

Cost Benefit Analysis for
NETNA TANK SCHEME PROJECT

On the basis of Guidelines for forest land diversion 2017

**Table-A Cases under which a cost benefit analysis for forest diversion
are required**

No.	Nature of proposal	Applicable/not applicable	Remarks
1	All categories of proposals involving forest land up to 20 hectares in plains and up to 5 hectare in hill	Not applicable	
2	Proposal for defense installation purposes and oil prospection (prospecting only)	Not applicable	
3	Habitation, establishment of industrial units, tourist lodges complex and other building construction	Not applicable	
4	All other proposals 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 project's mining activity railway lines, location specific installations like micro-wave station, auto repeater centres, TV towers etc.	Not applicable	

Table-B Estimation of cost of forest diversion

No.	Nature of proposal	Remark
1	Ecosystem services losses due to proposed forest diversion	Ecosystem services due to diversion of forest land suggested by the Central Powered Committee as per the forest classification report of proposed Netna Tank Scheme is Rs. 2.91 Lakh/Ha Cost of Land : = 2.50 x 2.91 = Rs. 7.275 Lakh.
2	Loss of animal husbandry productivity, including cost of fodder.	As per the cost benefit guideline i.e 10% of N.P.V. 0.291 Lakh per Ha. = 2.50 X 0.291 = Rs. 0.728 Lakh
3	Cost of human resettlement	There is no human settlement due to proposed Netna Tank Scheme hence 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.	There is no loss of public facilities and administrative infrastructures of forest land due to construction of Netna Tank Scheme, no cost has been added on this account.
5	Possession value of forest land diverted.	The possession value of forestland diverted is taken 30% of the N.P.V. due to loss of forest i.e 0.873 Lakh / Ha. = 2.5 x 0.873 = Rs 2.183 Lakh
6	Cost of suffering to oustees	Not applicable
7	Habital Fragmentation Cost	Forest land is being acquired for construction of dam, submergence & spill channel of Netna Tank Scheme. There is no amount is taken under this account.
8	Compensatory afforestation and soil & moisture conservation cost	The cost @ Rs 4.00 Lakh per Ha. is taken compensatory afforestation and soil moisture conservation Hence amount will be : = 2.50 x 4.00 = Rs. 10.00 Lakh
9	Total cost due to forest land diversion.	Total cost due to forest land diversion for Netna Tank Scheme will be: = 7.275 + 0.728 + 2.183 + 10.00 = 20.186

**Table-C Existing guidelines for estimating benefits of forest-diversion
in CBA**

No.	Nature of proposal	Remark
1.	Increase in productively attribute to the specific project.	The crop production benefit due to Netna Tank Scheme will be Rs. 611.72 Lakh in designed life of 100 years & water level will be increase economy growth of the project.
2.	Benefits to economy due to the specific project.	Netna Tank Scheme will trigger economy development and also influence with irrigation facility to a land of 210 Ha. in the surrounding area. Irrigation is proposed by Canal system.
3.	No. of population benefited due to specific project.	Project is located in backward area of the village. After completion of project, 201 cultivators will be benefitted and water level will be increased in surrounding area.
4.	Economic benefits due to of direct and indirect employment due to the project.	The project will provide direct employment for approximate 240 people (12 Month) during construction period.
5.	Economic benefits due to Compensatory afforestation.	An economic benefit due to compensatory afforestation has been considered as per the benefit of C.A. guidelines of ministry for N.P.V. estimation.

NETNA TANK SCHEME

COST BENEFIT ANALYSIS

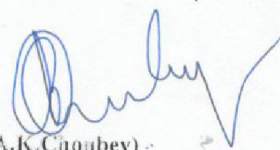
(A)	Pre development crop production benefits (Rs. Lakh)	-	7.20
(B)	Post development crop production benefits (Rs. Lakh)	-	78.22
(I)	Total crop production benefit due to project (B-A)	-	71.02
(C)	Total Cost of the project	-	611.72
1.	Annual Maintenance cost @ Rs.250/ Ha for CCA 210 ha	-	0.525
2.	Interest on capital 10%	-	61.17
3.	Depreciation Charges 1%	-	6.117
(II)	Total Charges (1+2+3)	-	67.812
	Net benefit from project (I-II)	-	3.21
	Profit for 50 years	-	160.50
(D)	Total cost due to forest land diversion	-	20.186
	Benefit Ratio of project	-	7.95



Sub Engineer



(D.P. Tiwari)
Sub Divisional Officer
Babir Matiya H/W Sub Division
Malthone



(A.K. Choubey)
Executive Engineer
Water Resources Division No. 1,
Sagar (M.P.)