

Sardar Sarovar Dam

The Sardar Sarovar Dam is a gravity dam on the Narmada river near Navagam, Gujarat in India. Four Indian states, Gujarat, Madhya Pradesh, Maharashtra and Rajasthan, receive water and electricity supplied from the dam. The foundation stone of the project was laid out by Prime Minister Jawaharlal Nehru on 5 April 1961. The project took form in 1979 as part of a development scheme funded by the World Bank through their International Bank for Reconstruction and Development, to increase irrigation and produce hydroelectricity, using a loan of US\$ 200 million.[3] The construction for dam begun in 1987, but the project was stalled by the Supreme Court of India in 1995 in the backdrop of Narmada Bachao Andolan over concerns of displacement of people. In 2000-01 the project was revived but with a lower height of 110.64 metres under directions from SC, which was later increased in 2006 to 121.92 meters and 138.98 meters in 2017. [4] The water level in the Sardar Sarovar Dam at Kevadiya in Narmada district reached its highest capacity at 138.68 metres on September 15, 2019. [5][6] One of the 30 dams planned on river Narmada, Sardar Sarovar Dam (SSD) is the largest structure to be built. It is one of the largest dams in the world.[7][8] It is a part of the Narmada Valley Project, a large hydraulic engineering project involving the construction of a series of large irrigation and hydroelectric multi-purpose dams on the Narmada river. Following a number of controversial cases before the Supreme Court of India (1999, 2000, 2003), by 2014 the Narmada Control Authority had approved a series of changes in the final height “ and the associated displacement caused by the increased reservoir, from the original 80 m (260 ft) to a final 163 m (535 ft) from foundation.[9][10] The project will irrigate more than 18,000 km² (6,900 sq mi), most of it in drought prone areas of Kutch and Saurashtra. The dam's main power plant houses six 200 MW Francis pump-turbines to generate electricity and include a pumped-storage capability. Additionally, a power plant on the intake for the main canal contains five 50 MW Kaplan turbine-generators. The total installed capacity of the power facilities is 1,450 MW.



Country	=India
Location	=Navagam, Kevadiya Colony, India
Coordinates	=21°49′24.9″N 73°44′25.0″ECoordinates: 21°49′24.9″N 73°44′25.0″E﻿•﻿21°49′24.9″N 73°44′25.0″E
Status	Operational
Construction began	=April, 1987
Opening date	=17 September 2017
Owner(s)	=Narmada Control Authority
Dam and spillways	
Type of dam	=gravity dam, concrete
Impounds	Narmada River

Height =138.68 meters
Height (foundation) =163 m (535 ft)
Length =1,210 m (3,970 ft)
Spillway capacity =84,949 m3/s (2,999,900 cu ft/s)
Reservoir
Total capacity =9.5 km3 (7,700,000 acreâ€¦ft)
Active calpacity =5.8 km3 (4,700,000 acreâ€¦ft)
Catchment area =88,000 km2 (34,000 sq mi)
Surface area =375.33 km2 (144.92 sq mi)
Maximum length =214 km (133 mi)
Maximum width =1.77 km (1.10 mi)
Maximum water depth =140m
Normal elevation =138 m (453 ft)
Power Station
Operator(s) =Sardar Sarovar Narmada Nigam Limited[1]
Commission date =June 2006
Turbines Dam =: 6 x 200 MW Francis pump-turbine
Canal: = 5 x 50 MW Kaplan-type[2]
Installed capacity =1,450 MW [1 Billion kwh every year]

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