NAME OF PROJECT:- WIDENING AND STRENGTHENING OF AREK SISODRA PUNI SARBHON ROAD KM 0/0 TO 7/4, TA-BARDOLI, DIST-SURAT.

COST BENIFIT ANALYSIS

District	Road	Length (m)	Width (m)	Area (Ha)
Surat	AREK SISODRA PUNI SARBHON ROAD KM 0/0 TO 7/4	7400	0.75 m (on RHS)	0.555
		7400	0.75 m (on LHS)	0.555
Total Area in Ha				1.11

Table B – Estimation of cost of forest diversion		
Sr. No.	Parameter	Description
1	Ecosystem services losses due to proposed forest diversion (Economic value of loss of eco system services due to proposed forest diversion has been taken as the "Net Present Value (NPV)" of the forest land being diverted as prescribed by the Central Govt. i.e. MoEF&CC. NPV rates taken as 4.38 lacs per Ha under Eco Class IV of Open Density Forest)	NPV towards 1.11 Ha of forest land works out as **Rs. 5.67 Lacs** (1.11 x 4.38 lacs = 4.82 Lacs)
2	Loss of animal husbandry productivity, including loss of fodder	There will be no loss of productivity of livestock due to construction of the road. However as per MoEF guideline same has been taken as 10% of the NPV i.e. **Rs. 0.48 Lacs**

3	Cost of human resettlement.	NIL As there is no displacement of people.
4	Loss of public facilities and administrative infrastructure	NIL No public and administrative facilities are affected.
5	Possession value of forest land diverted (Taken at 30% of NPV)	30% of NPV as per MoEF guideline is **Rs. 1.45 Lacs**
6	Cost of suffering to oustees	Nil As there is no displacement of people.
7	Habitat Fragmentation Cost (Taken as 50% of NPV)	50% of NPV as per MoEF guideline is **Rs. 2.41 Lacs**
8	Compensatory afforestation and soil conservation cost (Arrived at Rs. 2,00,000/- per Ha for double degraded area i.e. 2.708 Ha.)	Rs. 2.0 Lacs/Ha for CA and soil and moisture conservation cost = 2.0 x (1.11 x 2) = **4.44 Lacs**
Total Cost		**Rs. 13.6 Lacs**

Table C – Estimation of Benefits of forest diversion		
Sr. No.	Parameter	Description
1	Increase in productivity attributed to the project	Cost of the Road is **700.00 Lacs.** The project would result in substantial financial and social benefits. Increase saving shall accrue in vehicle operating and travel costs. The trading of this region will get a tremendous boost.
2	Benefits to the economy to the specific project.	**700.00 Lacs** By infusion of **700.00 Lacs,** various sectors like manufacturing industry, manpower, engineering, transportation etc. will get benefitted. Since this figure has already been considered in Sr. no. 1, this is not added to the total benefits.
3	No. of population benefitted due to specific project	The talukas and villages near Surat and nearby districts shall be benefitted.
4	Economic benefits due to direct and indirect	Approx 33000 man days employment

	employment due to project.	
5	Economic benefits due to compensatory afforestation	= 2.00 Lacs/Ha x (1.11 x 2) = **4.44 Lacs**
Total Benefit		**Rs. 704.44 Lacs**

Cost Benefit Ratio = Total Environment and Forest loss : Project Benefit

Cost Benefit Ratio = Rs. 13.6 Lacs : Rs. 704.44 Lacs

Cost Benefit Ratio = 1 : 51.79

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