

Cost Benefit Analysis for
PRABHUDHANA 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	Remark
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 centers, 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 losses due to diversion of forest land suggested by the Central Powered Committee as per the forest classification report of proposed Prabhudhana Tank Scheme is Rs. 2.91 Lakh / Ha Cost of Land : = 7.002 x 2.91 = Rs. 20.37 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. = 7.002X0.291=Rs 2.04Lakh
3	Cost of human resettlement	There is no human settlement due to proposed Prabhudhana 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 infrastructure of forest land due to construction of Prabhudhana 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. = 7.002x 0.873 = Rs. 6.11 Lakh
6	Cost of suffering to oustees	Not applicable
7	Habutal Fragmentation cost	Forest land is being acquired for construction of dam. Submergence & spill channel of Prabhudhana 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 : = 7.002 x 4.00 = Rs. 28.01 Lakh
9	Total cost due to forest land diversion	Total cost due to forest land diversion for Prabhudhana Tank Scheme will be : = 20.37 + 2.04 + 6.11 + 28.01 = 56.53 Lakh


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


No.	Nature of proposal	Remark
1	Increase in productivity attribute to the specific project.	The crop production benefit due to Prabhudhana Tank Scheme will be Rs.1098.58 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.	Prabhudhana Tank Scheme will trigger economy development and also influence with irrigation facility to a land of 350 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, 135 cultivators will be benefitted and water level will be increased in surrounding area.
4	Economic benefits due to direct and indirect employment due to the project.	The Project will provide direct employment for approximate 300 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.


Prabhudhana Tank Scheme

Cost Benefit Analysis

(A)	Pre development crop production benefits (Rs. Lakh)	-	19.71
(B)	Post development crop production benefits (Rs. Lakh)	-	155.87
(I)	Total crop production benefit due to project (B-A)	-	136.16
(C)	Total Cost of the project	-	1098.58
	1. Annual Maintenance cost @ Rs. 250/Ha for CCA 350 Ha.	-	0.875
	2. Interest on capital 10%	-	109.86
	3. Depreciation Charges 1%	-	10.98
(II)	Total Charges (1+2+3)	-	121.71
	Net benefit from project (I-II)	-	14.45
	Profit for 50 years	-	722.50
(D)	Total cost due to forest land diversion	-	56.53
	Benefit Ratio of Project	-	12.78


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