Name of the project: Diversion of 2.354 Ha of Forest land for the construction of Rising Main in Sy. No.59 of Adaganti Village and Sy No. 32 of Kaginele village of Shikaripura Taluk, Shimogga District, Sy.No. 91,126, 127, 153 of Varaha and Sy.No 291 of Nagavandha villages in Hirekerur Taluk of Haveri District to fill MI/ZP tanks by lifting 1.5 TMC of water from Tungabhadra river under Udugani, Talugunda and Hosuru (UTH) Tank Filling Project.

Table A: Category of proposals for which Cost Benefit Analysis are applicable

Sl.No.	Natureofproposal	Applicable/ Notapplicable	Remarks
1	Allcategoriesofproposalsinvolvingforestlandup to20HainPlainsandupto5Hainhills.	Notapplicable	
2	Proposalsfordefenseinstallationpurposesandoilpr ospecting(Prospectingonly)	Notapplicable	
3	Habitation,establishmentofindustrialunits,tourist lodges/complexandotherbuildingconstructions.	Notapplicable	
4	All other proposals involving forest land more than 20 Ha in plain and more than5 Ha in hills including roads, transmission lines, minor medium and major irrigation projects, hydel projects, mining activities, Railway lines, location specific installation like Micro-wave station, auto repeater center, TV towers, etc.	Not applicable	
5	ProposalforrenewalofMiningLeaseforforestland.	NotApplicable	

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Table-B: Calculation of the Cost

(Parameters for Evaluation of Loss of Forests)

Name of the Project :Diversion of 2.354 Ha of Forest land for the construction of Rising Main in Sy. No.59 of Adaganti Village and Sy No. 32 of Kaginele village of Shikaripura Taluk, Shimogga District, Sy.No. 91,126, 127, 153 of Varaha and Sy.No 291 of Nagavandha villages in Hirekerur Taluk of Haveri District to fill MI/ZP tanks by lifting 1.5 TMC of water from Tungabhadra river under Udugani, Talugunda and Hosuru (UTH) Tank Filling Project by Karnataka Neeravari Nigam Ltd, Govt. of Karnataka.

Quantum of Forest Applied For :2.354Ha

Life of Project :30 years

Division :Executive Engineer, Dandavathy Reservoir Project Division, Karnataka Neeravari Nigam Ltd, Shikaripura.

Sl.No	Parameter	Criteria	Cost per Year (lakhs)	Cost for 30 years (lakhs)
1	Ecosystem services losses due to proposed forest diversion	Economic Value of loss of eco-system services due to diversion of forest shall be the Net Present Value (NPV) of the forest land being diverted as prescribed by the Central Government (MoEF&CC). Present NPV for 1 Ha of forest land = 6.26 lakhs (density of 0.4) Present NPV for 2.354Ha forest land = 2.354X 6.26= 14, 73, 604/-	14,73,604/-	44,20,812/-
2	Loss of animal Husbandry Productivity, Including loss of Fodder.	10% of the NPV	1,47,360/-	4,42,081/-
3	Possession Value of Forest land Diverted	30% of the NPV	4,42,081/-	13,26,244/-
4	Habitat Fragmentation Cost	50% of the NPV	7,36,802/-	22,10,406/-
5	Compensatory afforestation and Soil & moisture conservation cost	Rate of C.A. for 1 Ha of forest land = 15.93 Lakh (2015-16) Value of C.A. for 2.354Ha forest land = 37,49,922/-	37,49,922/-	11,24,97,660/-
		Total	65,49,769/-	12,08,97,203/-

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Table-C: Calculation of the Benefits

(Parameters for Evaluation of Benefits)
(Not withstanding loss of forest)

Sl.No	Parameter	Criteria	Cost per Year (lakhs)	Cost for 50 years (lakhs)
1	Increase in Productivity attribute to the Specific project	Not Applicable for drinking water projects	-	-
2	Benefits to economy due to the Specific project	Not Applicable for drinking water projects	-	-
3	No of Population Benefited due to specific project	In Shikaripura taluk as per 2011 Census	1,29,000 People	
4	Economic benefits due to of direct and indirect employment due to this project	Total employment =50,000 (Per day wages as per Dept. of Labor, GOK2019-20)	-	
		10000 X Rs. 424.80/- (per day) X 20 days X 12 months = Rs.101,95,20,000/-	101,95,20,000/-	3058,56,00,000/-
5	Economic benefits due to Compensatory afforestation	Value of Carbon sequestration per Ha/year = Rs. 1,20,780/- (per Ha/Yr) X 2.354 Ha (forest land) = Rs. 2,84,316/-	2,84,316/-	85,29,483/-
		Value of Bio-Prospecting per Ha/year = Rs.25,553/- (per Ha/Yr) X 2.354 Ha (forest land) = Rs. 60,152/-	60,152/-	18,04,553/-
		Value of NTFP Ha/year= Rs.7,631/-(per Ha/Yr) X 2.354 Ha (forest land) = Rs. 17,963/-	17,963/-	5,38,901/-
		Value of Eco-tourism Ha/year = Rs.65,113/-(per Ha/Yr) X 2.354 Ha (forest land) = Rs. 1,53,276/-	1,53,276/-	45,98,280/-
		Value of fodder Ha/year = Rs.7631/- (per Ha/Yr) X 2.354 Ha (forest land) =Rs. 17,963/-	17,963/-	5,38,901/-
		Value of Flagship species Ha/year= Rs.2,58,400/- (per Ha/Yr) X 2.354 Ha (forest land) =Rs. 6,08,274/-	6,08,274/-	18,24,821/-
		Value of Ecological services of forests per Ha/Year= Rs.1,44,332/- (per Ha/Yr) X 2.354 Ha (forest land) =Rs. 3,39,757/-	3,39,757/-	1,01,92,726/-
		Total	**102,10,01,701/-**	**3061,36,27,665/-**

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CalculationofBenefit/CostRatio

Total Benefits (As per II calculations) =Rs. 3061,36,27,665/-

TotalLosses(AsperIcalculations) =Rs. 12,08,97,203/-

Hence,Benefit/CostRatio $\frac{3061,36,27,665}{12,08,97,203}$=253.22

Thus,theprojectgivespositiveBenefit/CostRatio with minimalenvironmentallosses.

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