

**COST BENEFIT ANALYSIS DUE TO FOREST DIVERSION (39.401 Ha.) OF,
BUDHABALANGA BARRAGE PROJECT UNDER MAYURBHANJ
INVESTIGATION DIVISION, UDALA**

AS PER MoEF &CC GUIDLINE NO 7-69/2011-FC (Pt). Date-01.08.2017

TABLE – B

ESTIMATION OF COST OF FOREST DIVERSION

Sl. No	PARAMETERS	Amount in Lakhs
1	Ecosystem services losses due to proposed forest diversion (NPV) @ Rs. 7.5 Lakhs per Ha considering the density of forest 0.5 and class of forest Eco- Value Class.I	295.5075
2	Loss of Animal husbandry productivity, including loss of fodder (10% of NPV)	29.55075
3	Cost of human resettlement	
4	Loss of public facilities and administrative infrastructure (Roads, building, schools, dispensaries, electric lines, railway, etc.) on forest land, which would require forest land if these facilities were diverted due to the project.	Nil
5	Possession value of Forest land Diverted (30% of environmental cost (NPV) due to loss of forest or circle rate of adjoining area in the district should be added as a cost component as possession value of forest land whichever is maximum).	88.65225
6	Cost of suffering to oustees	
7	Habitat Fragmentation Cost (While the relationship between fragmentation and forest goods and services is complex, for the sake of simplicity the cost due to fragmentation has been pegged at 50% of NPV applicable as a thumb rule)	147.7538
8	Compensatory Afforestation and soil & moisture conservation cost	84.8814
	Total Loss (1-8)	646.3457

TABLE – C**ESTIMATE BENEFITS OF FOREST DIVERSION IN CBA**

Sl. No.	PARAMETERS	Compliance in lakhs
1	Increase in productivity as-attribute to the specific project	8253.30
2	Benefit to Economy due to the specific project	5085.11
3	No. of population benefited from the specific project	15000 nos.
4	Economic benefits due to of direct and indirect Employment due to the project	30.00
5	Economic benefits due to Compensatory Afforestation. (The benefit from such Compensatory Afforestation accruing over next 50 years manetized and discounted to the present value should be included as benefit by Compensatory Afforestation). For next 50 years the estimated cost of NPV for present value is taken as benefit by Compensatory Afforestation i.e. Present value $X (1+i)^N = 84.8814X(1+0.04)^{50}$ (i=interest, N=Time)	603.2252
	Grand Total (SL. No 1 to 5)	13,971.6352

Cost Benefit Ratio: - 1:21.61


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