

*Cost Benefit Analysis Report*

*for*

*Diversion of 38.8633 Ha Forest Land in*

*Village : Hazira, Taluka : Choryasi, District : Surat*

*for*

*Expansion of RIL Hazira Manufacturing Division*

*and Associated facilities like Tank Farm, Warehousing, etc.*

**Table - A Cases under which a cost-benefit analysis for forest diversion are required**

| No. | Nature of proposal   | Applicable/ not applicable | Remarks  |
|-----|--|----------------------------|--|
| 1.  | All categories of proposal involving forest land up to 20 hectares in plains   | Not applicable             |  |
| 2.  | Proposal for defence installation purposes ad oil prospecting (prospecting only)   | Not applicable             |  |
| 3.  | Habitation, establishment of industrial units, lodges complex and other building construction  | Not applicable             |  |
| 4.  | All other proposals involving forestland more than 20 hectares in plains and more than 5 hectares in hills including roads, transmission lines, minor, medium and major irrigation projects, hydro projects, mining activity, railway lines, location specific installations like micro - wave stations, auto repeater centers, TV towers etc. | Applicable                 | The proposed project is for Diversion of approx. 38.8633 Ha of forest land at village : Hazira, Taluka : Choryasi, District : Surat for Expansion of RIL Hazira Manufacturing Division and Associated facilities like Tank Farm, Warehousing, etc. to cater expansion needs of Hazira Manufacturing Division (HMD) Vill. : Mora in Hazira Industrial Notified Area |

**Table – B : Estimation of Cost of Diversion**

| <b>SN.</b> | <b>Parameters</b>   | <b>Remarks</b>  |
|------------|---|---|
| 1.         | Ecosystem services losses due to proposed forest diversion  | NPV of the Forest Land being diverted i.e.<br>Revenue Forest (NPV) * Area (in Ha) =<br><b>Rs. 0.0626 Cr. * 38.8633 Ha = Rs. 2.43 Cr</b> |
| 2.         | Loss of animal husbandry productivity, including loss of fodder   | Not applicable due to nonexistence of animal  |
| 3.         | Cost of human resettlement  | Not applicable as there no R&R in involved within the applied forest area   |
| 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 | Not applicable as there is no public facilities exists within the applied area  |
| 5.         | Possession value of forest land diverted  | NPV * Area (in Ha) * 30% =<br><b>Rs. 0.626 Cr. * 38.8633 Ha * 30%= Rs. 0.73 Cr.</b>   |
| 6.         | Cost of suffering to oustees  | Not applicable  |
| 7.         | Habitat Fragmentation Cost  | NPV * Area (in Ha) * 50% =<br><b>Rs. 0.0626 Cr * 38.8633 Ha * 50%= Rs. 1.22 Cr.</b>   |
| 8.         | Compensatory afforestation and soil & moisture conservation cost  | CA Afforestation, S&MC cost =<br><b>Rs. 0.066 * 38.8633 = Rs. 2.56 Cr</b>   |

Note : NPV for Eco-class III Tropical Dry Deciduous Forests has been considered on Rs. 6,26,000/ Ha

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

|    |   |   |
|----|---|---|
| 1. | Increase in productively attribute to the specific project                    | Proposed Facilities of Expansion of RIL Hazira Manufacturing Division and Associated facilities like Tank Farm, Warehousing, etc. will generate estimated Revenue of <b>Rs. 15,000 Crs</b> over a period of 30 Years based on Life Span   |
| 2. | Benefits to economy due to the specific project                               | Direct/Indirect Taxation to the Govt → Approx <b>Rs 305 Crs</b>   |
| 3. | No. of population benefited due to specific project                           | ~ 1 Lakh  |
| 4. | Economic benefits due to of direct and indirect employment due to the project | Employment generation from the project will be 15-20 persons. (In addition to that project will help developing indirect employment/business opportunity for 700 people during construction phase.<br>In Steady State phase generation of Direct Employment: 40-50 Nos.<br>→ Approx <b>Rs. 120 Crs.</b> (for 30 Yrs.) |
| 5. | Economic benefits due to Compensatory Afforestation                           | Compensatory forestation of 38.8633 Ha of Land @ 1,100 nos. of sapling<br><br>Economic benefits of accruing over next 50 years monetized in terms of providing oxygen, water, soil moisture conservation, etc. + timber & firewood  |

**Cost Benefit Ratio of the project :**

**Benefit : Rs. 15,000 (for 30 yrs.)**

**Loss :**

- Project Cost = Rs. 2,000 Cr (1 time)
- O&M Cost = Rs. 2,500 Cr (for 30 yrs.)
- Employment Cost = Rs. 120 Cr (for 30 yrs.)
- Compensatory afforestation = Rs. 42 Cr (1 time)
- Total** **Rs. 4,662 Cr**

**Ratio : Benefit / Loss = 15,000/4,662 = 3.21**

