A VISIT REPORT ON

SARDAR SAROVAR DAM

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Water Resources management is one of the important subject in 4th semester of Civil Engineering, So we were arranged a technical visit at **Sardar Sarovar Dam site**, **Kevadiya Colony, Bharuch** on **24th febr , 2017 (Saturday)** to improve their knowledge and to get technical exposure of dam &appurtenant works, power generation unit (Tunnel), canals reservoir, aqueduct etc.

The Sardar Sarovar Project is an inter-state project, which has participation from the States of Gujarat, Madhya Pradesh, Maharashtra and Rajasthan. The project has undertaken construction of a dam across Narmada River at Navagam village of Bharuch District in the Gujarat State. It is on the border of Gujarat and Maharashtra states. The maximum height of the dam would be138.68 meters. The height of dam is being increased in phases. Following different sites visited
by our students:

1. Visit of Tunnel (Hydro Power Unit)

Total Power Generation capacity of 1450 MW comprising an underground River Bed Power House (RB PH) with six units each of 200 MW reversible type Francis turbine, a surface Canal Head Power House (CHPH) with five units each of 50 MW conventional type Kaplan turbine, GIS switch yard complex, and the 400 KV power transmission network up to MP-Gujarat and Maharashtra - Gujarat borders in Gujarat.

There is power generated by 6 X 200 MW River Bed Power House (RBPH) & 5 X 50 MW Canal Head Power House (CHPH) at SSP (1450 MW) share by M.P., Maharashtra and Gujarat is the ratio of 57:27:16. The power generated at SSP integrates in common switchyard. MP entitles to get 57% of the power available at bus bar in the switchyard after allowing for station auxiliaries.
The above entitlement applies both to availability of machine capacity for peak loads and to the total energy produced in any day.

2. Dam & Appurtenant Works

Comprising a 1210 m long and 163 m high (from deepest foundation) concrete gravity dam Across the main Narmada River along with its appurtenant works near village Kevadia of Dist, Baroda.

3. Reservoir

The reservoir formed by the main dam will have a gross storage capacity of 0.95 million hectare meters (7.70 MAF) and. a live storage of 0.58 million hectare meters (4.73 MAF) to provide irrigation to about 1.80 million hectares in about 3400 villages in Gujarat and in the arid areas of the Barmer and Jallore districts of Rajasthan, apart from providing drinking water to about 8215villages and 135 urban centers of Gujarat. The annual power generation at the project is estimated at 5469 GWH in initial years.

4. Canals & Head Regulator

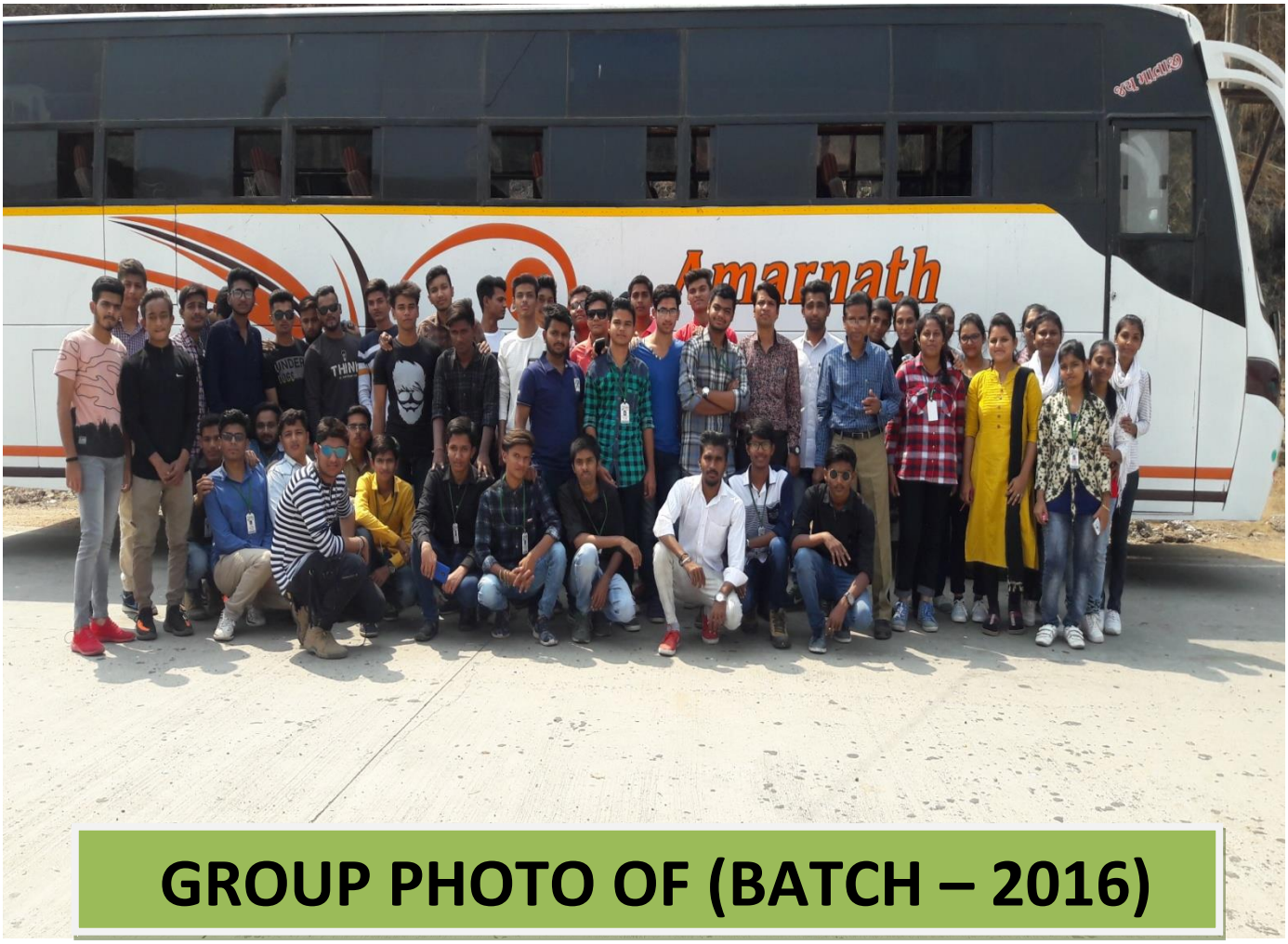
Comprising 458 km long Narmada Main Canal (NMC) in Gujarat & 74 Km in Rajasthan, 44 branch canals with gross length of 2500 km, 5500 km distributaries, nearly 30,000 km minors and sub minors.
The vast network of distribution system, including field channels, will have an aggregate lengthofabout75,000 km. withCCAof18.419lakhhainGujarat.

5. Statue of Unity

The Statue of Unity is an iconic 182 meter tall landmark statue dedicated to Sardar Vallabhbhai Patel, a visionary leader and statesman hailed as the Iron Man of India, due to his pivotal role in the country's struggle for independence and subsequent integration. Post completion in 2018, the Statue of Unity will be the world's tallest statue. The Statue of Unity is being built with 5,600 MT of structural steel, 66,000 MT of concrete and 1,900 MT of 'kansa' (bronze). The construction of the Rs2,989 crore project began in December 2015. The statue has so far been erected up to the knees — 59 meters tall, at 117 m above sea level — out of a planned 182 m, to match the number of assembly constituencies in Gujarat. Close to 2,400 workers are at work on day and night shifts. The core wall, the RCC spine of

the statue — on which steel frames will be affixed to hold the bronze cladding together - is being constructed.

STATUE OF UNITY UNDER CONSTRUCTION



GROUP PHOTO OF (BATCH – 2016)