8.2 UDAIPUR LAKES SYSTEM

Udaipur is dependent on its lake system, which is directly, or indirectly the life source of the city in terms of surface water resources, tourism, and the ecosystem at large. Most of the tourists (domestic as well as foreign) come to the city primarily because of placid beauty of the lakes. The lakes attract increasing number of young adventurous tourists especially foreign tourists who provide foreign exchange thus strengthening the local economy.

Lakes thus form the backbone of the city’s economy which is however under imminent danger of irremovable degeneration, possible destruction. While superficially, the beauty of Udaipur is un-smudged, the heavy siltation after deforestation has reduced the depth of the lakes to a quarter of which it used to be 40 yrs ago. With the uncontrolled increase of the density of habitation around the lakes, they have become a substitute for a sewage system.

The paradox is that tourism in Udaipur can grow immeasurably, specially with improved communication and infrastructure, but Udaipur tourism can dry up completely if the lakes are not saved.

8.2.1 Physical Features

The Udaipur lake system comprises of Lakes Pichola, Rang Sagar, Swaroop Sagar, Fateh Sagar, Badi, Madar and Udaï Sagar. All the lakes of Udaipur form a chain in the saucer shaped Udaipur valley.

The inner Girwa plain of Udaipur is surrounded by western and central hills and its water is drained into the Ahar River. Important lakes of this basin are the Badi, Fateh Sagar, Pichola, Rang Sagar and Swaroop Sagar.

_Fateh Sagar_

The Lake is situated in the north of Udaipur city, as apart of the western lake frontage. The lake was constructed in the year 1678 A.D. and then renovated in 1889 A.D. by Maharana Fateh Singh. The dam of this reservoir is 720m in length and about 100m in breadth. The lake has a catchment area of 53.66 km. The greatest depth of the Lake lies near the middle of the dam i.e. 13.4 m. The total spread is 4.0 sq. kms.
Pichola

A Banjara chieftain initially constructed the lake in the 14th century. Rana Udai Singh further raised its embankment in 1560 A.D. The water spread of the lake is 6.96 kms. And has a maximum depth of 10.5 m towards the west where the Kotra River drains into the lake. The lake forms the main source of drinking water for the city. The river Sisarma, a tributary of the Kotra is the chief source of water to the lake.
**Rang Sagar**

Rang Sagar Lake was constructed by Amar Singh Badava and is also called ‘Amarkund’ after him. Constructed in 1668, this lake has a length of 1030m, width of 245m and a maximum depth of 7 meters. It is one of the smallest lakes (water spread of 0.136sq.km.) along the western waterfront of Udaipur, providing watery connection between Pichola and Swaroop Sagar.

**Swaroop Sagar**

Swaroop Sagar Lake is located southwards to the Rang Sagar and is the ultimate part of Lake Pichola. The Lake provides a combined water weir for Pichola and Rang Sagar. Moreover the lake also links Pichola and Rang Sagar with adjoining Fateh Sagar Lake through a canal. This canal is sometimes employed to draw water in the Fateh Sagar during the Monsoon when Pichola maintains a high water level.

### 8.2.2 Catchment Areas:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Name of the Lake</th>
<th>Total solid waste (in tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lake Pichola</td>
<td>2700ha</td>
</tr>
<tr>
<td>2</td>
<td>Fateh Sagar Lake</td>
<td>2315ha</td>
</tr>
<tr>
<td>3</td>
<td>Bada Madar Lake</td>
<td>7290ha</td>
</tr>
<tr>
<td>4</td>
<td>Chotta Madar Lake</td>
<td>2534ha</td>
</tr>
<tr>
<td>5</td>
<td>Badi Lake</td>
<td>1820ha</td>
</tr>
</tbody>
</table>

### 8.2.3 Status of Pollution

The physical setting of the city enhances the flow of pollutants into the lakes. It has hills on all the sides rising from 20 meters to 150 meters. Thus the natural drainage leads towards the lake complex from all the sides.

Most of the Hotels (53 in number) along with 6000 residential houses accommodating 33,000 population are located on the lake slopes releasing all sorts of dirt and drain water into the lake complex. Even the garbage collected from the roads, dirt thrown from the houses, debris of the dilapidated houses, small-sized dead animals are thrown on the banks meeting the lake water. Slopes have about 300 hanging latrines, 73 ghats used for bathing and
washing, 45 drain spots, 53 hotels, 42 garbage spots and 118 open air defecation spots which release a shocking quantity of pollutants into the lakes. The barren hills from all the sides pour tons of eroded soil in the lakes each year.

The inhabited part of the lake region consists of the residential areas of the walled city and outside. The former is of pre-independence existence with traditional set-up of small sized rooms, whereas the latter usually has open houses of bungalows pattern constructed in a planned manner. Many people in the walled city use the river for bathing and sanitary use. Further, many traditional rituals and ablutions are performed along side the lakes. The lakes are thus subjected to organic contamination.

The Municipal sewerage lines open directly into the lakes and thereby increase the bacterial material and organic load. The 73 ghats situated on the banks of the lakes are traditionally used for bathing purposes and for washing clothes. This releases large amount of detergents in the lake, which increases its phosphate content. Similarly, increased commercial activity, especially of Hotels in the vicinity of the lakes, has also contributed considerably to water pollution. In the catchment area of Fateh Sagar Lake, chemical effluents from synthetic fiber mills are discharged every day in a drain, which carries water to Fateh Sagar. The boating activity has spread an oil layer in the waters near Navghat, Pipligbat of Pichola and boat booth of Fateh Sagar. In summers, vehicles are washed between the filter house and hotel site of Fateh Sagar.

In addition to the above, about 400-500 tonnes of solid waste is dumped on the banks of the lake. The places around Navghat, Lalghat, Gangaur Ghat, Ghat of Gadi Devra, Satapole, Chandpole bridge, Samla area, Hanuman ghat, Amet ki Haveli and Naga nagri of Pichola are the dumps of solid wastes amounting to 100 tonnes are deposited at 8 different spots. Some other spots, worth mentioning, are near Public Park at Yadav colony and near new bridge. Kalalia tanks have 5 waste dump points of 50 tonnes and the Lake Swaroop Sagar has 11 spots. Lake Fateh Sagar is polluted at 7 spots with about 90 tonnes of waste.

All the above squarely explain the disastrous situation of Udaipur lake-system and call for an urgent action to remedy situation.

**Table 8.1 Total Solid Waste Disposed in Udaipur Lake System**

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Name of the Lake</th>
<th>Total solid waste (in tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lake Pichola</td>
<td>95.00</td>
</tr>
<tr>
<td>2</td>
<td>Lake Rang Sagar</td>
<td>120.00</td>
</tr>
<tr>
<td>3</td>
<td>Lake Kalia Talav</td>
<td>50.00</td>
</tr>
<tr>
<td>4</td>
<td>Lake Swaroop Sagar</td>
<td>150.00</td>
</tr>
<tr>
<td>5</td>
<td>Lake Fateh Sagar</td>
<td>90.00</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>505.00</strong></td>
</tr>
</tbody>
</table>
Chemical Pollution levels

pH: All the water bodies of Udaipur lake system exhibit moderate to high alkaline pH. The pH data pooled from different studies are given below.

**TABLE 8.2 pH OF WATER BODIES**

<table>
<thead>
<tr>
<th>Year</th>
<th>Pichola</th>
<th>Rang Sagar</th>
<th>Swaroop Sagar</th>
<th>Fateh Sagar</th>
<th>Bari Madar</th>
</tr>
</thead>
<tbody>
<tr>
<td>1974-76</td>
<td>7.7-7.8</td>
<td>-</td>
<td>-</td>
<td>7.4-9.2</td>
<td>8.2</td>
</tr>
<tr>
<td>1984-86</td>
<td>7.8-8.7</td>
<td>-</td>
<td>-</td>
<td>7.8-9.5</td>
<td>-</td>
</tr>
<tr>
<td>1987</td>
<td>7.7-8.4</td>
<td>-</td>
<td>-</td>
<td>7.5-8.35</td>
<td>-</td>
</tr>
<tr>
<td>1988-91</td>
<td>7.5-8.6</td>
<td>-</td>
<td>-</td>
<td>7.5-8.0</td>
<td>7.5-8.4</td>
</tr>
<tr>
<td>1994</td>
<td>8.0-8.7</td>
<td>8.0-8.4</td>
<td>7.8-8.5</td>
<td>8.2-8.7</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: Zheel Sanrakshan Samiti Report

DO (Dissolved oxygen):

The variations in dissolved oxygen contents of Udaipur lakes have been wide from zero values in the bottom water to values as high as 17ppm. The dissolved oxygen levels in surface waters of Udaipur Lakes are as follows:

**TABLE 8.3 DO CONTENT OF WATER BODIES**

<table>
<thead>
<tr>
<th>Year</th>
<th>Pichola</th>
<th>Rang Sagar</th>
<th>Swaroop Sagar</th>
<th>Fateh Sagar</th>
<th>Bari Madar</th>
</tr>
</thead>
<tbody>
<tr>
<td>1974-76</td>
<td>4.4-11</td>
<td>-</td>
<td>-</td>
<td>0.5-12</td>
<td>- 6.8</td>
</tr>
<tr>
<td>1984-86</td>
<td>9.2-23.2</td>
<td>0.8-8.6</td>
<td>8.4-23.2</td>
<td>8.0-22.8</td>
<td>-</td>
</tr>
<tr>
<td>1987</td>
<td>6.37</td>
<td>-</td>
<td>-</td>
<td>6.57</td>
<td>-</td>
</tr>
<tr>
<td>1988-91</td>
<td>3.5-13.0</td>
<td>-</td>
<td>-</td>
<td>5.6-14.30</td>
<td>4.53-11.0</td>
</tr>
<tr>
<td>1991-92</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>6.8-11.6</td>
</tr>
<tr>
<td>1994</td>
<td>5.0-8.4</td>
<td>3.4-14.0</td>
<td>4.6-17.0</td>
<td>4.4-9.4</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: Zheel Sanrakshan Samiti Report

BOD (Biological Oxygen Demand):

During 1984-86 the levels of B.O.D. in surface waters of Udaipur ranged between 4.6 to 19.4 ppm depicting following specific ranges:

<table>
<thead>
<tr>
<th>Lake</th>
<th>Range of B.O.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Rang Sagar</td>
<td>7.6-14.2</td>
</tr>
<tr>
<td>2. Swaroop Sagar</td>
<td>8.2-16.2</td>
</tr>
<tr>
<td>3. Fateh Sagar</td>
<td>4.6-12.0</td>
</tr>
</tbody>
</table>
4. Pichola  6.4-13.5

COD (Chemical Oxygen Demand):

The 1974-76 Tidy’s test performed on the water samples of Pichola, Fateh Sagar and adjoining water body Dudh Talai, which indicate the following values.

<table>
<thead>
<tr>
<th>Lake</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pichola</td>
<td>2.8</td>
</tr>
<tr>
<td>2. Dudh Talai</td>
<td>6.0</td>
</tr>
<tr>
<td>3. Fateh Sagar</td>
<td>0.8</td>
</tr>
</tbody>
</table>

Community health implications

Health problems of people cannot be viewed in isolation from the physical surroundings of the habitation. This is especially so in the urban setting of Udaipur city. Here, the health delivery system is under extreme stress owing to unabated pollution of drinking water sources. In Udaipur, over 70% of daily water supply from PHED pumping station is drawn from the lake system, which are highly polluted by anthropogenic activities. The human inference in the lake ecology has greatly enhanced the risk of water borne diseases.

Table 8.4 Bacteriological analyses of water & sediments of Udaipur lakes (Faecal Coliform/100ml)

<table>
<thead>
<tr>
<th>Water Body</th>
<th>Water</th>
<th>Sediments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Badi</td>
<td>350</td>
<td>E.Coli</td>
</tr>
<tr>
<td>Fateh Sagar</td>
<td>250</td>
<td>E.Coli and Citrobacter</td>
</tr>
<tr>
<td>Swaroop Sagar</td>
<td>300</td>
<td>E.Coli</td>
</tr>
<tr>
<td>Rang Sagar</td>
<td>115</td>
<td>E.Coli and Citrobacter</td>
</tr>
<tr>
<td>Pichola</td>
<td>300</td>
<td>E.Coli and Strepto faecalis</td>
</tr>
</tbody>
</table>

Source: Zheel Sanrakshan Samiti Report

8.2.4 Inferences and Recommendations:

The foregoing account on the different scientific aspects of Udaipur lake system squarely points out to the need of an urgent action on the conservation Programme has to be phased out in immediate and long-term measures, which are spelled out below in brief:

Measures to be adopted within shortest possible period

1. Dry and wet desilting operations are absolutely necessary. During wet desilting, the
problem of turbidity will arise. Since the source water is used for drinking, effective measures for this temporarily turbidity increase be taken.

2. Diverting the sewage and wastewater drains presently opening into the lake and establishing sewage treatment plants at suitable sites.

3. Creating bathing, swimming and washing facilities for the public so as to discourage the use of Ghats. The latter be preserved as historical monuments.

4. Providing Sulabh complexes at selected places and making their use free of charge so as to dissuade the public from open-air defecation.

5. De-weeding of the lake bottom and surface.

6. Introduction of selected varieties of fishes especially Grass-craps, silver craps, which would work as scavengers. Rejuvenation of Mahseer Fishery.

7. Mass Awareness Programme for the people living in the catchment areas of the lakes.

8. Solid waste dumping grounds to be located away from catchment and construction incineration facility for solid waste.

**Long-term Preventive measures**

1. Creating alternative source of drinking water situated far away from the habitation so that the use of lake water for drinking and domestic use is progressively discontinued.

2. Creating silt-traps through anicut construction and in the form of artificial swamps at inlets and in catchments.

3. Afforestation of the catchments areas.

4. Creation of a lake water quality monitoring and research facility in Udaipur.

---

**TABLE 8.5 WORKS IDENTIFIED AND THEIR COSTS UNDER THE NATIONAL LAKE CONSERVATION PLAN FOR UDAIPUR LAKE SYSTEM:**

<table>
<thead>
<tr>
<th>Sr.No.</th>
<th>Project description</th>
<th>Basic Cost (in Lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Catchment area treatment</td>
<td>1966.00</td>
</tr>
<tr>
<td></td>
<td>Laying of sewage lines, pumping stations and treatment</td>
<td>1395.00</td>
</tr>
<tr>
<td>3</td>
<td>Construction of bathing ghats and sulabh complexes</td>
<td>100.00</td>
</tr>
<tr>
<td></td>
<td>Construction of roads along lake periphery @Rs. 10lakhs/Km</td>
<td>100.00</td>
</tr>
<tr>
<td></td>
<td>Project Description</td>
<td>Cost</td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>5</td>
<td>Partial dredging and desilting of lakes</td>
<td>500.00</td>
</tr>
<tr>
<td>6</td>
<td>Water augmentation</td>
<td>217.00</td>
</tr>
<tr>
<td>7</td>
<td>Disposal of solid waste</td>
<td>529.00</td>
</tr>
<tr>
<td>8</td>
<td>Fisheries Development and Management</td>
<td>44.00</td>
</tr>
<tr>
<td>9</td>
<td>Water quality, biodiversity monitoring and research (@10% of total budget)</td>
<td>500.00</td>
</tr>
<tr>
<td>10</td>
<td>Public awareness campaign and training</td>
<td>75.00</td>
</tr>
<tr>
<td>11</td>
<td>Landscaping and beautification</td>
<td>500.00</td>
</tr>
<tr>
<td>12</td>
<td>Proposed Institutional set up for the Lake development Authority</td>
<td>350.00</td>
</tr>
<tr>
<td>13</td>
<td>Weed Control Unit</td>
<td>50.00</td>
</tr>
<tr>
<td>14</td>
<td>Land Acquisition</td>
<td>1000.00</td>
</tr>
<tr>
<td></td>
<td><strong>Total Cost</strong></td>
<td><strong>7326.025</strong></td>
</tr>
</tbody>
</table>
8.3 INVENTORY OF TOURIST PLACES

The places of tourist attraction in Udaipur can be broadly classified into four classes:

- Lakes
- Palaces, Museums and forts
- Gardens/Parks
- Religious Places

8.3.1 Lakes
- Lake Pichola
- Lake Fatehsagar
- Lake SwaroopSagar
- Dudh Talai
- Goverdhan Sagar
- Udaisagar

8.3.2 Palaces Museums and Forts
- The City Palace
- The City Palace Museum
- Durbar Hall
- Crystal Gallery
- Government Museum
- Bagore ki Haveli Museum
- Jag Niwas (Lake Palace)
- Pratap Memorial (Mot i Mangari)
- Sajjangarh
- Shilpagram
- Ahar Dhoolkot Archeological Museum
- The tribal museum
- Meera Kala Mandir Folk Dance Museum
- Udaipur Museum

8.3.3 Gardens and Parks
- Sajjan Niwas Gardens
- Dudh Talai
- Gardens
- Manikya Lal Verma Gardens
- Pandit Deendayal Upadhyay Gardens

8.3.4 Religious Places
Nehru Island Parks
Saheliyon ki Bari
Sukhadia Circle

8.3.4 Temples

Jagdish temple
Jag Mandir
Nimach Mata Mandir
Eklingji
Delwara Temple
Nadga Temple
MAP 8.1 TOURIST LOCATIONS
8.4 Tourist Arrivals

Rajasthan is one of the favorite destinations for tourists around the world. Out of the total tourists coming to Rajasthan, Mount Abu, Udaipur, Jaipur and Pushkar have attracted the maximum number of foreign and domestic tourists.

The Tourism sector is the largest contributors to Udaipur’s economy. In 2005 Udaipur attracted about 15% of the total foreign tourist in the state and 3% of the domestic tourists.

Table 8.6: Tourism Sector Share: State v/s Udaipur

<table>
<thead>
<tr>
<th>Year</th>
<th>Year 2004</th>
<th>Year 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Domestic</td>
<td>Foreign</td>
</tr>
<tr>
<td></td>
<td>460774</td>
<td>198556</td>
</tr>
<tr>
<td>State over all</td>
<td>16033896</td>
<td>971772</td>
</tr>
<tr>
<td>% State share</td>
<td>2.87%</td>
<td>20.43%</td>
</tr>
</tbody>
</table>

Source: Rajasthan Tourism Department, Udaipur

8.4.1 Tourist Arrival Statistics

Annual Statistics:

The number of foreign tourists has increased by more than 50% in the last five years. Statistics show a tremendous increase of foreign tourists from 56760 in the year 2001 to 173804 in the year 2005. The potential of the city however hasn’t been explored to its fullest as the decadal statistic shows a decline in both the domestic as well as total number of tourists.

Table 8.7: Time Line of Tourist Arrivals

<table>
<thead>
<tr>
<th>Year</th>
<th>Domestic</th>
<th>Foreign</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>675493</td>
<td>79871</td>
<td>755364</td>
</tr>
<tr>
<td>1993</td>
<td>688188</td>
<td>85225</td>
<td>773413</td>
</tr>
<tr>
<td>1994</td>
<td>644995</td>
<td>73083</td>
<td>718078</td>
</tr>
<tr>
<td>1995</td>
<td>646547</td>
<td>86506</td>
<td>733053</td>
</tr>
<tr>
<td>1996</td>
<td>621516</td>
<td>82610</td>
<td>704126</td>
</tr>
<tr>
<td>1997</td>
<td>638987</td>
<td>84284</td>
<td>723271</td>
</tr>
<tr>
<td>1998</td>
<td>575088</td>
<td>78267</td>
<td>653355</td>
</tr>
<tr>
<td>1999</td>
<td>578622</td>
<td>78708</td>
<td>657330</td>
</tr>
<tr>
<td>2000</td>
<td>735333</td>
<td>77174</td>
<td>812507</td>
</tr>
<tr>
<td>2001</td>
<td>662826</td>
<td>56760</td>
<td>719586</td>
</tr>
<tr>
<td>2002</td>
<td>471576</td>
<td>101303</td>
<td>572879</td>
</tr>
<tr>
<td>2003</td>
<td>440702</td>
<td>156928</td>
<td>597630</td>
</tr>
</tbody>
</table>
The tourist season in Udaipur starts by August and lasts until March. The period between...
October and February is the peak season for tourist activities. Most of the fairs and festivals are also during this season. There is also a huge number of religious tourist inflows during these months.
Table 8.8: Tourist Arrivals: Annual Break-up

<table>
<thead>
<tr>
<th>Months</th>
<th>Year 2004</th>
<th>Year 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Indian</td>
<td>Foreign</td>
</tr>
<tr>
<td>January</td>
<td>23054</td>
<td>16083</td>
</tr>
<tr>
<td>February</td>
<td>43147</td>
<td>18534</td>
</tr>
<tr>
<td>March</td>
<td>33520</td>
<td>13540</td>
</tr>
<tr>
<td>April</td>
<td>36120</td>
<td>8219</td>
</tr>
<tr>
<td>May</td>
<td>36830</td>
<td>7511</td>
</tr>
<tr>
<td>June</td>
<td>41367</td>
<td>5760</td>
</tr>
<tr>
<td>July</td>
<td>31016</td>
<td>7787</td>
</tr>
<tr>
<td>August</td>
<td>38084</td>
<td>12132</td>
</tr>
<tr>
<td>September</td>
<td>49015</td>
<td>9285</td>
</tr>
<tr>
<td>October</td>
<td>40250</td>
<td>14146</td>
</tr>
<tr>
<td>November</td>
<td>58840</td>
<td>31888</td>
</tr>
<tr>
<td>December</td>
<td>50073</td>
<td>37267</td>
</tr>
<tr>
<td>Total</td>
<td>481316</td>
<td>182152</td>
</tr>
</tbody>
</table>

Source: Rajasthan Tourism Department, Udaipur

On an average approximately 47000 tourists visit Udaipur during the lean months of April - June whereas approximately 61000 tourists visit Udaipur during the peak months of August - March.

Table 8.4: Month wise arrival of foreign and domestic in 2004 and 2005

8.5 Tourism Infrastructure

The city has about 245 accommodation facilities in the form of Star Hotel, Budget Hotels, Lodging facilities, Govt. accommodation facilities, Dharmasala and paying guest homes. The total number of rooms and beds in these hotels amount to 3814 and 7706 respectively.
There are about six tourist information centers in various parts of the city and about 18 travel agencies apart from RTDC, which provide travel and accommodation facilities to the tourists.

**TABLE 8.9: TOURISM INFRASTRUCTURE**

<table>
<thead>
<tr>
<th>Heritage and top end hotels</th>
<th>&lt;3500</th>
<th>1200-3500</th>
<th>500-1200</th>
<th>100-500</th>
<th>75-500</th>
<th>Varies</th>
<th>Varies</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Hotels</td>
<td>11</td>
<td>16</td>
<td>60</td>
<td>87</td>
<td>5</td>
<td>6</td>
<td>60</td>
</tr>
</tbody>
</table>

Source: Department of Tourism, Government of Rajasthan, 2006.

**8.6 KEY ISSUES RELATED TO TOURISM**

**8.6.1 Access**

The city is fairly connected by road network, however rail connectivity is still via meter gauge. The only broad gauge route is in the northern part of the city leading to Jaipur. The nearest international airport for access to foreign tourists is at Ahmedabad i.e. 252 kms. Access to tourist sites like Ahar Dhoolkot archeological site, Government Museum is also a key issue that needs to be addressed.

**8.6.2 Efficient use of available water resources for tourist activities**

Udaipur enjoys abundant water resources in the form of lakes and rivers. The biggest attractions of these lakes are the gardens and monuments built amidst these lakes. However the lack of rain in the last few years has prevented the natural overflow and with a lot of filth being thrown in, there have been serious effects on the lake ecosystem. These factors have resulted in the decline of tourist arrivals to these places.

**8.6.3 Propagation of Adventure or Eco-Tourism**

In spite of the large number of lakes and mountain ranges in and around the city the natural landscape and ecological diversity of the region is not currently packaged and propagated well, adventure trips like mountain climbing, water sports need to find their way into the tourism industry in Udaipur.

**8.6.4 Tourist Information Centers**

The city still lacks required number of tourist information facilities at most important areas like railway stations, major bus stands etc. Easy availability and access to information about the city from a tourist’s perspective is of vital importance. The city lacks propagation and branding of its
tourist facilities.

8.6.5 Transportation Facilities

One of the most important facilities that need to be addressed is provision of transportation facilities within the city. The city clearly lacks a properly maintained mass transportation facility of international standards. The existing transportation facility within the city is dominated by private buses/chakdas, which are normally overcrowded.

8.6.6 Accommodation Facilities

Over last few years many hotels, restaurants, guesthouses and lodges have sprung up across the city. There are nearly no regulations governing their service delivery. A severe case of poor performance by one can result in adverse publicity and can tarnish reputation of the whole city.

8.7 STRATEGIES AND OBJECTIVES FOR TOURISM

8.7.1 Lakes

1. Propagating water sports, boating and other entertainment facilities in lakes.
2. Regulating pollution control guidelines in and around the premises of lakes.
3. Formulating building control regulations in the premises around lakes.
4. Imposing pollution control requirements to hotels/guesthouses alongside lakes.
5. Prohibition of bathing and washing in lakes and ghat areas.
6. Providing dustbins and solid waste collection facilities around lakes.

8.7.2 Tourist Information Facilities

1. Providing police assistance and tourist information centers at prime tourist locations in the city like railway stations, bus stands and hotels frequently visited by tourists.
2. Fixing tourist information placards banners etc and propagating and branding of tourism in the city through mass media, Internet, brochures etc.
3. Training and registration of tourist guides in the city.
4. Repairing/repainting of existing information boards.

8.7.3 Tourist Infrastructure facilities

1. Repairing of roads and organizing special bus services for tourist.
2. Providing public toilet and drinking water facilities.
3. Provision of registration only to those hotels/restaurants having minimum level of service.
4. Diversion of heavy vehicles from tourist areas and pedestrianising stretches of roads like Jagdish chowk to Palace Gate.

8.7.4 Propagation of Eco-tourism and adventure sports
1. Arranging three day adventure tours to nearby mountain ranges, lakes etc.
2. Propagation of ropeways.
3. Cleaning up of Ahar River. Developing the riverside for entertainment and recreational facilities.

1.8 ONGOING PROJECTS ON TOURISM

TABLE 8.10: ONGOING PROJECTS

<table>
<thead>
<tr>
<th>S.N o.</th>
<th>Project work description</th>
<th>Cost of project</th>
<th>Executing Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Providing floodlighting facility at all historical gates in the city.</td>
<td>Rs. 3.2 lakhs Rs. 80 thousand used.</td>
<td>P.W.D. dept. Udaipur.</td>
</tr>
<tr>
<td>2.</td>
<td>Renovation and furnishing of tourist information centers at all major bus stands, railway stations etc.</td>
<td>Rs. 6.11 lakhs</td>
<td>Department of tourism, Rajasthan</td>
</tr>
<tr>
<td>3.</td>
<td>Construction of food crafts institute</td>
<td>Rs. 14 lakhs Rs. 10 lakhs used</td>
<td>Department of tourism, Rajasthan</td>
</tr>
<tr>
<td>4.</td>
<td>Mewar Complex</td>
<td>Rs. 675 lakhs</td>
<td>Department of tourism, Rajasthan</td>
</tr>
</tbody>
</table>

Source: Rajasthan Tourism Department, Udaipur

8.9 HERITAGE AND CONSERVATION

8.9.1 List of Heritage Sites and Monuments

| Sr. No. | Name of the Heritage monument/Site |
|---------|-----------------------------------|-------------------------------|


<table>
<thead>
<tr>
<th>No.</th>
<th>Place</th>
<th>Details</th>
</tr>
</thead>
</table>
| 1.  | City Palace                               | 1. Founded by Udai Singh and subsequently built upon by later rulers.  
2. The palace complex comprises of many structures built on by various rulers over the years. They include - Bari Pole, Dhuni Mata Temple, Moti Mahal (Sheesh Mahal), Krishna Vilas, Bhim Vilas, Shiv Vilas and Amar Vilas.  
3. Striking architectural features of this palace are the richly decorated motifs, cornices, and columns, typical to the Mewad region.  
4. Another typical feature of the palace is the glass floorings and tinted glass designs in the Moti Mahal.  
5. The palace is also famous for paintings by artists from the 17th and 18th century. |
2. Located in the middle of the Lake Pichola, it was a summer residence for previous rulers.  
3. Built of granite and marble.  
4. Striking architectural features are the intricately hand worked glass inlaid designs. The arched doors and balconies worked in marble.  
5. The Palace has however been converted into a star hotel and extensions to the old building have been made. However the old architectural character of the building has been maintained in the newly extended parts also. |
| 3.  | Bagore-Ki-Haveli                          | 1. The Haveli/Mansion was built in 1751. In 1875 a triple arched gate was built that leads to the Gangaur Ghat.  
2. The Haveli consists of fine workmanship in glass inlay work, mirrors and frescoes. Other interesting architectural features are the Jharokas, Balconies, cupolas and archways, which are very typical to the architectural style in this region. |
2. The Ahar village was the ancient capital of Sisodia dynasty.  
3. The striking architectural features in this site are the ancient cenotaphs and Kunds typical to the Hindu architecture.  
4. Also found in this site are the coins, pots, statues, bronze objects and other historic artifacts of the Indo Aryan civilization. |
### 5. Shilpagram
- Village cum ethnographic museum depicting the tribal life of people of Rajasthan, Gujarat, Goa and Maharashtra.
- Traditional homes depicting the life of people in the various regions.
- Provides a platform for rural artists and craftsmen for display and sale of their works which include - terra cotta, wooden, metal and earthen articles.
- Annual ten day festival also of rural art and crafts.

### 6. Jag Mandir
- This Island Palace was built by Maharana Jai Singh-I who made several additions to it.
- Constructed amidst the lake Pichola.
- Built in 1651 and is a yellow sand stone palace and is lined by white marble from inside.
- Three storied complex capped by domes. Flooring of white and black marble.

### 7. Sahelion Ki Bari
- Sahelion Ki Bari, or the gardens of the Maids of Honor, is situated below the embankment of the Fateh Sagar Lake.
- Originally built by Maharana Sangram Singh II in the 18th century it was later reconstructed to its original form by Maharana Fateh Singh.
- The gardens contain ornamental lotus pools, finely sculptured chatries of soft black stone surrounded on all sides by fountains.
- One of the main attractions in the garden are the four huge elephants, each one sculptured out of a single piece of stone, which spout out water from their trunk.

### 8. Jagdish Mandir
- The Jagdish Temple, dedicated to Lord Vishnu was built by Maharana Jagat Singh in 1651.
- The temple is built on a rectangular podium that is 25 ft. high.
- The temple built in the Indo-Aryan style, has a pillared porch (Mandapa), an intermediate Anthrala and the inner Garbhagriha, covered by a Shikhara.
- The raised platform of the temple is decorated by sculptured bands between the plasters.
- Four small temples surround the main temple viz. Lord Ganesha, Surya, Mataji, and Lord Shiva.

### 9. Eklingji Temple:
- This is the first temple of the Mewar dynasty.
- Built in 734AD, the complex of 108 temples is enclosed by a high wall.
- The temple of Eklingji, enshrining the chief deity 'Lord
Shiva is situated at Kailashpuri.

4. The present structure however dates back to the days of Maharana Raimal (1472-1509).

5. Inside this shrine is the four-faced image of Lord Shiva in Black marble.

6. Outside the porch, opposite the western face of the image are the statues of Nandi and Bappa Rawal – the founder of the temple.

7. Other shrines within the enclosure are that of Shyam, Ganpati, Amba, and Kali.

Nagda Temple.

1. The ruined temples of Nagda are the remains of the old city found by Nagaditya, the fourth ruler of the Mewad dynasty in the 7th century.

2. The city, which was a flourishing merchant town, bore the onslaught of many Muslim invasions until it was finally devastated in 13th century leaving behind the ancient temples of Sas-Bahu dating back to the 11th century.

3. The interesting architectural features of this Indo-Aryan temple are the carved figures on its podium and Mandapa.

Sajjangarh Fort

1. Sajjangarh – the ‘monsoon palace’ of the Maharanas is located within a wildlife sanctuary on one of the highest peaks in of Udaipur.

2. The palace was built by Maharana Sajjan Singh between 1874-84 and is one of the best places to view the sunset.

3. The palace provides a spectacular view of the city. Within the palace is a picture gallery exhibiting different wildlife species in the sanctuary.

8.10 Key Issues related to Heritage Conservation

1. Many of the traditional houses in the old core of the city were demolished by their owners in the 1970’s – 80’s and replaced by new ones. This process still continues and the walled city is slowly losing its traditional character.

2. Most of the pols (gates) like Delhi Darwaza have been encroached by the informal market activities during the year.
3. Pols like Kishan pole which are now in ruins require repair / renovation.

4. Many traditional houses in the walled city risk demolition by their owners due to problems like renovation/maintenance.

5. No provision direct access for the rural artist/craftsmen into the market system.

6. Many traditional artists/craftsmen migrating to other urban areas in search of alternative jobs.

7. Many of the palaces and monuments in the outskirts of the city, (like Sajjangarh and Ahar Archeological site) are not maintained well. Common problems are depicted below.

8. Lack of civic awareness on heritage and conservation.

9. Heritage buildings treated only as commercial spots with no emphasis on conservation and protection

10. Need for maintaining the external architectural character of the existing buildings. (Maintaining the external appearance of the buildings and making necessary internal changes.)
8.10.1 Strategies and Objectives for Heritage Conservation

1. Restrict and control building activities in the walled city area and heritage monuments premises.
2. Provide financial as well as technical assistance to owners of heritage buildings for maintenance/repair and conservation of these buildings.
3. Enlist all major monuments/sites of heritage importance and enforcing strict construction/alteration rules on them.
4. Restricting the vehicular movement on the heritage walk route between Palace gate to Jagdish chowk.
5. Documentation, branding and awareness drives of the heritage through mass media, Internet, video films, slides and literature.
6. Providing adequate space around the ancient pols for landscaping and viewing space.
7. Providing a market for the rural artists and craftsmen by provision of craft complexes (Haat Bazaars) and melas.
8. Decongesting the squares in the walled city by removal of encroached structures.
9. Carrying out repair and renovation of dilapidated and unmaintained site/monuments like Ahar museum, Sajjangarh and Kishan Pole.
10. Proper management of heritage building/sites avoiding overlapping of duties and responsibilities among various departments and lack of clear-cut responsibilities.
11. Providing underground services of electric wiring, drainage and water supply line in the city, especially around heritage monuments premises.

**Table 8.11: Ongoing Projects on Heritage Conservation**

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Project Description</th>
<th>Cost of project</th>
<th>Executing agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Repair of historical gates/pols</td>
<td>Rs. 19.77 lakhs. Already used Rs. 2.94 lakhs</td>
<td>Udaipur Municipal Council.</td>
</tr>
<tr>
<td>2.</td>
<td>Restoration of following tourist places:</td>
<td>Rs. 830 lakhs</td>
<td>Rajasthan Tourism Department.</td>
</tr>
<tr>
<td></td>
<td>Pichola Lake</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fateh Sagar lake</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
8.11 PARKS IN UDAIPUR

Udaipur city is famous for its Gardens and parks. There are about 36 parks/ gardens/ nurseries in the city. Out of these three very famous gardens are the Gulab Baugh, Sahelion Ki Bari, and Moti Magri.

8.11.1 Sahelion Ki Bari

Sahelion ki Bari, or the gardens of the maids of honour is situated below the embankment of the Fateh Sagar Lake. The original gardens that were constructed by Maharana Sangram Singh II in the first half of the 18th century were damaged when a breach occurred in the embankment and Maharana Fateh Singh reconstructed the gardens in their present form. The Gardens contain ornamental lotus pools, one with finely sculptured Chatries of soft black stone surrounded on all sides by fountains, and another guarded by four huge elephants, each spout water from their trunks.

8.11.2 Gulab Baugh/ Sajjan Niwas

Gulab Baugh or Sajjan Niwas gardens situated immediately below the embankments of the Pichola Lake cover an area of about 100 acres, The garden were laid out by Maharana Sajjan Singh (1874 -1884) and contain a small zoo, spacious lawns and the Victoria Hall. Although initially named Sajjan Niwas it is still commonly known as Gulab Baugh (Rose Garden). The garden contains a small zoo, spacious lawns the Victoria Hall. The Viceroy, Lord and Lansdowne, to commemorate the 1887 Jubilee of Queen Victoria, opened this building, which houses a reading room and a library, in 1890.
8.11.3 Moti Magri

Near the southern end of the embankment of the Fateh Sagar Lake is a steep hill garden known as the Moti Magri. The garden contains a bronze alloy statue of Maharana Pratap riding on his faithful horse, Chetak. The present Maharana erected his. Nearby are the remains of the old palace, known as Moti Mahal, which was occupied by Maharana Udai Singh. Light and Sound shows depicting glorious history of the city for the past 900 yrs. held here during summers and winters. As per the 2022 master plan proposals are being made for new gardens and converting unutilized grounds for gardens/parks.

8.11.4 Sukhadia Fountain

Situated in the front of Railway raining School, this huge circle has been converted into a pond having a fountain in the center. He pond is about 200 ft in diameter and it has a 42 ft high fountain unique in the country. There are boating services in this pond. Alongside the pond are small gardens/lawns with other entertainment activities like horse riding, eateries etc.

8.11.5 Guru Govind Singh Rock Garden:

On the serpentine drive of the Fateh Sagar is a rock garden over a rugged rock. One can have a beautiful view of the lake from here. He garden is known for its location to witness the beautiful sunset across the lake.

8.11.6 Other Parks listed under the Udaipur Municipal Corporation:

1. Manikyalal Verma Garden
2. Gulab Garden near Dudh Talai
3. Patel Circle Park
4. Meera Park
5. Amal Ka Kata Park
6. Chandpole Park
7. Aravalni Vatika Park
8. Gurugovind Park
9. Panchvati Park
10. Sardarpura Park
11. Residency Park
12. Alipura Park
13. Surajpole Fountain
14. Ayurved Square Park
15. Jawahar Park Pratapnagar
16. Ravindra Naga Park
17. Shivam Park
18. Ekling Park
19. Court Choraha Park
20. Verma Choraha Park
21. Math Park
22. Nehru Bal Udyan Park
23. Dholi Bavdi Park
24. Vermaji ki Samadhi Park
25. Hanuman Park
26. Boharwadi Park
27. Sukhadiya Circle Park
28. Fatehvatika Park
29. Shaktinagar Corner Park
30. Shaktinagar Nala Park
31. Shastri Circle Fountain
32. Shiv Mandir Park
33. Ambamata Teacher’s colony Park
34. Sukhadia Circle nursery
35. Aravali Vatika nursery
36. Dudh Talai nurse