

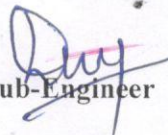
**Cost Benefit Analysis for**  
**SEVAN TANK SCHEME PROJECT**

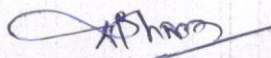
**On the basis of Guidelines for forest land diversion 2018**

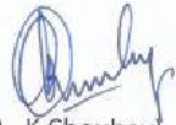
**Table – A Cases under which a cost benefit analysis for forest diversion**

**Are required**

No.	Nature of proposal	Applicable/not applicable	Remarks
1	2	3	4
1	All categories of proposals involving forest land up to 20 hectares in plains and up to 5 hectare in hill	<u>Not applicable</u>	
2	Proposal for defense installation purpose and oil prospection (prospecting only)	<u>Not applicable</u>	
3	Habitation, establishment of industrial units, tourist lades complex and other building construction	<u>Not applicable</u>	
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.	Aapplicable	These are cases where a cost benefit analysis is necessary to determine when diverting the forest land to non-forest use of overall public interest. The Sevan Tank Scheme fall under this category.

  
Sub-Engineer

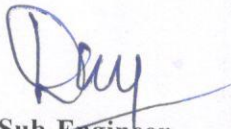
  
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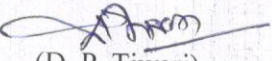
  
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**Table – C Existing guidelines for estimating benefits of forest-diversion in CBA**

No.	Nature of proposal	Remark
1	2	3
1	Increase in productively attribute to the specific project.	The crop production benefit, due to Sevan Tank Scheme will be Rs. 420.22 Lacs in designed life of 50 years & water level will be increase economy growth of the project.
2	Benefits to economy due to the specific project.	Sevan Tank Scheme will trigger economy development and also influence with irrigation facility to a land of ha. 140 in the surrounding area. Irrigation is proposed by Canal system. by 1:16
3	No. of population benefited due to specific project.	Project is located in backward area of the village. After completion of project, 160 cultivators will be increase 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 168 people (24 month) during construction period.
5	Economic benefits due to Compensatory a forestation.	An economic benefit due to compensatory a forestation has been considered as per the benefit of C.A. guidelines of ministry for N.P.V. estimation.

  
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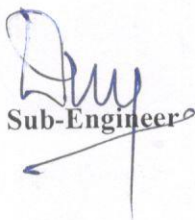
  
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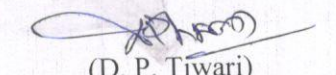



## SEVAN TANK SCHEME

### **COST BENEFIT ANALYSIS**

(A)	Pre development crop production benefits (Rs. Lacs)	-	10.60
(B)	Post development crop projection benefits (Rs. Lacs)	-	60.72
(i)	Total crop production benefit due to project (B-A)	-	50.12
(C)	Total Cost of the project	-	420.22
	1. Annual Maintenance cost @ Rs. 250 Ha for CCA 140 ha.-		0.35
	2. Interest on capital 10%	-	42.02
	3. Depreciation Charges 1%	-	4.20
(ii)	Total Charges (1+2+3)	-	46.57
	Net benefit from project (I-II)	-	3.55 ✓
	Profit for 50 Years	-	177.50 ✓
(D)	Total cost due to forest land diversion	-	64.54 57.448
	Benefit Ratio of project	-	3.089 3.63

  
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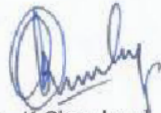


**Table – B Estimation of cost of forest diversion**

No.	Nature of proposal	Remark
1	2	3
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 Sevan Tank Schemes is Rs. 3.00 Lacs Ha. $\checkmark$ $= 6.26 \times 3.00 = \text{Rs. } 18.78 \text{ Lacs}$
2	Loss of animal husbandry productivity, including cost of fodder.	As per the cost benefit guideline i.e. 10% of N.P.V. 0.30 Lacs per Ha. $\checkmark$ $= 6.26 \times 0.30 = \text{Rs. } 1.878 \text{ Lacs}$
3	Cost of human resettlement	There is no human settlement due to proposed Sevan 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 Sevan Tank Scheme no cost has been added on this account
5	Possession value of forest land diverted.	The possession value of forest land diverted is taken 30% of the N.P.B. due to loss of forest i.e. 1.878 lacs / Ha. $\checkmark$ $= 6.26 \times 1.878 = \text{Rs. } 11.75 \text{ Lacs}$
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 Sevan Tank Scheme. There is no amount is taken under this account.
8	Compensatory afforestation and soil & moisture conservation cost.	The cost @ Rs. 4.00 Lacs per ha. is taken compensatory afforestation Hence amount will be $\checkmark$ $= 6.26 \times 4.00 = \text{Rs. } 25.04 \text{ Lacs}$
9	Total cost due to forest land diversion.	Total cost due to forest land diversion for Sevan Tank $18.78 + 1.878 + 11.75 + 25.04 =$ $\text{Rs. } 57.448 \text{ Lacs}$ $\checkmark$

  
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$= 64.54 \checkmark$