

Name of Project: - Widening of Single Lane/Two Lane to 2 Lane with PSS Km. 0/00 to 56/620 Khokhra (Gujarat Border)-Vijaynagar-Antarsuba-Mathasur road on NH-58 in State of Gujarat.

ANNEXURE - 5

FINANCIAL AND SOCIAL BENEFIT

(COST BENEFIT ANALYSIS)

(As per MoEF&CC guidelines for conducting Cost-Benefit Analysis vide its Handbook 28th March, 2019 & letter-3/2011-FC(Vol-1), Dated 06/01/2022)

Table-A: Parameters for evaluation of loss of forest.

Sr. No.	Parameter	
1.	Ecosystem services losses due to proposed forest diversion.	The NPV of the Forest Land diverted as per MoEF's circular dated 06/01/2022 is Rs. 12,28,590 per Hectare (RF) & Rs. 09,57,780 per Hectare (PF). Therefore, total value of 27.051 Ha. (RF) & 39.547 Ha. (PF) of forest land to be diverted is estimated to be Rs. 7,11,11,920.00.
2.	Loss of animal husbandry productivity, including loss of fodder.	No loss to animal husbandry or fodder losses. But for consideration as per 10% of the NPV i.e., Rs. 71,11,192.00 is considered.
3.	Cost of human resettlement.	No resettlement is envisaged in the forest land that is diverted for the project.
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.	Since this is an infrastructure development project there will be no loss to the public facilities. On the contrary the road connectivity will be improved significantly which will benefit the population in the region.
5.	Possession value of forest land diverted.	As per the rules, 30% of NPV i.e., Rs. 2,13,33,576.00 is considered.
6.	Cost of suffering to oustees.	No cost of suffering to oustees.
7.	Habitat Fragmentation Cost.	The project is widening and upgradation of existing NH-58 from Khokhra Gujarat Border - Vijaynagar - Antarsumba - Mathasur. Therefore, no habitat fragmentation is envisaged.
8.	Compensatory Afforestation and soil & moisture conservation cost.	The tentative cost of Compensatory Afforestation is estimated to be around Rs. 21,33,35,741.25. (The cost of CA is considered 1.5 times the NPV in double extent separately for reserve & protected forests)




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Table-B: Parameters for Evaluation of Benefits, notwithstanding loss of forests.

Sr. No.	Parameter	
1.	Increase in productivity Attributable to specific project.	The proposed project will create infrastructure which will provide uninterrupted free flow of traffic between Mathasur T-Junction to Khokhra Gujarat-Rajasthan Border (NH-58) (Ch. 56/194 Km – 0/00 Km) The project will result in economic growth in the region. Moreover, it is a shortest route to Udaipur from North Gujarat. The work of NH-58 in Rajasthan state is completed construction, hence NH-58 in Gujarat state will act as a missing link road.
2.	Benefits to economy.	The NH-58 Road will provide uninterrupted free flow of traffic and shall result in (1) Saving in Travel time & Cost (saving of approx. Rs. 150 Cr. per year in Vehicle Operation Cost). (2) Saving in foreign exchange due to less consumption of fuel. (3) Increase in income of truck bus, taxi, etc. and owner as they will be able to communicate maximum distance in short time. (4) Reduction in road accidents due to improved road geometry.
3.	No. of population benefited.	About 99,924 populations nearby District Sabarkatha will be benefited by safe road journey and reduced travel time and vehicle operating cost.
4.	Economic benefits due to of direct and indirect employment due to the project.	Direct and Indirect employment will be generated during construction and operation period.
5.	Economic benefits due to compensatory Afforestation.	The proposed area for compensatory afforestation will be double degraded forest area. This will improve the forest cover in twice the diverted area which will improve the forest ecosystem. Over a period of 50 years, the benefits due to CA will be around Rs. 1066.68 Cr.

- A. Total Cost = NPV + 10% of NPV (Loss of Animal Husbandry) + 30% of NPV (Possession value) = Rs. 9,95,56,688.00
- B. Total Benefits = CA + Reduction in Vehicle operation cost = Rs. 171,33,35,741.25.00
- C. Benefit/Cost Ratio (B/A) = 17.21


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