

2.1 Description of the Study area:

Vadodara district is one of the most important districts of Gujarat. Many ponds are located in the Vadodara city.

2.2 Geographical Location:

Vadodara District is a district in the eastern part of the state of Gujarat in western India. It lies between latitudes $21^{\circ} 45'$ and $22^{\circ} 45'$ North and longitudes $72^{\circ} 48'$ and $74^{\circ} 15'$ East having a geographical area of 7,550 km². The district is bounded by Panchmahal and Dahod districts to the North, Anand and Kheda to the West, Bharuch and Narmada districts to the South, and the state of Madhya Pradesh to the East. Administratively, the district is subdivided into twelve talukas, viz. Vadodara, Karjan, Padra, Savli, Dabhoi, Sankheda, Waghodia, Jetpur Pavi, Chhota Udepur, Naswadi, Tilakwada and Sinor.

In the present work, ponds of Vadodara city and its surroundings were selected which included six different study sites.

2.2.1 Harni Pond, Vadodara

Harni Pond is in Harani, Dist : Vadodara. Harani lake is geographically located at latitude $22^{\circ} 20' 18.83''$ and $73^{\circ} 13' 03.84''$ longitude. It has spread in large area and varieties of vegetation found in and surrounding area of pond.

2.2.2 Gotri Pond, Vadodara

Gotri pond is in Gotri, Dist: Vadodara. Gotri lake is geographically located at latitude $22^{\circ} 18' 51.9''$ and $73^{\circ} 08' 01.87''$ longitude. It has spread in small area and many vegetation found in it.

2.2.3 Sewasi Pond, Vadodara

Sewasi pond is located 1 km away from Gotri lake, Dist: Vadodara. Sewasi is geographically located at latitude $22^{\circ} 20' 25.9''$ and longitude $73^{\circ} 13' 13.8''$.

2.2.4 Mahisagar River, Dist: Vadodara

Mahi River is in Padra, Dist: Vadodara, State: Gujarat, India. Mahi River Dam is geographically located at latitude $22^{\circ} 18'45.06''$ and longitude $72^{\circ} 48'57.95''$

2.2.5 Timbi Village Pond, Dist: Vadodara

Timbi lake is in Waghodia Vadodara District. Gujarat State in India. Timbi lake is geographically located at latitude $22^{\circ}14'53.66''$ and longitude $73^{\circ}17'07.38''$

2.2.6 Vadhvana Lake, Dist: Vadodara

It is the second largest lake in Gujarat and was built at the initiative of Sir Sayajirao Gaekwad, the then King of the State of Vadodara. Vadhvana is famous as an irrigation reservoir and has been acting as water source for 25 nearby villages. It is located at a distance of 10 kms from Dabhoi and 20kms from the famous Jambughoda Sanctuary. The wetland is a popular sightseeing spot because of the natural beauty and for a great number of birds that flock the region. Vadhvana lake is geographically located at latitude $22^{\circ}10'15.0''$ and longitude $73^{\circ}29'11.0''$.



Figure 2: Map of Gujarat

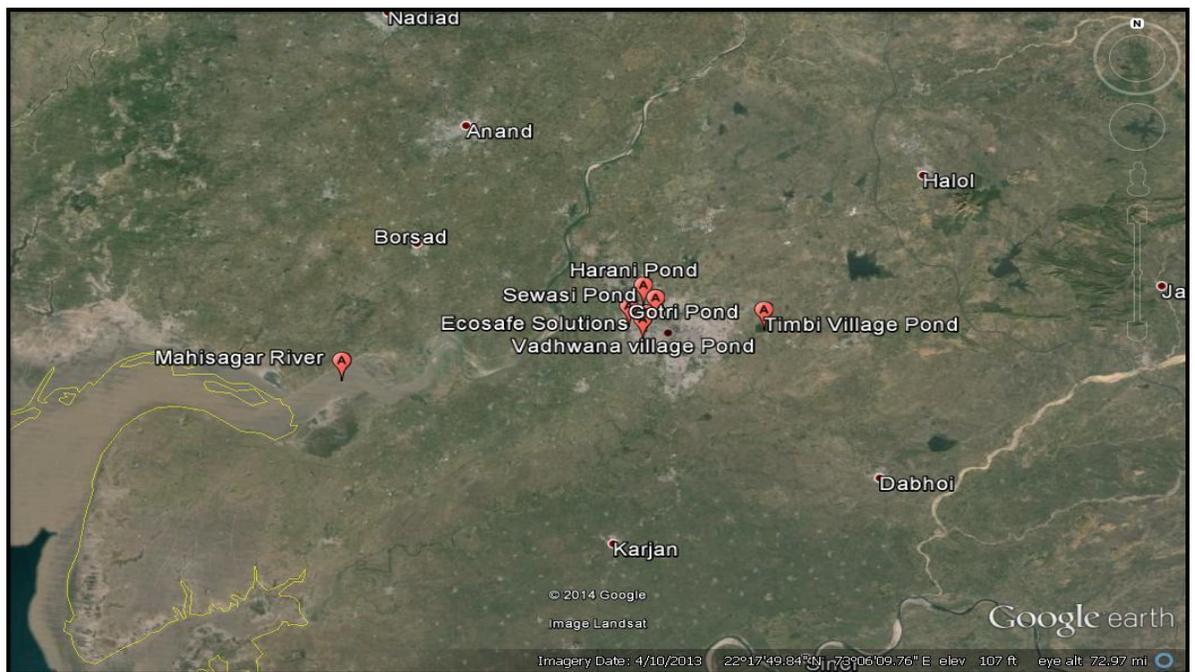


Figure 3: Google earth image of selected study area of Baroda District

Photographs of Various sites of collection



Figure : 4: Site 1: Harani Pond, Vadodara



Figure 5: Site 2: Gotri Pond, Vadodara



Figure 6 : Site 3: Sewasi Pond, Vadodara



Figure 7: Site 4: Mahisagar River, Vadodara



Figure 8 : Site 5: Timbi Village Pond, Vadodara



Figure 9 : Site 6: Vadhavana Village Pond, Vadodara