

## Bhadhaka Dam

|                                      |  |
|--------------------------------------|--|
| Location                             | 23.0292° N, 73.6925° E                 |
| State                                | Gujarat                                |
| Nearest City                         | Godhara                                |
| Year of Completion                   | 1868                                   |
| Operated and Maintained by           | Gujarat Engineering Research Institute |
| River Basin                          | Mahi                                   |
| River                                | Kotar                                  |
| Dam Type                             | Earthfill Embankment                   |
| Height above lowest foundation level | 14.0 m                                 |
| Dam length                           | 81.0 m                                 |
| Reservoir Area                       | 59902689.0 m <sup>2</sup>              |
| Gross storage capacity               | 1440000.0 m <sup>3</sup>               |
| Effective storage capacity           | 1028000.0 m <sup>3</sup>               |

## CATCHMENT CHARACTERISTICS

| Catchment Properties    | Values                      |
|-------------------------|-----------------------------|
| Area of catchment       | 4.6 km <sup>2</sup>         |
| Perimeter of catchment  | 9.0 km                      |
| Basin Length            | 2979.0 m                    |
| Form factor             | 0.52046                     |
| Circularity ratio       | 0.71911                     |
| Elongation ratio        | 0.81377                     |
| Highest Stream order    | 4                           |
| Max elevation           | 233.0 m                     |
| Min elevation           | 127.0 m                     |
| Mean bifurcation ratio  | 2.2468                      |
| Stream frequency        | 80.9760 per km <sup>2</sup> |
| Relief                  | 106.00 m                    |
| Drainage density        | 10.8400 km/km <sup>2</sup>  |
| Length of overland flow | 46.125 m                    |

## CATCHMENT CLIMATOLOGY

