

Annexure-5

Name of Project: Diversion of **10.19 ha.** R.F. Land for construction of Barrage and approach road on Sabarmati River in Village: Hirpura, Ta. Vijapur, Dist. Mehsana.

COST BENEFIT ANALYSIS

a) Parameters for evaluation of loss of Forest

The parameters for the evaluation of "costs" incurred due to a project for which a cost-benefit analysis must be done is provided in the guidelines to this Act, issued by the MoEF&CC.

Sr. No.	Parameters	Description
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 derived livelihood and wages from the harvest of these commodities.	The area 10.19 ha. is part of Degraded Reserve Forest having poor shrubby growth and moderate ravines. The actual 19 gated barrage concrete structure is to be constructed across the river, however approach road and earthen bund only are to be constructed on demanded Reserve Forest Land. Most of the species to be removed are injailly fuel wood species such as acacia, prasophis etc. Hence there will me minimal loss of timber fuel wood, also there will be no loss of man hours as no people derives livelihood and wages from said commodities. Also, avenue plantation will be carried out after completion of project.
2.	Loss of animal husbandry productivity, including loss of fodder.	No loss to animal husbandry or fodder losses.
3.	Cost of human resettlement.	No Resettlement in the Section-4 Reserve Forest land that is to be diverted for the project.
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.	There will be no losses to the public facilities, instead the proposed project will provide administrative ease to the public facilities such as schools, dispensaries etc.


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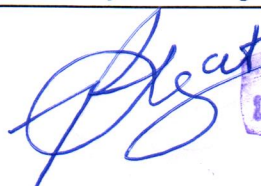
5.	Environmental losses: (Soil erosion, effect on hydrological cycle, wildlife habitual, microclimate upsetting of ecological balance)	The proposed area is a river bed, the sole purpose of the project is water conservation and SMC, with check erosion and restore vegetative cover.
6.	Suffering to oustees.	No Suffering to oustees.

Therefore, the total loss of Forest, as per the approved parameters, works out to as under:

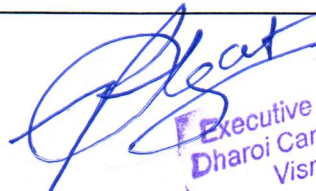
Parameters No	Description	Loss (in Lacs)
5	Environmental losses: (Soil erosion, effect on hydrological cycle, Wildlife habitat, microclimate upsetting of ecological balance.	NIL

Evaluation of Benefit from Forests:

Sr. No.	Parameters	Description
1	Increase in productivity attributable to the specific project.	At present the area is Semi-Arid region with avg. 827mm rainfall annually and in recent years due to irregular rainfall the area has seen a large fall in ground water level. The construction of proposed 19 gated barrage mainly intending to enhance irrigation assured facilities of the region having agribusiness as main occupation, it is estimated that the construction of barrage will directly boost up the agribusiness by appx. 13%. The project will be providing irrigation facilities to more than 7060 acres of cultivable land and will accelerate the growth of economy and in general and improve socio-economic status of people of this area. People will get assured irrigation and will add to the development of this area. It will also improve the ground water recharge in the entire area also improving the Forest Growth and vegetative area.
2.	Benefits to economy	The proposed project will provide assured irrigation facility to 7060 acres of land and will be benefitting more than 50000 farmers. Currently, the irrigation facilities

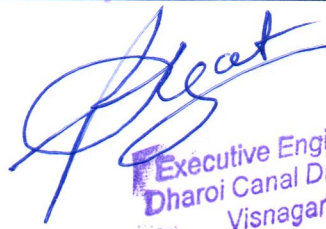
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		in Vijapur taluka is very less in comparison to other regions of the state. The project will decrease the economic disparities due lack of easy availability of water for farming which will later add to the Gross National Productivity of the nation where 58% of the total population is depending on agriculture. Presently entire is draught prone/semi-arid area with scanty rain with no irrigation facilities. This project is a vital barrage across river Sabarmati facilitating irrigation in 1060 ha. recharging the overall.
3.	No. of population benefitted	Almost covering entire North Gujarat and Districts Mehsana and Sabarkantha especially to approximately 50000 farmers of villages.
4.	Employment Potential	With increase in cultivable area, the project would enhance overall agriculture based employment and also increase employment opportunities tremendously through other subsidiaries and ancillaries. The project would employ: i) Permanent/Regular employment: 30 Persons for operation and management purposes. ii) Temporary Employment: 250 Persons during construction stage.
5.	Cost of acquisition of facility on non-forest land wherever feasible.	The non-forest land acquired is ravine deteriorated and degraded land. The acquisition cost is approximately ₹ 10 Lacs.
6.	Loss of a) Agriculture b) Animal husbandry production due to diversion of Forest Land.	a) NIL b) NIL Instead it will improve agriculture production and fodder development enhancing animal husbandry.
7.	Cost of rehabilitating. The displaced persons as different from compensatory amounts given for displacement.	There will be no Rehabilitation, hence NIL cost.


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8.	Cost of supply of free Fuel-Wood to workers residing in or near forest area during the period of construction.	No free fuel-wood shall be provided and no workers shall be residing in the forest area. As a measure to mitigate environmental impacts, non-polluting means shall be uses instead of fuel wood.																
A	<p>Total benefits as per above parameters are:</p> <table><thead><tr><th>Parameters</th><th>Appx. Amount (in lacs)</th></tr></thead><tbody><tr><td>2. Benefits to economy</td><td>1000</td></tr><tr><td>3. Population benefit</td><td>1000</td></tr><tr><td>4. Employment potential</td><td>50</td></tr><tr><td>5. Cost of acquisition of facility on non-forest land wherever feasible</td><td>0</td></tr><tr><td>6.Loss of (a) Agriculture and (b) animal husbandry production due to diversion of forest land.</td><td>0</td></tr><tr><td>7. Cost of supply of free fuel-wood to workers residing in or near Forest Area during the period of construction.</td><td>0</td></tr><tr><td>Total:</td><td>2050</td></tr></tbody></table>		Parameters	Appx. Amount (in lacs)	2. Benefits to economy	1000	3. Population benefit	1000	4. Employment potential	50	5. Cost of acquisition of facility on non-forest land wherever feasible	0	6.Loss of (a) Agriculture and (b) animal husbandry production due to diversion of forest land.	0	7. Cost of supply of free fuel-wood to workers residing in or near Forest Area during the period of construction.	0	Total:	2050
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1.d Total Population Benefitted


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i) Employment Number during construction and Operation: (DIRECT BENEFITS)

Sr. No.	Description	Construction	Operation
1.	Skilled	050	12
2.	Semi-skilled	100	15
3.	Un-skilled	100	03
	Total	250	30

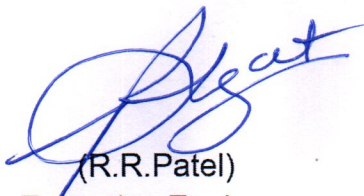
1.e Employment Generation

Construction Stage:

Sr. No.	Description	Numbers
1	Skilled	050
2	Semi-skilled	100
3	Un-skilled	100
	Total	250

Date: **05/06/2022**

Place: Visnagar


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