

Details of calculation of Economic Analysis of Road Project

NAME OF PROJECT :- Construction of Road from Kanthan to Sawalakot Part II

A.

1. Total earning of the District	Rs 10,849.50 Lacs
2. Total Length of the Road in District	450km
3. Earning per Km	Rs 24.11 Lacs
4. Length of road covered under the Project (km)	26.76 Kms
5. Total Earning on account of the project	645.19 lacs

B. Reduction in vehicle operating cost

(i) Total length of road under Project	=	26.76Kms
(ii) Total P.C.U(Passenger Car Unit)	=	26
(iii) Conversion factor	=	Rs. 7/Km/PCU
(iv) Income generated out of VOC	=	<u>$7 \times 26.76 \times 26$</u> 10^5
	=	0.05 Lacs

C. Travel time saved

Proportionate saving in travel time

$$= 10\% \text{ of population} \times \text{time reduction} \times \text{Km}$$

$$= 10/100 \times 4473 \times 8/60 \times 365/8 \times 26.76 \times 0.65 \times 500$$

0.65 ----- Probability of serving employment

$$500 ----- \text{Avg. wage rate/day}$$

$$= 0.00198 \times 4473 \times 26.76 = 237.01 \text{ Lacs}$$

$$\text{Total benefit} = 645.19 + 0.05 + 237.01 = 882.25 \text{ lacs}$$

Therefore , Cost Benefit Ratio

$$= 882.25/249.38 = 3.53$$

Assistant Executive Engineer
PMGSY Sub-Division
Arnas

Executive Engineer
PMGSY Division
Mahore
Executive Engineer
PMGSY Division
Mahore

Divisional Forest Officer
Mahore Forest Division
HQ Dharmari

FOREST PROPOSAL FOR THE CONSTRUCTION OF ROAD - 'KANTHAN TO SAWALAKOT PART II' IN BLOCK KANTHAN, MAHORE FOREST RANGE,

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 117.93 lacs	10% of NPV
2	Loss of Animal Husbandry productivity, including loss of fodder	Rs 11.79 lacs	NPV
3	Cost of Human Resettlement	0.00	-
4	Loss of Public Facilities and administrative infrastructure (Roads, Building, Schools, Dispensaries, 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 35.38 lacs	30% of NPV
6	Cost of suffering to outsees	0.00	-
7	Habitat Fragmentation cost	Rs 58.97 lacs	50% of NPV
8	Compensatory Afforestation and soil and moisture conservation cost	Rs 25.31 lacs	Double of Cost of Forest Area involved
TOTAL		Rs 249.38 lacs	

ESTIMATION OF BENEFITS OF FOREST DIVERSION			
S.NO.	PARAMETERS	DETAILS	REMARKS
1	Increase in productivity attribute to specific project.	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. B. Agriculture Productivity: Because of new road, there shall be positive impact on agriculture productivity due to easy access to technology and marketing.	

2	Benefits to Economy due to the project.	<p>The project for construction of road from KANTHAN TO SAWALAKOT PART II (Package No.:JK14-559) is sanctioned under PMGSY. The total length of the road upto village Sawalakot is 48.01km and it takes off from hamlet Dharmatha from railway road (Kanthan to Kouri). The proposed road will benefit total population of 4473 souls as per 2001 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 services viz Higher Secondary School and Degree college at Reasi.</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	<p>The proposed road will benefit total population of 4473 souls as per 2001 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.</p>
4	Economic Benefits due to direct and indirect employment due to project	<p>A. The project will provide employment to approx. 40 persons a day till its completion period of 1.5 yrs generating approx 22000 mandays.</p> <p>B. The cultivators and traders of the area will get direct access to the market thus affecting their livelihood in a positive manner.</p>
5	Economic Benefits due to compensatory afforestation	<p>There shall be compensatory afforestation on 28 ha of degraded land at 76/Ar in Mahore Forest division /Reasi District. Over the years it will lead to economic benefits by providing timber , fuel and fodder in the area.</p>