

**Cost Benefit Analysis**

Total Length of the Road = 12.842 km

**Benefits -**

(A) Benefit due to easy communication of vehicles -

Suppose 500 vehicle (heavy) ply per day

For 1 year nos of Vehicles =  $365 \times 500 = 182500$ 

Assuming Rs. 2000 (av) benefit per vehicle per day

Total benefit =  $182500 \times 2000 = \text{Rs. } 36.50 \text{ Crores}$ 

(B) Benefit due to transportation of Food grains, vegetables, Jungle products etc.

Assuming 2500 MT Paddy &amp; Wheat

700 MT Mahua

100 MT Vegetable

Cost enhancement of product due to easy/proper connectivity

2500 MT x 2000 per MT = 0.50 Crores

700 MT x 5000 per MT = 0.35 Crores

100 MT x 5000 per MT = 0.05 Crores

Sub Total = 0.90 Crores

(C) Hat Bazar Development besides alignment of road

Assuming Rs. 2,50,000.00 benefit (av) per day

For 1 year  $365 \times 2,50,000.00 = \text{Rs. } 9.125 \text{ Crores}$ 

(D) Social upliftment of area

Assuming L.S. = 50.00 Crores

(E) Other benefits such as petrol pump, School, College, industries etc establishment

Assuming L.S. = 100.00 Crores

Total 196.525 Crores

**Value of Forest/ Environment**

Assume loss due to forest per hectare = 0.50 Lakh

Total Loss =  $6.532 \times 0.5 = 3.27 \text{ Crore}$ 

Thus even for as much as 6.532 hectare forest area involved in the construction of Gumla By pass road would be advantage in monetary terms

Cost benefit ratio =  $196.525/3.27 = 60.10$ Chd  
11-6-16

JE

NH Section, Gumla

Jm  
11-6-16  
AE

NH Div. Gumla

Gumla  
11-06-2016

EE

NH Division, Gumla