

Cost Benefit Ratio Chart

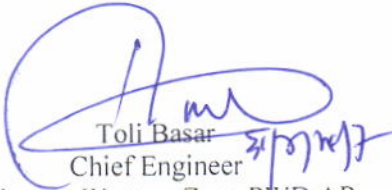
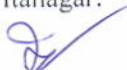
Annexure-VI (A)

Name of Project - 2 Lane Trans-Arunachal Highway (NH-229) from Khupirealignment segment Ch: 17.180-21.00 Km (3.8 Km) in West Kameng District in the state of Arunachal Pradesh

Block :

District : West Kameng

Sl. No.	Particulars	Amount in Lakhs	Remarks
1	2	3	4
1	Total Cost (Investment incurred)		
(A)	Construction Cost of Project	1900	Construction cost, scoping cost & operation cost.
(B)	N.P.V. Amount to be disposed @ 9.39 Lac/Hectare	121.037	
(C)	Substitute /Alternation Plantation Cost to be Disposed:-	7.77063	
Total		1936.33823	
2	Benefits :- (Taking Age of Road As 50 Years)		
(A)	Economics Benefits- savings in travel time and Vehicle operating cost for 50 years	38.04	
(B)	Direct Employment of Labours- a. About 50 labours will get direct employment for duration of 1 years. @ Rs. 54.00 Lakhs and about 25 labours for maintenance period of 12.5 years @ Rs. 335.25 lakhs b. Approximately 19 skilled manpower are required for construction of road for 1 years @ Rs. 324.00 Lakhs and about 12 skilled manpower are required for maintenance period of 12.5 years @ Rs. 1564.5 lakhs	2277.75	
(C)	Economics Benefits due to other activities	Enhancement of tourism, petty contracts to local people, etc. will also generate employment.	
Total		2315.79	
	Total Benefit / Cost Ratio =2315.79 / 1936.338	1.19	
Note	Therefore construction of road is Economically viable and Socially beneficial.		


 Toli Basar
 Chief Engineer
 Highways Western Zone PWD AP
 Itanagar:


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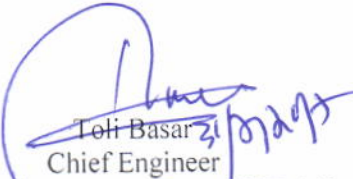

Annexure-VI (B)

Name of Project - 2 Lane Trans-Arunachal Highway (NH-229) from Khupirealignment segment Ch: 17.180-21.00 Km (3.8 Km) in West Kameng District in the state of Arunachal Pradesh

Parameter for Evaluation of loss of Forests :-

Nature of Proposal :- Road

Sl. No.	Parameters	Descriptions
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 wage from the harvest of these commodities	There is no loss of timber, fuel wood and minor forest produce on an annual basis. No livelihood of people affected.
2	Loss of Animals husbandry productivity including loss of fodder	Loss of animal husbandry in protected forest land would be negligible.
3	Cost of human resettlement	There will be no human resettlement in the forest land.
4	Loss of public facilities and administrative infrastructure (Roads, Buildings, Schools, Dispensaries, Electric Lines, Railways, etc.) on which would require forest land if these facilities were diverted due to the project	No loss of public facilities and administrative infrastructures will be diverted on Forest land due to Project.
5	Environmental losses; (soil erosion, effect on hydrological cycle, wildlife habitat, microclimate upsetting of ecological balance.)	Economic value loss of ecosystem due to diversion of Forests.
6	Suffering to ousters	Nil


 Toli Basar
 Chief Engineer
 Highways Western Zone PWD AP
 Itanagar:


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Annexure-VI (C)

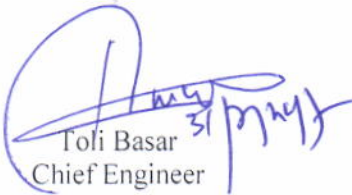
Name of Project - 2 Lane Trans-Arunachal Highway (Nh-229) from Khupirealignment segment Ch: 17.180-21.00 Km (3.8 Km) in West Kameng District in the state of Arunachal Pradesh

Parameter for Evaluation of Benefit, notwithstanding loss of Forests

Nature of Proposal :- Road

Sl. No.	Parameters	Descriptions
1	Increase in productivity attributable to the specification project	In Lieu of total trees to be affected in forest land in Project under Bombdila Forest Division in West Kameng district, it is proposed to undertake Compensatory Afforestation of 12.89 hectares as per Forest (Conservation) Act. The road connects mainland to the border which is strategically very important road for enhancing the defense potential of the area. This will directly going to enhance the productivity and development of the society and economic upliftment.
2	Benefits to economy	<p>The main objective of this project is to alleviate the current unsafe condition of the highway and provide better quality and safe road to the users by minimizing the chances of accidents.</p> <p>The project will yield significant economic benefits to the State. Widening and up gradation of the highway will lead to much better connectivity, which will play a significant role in improving the socioeconomic condition of the people of the State in many folds. It will aid in boosting the tourism in the region and also generate direct and indirect employment opportunities for the people in addition to other indirect benefits by way of saving vehicle operating costs, less fuel consumption and saving time and cost of passenger travel etc.</p> <p>An amount of Rs. 250.00 Millions¹ (per capita expenditure of tourist taken as Rs. 10,000 (approx.) per person for 10 days package for additional 25,000 tourists) may be earned from tourism due to approximately increase of 10% tourist flow of 2.52 lakhs of present tourist flow.</p>
3	No. of population benefited	<p>Entire population along the NH-229 West Kameng District shall be benefited from the project.</p> <p>In addition, the project will boost the economic growth of the Region and State as well by boosting through tourism.</p>
4	Employment potential	<ol style="list-style-type: none"> 1 Increased tourism due to better transport service. 2 Increased employment during construction & operation phase.
5	Cost of acquisition of facility on non-forest land wherever feasible.	Total land acquisition other than forest land is 2.541 ha for the proposed section.
6	Loss of (a) agricultural & (b) animal, husbandry production due to diversion of forest land.	NIL
7	Cost of rehabilitating the displaced persons as different from compensatory amount given for displacement.	NIL

8	Cost of supply of free fuel-wood to workers residing in or near forest area during the period of construction.	No fuel wood will be supplied to the workers during the construction period. Contractor will supply fuel like LPG and Kerosene will be provided to the workers for the cooking and other purposes in the camp. A wood depot will be setup for supply of firewood as a backup fuel to avoid unauthorized cutting of trees for miscellaneous purposes in camp.
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Toli Basar
Chief Engineer
Highways Western Zone PWD AP
Itanagar:
