

COST BENEFIT ANALYSIS

Project: Diversion of 15.944 hectare of forest land in Section-4 notified forest area of Bharamapura, Gogudda, Hilitotla, Sooragonadanahalli & Gownahali villages in Hiriya Taluk, Chitradurga District for already established 9.60 MW of Wind Power Project in favor of M/s Wind World (India) Ltd, Bangalore (ex-post factor approval)

Table B- Estimation of cost of forest diversion (As per MoEF&CC Guideline dated 1st Aug 2017 related to Cost Benefit Analysis)

Sr No	Parameters	Remarks (For Wind Power Project)
1	Ecosystem Services losses due to proposed forest diversion	NPV of the forest land being diverted 50% of 4.38 Lakhs i.e. INR.2.19 lac x 15.944 ha = INR 34.92 Lac
2	Loss of animal husbandry productivity including loss of fodder.	There will be no loss of Productivity of livestock due to construction of Wind Power Projects. 10% of NPV Applicable i.e INR 3.492 Lac
3	Cost of human resettlement.	Nil , There is no displacement of people due to the Project hence there would be no cost of human resettlement.
4	Loss of public facilities & administration infra-structure (Roads, Building, School, Dispensary, Electric lines, Railways etc.) on forest land or which would require forest land if these facilities were diverted due to project.	Nil , Since this is already commissioned project in section-4 notified area of forest land, now applying for Post-Facto approval of 15.944 Ha of forest land.
5	Possession value of forest land diverted (Taken at 30% of NPV)	30% of Net Present Value (NPV) as per MOEFCC Guideline is INR 10.476 Lac
6	Cost of suffering of Oustees	Nil , Since there will be no displacement of peoples due to this project.
7	Habitat Fragmentation Cost (Taken at 50% of NPV Value)	50% of NPV Applicable as per MOEFCC guidelines INR 17.46 Lac
8	Compensatory Afforestation @ 3.15 lakh/Ha and Soil & Moisture Conservation Cost @ 0.6158 lakh/Ha .	Comp. Afforestation Cost INR 50.22 Lac Soil & Moisture Conservation charges cost INR 9.82 Lac
Total Loss (Against the proposed Forest Land diversion for Wind Power Project)		INR 126.338 lac

Table C- Estimation of Benefit of Forest Diversion in Cost Benefit Analysis (as per MoEF&CC Guideline dated 1st Aug 2017 related to cost benefit analysis)

SN	Parameters	Remarks (For Wind Power Project)
1	Increase in Productivity attribute to the specific project	Project Cost is INR 16000 Lac .
2	Benefit to economy due to the specific project	By infusion of INR.16000 Lac , various sectors of economy like manufacturing, industry, banking, manpower, engineering etc. will get benefited. This project will definitely improve the Socio Economic development of the Karnataka State.
3	No of population benefited due to specific project	Considering average consumption of 500 Unit per family of 4 persons, total requirement is 6000 Units per year per family. The total generation of 15.8 Crore Units of electricity can feed power to 26350 families.
4.	Economic benefit due to direct and indirect employment due to the project	Socio economic condition of the persons to be employed will be increased. (i) During Project Construction Stage: Project is already commissioned in 2001. (ii) During Operation & Maintenance for 10 Year: The project will provide Permanent Employment to 10 Person for operation and maintenance for repair/machine services in case of shutdown respectively for a period of 4 Months in each years for 10 Years. The Economic Benefit is estimated at INR 600 Lac .
5.	Economic benefits due to Compensatory Afforestation Cost @ 3.15 lakh/Ha .	INR 3.15 lac x 15.944 ha = INR 50.22 Lac
Total (Benefit from Project in proposed Forest Land diversion for Wind Power Project)		INR 16650.22 lac or INR 16650 lac

COST BENEFIT RATIO (CB Ratio) OF THE PROJECT: Project Benefit /Total Environment & Forest Loss

Benefit INR.16650.22 lac

Loss INR.126.338 lac

Cost Benefit Ratio... 131.79 : 1

Hence, the Project has very high benefit to the country as compared to forest losses. The benefit to loss ratio is approximately 131 times.



Date: 13 Sept 2021

Signature:

Place: Mumbai

Name in Block Letter: MAHENDRA KUMAR SHARMA

Designation: Executive

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