

Annexure-5

Name of Project: Widening & Strengthening to 4 lane of Vav cross road (Ch. Km. 92/320) to Kheralu Cross road (Ch. Km. 115/320) section on NH 58 in the state of Gujarat. (Area. 46 ha.)

COST BENEFIT ANALYSIS

a) Parameters for evaluation of loss of Forest

The parameters for the evaluation of “costs” incurred due to a project for which a cost-benefit analysis must be done is provided in the guidelines to this Act, issued by the MoEF&CC.

Sr. No.	Parameters	Description
1.	Loss of value of timber fuel wood and minor forest produce on an annual basis, including loss of man hours per annum of people who derived livelihood and wages from the harvest of these commodities.	There will be no loss on minor forest produce on an annual basis, including loss of man hours per annum of people who derived livelihood and wages from the harvest of these commodities.
2.	Loss of animal husbandry productivity, including loss of fodder.	No loss to animal husbandry or fodder losses.
3.	Cost of human resettlement.	No Resettlement in the Protected Forest land that is to be diverted for the project.
4.	Loss of public facilities and administrative infrastructure (Roads, building, schools, dispensaries, electric lines, railways etc.) on forest land or which would require forest land if these facilities were diverted due to the project.	There will be no losses to the public facilities, instead the proposed project will provide administrative ease to the public facilities such as schools, dispensaries etc.
5.	Environmental losses: (Soil erosion, effect on hydrological cycle, wildlife habitual, microclimate upsetting of ecological balance)	The area demanded will not have any losses on soil erosion, effect on hydrological cycle, wildlife habitual, microclimate upsetting of ecological balance, the losses will be compensated by C.A in double degraded area, twice the area demanded in lieu of area to be diverted.
6.	Suffering to oustees.	No Suffering to oustees.

Therefore, the total loss of Forest, as per the approved parameters, works out to as under:

Parameters No	Description	Loss (in Lacs)
5	Environmental losses: (Soil erosion, effect on hydrological cycle, Wildlife habitat, microclimate upsetting of ecological balance.	Approximately Rs. 50 Lacs and the same shall be compensated by treating double degraded area under C.A. Scheme and other avenue plantation on both side and road median.

Evaluation of Benefit from Forests:

Sr. No.	Parameters	Description
1	Increase in productivity attributable to the specific project.	Project would act as a catalyst for the growth of the region. Road widening is crucial for transportation of raw material from adjoining industries and other business products from the region. Proposed road Forms central spine of region through which movement of goods will be carried out and hence will increase over-all production.
2.	Benefits to economy	This project is a vital road connecting Mehsana and Banaskantha Districts with adjoining districts, talukas and villages. It will also affect in reduction of Vehicle Operation Cost. Enhance economic development of industrial area and make the surrounding area more accessible with administrative purposes as well as reduction in travel time, fuel consumption and pollution. It will provide better connectivity and streamlining of basic necessities to the citizens such as educational facilities, Health Care Facilities etc. will be more accessible. The project will provide connectivity along adjoining Rajasthan state, help boosting economy to remote areas, trade improvements, access to armed forces and connectivity with costal states. The project will also provide easy connectivity to famous pilgrimage Ambaji Temple.
3.	No. of population benefitted	Almost Covering all talukas and Industrial area of Mehsana, Banaskantha and Sabarkantha District.
4.	Employment Potential	The proposed road would act as the prime artery for economic flow to this region. It enhances economic development,

		provides employment opportunities to locals. With improvement in economy more opportunities for employment generation. The project would employ: i)Permanent/Regular employment: 15 Persons ii)Temporary employment :250 to 300 full time workers.																
5.	Cost of acquisition of facility on non-forest land wherever feasible.	There will be no acquisition.																
6.	Loss of a) Agriculture b) Animal husbandry production due to diversion of Forest Land.	a) NIL b) NIL																
7.	Cost of rehabilitating. The displaced persons as different from compensatory amounts given for displacement.	There will be no Rehabilitation, hence NIL cost.																
8.	Cost of supply of free Fuel-Wood to workers residing in or near forest area during the period of construction.	No free fuel-wood shall be provided and no workers shall be residing in the forest area. As a measure to mitigate environmental impacts, non-polluting means shall be uses instead of fuel wood.																
A	<p>Total benefits as per above parameters are:</p> <table><thead><tr><th>Parameters</th><th>Appx. Amount (in lacs)</th></tr></thead><tbody><tr><td>2. Benefits to economy</td><td>2000</td></tr><tr><td>3. Population benefit</td><td>1000</td></tr><tr><td>4. Employment potential</td><td>50</td></tr><tr><td>5. Cost of acquisition of facility on non-forest land wherever feasible</td><td>0</td></tr><tr><td>6.Loss of (a) Agriculture and (b) animal husbandry production due to diversion of forest land.</td><td>0</td></tr><tr><td>7. Cost of supply of free fuel-wood to workers residing in or near Forest Area during the period of construction.</td><td>0</td></tr><tr><td>Total:</td><td>3050</td></tr></tbody></table>		Parameters	Appx. Amount (in lacs)	2. Benefits to economy	2000	3. Population benefit	1000	4. Employment potential	50	5. Cost of acquisition of facility on non-forest land wherever feasible	0	6.Loss of (a) Agriculture and (b) animal husbandry production due to diversion of forest land.	0	7. Cost of supply of free fuel-wood to workers residing in or near Forest Area during the period of construction.	0	Total:	3050
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5. Environmental losses:	50.00
(Soil erosion, effect on hydrological cycle, wildlife habitat, microclimate upsetting of ecological balance.	
Therefore, benefits/cost ratio works out as under:	
Benefit	= 3050
Cost	= 50
	(= 61)
Hence Cost Benefit Ratio = 1:61	

1.d Total Population Benefitted

i) Employment Number during construction and Operation: (DIRECT BENEFITS)

Sr. No.	Description	Construction	Operation
1.	Skilled	050	05
2.	Semiskilled	100	10
3.	Unskilled	100	00
	Total	250	15

1.e Employment Generation

Construction Stage:

Sr. No.	Description	Numbers
1	Skilled	050
2	Semiskilled	100
3	Unskilled	100
	Total	250

Furthermore, there will be reduction in Travel time between two regions which will eventually lead to reduction in pollution. The proposed road, as a part of economic corridor will play a vital role in socio-economic upliftment of the region. Also, it is planned to translocate trees/species which can establish well under supervision of Forest Department and avenue plantation on shall be taken up on central verge and both sides of the road under consultation of Forest Department.

Date: 20/06/2022

Place: Idar

(R.D.Dhruv)
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Idar