

COST BENEFIT ANALYSIS

PROPOSAL FOR DIVERSION OF 3.04 HA OF FOREST LAND FOR THE CONSTRUCTION OF 2-LANING OF ARROWA-TIDDING ROAD OF NH-113 FROM KM 0 TO KM 1.76 ON EPC MODE IN LOHIT DISTRICT IN THE STATE OF ARUNACHAL PRADESH.

TABLE-A: CASE UNDER WHICH A COST-BENEFIT ANALYSIS FOR FOREST DIVERSION IS REQUIRED.

Sl. No.	Nature of Proposal	Applicable/ Not applicable	Remarks
1	All categories of proposal involving forest land up to 20 hectares in plains and up to 5 hectares in hills	Applicable	This is highway project and total community land under USF (Unclassed State Forest) required is 3.04 ha. The cost benefit analysis as per prescribed format is enclosed in the subsequent pages.
2	Proposal for Defence installation purposes and oil prospecting (Prospecting only)	Not applicable	-
3	Habitation, establishment of industrial units, tourist lodges complex and other building construction	Not applicable	-
4	All other proposal involving forest land more than 20 hectares in plains and more than 5 hectares in hills including roads, transmission lines, minor, medium, and major irrigation projects, hydro projects, mining activity, railway lines, location specific installation like micro-wave station auto repeater centers, TV towers etc.	Not applicable	-




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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-1) tropical Semi evergreen density 0.2 being diverted i.e. Forest = 3.04 ha. X 7.30 lac = Rs. 22.19 lakh. Total Cost = Rs. 22.19 lakh
2	Loss of animal husbandry productivity, Including loss of folder	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 outsee 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 if these facilities were diverted due to the project	NIL As there is no public facilities service existing.
5	Possession value of forestland diverted	NIL
6	Cost of suffering to out sees	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	Compensation afforestation cost 4.62 lakh (Approx. 1.52 lakh/ha) . Soil & Moisture Conservation cost included in Compensatory Afforestation cost.
	Total Loss (Against the proposed forest land diversion)	Rs. 26.81 Lakh (Say Rs. 27 lakhs)




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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)

Sl. No.	Parameters	Remarks
1	Increase in productively attribute to the specific project	The construction road (a National Highway) NH-113 sponsored by MoRTH. The road connects mainland to the North Eastern border which is strategically very important road for enhancing the defence potential of the area. This will directly be going to enhance the productivity and development of the society and economic upliftment. Hence winding of this road will increase productivity of the local population. Project Cost Rs. 4547 lakhs
2	Benefits to economy due to the specific project	As stated in Sl. 1 above construction 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 to China Border.
3	No. Of population benefited due to specific project	Construction of the road is going to benefit the population @ 1.46 lacs approx. of Lohit district as well as huge Army & Paramilitary force 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 generated for skilled and unskilled manpower about 50 persons will be employed during the peak working season for construction of the road resulting in about 36500-man days approx. 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 20 people will be employed for upkeep and maintenance of the road and other structures. The road will facilitate in tourism & horticulture where local population as per their experience and qualification will get benefited.
5	Economic benefits due to compensatory afforestation	CA for 3.04 Ha of degraded forest land @ 3.5 lakh/ha . For 50 Years (as per Guideline issued by MoEF vide letter No. 5-3/2007-FC/ Dated 05.02.2009 = Rs. 10.64 lakh
	Total	Rs. (4547+10.64) Lakh, Total Say 4558 Lakh

D. Cost Benefit Ratio i.e. Project Benefit / Forest Loss = 4558/27 = 168:1

Hence, the Project has very high benefit to the country as compared to forest loss. **The benefit to loss ratio is approximately 168 times.**



File
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