

# COST - BENEFIT ANALYSIS

## Calculation of COST-PART

**Name of the project :-** Construction of Fencing & Road along certain stretches of Indo-Bangladesh Border in Mizoram state from near BP No. - 2306 (Andermanik) to near BP No. - 2313(Silsuri) for an approximate length of 70 km. falling within DAMPA TIGER,RESERVE (DTR) Protected Area of forest in Mamit district of Mizoram.

Sl. No.	Parameters	Details	Amount (Rs.lacs)	REMARKS
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.	<p><b>a) Value of timber / fuel wood</b></p> <p>Number of trees falling along the actual proposed site required for road &amp; fencing is 1200 nos. which belongs to various species and diameter classes roughly calculated to be as under :-</p> <p>Average diameter of trees = 40 cm = 0.40 m.  Average height of trees = 5.00 m.  Hence, average volume of timber per tree = <math>(3.142/4) \times (0.4 \times 0.4) \times 5.00</math>  = 0.628 cum.  So, total volume of timber out of 1200 nos. trees  = <math>1200 \times 0.628</math>  = 753.60 cum.  Considering average present rate including Royalty &amp; Monopoly Fee etc.  = Rs. 2000.00 per cum.  So, total cost = <math>753.60 \times \text{Rs. } 2000.00 = \text{Rs. } 15,07,200.00</math> .....(a)</p> <p><b>b) Random sampling of bamboos</b> of this proposed area shows that on the average 1 Ha will have a stock of 48,000 nos. of :-</p> <p>Helocaha bambusoids whose present rate of royalty is Rs.8.00 per one hundred numbers. Thus 46.939 Ha.(approx.) will yield roughly 2253072 numbers of Mulli whose royalty will be <b>Rs.1,80,246.00</b> ..... (b)</p> <p><b>c) Loss of man hour per annum</b> of people who deprived livelihood and wages from harvest of above forest produces is taken roughly to be 30% the above (a + b) which comes to <b>Rs.5,06,234.00</b> ..... (c)</p>	21.94	
2	Loss of animal husbandry productivity, including loss of fodder.	Animal and husbandry in the villages - is negligible. Loss of animal husbandry products including fodder is not anticipated to.	Nil	
3	Cost of human resettlement.	The scheme does not involve and displacement of people. Thus no human settlement is anticipated to.	Nil	
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.	No public facility of administrative infrastructural loss anticipated to.	Nil	
5	Environmental losses : (soil erosion, effect on hydrological cycle, wildlife habitat, microclimate upsetting of ecological balance).	<p>Of the <b>46.939 Ha.</b>(approx) of forest to be cleared only 30% is open bamboo forest and density of the area on and average is taken as 12.5% as a whole environmental losses as per the Annexure-V of Forest Conservation Act.1980 guidelines is calculated as</p> $\frac{46.939 \times 0.125 \times 126.74}{50} = \text{Rs.14.87 lacs}$	14.87	
6	Suffering to oustees.	Not anticipated as the scheme is only for road & fencing.	Nil	
<b>TOTAL COST</b>			<b>36.81</b>	

N.B.C.C. Ltd.  
IBB Fencing Works  
Dintha Veng. W Phaileng  
Pin: 796431 - MIZORAM

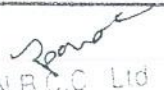


## COST - BENEFIT ANALYSIS

### Calculation of BENEFIT-PART

**Use of the project :-** Construction of Fencing & Road along certain stretches of Indo-Bangladesh Border in Mizoram state from near BP No. - 2306 (Andermanik) to near BP No. - 2313(Silsuri) for an approximate length of 70 km. falling within DAMPA TIGER RESERVE (DTR) Protected Area of forest in Mamit district of Mizoram.

Sl. No.	Parameters	Details	Amount (Rs.lacs)	REMARKS
1	Increase in productivity attributable to the specific project.	Increase in trade and commerce in the State of Mizoram and neighbouring states as the safety and security of the country as a whole including prevantion of smuggling valuable woods and establishment of law and order in the State will result subsequent economic growth as well as redical development of the society. This can not be directly quantified. However, approximate amount will be around Rs. 15.00 lacs.	15.00	
2	Benefits to economy.	Long term planning has to be kept in view for economic and social benefit as a result of economic activities growing in this State and the whole country as a whole. Therefore, this project is expected to serve tremendous economic and social cause. This can not be directly quantified. However, approximate amount will be around Rs.10.00 lacs.	10.00	
3	No. of population benefited.	In general all population of the Mamit district will be benefitted in terms of safety & security resulting economic growth through small scale business & other trades likely to be generated as soon as this infrastructure is developed. This benefit part can not be directly quantified, however, approximately taken as Rs. 4.00 lacs.	4.00	
4	Employment potential.	Approximately 50000 nos. of villagers likely to be employed on self-employment basis due to the likely development of small scale industries as well as general developement of economy is expected to occur due to this infrastructure development. This amount cannot be directly quantified, however, this is taken as Rs. 10.00 lacs.	10.00	
5	Cost of acquisition of facility on non-forest land wherever feasible.	No such case	nil	
6	Loss of (a) agriculture & (b) animal husbandry production due to diversion of forest land.	No such case	nil	
7	Cost of rehabilitating the displaced persons as different from compensatory amounts given for displacement.	No such case	nil	
8	Cost of supply of free fuel-wood to workers residing in or near forest area during the period of construction.	This can not be directly quantified. However, the amount is taken as Rs. 4.50 lacs.	4.50	
<b>TOTAL BENEFIT</b>			<b>43.50</b>	

  
 N.B.C. Ltd  
 IBB Fencing Works  
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