

# SURAT: GUJARAT

### **CITY REPORT**

15TH MAR 2021



46.46 Lakhs population

474.2 km² area

35 kilometres Coastline Tropical savanna climate

Avg temperature 37 °C (99 °F)

Literacy rate 86.65% Avg elevation 13 metres

Gujarati Language

State: Gujarat

The city of Surat is located in the western part of the State of Gujarat, the city has earned for itself the title of being the cleanest city along with 'THE SILK CITY, 'THE DIAMOND CITY', and 'THE GREEN CITY." Apart from that in terms of its economic growth, it is a dynamic city that provides a vast range of employment opportunities and also serves as an important attraction for immigrants due to its industries.

### DEMOGRAPHY AND TOPOGRAPHY

In terms of its area, it covers a total landmass of 7,657 sq km and has a population of 60,81,332 as per the 2011 census. The city also has high literacy rates of 87%. In terms of its geography, it is located at Latitude-21.1, Longitude-72.8. It shares a border with Nandurbar District to the East, Bharuch District to the North, Narmada District to the North, Navsari District to the South. It is sharing Border with the state of Maharashtra to the East. The Coastal district has beautiful beaches as it shares borders with the Arabian sea.

The climate of Surat district is characterized by hot summer and cold winter. The months of summer and winter in Surat district are March to May and December to February respectively.. The months of monsoon in Surat district are June to September. The maximum temperature reaches around 43° C in the months of March to May and the lowest temperature is around 11° C in the months of December to February. Winds are light and moderate in the months of March to May and become stronger in the months of monsoon.



Male literacy 93%

Promising by

Female literacy 84%

GDP (\$US): 40 billion 1150 M.T. of solid waste/ year



### **ADMINISTRATION**

When it comes to the administrative structure, Surat district is organized into 9 talukas, there are 567 Gram Panchayats for 707 inhabited villages. This is because the Gram Panchayat is constituted for the local area having population less than 10000.

### **ECONOMY**

Surat is the 8th largest city of India and the 4th fastest developing city. It has the fastest-growing GDP in India @40 billion USD. The economy of Surat District in Gujarat is concentrated in the diamond processing, textiles, and chemical and petrochemical industries. The contributes 18 percent to the total manmade fiber exports and 40 percent of man-made fabric manufacture in India. Surat has also been very flourishing in attracting a sizeable amount of Foreign Direct Investment (FDI) in different sectors like oil, energy, and petroleum. The district captured a share of 15.24 percent of the total fruit production in Gujarat by becoming the producer of papaya and the secondlargest producer of bananas in the State.

It is also the biggest producer of Okra (Lady Finger) in Gujarat with a share of 19 percent of the overall production. It also contributes 10.39 percent to the total production of spices in Gujarat as it is the largest producer of turmeric and second largest producer of ginger and chilly in the State.



### **AIR POLLUTION**

Since, Surat is an industrial city and it is likely to have many pollution issues. The major sources of pollution in Surat city are: Hazira belt industries, the Pandesera industrial belt.



### WASTE GENERATION AND TREATMENT

The city at present generates 1150 M.T. of solid waste yearly and the SMC is collecting 1100 M.T. of this solid waste. The transported waste is then sent to the final disposal site where it is dumped and leveled by heavy machinery.

## TO ADDRESS THE PROBLEM OF SOLID WASTE IN SURAT CITY SMC HAS ADOPTED A NEW MODERN APPROACH. IT INCLUDES:

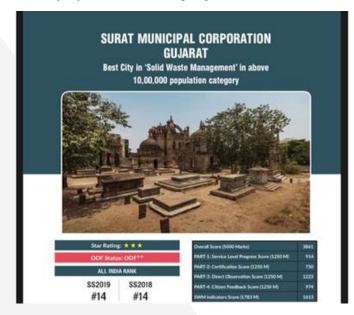
- Integration of SWM with other activities viz. sewerage, water supply, health care, engineering departments, etc.
- The emphasis has been laid on the Complaint redressal system, Litter prevention system, Slum Upgradation & Rehabilitation, Field Work, etc..
- Financial commitment: Equipment, Vehicles, communication.
- Involving citizens: Positive involvement, penalizing truants, creating public awareness.



### SWACHH SURVEKSHAN RANK

The Solid Waste Management (SWM) activity of Surat Municipal Corporation is directly linked with generation, storage, collection. transfer and transport. processing and disposal of solid wastes generated in the city. The city has been awarded the 'Best City in Solid Waste Management' in the more than 10 lakh population category. It scored 1613 out of a maximum of 1783 marks in the Swachh Survekshan 2019. All residential, as well as commercial areas of the ULB are covered under 100% door-to-door garbage collection as well as source segregation. In fact, the city also has a mechanism in place for segregating domestic hazardous and plastic waste. 100% of the city's waste is treated efficiently in decentralized centralized waste processing plants and proper logbooks are being maintained. In Direct Observation component of Solid Waste Management under the Swachh Survekshan 2019, the city has scored 773 marks out of 790, making it a high performer in terms of maintenance of public facilities.

Based on the project submitted under Innovations and best practices, it is found that Surat Municipality invested their resources to promote water conservation activities by the execution of decentralized **TSTP** (Tertiary Sewage Treatment Plant) at Kavi Kalapi Lake for treatment of sewage. They also have successfully identified the role of Resident Welfare Associations in maintaining the cleanliness of the city. The city Municipal Corporation launched an innovative scheme by the name Anudan which will work as а catalyst between Residential or Industrial bodies and the civic body to maintain the internal cleanliness premises. These of the initiatives as a whole have catapulted the cleanliness level in the city and have been a major contributor to this Best Solid Waste Management award under the > 10 Lakh population category.



### **ENERGY REQUIREMENTS**

The renewable energy production in the city has seen an increase of 30% in capacity. Of the 25 crore units of electricity the city produces, the share of wind and solar energy is 90%. Surat happens to be the only city in the country whose captive power generation meets 33% of the demands of consumers. Surat Municipal Corporation Annual Energy demand is 250-gigawatt hours. At present, SMC produces 78.4 GWh of wind energy. This saves SMC Rs 47.2 crore per annum on electricity bills, it also helps reduce the emission of 64,000 tonnes per annum carbon dioxide. SMC has set up 6 (MW) solar power plants in the last three years and they generate 8.3 GWh of energy.

### INITIATIVES BY ADMINISTRATION

Surat Municipal Corporation has created a Centralized Plastic Waste Management Plant wherein the SMC has signed an agreement with Eco Vision Resources L.L.P. for a 15 years concession period. A minimum of one collection center per zone has been established and is operated by the agency, in order to deal with the street level plastic the agency has tied up with rag pickers and NGOs. There is also a centralized Waste processing Treatment Plant at Khajod, the integrated Municipal Solid Waste treatment process of the SWC is to find the best possible technology and scientific solution for the perennial garbage disposal problem for the city through the PPP model.

Similarly, the SMC has provided 3 acres of land to Surat Precast Green Pvt Ltd at Kosad. This has primarily been set up for the management of waste generated from construction and demolition material.

The city has also taken a lead in managing water. Surat's civic body has set up a state of the art sewage treatment plants (STPs) to ensure every drop of wastewater is treated and reused for purposes other than drinking. Starting from March 2019, the SMC has supplied 115 MLD treated water to industries located within the city, in order to meet the industrial requirement of water through recycled water.

### THE SUCCESS

The efforts of the city towards a clean and sustainable environment are encouraging and have paid off very well for its own growth and development. The city managed to secure the second position in the Swachh Survekshan 2020. Elated by this great success, the Chief Minister of Gujarat had stressed the fact that the city had walked on the path to cleanliness as showed by Mahatma Gandhi, the success can be attributed to the following of 3Rs- Reduce, Reuse and Recycle. Also, the system of waste segregation at home along with the development of various mechanisms to treat waste have contributed to the exemplary performance of the city.

### SWACHH SURVEKSHAN 2020 TOP 3 CLEANEST CITIES OF INDIA (MORE THAN 1 LAKH POPULATION)

- INDORE, MADHYA PRADESH
- SURAT, GUJARAT
- NAVI MUMBAI, MAHARASHTRA















ICCE is studying several cities in India on several parameters. This is an initiative under Circular Cities project.

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