Nagarjuna Sagar Dam

Nagarjuna Sagar Dam is a masonry dam across the Krishna river at Nagarjuna Sagar which straddles the border between Guntur district, Andhra Pradesh and Nalgonda district, Telangana. Constructed between 1955 and 1967, the dam created a water reservoir with gross storage capacity of 11.472 billion cubic metres (405.1Ã—109 cu ft). The dam is 590 feet (180 m) tall from its deepest foundation and 0.99 miles (1.6 km) long with 26 flood gates which are 42 feet (13 m) wide and 45 feet (14 m) tall.[2] Nagarjuna Sagar was the earliest in a series of large infrastructure projects termed as "modern temples" initiated for achieving the Green Revolution in India. It is also one of the earliest multi-purpose irrigation and hydro-electric projects in India. The dam provides irrigation water to the Nalgonda, Suryapet, Krishna, Khammam, West Godavari, Guntur and Prakasam districts along with hydro electricity generation. Nagarjuna Sagar dam is designed and constructed to use all the water impounded in its reservoir of 312 TMC gross storage capacity which is the second biggest water reservoir in India.

History

The Nizam made the British engineers begin the survey work for this dam across the Krishna river in the year 1903.[3] But the project construction was officially inaugurated by Prime Minister Jawaharlal Nehru on 10 December 1955 and proceeded for the next twelve years. Raja Vasireddy Ramagopala Krishna Maheswara Prasad, popularly known as late Muktyala Raja was instrumental in the construction of the Nagarjuna Sagar Dam via active political lobbying, a donation of one hundred million British pounds and fifty-five thousand acres of land. It was the tallest masonry dam in the world at that time, built entirely with local know-how under the able engineering leadership of Kanuri Lakshmana Rao the then Member of Parliament from Vijayawada. The construction of the dam submerged an ancient Buddhist settlement, Nagarjunakonda, which was the capital of the Ikshvaku dynasty in the 1st and 2nd centuries, the successors of the Satavahanas in the Eastern Deccan. Excavations here had yielded 30 Buddhist monasteries, as well as artworks and inscriptions of great historical importance. In advance of the reservoir's flooding, monuments were dug up and relocated. Some were moved to Nagarjunakonda, now an island in the middle of the reservoir. Others were moved to the nearby mainland village of Anupu.[4] The reservoir water was released into the left and right bank canals by Prime Minister Indira Gandhi on August 4, 1967.[5] Construction of the hydropower plant followed, with generation increasing between 1978 and 1985, as additional units came into service. In 2015, diamond jubilee celebrations of project's inauguration were held, alluding to the prosperity the dam has ushered into the region.

Location =Guntur district, Andhra Pradesh and Nalgonda district, Telangana
Coordinates =16Â°34â€²32â€³N 79Â°18â€²42â€³ECoordinates: 16Â°34â€²32â€³N 79Â°18â€²42â€³E
Purpose =Hydroelectric & Irrigation
Construction began =December 10, 1955
Opening date =1967
Construction cost =132.32 crore rupees
Dam and spillways
Impounds =Krishna River
Height =124 metres (407 ft) from river level
Length =1,550 metres (5,085 ft)
Reservoir
Creates =Nagarjuna Sagar Reservoir
Total capacity =11.56 km3 (9Ã—106 acreâ‹…ft)
(405 Tmcft)
Active capacity =5.44Ã—109 m3 (4,410,280 acreâ‹…ft)[1]
Catchment area =215,000 square kilometres (83,000 sq mi)
Surface area =285 km2 (110 sq mi)
Power Station
Operator(s) =TSGENCO
Commission date =1978â€“1985
Turbines =1 x 110 MW Francis turbine, 7 x 100.8 MW reversible Francis turbines
Installed capacity =816 MW (1,094,000 hp)