.393 ha., the forest area totalling to 133.579 ha. is put under Ecavalue class-I (open forest) with cost of NPV @ Rs. 7,30,000/- per ha. in pursuance to MoEF letter F. No. 5-3/2007 FC dt. 5.2.2009 and the cost of forest diversion has been calculated as under :

Table - B : Estimation of cost of forest diversion.

Sl. No.	Parameters	Rate in lakhs	Cost in lakhs
1	Eco system services losses due to proposed forest diversion	7.3 lakhs x 133.579 ha.	975.126
2	Loss of Animal Husbandry Productivity, including loss of fodder	975.126 lakhs x 10%	97.512
3	Cost of Human re-settlement	-	0.00
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	-	744.836
5	Possession value of forest land diverted	975.126 lakhs x 30%	292.537
6	Cost of suffering to oustees	-	0.00
7	Habitat fragmentation cost	975.126 lakhs x 50%	487.563
8	Compensatory Afforestation and Soil & Moisture Conservation cost.	-	285.846
	Total estimation of cost of forest diversion		2883.42


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Table-C : Esisting guidelines for estimating benefits of forest diversion in CBA.

Sl. No.	Parameters	Remarks
1	Increase in productively attribute to the specific project.	The road is not also for public purpose to the increase the access to social sector and reduction in time and cost but also to increase economic activity local employment opportunity in mining sector which are immediate economic benefit of the project. Reduction of vehicular traffic in mining sector and increase in transportation of chromite ore to different destinations. In the present scenario with lot of traffic congestion around 50.00 lakhs M.T. of chrome ore is being transported per annum. With widening of the road additional 4.0 lakhs M.T. can also be transported smoothly for which Rs. 108 corer (Rs. 9,000/- per M.T. x royalty 30% x 4.0 lakhs M.T. of chrome ore transports) will be added to the state exchequer in terms royalty.
2	Benefits to economy due to the specific project	Benefit to general public over a period of 50 years and more cannot be translated in the financial mode. This development project will improve the socio economic condition of this back ward area besides enhancing royalty from the mining sector to the state.
3	Number of population benefited due to specific project.	60,000 nos.
4	Economic benefits of direct and indirect employment due to the project	Rs. 6305.557 crore (11517 persons x Rs. 300/- on an average wage x 365 working days x 50 years)
5	Economic benefits due to Compensatory	Rs. 19.697 crore (Rs. 7.3 lakhs x 2.02 % x 133.579 ha. x 50 years)
	Total	Rs. 6433.254 crore or 643325.4 lakhs

CB ratio (calculation is done on available information against the parameters) = **1:223.**


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