

## Vagadi Dam

Location	23.5844° N, 73.1558° E
State	Gujarat
Nearest City	Himmatnagar
Year of Completion	1985
Operated and Maintained by	Gujarat Engineering Research Institute
River Basin	Sabarmati
River	Local Vangha
Dam Type	Earthfill Embankment
Height above lowest foundation level	17.5 m
Dam length	470.0 m
Reservoir Area	166037.0 m <sup>2</sup>
Gross storage capacity	1000000.0 m <sup>3</sup>
Effective storage capacity	890000.0 m <sup>3</sup>

## CATCHMENT CHARACTERISTICS

Catchment Properties	Values
Area of catchment	8.4 km <sup>2</sup>
Perimeter of catchment	13.1 km
Basin Length	4610.3 m
Form factor	0.39501
Circularity ratio	0.61900
Elongation ratio	0.70895
Highest Stream order	5
Max elevation	265.0 m
Min elevation	161.0 m
Mean bifurcation ratio	2.1534
Stream frequency	70.2730 per km <sup>2</sup>
Relief	104.00 m
Drainage density	8.5430 km/km <sup>2</sup>
Length of overland flow	58.527 m

## CATCHMENT CLIMATOLOGY

