

NAME OF PROJECT: Construction of Road from Nallah Gouran to Murara Devi

ESTIMATION OF COST OF FOREST DIVERSION			
S.NO.	PARAMETERS	DETAILS/COST	REMARKS
1	Ecosystem services losses due to proposed forest diversion	Rs 55.98 lacs	NPV
2	Loss of Animal Husbandry productivity , including loss of fodder	Rs 5.60 lacs	10% of NPV
3	Cost of Human Resettlement	0.00	-
4	Loss of Public Facilities and administrative infrastructure (Roads , Building , Schools, Dispansaries , electric lines , railways etc.) on Forest land, which would require forest land if these facilities were diverted due to the project	-	No such infrastructure involved
5	Possession value of Forest land diverted	Rs 16.79 lacs	30% of NPV
6	Cost of suffering to outsees	0.00	-
7	Habitat Fragmentation cost	Rs 27.99 lacs	50% of NPV
8	Compensatory Afforestation and soil and moisture conservation cost	Rs 22.87 lacs	Double of Forest Area involved
TOTAL		Rs 129.23 lacs	

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ESTIMATION OF BENEFITS OF FOREST DIVERSION

S.NO.	PARAMETERS	DETAILS	REMARKS
1.	Increase in productivity attribute to specific project	<p>A. Road is basic amenity which makes crucial contribution both in social and economical way of growth of area and its inhabitants.</p> <p>B. Agricultural Productivity: Because of road there shall be impact on production due to access to market and technology cum equipment.</p>	
2.	Benefits to economy due to the road project	<p>A. The road project from Nallah Gouran to Murara Devi (Package No. JK14-454) is sanctioned under PMGSY. The total length of road is 13.325 KM and it takes off from NallaGhoran (on Ghordi to NallaGhoran road). The proposed road will benefit the economy by providing access to basic services to the population thereby furthering the target of poverty elimination by the Govt.</p> <p>B. Access to medical services: The road will provide access to medical services to the population especially the underprivileged and vulnerable sections i.e. kids, women, elders, children etc.</p> <p>C. Access to education services.</p> <p>D. Extension of Govt. schemes: Various govt. schemes will be accessible easily to the population of the villages after construction of said road.</p> <p>E. Social Infrastructure: The social infrastructure development parameters like Health, Sanitation, Water Supply etc. will also improve and upgrade with the road development.</p>	
3.	No. of population benefitted due to the project	The proposed road will benefit total population of 365 souls as per census 2011 under PMGSY Core Network. The people of these villages will be benefitted both socially and economically after completion of the said project. There has been no motor able road till date and this project will give them road access to District and Block headquarters.	
4.	Economic benefits due to direct and indirect employment due to the project	<p>A. The project will provide employment to approx. 20 persons a day till its completion which will eventually generate about 10000 plus mandays.</p> <p>B. The traders and land owners will get market access and thus it will help them improve their livelihood.</p>	
5.	Economic benefits due to compensatory afforestation	There shall be compensatory afforestation on 8.525 Ha of land in Ramnagar Forest Division/Udhampur District. Over the years it will lead to benefits by providing timber, fuel and fodder in the area.	

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Details of calculation of Economic Analysis of Road Project

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1. Total earning of the District	Rs. 60648 lacs
2. Total Length of the Road in District	2846 km
3. Earning per Km	Rs. 21.31 lacs
4. Length of road covered under the Project	13.325 km
5. Total Earning on account of the project	Rs. 283.95 lacs

Reduction in vehicle operating cost

(i) Total length of road under Project	=	13.325 km
(ii) Total P.C.U(Passenger Car Unit)	=	290
(iii) Conversion factor	=	Rs. 7/Km/PCU
(iv) Income generated out of VOC	=	<u>$7 \times 13.325 \times 290$</u> 10^5 = 0.27 lacs

Travel time saved

Proportionate saving in travel time

$$\begin{aligned} &= 10\% \text{ of population} \times \text{time reduction} \times \text{Km} \\ &= 10/100 \times 1200 \times 8/60 \times 365/8 \times 13.325 \times 0.65 \times 500 \\ &\{0.65 \text{ ---- Probability of serving employment}\} \\ &\{500 \text{ ----- Avg. wage rate/day}\} \end{aligned}$$

$$= 0.00198 \times 752 \times 16.695 = 31.61 \text{ lacs}$$

$$\text{Total benefit} = 283.95 + 0.27 + 31.61 = 315.83 \text{ lacs}$$

$$\begin{aligned} \text{Therefore , Cost Benefit Ratio} &= 315.83/129.23 \\ &= 2.44 > 1 \end{aligned}$$

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