

COST BENEFIT ANALYSIS

Project: PROPOSAL FOR DIVERSION OF 49.69 HA OF FOREST LAND FOR CONSTRUCTION OF 2-LANING WITH HARD SHOULDERS OF DEMWE-BRAHMAKUND ROAD FROM KM 0.00 TO KM 18.464 ON DEMWE-HAWAI ROAD ON EPC MODE IN LOHIT DISTRICT IN THE STATE OF ARUNACHAL PRADESH

Table-B: Estimation of cost of Forest Diversion (as per MoEF&CC Guideline dated 1st August 2017 related to Cost Benefit Analysis).

SL No.	Parameters	Remarks
1	Ecosystem services losses due to proposed forest diversion	NPV of the unclassified forest (for ECO class-I) tropical Semi evergreen density 0.3 to 0.4 being diverted i.e. Forest = 49.69 ha X 7.30 lac = Rs. 362.74 lacs Total Cost = Rs. 362.74 lac Say 363 Lacs
2	Loss of animal husbandry productivity, Including loss of fodder	NIL Productivity of livestock will not be affected due to construction & widening of existing highway.
3	Cost of human resettlement	NIL No, as area is not habited hence there is no displacement of any oust sees in the project & hence there would be no resettlement.
4	Loss of public facilities and administrative infrastructure (Roads, buildings, schools, dispensaries, electric line, railways etc.) on forest land, which would require forest land if these facilities were diverted due to the project	NIL As there is no public facilities service existing.
5	Possesion value of forestland diverted	NIL
6	Cost of suffering to outees	NIL Loss of house/Habitat/Structure is NIL, hence not applicable.
7	Habitat fragmentation cost	NIL
8	Compensatory Afforestation and soil and moisture conservation cost	Compensatory afforestation cost 24.85Lac (Approx. 0.5 lac/ha) . Soil & Moisture Conservation cost included in Compensatory Afforestation cost.
	Total Loss (Against the proposed forest land diversion)	Rs. 387.85 Lacs Say Rs. 388 Lacs

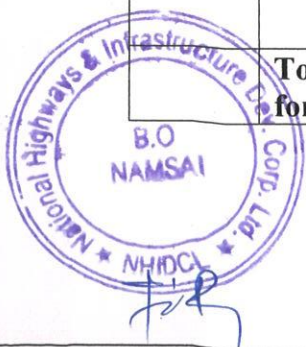
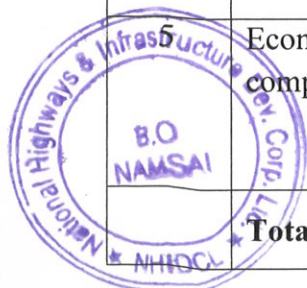


Table C: Estimation of Benefit of Forest Diversion in Cost Benefit Analysis (as per MoEF&CC Guideline dated 1st August 2017 related to Cost Benefit Analysis).

Sr. No	Parameters	Remarks
1	Increase in productively attribute to the specific project	The construction road (a National Highway) NH-13 sponsored by Ministry of Highway. The road connects mainland to the North Eastern border which is strategically very important road for enhancing the defence potential of the area. Also many multipurpose hydroelectric power projects have been planned along project road which provides connectivity to dam site. This will directly going to enhance the productivity and development of the society and economic upliftment. Hence widening of this road will increase productively of local population. Project Cost Rs. 35300 lacs (approx.) for 20 years.
2	Benefits to economy due to the specific project	As stated in Sl. 1 above widening of the road will facilitate economic growth of the area. Directly it will be and many more in after completion of project as per feasibility report. It will help in trade and local development of border areas. Beside that it is an important strategic road lead to China Border.
3	No of population benefited due to specific project	Widening of road is going to benefit the population @ 1.60 lac approx. of Lohit district as well as huge Army and Paramilitary forces are deployed in the border areas.
4	Economic benefits due to direct and indirect employment due to project	During the improvement stage employment will be generate for skilled and unskilled manpower about 130 persons will be employed during the peak working season for construction of the road resulting in about 11700 man days would be required during the construction phase of two years. The local people will also get the opportunity to carry out contract works subject to their work capability/expertise. After the completion, about 90 people will be employed for upkeep and maintenance of the Road and other structures. The Road will facilitate in Tourism and horticulture where local population as per there experience and qualification will get benefited.
5	Economic benefits due to compensatory afforestation	C.A. for 49.69 ha. of degraded forest land @ 3.5 lacs/ha for 50 years (as per Guidelines issued by MoEFvide letter no. 5-3/2007-FC/ Dated 05.02.2009) = Rs. 173.92 lacs
	Total	Rs. 35473.92 Lacs Total Say Rs. 35474 Lacs



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C. Cost Benefit Ratio i.e. Project Benefit/Forest loss = 35474/388= 91:1

Hence the Project has very high benefit to the country as compared to forest loss. **The benefit to loss ratio is approximate 91 times.**



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General Manager (P)
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