



# TERI SAS – Jaipur Study Trip

JAIPUR, TILONIYA AND SARISKA

Sem - 1 | Study Trip - 2019 | 14<sup>th</sup> – 17<sup>th</sup> oct 2019

## Objective

TERI School of Advanced Studies organized a study tour to Jaipur from 14<sup>th</sup> October – 17<sup>th</sup> October 2019, for the first semester Master's student. The objective of the tour was to expose students to issues of sustainable development in an urban area, rural area and natural habitat. Study group visited Amer fort, old walled city of Jaipur, Tilonia Village and Sariska Tiger Reserve.

## Visited Locations

Following is the description of the places visited during the study trip. Also, a summary of our experience and the knowledge that we have gained is mentioned.

### 1. AMERFORT

Our group reached Amber at 3 PM on 14<sup>th</sup> Oct 2019. It was a sublime experience since we got a chance to get in touch with our country's history.



*Figure 1 View of Amber Fort*

Amer Fort is a fort located in Amer, Jaipur. It was ruled by Raja Man Singh I. Amer Fort is known for its artistic style elements. With its large ramparts and series of gates and cobbled paths, the fort overlooks Maota Lake, which is the main source of water for the

Amer Palace. Mughal architecture greatly influenced the architectural style of several buildings of the fort. Constructed of red sandstone and marble, the attractive, opulent palace is laid out on four levels, each with a courtyard. It consists of the Diwan-e-Aam, or "Hall of Public Audience", the Diwan-e-Khas, or "Hall of Private Audience", the Sheesh Mahal (mirror palace), or Jai Mandir, and the Sukh Niwas where a cool climate is artificially created by winds that blow over a water cascade within the palace. Hence, the Amer Fort is also popularly known as the Amer Palace. The palace was the residence of the Rajput Maharajas and their families.



*Figure 2 Pavilion inside fort*

## 2. JAIPUR WALLED CITY

Visit of old walled Jaipur city was on early morning of 15<sup>th</sup> Oct 2019. It was like a heritage walk of the old city. It was really a great experience to see the architecture and urban design of the city. The Heritage Walk was an entertaining and informative experience since not only did we see the smallest palace of the city, we learnt a learnt about how the government improved the conditions of the “Gandi Gali” (Dirty Streets) with the help of pipelines.

The ruler planned the town formally and then distributed space to different classes of society according to their socio-economic and political status. Town Planning means the preparation and implementation of a suitable ground plan to meet the needs of a particular type of town. In other words, it means putting down on paper the plans of roads, residential area, sewage system, water supply system, playgrounds, education centre, office area, recreational centers and a host of other things, and thus of course implementing this plan. The plan must not only fit the Topography of the place and be suitable for its climate but it should also meet the needs of the society^" according to its habits, and customs, festivals, fairs, economic conditions, means of livelihood, etc.



*Figure 3 Residence of former prime minister of Jaipur*





*Figure 4 Tower built by Maharaja Ishwari Singh, 'Isarlat'*



*Figure 5 Typical residential building architecture of Jaipur*

The city consists of a planned town with 'Grid-Iron Pattern' or the 'Chess-Board System' of street planning. The principal businesses of Jaipur City were banking and trade in jewelry, grains, cotton and stone.



*Figure 6View of Tripolia Bazar*

### **3. SEWAGE TREATMENT PLANT, DELAWAS**

There are two STPs of 62.5 MLD capacity each exists in the same premises. Both the STPs were constructed and owned by Rajasthan Urban Infrastructure Development (RUIDP). Unit I was commissioned in 2006 and unit II in 2011. The STPs were constructed by RUIDP and thereafter handed over to JMC (Jaipur Municipal Corporation) for operation. Both STPs are constructed for treating thesewage from southern part of Jaipur city including Sanganer industrial area effluent.

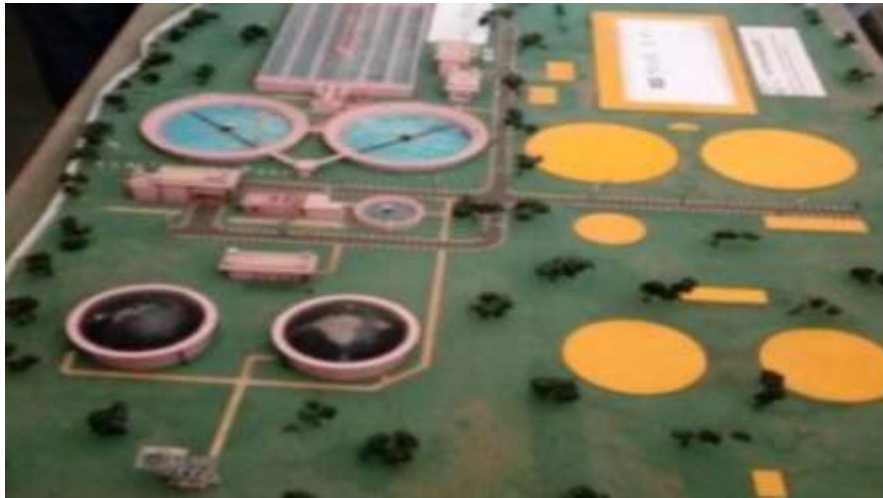


*Figure 7 Group photo at STP site*

The STPs covers the Southern drainage which carries almost 75 % of Jaipur Citysewage into/ towards Amanisha drain which finally joins River Dhund. These STPs are completely dedicated for this zone.

Both the STPs are having similar type of treatment system. The treatment system consisting of coarse & fine screens, grit separators, primary clarifiers, diffused aeration, secondary clarifiers, sludge thickener, centrifuge, sludge digesters and gasholders. The gases are being used for power generation to run the blower for supplying of the air into the diffused aeration system.





*Figure 8 STP Model*



*Figure 9 Aeration tank*

#### **4. HAWA MAHAL**

Hawa Mahal is a palace in Jaipur, India. Made with the red and pink sandstone, the palace sits on the edge of the City Palace, Jaipur. The structure was built in 1799 by Maharaja Sawai Pratap Singh, the grandson of Maharaja Sawai Jai Singh, who was the founder of Jaipur. Its unique five floors exterior is akin to the honeycomb of a beehive with its 953 small windows called Jharokhas decorated with intricate latticework. The architectural feature allows cool air from the Venturi effect to pass through, thus making the whole area more pleasant during the high temperatures in summer. Many people see



the Hawa Mahal from the street view and think it is the front of the palace, but in reality it is the back of that structure.



*Figure 10 View of Hawa Mahal*

## **5. RAM NIWAS GARDEN AND ALBERT HALL MUSEUM**

Albert Hall Museum or the Central Museum is the oldest museum in Rajasthan and is situated opposite to the new gate of the Ram Niwas Garden. The museum is a good illustration of the Indo-Saracenic type of architecture. It was named after Albert Edward (King Edward VII), the then Prince of Wales, who laid the foundation stone of the museum during his visit to Jaipur.



*Figure 11 Albert hall museum in evening*



*Figure 12 Maharaja Sawai Ram Singh Statue*

## **6. BAREFOOT COLLEGE, TILONIA**

The Barefoot College is located in the Ajmer district, between vibrant villages and yellowy mustard fields, in the central part of the rocky and dry desert of Rajasthan. Bunker Roy is the founder of what is now called Barefoot College. They welcomed us with a puppet show which had a social message and taught us the reason behind its name. Barefoot College got its name from the proposition of not letting prior degree or basic



education act as a hindrance for entering and acquiring knowledge. However, a lot of us still believed that the reason behind its name was due to the restriction of not being able to wear our shoes inside any of the blocks and working area. Night Schools at the college allow students who worked to support their families during the day to still receive training. The organization has utilized a system of training the trainers to bring skills training to villages.



*Figure 13 Cloth making at Barefoot College*

Today a big part of Tilonia's work is bringing women from poor rural villages around the world to learn to make solar panels and electronics in order to bring solar energy back to their villages. The project focuses on women since experience shows that they are more likely to keep their skills in their home areas, while men tend to take their training and move on to urban centers.



*Figure 14 Workers explaining manufacturing process of sanitary napkin pads*

Barefoot's community radio station part of a strategy that combines rural knowledge and modern innovation to help villagers build a better, more sustainable, self-reliant life. From local news to farming tips and civil rights, the radio provides important information to residents from more than 30 villages within a 15 mile radius, reaching an audience of 50,000 people.





*Figure 15 Community radio station at Barefoot*



*Figure 16 Group members having lunch at Barefoot College*

## **7. SARISKA TIGER RESERVE**

Sariska Tiger Reserve is a tiger reserve in Alwar district, Rajasthan, India. It stretches over an area of 866 km<sup>2</sup> comprising scrub-thorn arid forests, dry deciduous forests, grasslands, and rocky hills. This area was a hunting preserve of the Alwar state and was declared a wildlife reserve in 1955. It was given the status of a tiger reserve making it a part of India's Project Tiger in 1978. The wildlife sanctuary was declared a national park in 1990, with a total area of about 273.8 km<sup>2</sup>. It is the first reserve in the world to have successfully relocated tigers.

The park is situated 107 km from Jaipur and 200 km from Delhi and currently has only 17 tigers. It is a part of the Aravalli Range and the Kathiawar-Gir dry deciduous forests' ecoregion. It is rich in mineral resources such as copper. In spite of the Supreme Court's 1991 ban on mining in the area, marble mining continues to threaten the environment.



*Figure 17 Asian Antelope at Sariska*



*Figure 18 Passing through the Sariska*





*Figure 19 Group photograph at end of the Sariska tour*

We were picked up by our safari early in the morning on 17<sup>th</sup> Oct 2019. Unfortunately, we could not spot any tigers. Nonetheless, it was a good visit as we got to see many other species of animals, plants and the overall functioning of an ecosystem.

## Conclusions

This tour has given us a great opportunity to discover Jaipur's urban planning and culture, women empowerment and sustainability in Tilonia Village, and interaction with nature in Sariska.

Following are the conclusions of the study trip -

- A) The exposure to pink city Jaipur has made us learn how the city was planned about 400 years back. One of the most interesting things is how the buildings are designed to sustain in harsh summer.
- B) It was great to learn about water scarcity in Rajasthan and how it is managed.
- C) Nature is extremely important for us and we should always try to protect it from vanishing.