



G H Patel College of Engineering & Technology, V. V Nagar

Department of Civil Engineering

Report on

Visit to “1. State Water Data Centre, Gandhinagar  
2. Gujarat Vidhan Sabha, Gandhinagar  
3. Karai Dam, Ahmedabad”



Department of Civil Engineering, GCET had organized one day Educational visit to “State Water Data Centre, Gandhinagar” on August 10<sup>th</sup>, 2018. 74 students, 4 faculty members had visited the state water data centre at Gandhinagar.

**About State Water Data Centre, Gandhinagar:**

- The hydrology project aims at assisting the Government of India and the eleven participating States in developing comprehensive, easily accessed and user-friendly databases covering all aspects of the hydrological cycles including surface water and ground water in terms of quality and quantity and climatic measurements.
- This should contribute to improve planning and management of water resources in India.
- The main objective of Hydrology Project is to improve the Hydrological Information System (HIS) in all the participating states and Agencies of Government of India, to standardize the observation system with uniform format.

**Aim of Visit:**

The main aim of visit was to make students aware and to teach them about the various weather parameters (Rainfall, Temperature, Evaporation, Sunshine Hours etc.) their importance and significance, their measurement and various advanced methods for the prediction of same as they are studying the part of it in subject called “*Hydrology & Water Resources Engineering*”. Moreover students were aware about different types of data available at the State Water Data centre and the process to collect them for their future projects/studies

**About Gujarat Vidhan Sabha, Gandhinagar:**

Gujarat Legislative Assembly or Gujarat Vidhan Sabha is the unicameral legislature of the Indian state of Gujarat. It is situated in the capital Gandhinagar. Presently, 182 members of the Legislative Assembly are directly elected from the single-seat constituencies and one member is nominated. It has term of 5 years unless it is dissolved sooner. 13 constituencies are reserved for scheduled castes and 27 constituencies for scheduled tribes.

**Aim of Visit:**

- All Students have attended Live Assembly of Gujarat.

- Students also became aware of the Constitution and working of the legislative assembly of Gujarat.

### **Karai Dam(Syphon), Ahmedabad:**

The Sabarmati Canal Syphon (Karai Dam) is one of the largest Canal Syphon in the world. The total length of the Canal Syphon is 614 m and is constructed to cross the Narmada Main Canal across the Sabarmati river. Out of the total length of the Syphon, 335m is in the river bed, 72.75m on left bank and 93.84m on the right bank. The discharge capacity of the Canal Syphon is about 881.6 cumecs discharging water through 9 reinforced concrete barrels of 6.25m x 6.25m opening size. There are radial gates provided in each barrel of size 6.25m x 8.3m to regulate the flow through the Canal Syphon. The Canal Syphon was constructed from 1994 to 2001.

### **Aim of Visit:**

The visit was initiated with an overview by the engineers at the Canal Syphon. The students were shown an overview of the structure mainly consisting of two sections namely

1) The Aqueduct and 2) The Syphon Aqueduct. Furthermore, the students were given a visit of escape. The students were given a detailed level of information on the radii of the escape along with dimensions in order to enhance their knowledge and to give them a chance to appreciate the complexity of a structure.

The students learnt and understood a practical applicability of Irrigation Engineering, importance of accurate dimension measurement and making engineering designs with a difference.