

Details of calculation of Economic Analysis of Road Project

NAME OF PROJECT :- Construction of Road from Mari to Dhakikote Part I

A.

1. Total earning of the District	Rs 10,849.50
2. Total Length of the Road in District	450km
3. Earning per Km	Rs 24.11
4. Length of road covered under the Project (km)	16.695 Kms
5. Total Earning on account of the project	402.52 lacs

B. Reduction in vehicle operating cost

(i) Total length of road under Project	= 16.695Kms
(ii) Total P.C.U(Passenger Car Unit)	= 290
(iii) Conversion factor	= Rs. 7/Km/PCU
(iv) Income generated out of VOC	= $\frac{7 \times 16.695 \times 290}{10^5}$

C. Travel time saved = 0.34 Lacs

Proportionate saving in travel time

$$\begin{aligned}
 &= 10\% \text{ of population} \times \text{time reduction} \times \text{Km} \\
 &= 10/100 \times 752 \times 8/60 \times 365/8 \times 16.695 \times 0.65 \times 500
 \end{aligned}$$

0.65 ---- Probability of serving employment

500 ----- Avg. wage rate/day

$$= 0.00198 \times 752 \times 16.695 = 22.86 \text{ Lacs}$$

$$\text{Total benefit} = 402.52 + 0.34 + 22.86 = 425.72 \text{ lacs}$$

Therefore , Cost Benefit Ratio

$$\begin{aligned}
 &= 425.72/278.58 \\
 &= 1.53 > 1
 \end{aligned}$$

(cost of forest

Division),

Assistant Executive Engineer
PMGSY Sub-Division
Pouni

Executive Engineer
PMGSY Division
REASI

-14

FOREST PROPOSAL FOR THE CONSTRUCTION OF ROAD - 'MARI TO DHAKIKOTE PART I' IN BLOCK POUNI, DISTRICT REASI

COST BENEFIT ANALYSIS

ESTIMATION OF COST OF FOREST DIVERSION

S.NO.	PARAMETERS	DETAILS	REMARKS
1	Ecosystem services losses due to proposed forest diversion	Rs 122.94 lacs	NPV
2	Loss of Animal Husbandry productivity , including loss of fodder	Rs 12.29 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 36.88 lacs	30% of NPV
6	Cost of suffering to outsees	0.00	-
7	Habitat Fragmentation cost	Rs 61.47 lacs	50% of NPV
8	Compensatory Afforestation and soil and moisture conservation cost	Rs 45.00 lacs	Double of Forest Area involved
TOTAL			Rs 278.58 lacs

OTHER NON-QUANTIFIABLE BENEFITS

ESTIMATION OF BENEFITS OF FOREST DIVERSION			
S.NO.	PARAMETERS	DETAILS	REMARKS
1	Increase in productivity attribute to specific project.	<p>A. Road is the basic amenity which makes a crucial contribution both in social and economical way of growth and development of an area and general inhabitants.</p> <p>B. Agriculture Productivity: Because of new road, there shall be positive impact on agriculture productivity due to easy access to technology and marketing.</p>	
2	Benefits to Economy due to the project.	<p>The project for construction of road from MARI TO DHAKIKOTE PART I (Package No : JK14-440) is sanctioned under PMGSY. The total length of the road upto village Dhakikote is 49km and it takes off from Reasi-Pouni National Highway at village Mari in Pouni. After redefining block boundaries , upto 16.695kms road length falls in Pouni Block and is Part I of road project, whereas rest of length falls in Arnas block of Mahore PMGSY division. The proposed road will benefit total population of 752 souls as per 2011 census.</p> <p>The 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>A. Access to Medical Services: The road will provide access to medical services to the population of these villages especially the vulnerable classes i.e, old , pregnant women and the children.</p> <p>B. Access to Education</p> <p>services viz Higher Secondary School and Degree college at Pouni.</p> <p>C. Extension of Govt Schemes: Various Govt schemes will be easily extended to the population of these villages after the construction of said road.</p> <p>D. Social Infrastructure: The new road will also help in development of social infrastructure (Health, Sanitation, water supply etc.) in these villages. .</p>	

3	No. of Population Benefitted due to project	The proposed road will benefit total population of 752 souls as per 2011 census . The people of these villages will be socially and economically benefitted after the completion of this road as they do not have access to any motorable road till date and also these villages will be directly connected to their District and Block Headquarters .	
4	Economic Benefits due to direct and indirect employment due to project	A. The project will provide employment to approx. 35 persons a day till its completion period of 1.5 yrs generating approx 20000 mandays. B. The cultivators and traders of the area will get direct access to the market thus affecting their livelihood in a positive manner.	
5	Economic Benefits due to compensatory afforestation	There shall be compensatory afforestation on 29 ha of degraded land in Reasi Forest division /Reasi District. Over the years it will lead to economic benefits by providing timber , fuel and fodder in the area.	