

BARGI DIVERDION PROJECT

SALIENT FEATURES

1. CANAL SYSTEM

1.1 MAIN CANAL

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|----------------------------------|---|--|
| 1.1.1 Purpose | : | Irrigation & Water Supply. |
| 1.1.2 Type | : | Flow Canal fully lined
(Cement concrete lining)
upto 40 ha. Block & 10%
selective lining below
40 ha. Block. |
| 1.1.3 Total Length of Main Canal | : | 193.88 Km |
| 1.1.4 Full supply level at head | : | 411.48 m. |
| 1.1.5. Full supply depth at head | : | 5.50 m |
| 1.1.6 Bed Width at head | : | 21.50 m |
| 1.1.7 Side slopes | : | 1.5:1 |
| 1.1.8 Bed grade at head reaches | : | 1/10,000 |
| 1.1.9 Maximum discharge at head | : | 227.438 cumecs. |

1.2 Branch Canals

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|--------------------------------------|---|------------|
| 1.2.2. Total Length of branch canals | : | 183.87 Km. |
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1.3. Length of Distribution System

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| i) In Jabalpur Distt. | : | 970 Km. |
| ii) In Rewa&SatnaDistt. | : | 1730 Km. |

2. IRRIGATION DETAILS

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|-------------------------------|---|-------------|
| 2.1 C.C.A. | : | 3,67,614 ha |
| 2.2 C.C.A. In Jabalpur Distt. | : | 81,823 ha. |
| In SatnaDistt. | : | 1,59,655 ha |
| In Rewa Dist. | : | 3,532 ha |

Total	<hr/>	2,45,010 ha
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2.3 Annual Irrigation

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|-----------------|---|--------------|
| Jabalpur Distt. | : | 1,31,735 ha. |
| SatnaDistt. | : | 2,39.481 ha |
| RewaDistt. | : | 5,298 ha |

Total	<hr/>	3,76,514 ha
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2.4 76% Dependable Yield/ Water Utilization

- i) 75% dependable yield at Bargi Dam site : 5447 Mm³
- ii) Water Utilization

	Bargi Dam (L.B.C.) System			Bargi Dam (L.B.C.) Project (RBC) Sys.			Grand Total
	Surface Flow Mm ³	Ground Water Mm ³	Total Mm ³	Surface Flow Mm ³	Ground Water Mm ³	Total Mm ³	
a) Requirement for Irrigation	1008.00	345.00	1353.00	1853.00	463.30	2316.40	3669.40
b) Requirement for Industrial & domestic use	54.00	-	54.00	116.40	-	116.40	170.40
c) Evaporation	103.00	-	103.00	192.00	-	192.00	295.00
	1165.00	345.00	1510.00	2161.50	463.30	2624.80	4134.80

3.0 COST ESTIMATES

- i) Estimated cost of Project : Rs. 1101.23 crores
- ii) Apportionment of Cost of Bargi Multipurpose Project for B.D. P. : Rs. 93.61 crores
- Total cost for B.C. Ratio assessment Rs.1194.84 Crores

4.0 ANNUAL BENEFITS/REVENUE

- i) Total produce after irrigation : Rs. 877642 MT
- ii) Total produce before irrigation : Rs. 301450 MT
- iii) Additional food production : Rs. 576192 MT
- iv) Value of total produce after irrigation. : Rs. 38098.51 Lakhs
- v) Value of total produce before irrigation. : Rs. 7161.72 Lakhs
- vi) Value of additional food production. : Rs. 30936.79 Lakhs
- vii) Revenue from 0.0944 maf. Water supply. : Rs. 49.34 Lakhs

5.0. **ECONOMIC EVALUATION**

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|---|---|------------|
| i) B. C. Ratio with 10% rate of Interest | : | 1.54 |
| ii) I. R.R | : | 9.26% |
| iii) Financial return after 10 years of completion of project | : | (-) 0.028% |
| iv) Cost of irrigation/Ha. | : | Rs.31,734 |
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