

Cost Benefit Analysis

(As per MOeF & CC guideline no. 7-69/2011-FC(pt.) dated 1, August, 2017)

Table B: Estimation of Cost of forest Diversion

परियोजना विवरण :- मा0 मुख्यमंत्री जी की घोषणा सं0 :- 347/2018 के अंतर्गत जनपद टि गढ़वाल के विधानसभा क्षेत्र देवप्रयाग के विकासखण्ड कीर्तिनगर के अन्तर्गत चुन्नीखाल-नौड़ा -तेगड़ मोटर मार्ग का नवनिर्माण कार्य

Block : Kurtinagar District : Tehri Garhwal
 Road Length : 11.650 km
 Forest Land : 5.2175 Hectare.
 Nap Land : 3.3280 Hectare
 Population : 1265

SL. No.	Particulars	Remark
1	Ecosystem service losses due to proposed forest diversion.	NPV of the forest Land being diverted 5.2175 @ Rs 8.45 Per Lakh per Hec. =Rs 44.09 Lakh
2	Loss of animal husbandry productivity including loss of fodder.	10 % of NPV ie 10 % of 44.09 lakh=4.41 Lakh
3	Cost of Human resettlement.	There is no human displacement due to the project Therefore cost of Human resettlement is.-NIL
4	Loss of public facilities and administrative infrastructure (Roads building Schools dispensaries electric lines railways etc) on forest land which would require forest land if these facilities were diverted due to the project.	Not applicable, Since these facilities are not available inside the forest area for proposed diversion No Loss of public facilities and administrative infrastructure due to the project, therefore loss is -NIL
5	Possession value of forest land diverted	30 % of NPV ie 13.23 lakh
6	Cost of suffering to oustees	Not applicable Since there is no displacement of people
7	Habitat Fragmentation cost	50 % of NPV ie 22.04 lakh
8	Compensatory Afforestation and soil & moisture conservation cost	The estimated cost for raising the CA in 10.31 Hec is 34.77 Lakh for 10 Years
Total loss (Against the proposed forest land diversion)		Rs 118.54 Lakh

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नरेन्द्र नगर वन प्रभाग

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Table C: Estimation of benefit of forests Diversion

SL. No.	Particulars	Remark
1	Increase in productively attribute to the specific project.	Vegetable 200 Qtl @ Rs 1500/ =Rs 300000.00 Fruits 150 Qtl @ Rs 1500/ =Rs 225000.00 Total Vegetable & Fruits =Rs 525000.00 or Rs 5.25 Lakh For 50 Years=Rs 5.25x50 = Rs 262.50.00 Lakh
2	Benefits to economy due to the specific project.	Due to milk Production, Vegetable, fruits, tourism and other mining mineral material About 2.00 Lakh Per Year Amount for 50 Years =Rs 2.00x50 = 100.00 Lakh
3	No of population benefited due to specific project	Daldung-770, Moldhar-318, Khoncha-116, Pandev-61 Total=1265
4	Economic benefits due to of direct and indirect employment due to the project	I-Direct Employment of Labour Benefits for annual maintenance of the road takes 10 Beldar for maintenance for road for one month @ Rs 8000.00 Benefit for 10 Beldar@Rs 8000.00x10 =Rs80000.00 Say Rs 0.80 Lakh Benefits for 50 Years=Rs0.80x12x50= Rs 480.00 Lakh II-Market Development Taking 15 Shops shall Established after construction of above road taking minimum benefit for per shop per day Rs 200.00 Benefit for 15 Shops per months=200x15x30=Rs 90000.00 or Rs 0.90 Lakh Benefit for one Years=Rs 0.90x12=Rs10.80 Lakh Benefit for 50 Years=Rs10.80x50 = Rs 540.00 Lakh III-Nap land 3.328 Hec @ Rs 8.38530 lakh / Hec= Rs 27.91 Lacs IV-Tourism -Tourism activities will be increased by providing atleast 5 people Benefit @ Rs 20000.00 per months for 50 Years=Rs 0.20x5x12x50= Rs600.00 lakh V- Temporary Labours -100 temporary Labours @Rs 9000.00 per months for 3Years in this project will get employment to Local Youth, their social, economic Cultural, Emotional Life structure will be benefittrd=Rs9000x100x12x3= Rs 324.00 Lakh
5	Economic benefits due to Compensatory afforestation	The annual timber and fuel wood ,carbon,eco-tourism fooder and watershed services from C.A is approx Rs 0.50 Lach per annum for 50 Years= Rs 25.00 lakh
Total Benefit derived from the project		Rs 2359.41 Lakh

Cost Benefit Ration ie Project Benefit/Forest loss= 19.90 : 1

Hence the Project has high benefit as compared to forest loss : The benefit to loss ratio is approximate 19.90 Say 20 times.

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(5.00 हे० से अधिक के प्रकरणों में लागू)

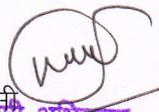
Cost Benefit Ratio Calculation Performa

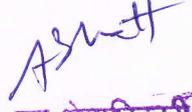
परियोजना विवरण:- माननीय मुख्यमंत्री घोषणा सं० 347/2018 के अन्तर्गत जनपद टिहरी गढ़वाल के विधानसभा क्षेत्र देवप्रयाग के विकासखण्ड कीर्तिनगर के अन्तर्गत चुन्नीखाल-नौड़ा-तेगड़ मोटर मार्ग का नव निर्माण कार्य।(लम्बाई 11.650 कि०मी०)।

Block:- Kirtinagar District:- Tehri

SL. No.	Particulars	Amount in lakhs	Remark
1	Total cost (Investment incurred)		
(A)	Construction cost of the project	951.80	
(B)	N.P.V. Amount to be deposited @8.45 lakh /Ha	44.09	
(D)	Substitute/Alternative Plantation Cost to be Deposited:-	34.77	
(E)	Other cost if any	—	
	Grand Total	1030.66	
2	Benefits	Estimated Cost /yearly	Total benefit during the life of the created development
2.1	i. Direct Economic Benefits		
	a. Employment of Labour (Permanent+Temp) -	804.00	
	b. Market Development -	540.00	
	c. Tourism & NAAP Land -	627.91	
	Total direct benefits	1971.91	
2.2	ii. Social Benefits		
	a. Vegetable & fruits production -	262.50	
	b. Milk production -	100.00	
	c.		
	Total social benefits	362.50	
2.3	iii. Ecological Benefits		
	a.	—	
	b.	—	
	c.	—	
	Total ecological benefits	—	
2.4	Other Benefits(if any)		
	a. Timber & fuelwood -	25.00	
	b.		
	Total benefits	4125.00	
	Grand Total benefits	2359.41	

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प्रारूप-29.1**Parameter for Evaluation of loss of Forests**

परियोजना विवरण:- माननीय मुख्यमंत्री घोषणा सं० 347/2018 के अन्तर्गत जनपद टिहरी गढ़वाल के विधानसभा क्षेत्र देवप्रयाग के विकासखण्ड कीर्तिनगर के अन्तर्गत चुन्नीखाल-नौड़ा-तेगड़ मोटर मार्ग का नव निर्माण कार्य।(लम्बाई 11.650 कि०मी०)।

Block:- Kirtinagar District:- Tehri Garhwal

Sl.no.	Parameters	Details
1	2	3
1	Loss of Value of timber, fuelwood and minor forest produce on an annual basis, including loss of man hours per annum of people who derived there livelihood and wage from the harvest of these commodities	25.00 Lacs
2	Loss of animals husbandry productivity including loss of fodder	4.41 Lacs
3	Cost of human resettlement	—
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.	—
5	Environmental losses;(Soil erosion, effect on hydrological cycle, wildlife habitat, microclimate upsetting of ecological balance.)	—
6	Suffering to oustees	—

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Parameter for Evaluation of Benefit, not with standing loss of Forests

परियोजना विवरण:- माननीय मुख्यमंत्री घोषणा सं० 347/2018 के अन्तर्गत जनपद टिहरी गढ़वाल के विधानसभा क्षेत्र देवप्रयाग के विकासखण्ड कीर्तिनगर के अन्तर्गत चुन्नीखाल-नौड़ा-तेगड़ मोटर मार्ग का नव निर्माण कार्य।(लम्बाई 11.650 कि०मी०)।

Block:- Kirtinagar District:- Tehri

Sl.no.	Parameters	Details
1	Increase in productivity attributable to the specific project.	262.50 lac
2	Benefits to economy	100.00 lac
3	No. of population benefited.	1265
4	Employment potential.	804.00 lac
5	Cost of acquisition of facility on non forest land wherever feasible.	27.91 lac
6	Loss of (a) agricultural & (b) animal, husbandry production due to diversion of forest land.	4.41 lac
7	Cost of rehabilitating the displaced persons as different from compensatory amounts given for displacement.	—
8	Cost of supply of free fuel-wood to workers residing in or near forest area during the period of construction.	2.50 lac

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