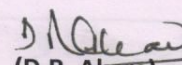


Cost-benefit analysis is applicable for Bichhli Nala Tank of Shahdol District in the state of Madhya Pradesh

**BICHHLI NALA TANK SCHEME**  
**CATEGORY OF PROPOSAL FOR WHICH**  
**COST-BENEFIT ANALYSIS IS APPLICABLE**

S.No.	Nature of Proposal	Applicable Not applicable	Remarks
1	All categories of proposal involving forest land upto 20 hecatares in plains and up to 5 heactares in hills	Not Applicable	-
2	Proposal for defence installation purpose and soil prospecting (prospecting only)	Not applicable	-
3	Habitation, establishment of industrial unit, tourist lodges construction	Not applicable	-
4	All other proposal 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 projects, hydel projects mining activity, railway lines, location specific installations like micro-wave stations, auto repeater centers, TV lowers etc.	Not Applicable	-

  
(D.R. Akare)

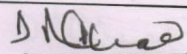
Executive Engineer  
Water Resources Division No.2  
Shahdol (M.P.)



Cost-benefit analysis is applicable for Bichhli Nala Tank of Shahdol District in the state of Madhya Pradesh

### PARAMETERS FOR EVALUATION OF LOSSES OF FOREST

S. No	Parameters	Irrigation project, quarrying of stones/metals
1	Loss of value of timber, fuel-wood and minor forest produce on an annual basis, including loss of man- hours per annum of people who are deprived livelihood and wages from the harvest of these commodities.	All the reference parameters were qualified in the Net present value (N.P.V) for forest land suggested by central empowered committee in constituted by supreme court of India, As per the forest are classification in central empowered committee report, The forest areas along. The proposed Bichhli Nala irrigation tank fall in to III (tropical dry deciduous forest) include N.P.V. Rs. 5.00 lakh per/ha. Hence total cost due to loss of project due to diversion of forest land for the present project total Rs 43.00 lakh.
2	Loss of animal husbandry productivity including loss of fodder.	Qualified in N.P.V. suggested by central empowered committee and including in the N.P.V. as mentioned above.
3	Cost of human resettlement.	Based on the preliminary survey, there is 4 family displacements of any outsees in the project and hence there wood be resettlement. Hence, provision of 20 lacs for Resettlement for affected families.
4	Loss of public facilities and administrative infrastructure (Roads. building. schools, dispensaries, electric lines. railways etc. ) on forest land or which would require forest land if these facilities were diverted due to the project.	Three is no loss of public facilities and administrative infrastructure on forest land for this project.
5	Environmental losses (soil erosion, effect on hydrological cycle, wildlife habital . microelimate. upsetting of ecological balance)	Forest land coming under submergence area of Bichhli Nala tank project only. No wildlife habitat will be affected due to submergence area of the project impact on microclimate due to tree cutting along the proposed alignment will be compensated with avenue plantation of thrice the number of tree to be cut with indigenous due to project. Hence the project is expected to have only minor impact on environment.
6	Suffering to oustees.	As per LA policy compensation is to be paid.
	Total cost due to forest land division for the project	Rs 43.00 lakh.

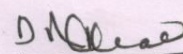
  
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## PARAMETERS FOR EVALUATION OF BENEFIT, NOTWITHSTANDING LOSS OF FOREST

S.No.	Parameters	Irrigation project
1	Increase in productivity attributable to the specific project	The crop production benefit due to Bichhli Nala Tank project with total Rs <b>280.98</b> lakh in design life of 100 years and water level will be increase in surrounding area. It will be increase economy growth of the project.
2	Benefits to economy	Bichhli Nala tank project will Trigger economy development in the project influence area with irrigation facility project will create irrigation facility in <b>760</b> ha. At the surrounding area. The farmers will irrigated <b>760</b> ha. By gravity flow or canal farmers will also life water by pump with their own arrangement to irrigation <b>760</b> hac. Area available in the nearby field of dem.
3	No of population benefited	Since the project location in the back word area of the village. After completion of project <b>950</b> cultivators will be befitted and water level will be increase surrounding area.
4	Employment potential	The project will provide direct employment for approximate <b>48000</b> people during constriction period for 36 month.
5	Cost of acquisition of facility on non-forest land where feasible	Yes, cost of acquisition of facility is feasible cost of non- forest Land work out to be 778.34 lacs
6	Loss of (a) agricultural & (b) non-forest land wherever feasible	The forest area under the Bichhli Nala tank project is already protected entity and hence, there will not be any impact on agriculture and animals husbandry.
7	Cost of rehabilitating the displaced persons as different from compensatory amounts given for displacement	Based on the preliminary survey, there is 4 family displacements of any outsees in the project and hence there wood be resettlement. Hence, provision of 20 lacs for Resettlement for affected families.
8	Cost of supply of free fuel wood to workers residing in or near forest area during the period of construction	The construction labors will be provided with labor camps and labours camp will be located within forest area. The labours camps will be provided with kerosene/LPG facilities and hence will not be any tree cutting for fuel wood.
9	Total benefit due to project not withstanding loss of forest.	Rs <b>280.98</b> lacs per Year Rs <b>28098</b> lacs after 100 Year

  
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### Cost Benefit Analysis

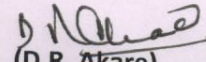
- (i) Total benefit due - to project - 527.92 lacs
- (ii) Total annual cost (expenditure) - @ 5% =171.38 lacs & @10% =313.38 lacs
- (iii) Benefit cost Ratio 10% - 1.68
- (iv) Cost Benefit cost Ratio 5% - 3.08

### ODARI DIVERSUION II TANK PROJECT

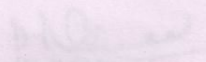
A note regarding identification for locating the in Forest land

Odari Diversuion II Tank project envisages construction of a tank near village Shahdol. On the Forest land. The project is proposed to serve the area of 950 ha. A detailed extensive survey has been carried out to select the site and optimum project cost for this purpose a study is done for the alternative dam site with different height and finally FTL is decided at RL 102.10 m with 0.543 Mcum live storage to irrigate 950 ha.

It is provide that either by increasing the capacity. The submergence area would be increased. The submergence area would be increased. Therefore present proposal is decided with minimum submergence of forest area of 39.49 hector with 0.543 Mcum live storage and to serve rain fed area 950 hector.

  
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