## **COST BENEFIT ANALYSIS**

(As per MOEF & CC Guideline no. 7-69/2011-FC(pt.) Dated 1<sup>st</sup> August 2017)

## Table B: Estimation Of Forest Diversion

S.No.	Parameters	Estimated Cost
1	2	3
1	Ecosystyem Services Losses due to Proposed forest diversion	The estimated NPV (Economic value of loose of ecosystem services) of the 2.975 hect. Forest land is Rs. 2388925.00 Lakhs
2	Loss of animals husbandry productivity including loss of fodder	10% of NPV = Rs 238892.50
3	Cost of human resettlement	There is no displacement due to the project. Therefore the cost of human settlement is Rs. 0.00
4	Loss of public facilities and administrative infrastructure(Roads Buildings Schools Dispensaries Electric lines Railways etc.) on which would require forest land if these facilities were diverted due to the project.	No loss of public facilities and administrative infrastructure due to the project. Therfore Loss is Rs. 0.00.
5	Possession value of Forest land Diverted	30% of NPV = 716677.50 lakhs
6	Cost of suffering to oustess	No suffering of oustsees. Therfore the cost of suffering to oustees is Rs 0.00
7	Habitat Fragmentation Cost	50% of NPV = 1194462.50 lakhs
8	Compensatory Afforestation and soil & Moisture Conservation cost	The estimated cost for raising the C.A. 2.975 Hect. Is Rs. 1519992.00
	Total Environmental Loss	Rs. 6058949.50

सहायक अभिग्नन्ता अस्थाई खण्ड लो०नि०वि० थत्यूड (टि०ग०)। अधिशासी अभियन्ता, अस्थाई खण्ड लो०नि०वि० थत्यूड (टि०ग०)।

## Table C: Estimation of cost of Forest Diversion

Taking age of the road = 50 years

S.No.	Parameters	Estimated Cost
1	2	3
1	Increase in productivity attributable to the Specific Project	Vegetable and fruits = 90 Qtl. @ 1200.00 =108000.00 For 50 years = 108000 x 50 =54.00 lakh
2	Benefits to economy due to the Specific Project	About Rs. 4.00 lakh due to milk production, vegetable and fruits, tourism and other mining winseal material.
3	No. of Population benefited due to the Specific Project	621 Peoples as per census.
4	Economic benefits due to the direct and indirect employment due to the project	(i) 100 temporary labours in this project will get employment to local youth, their social, economic, cultural, emotional life that will be100 x 300 x 365 x 2 = 219.00 lakh (ii) Making Development =10 shops as established after construction of road taking minimum benefit shop @ month =10x30x250x12=9.00 lakh. (iii) Tourism activities will be increased by atleast 5 people benefit. For years = 50000x5x50= 125.00 lakh
5	Cost of acquisitionof facility on non forest land nearer farmable.	Total naap land 750 x 9.00= 6750 = 0.675 hect @ 2200000.00= 14.85
	Total Benefit derived from the project	Rs. 425.85 lakh

Benefit Cost ratio = 42585000/6058949.50 = 7.02

It is clear from above analysis that construction of Bharvakatal Shripur motor road is more beneficial than environmental losses.

सहायके अभिग्रन्ता अस्थाई खण्ड लो०नि०वि० थत्यूड (टि०ग०)। अधिशासी अभियन्ता, अस्थाई खण्ड लो०नि०वि० थत्यूड (टि०ग०)।