

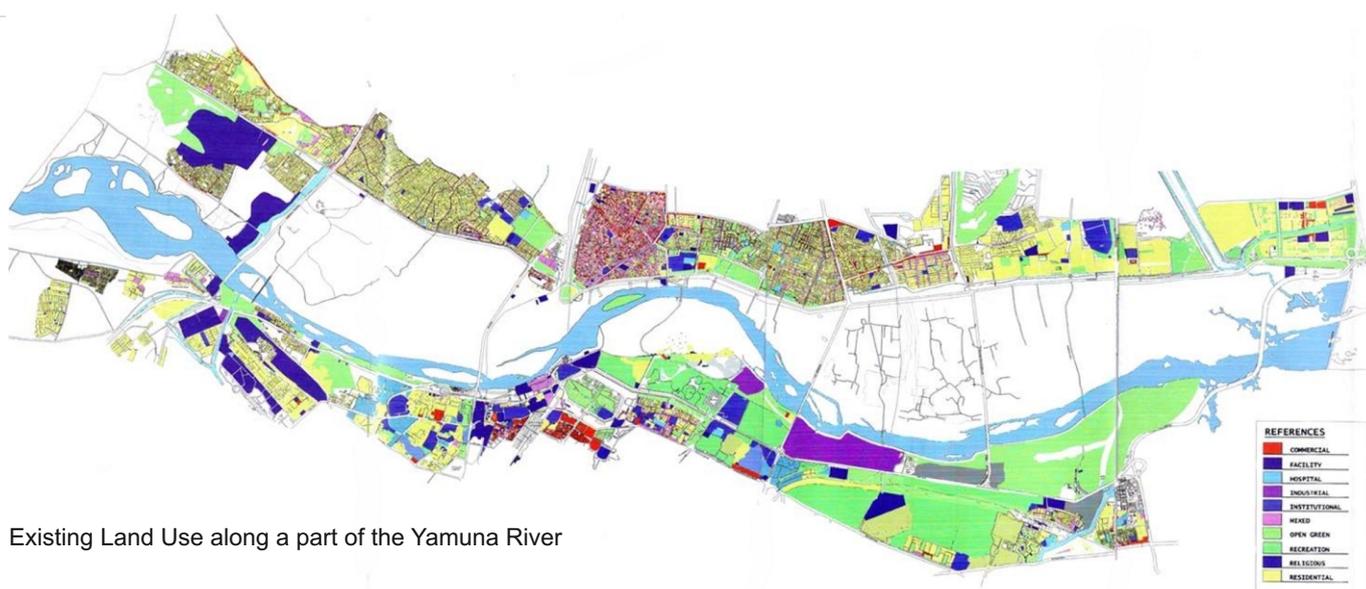
2004 - 2005

Development of the Yamuna River Edge of Delhi

Faculty Team: Dr. Suptendu P. Biswas (Coordinator), Vishal Agarwal, Ashish Bhalla, Ashish Choudhury and Akshay Kaul  
 Institution: Sushant School of Art & Architecture, Gurgaon

As a child, each one of us must have drawn and painted rivers – river that flows, bends and turns – a solitary boat floating -- a tree in the fore ground and natural landscape in the horizon. All of us, for sure, coloured that river blue. That is how we learnt to imagine the river. But when anyone of us saw the Yamuna in Delhi for the first time, all those childhood imaginations got a shock! Here is a river --- a thin curve of dark gray water that hardly flows --- yet, stinks. Only in monsoon, nourished with rainwater, the Yamuna takes the body of a 'real river'.

However, the concentration of various medieval settlements along the river reminds us of the intrinsic link the city of Delhi used to share with the river. The planning of the colonial capital in early 20th Century also did not undermine the presence of the Yamuna. Even the Master Plans of Delhi, both in 1962 and in 2001, reiterated the need for integrating the environmental improvement and development of the river and its bed along with the growth of the city. With a desire for a 'pollution free' river, both the Master Plans highlighted the importance of maintaining 'ecological balance' and, as a result, intended to augment sewage treatment facilities and control sewage outflows to the river. Since late '70s, committees were formed -- studies have been taken up to look into the future of the river and its ever-changing relationship with the city. The Cabinet approved Yamuna Action Plan in 1993. Around the same time, Central Water and Power Research Station (CWPRS), Pune submitted the final plan, which recommended the channelization of the river 'with least structural damage, minimum maintenance costs and safe riverfront development'. The Delhi Urban Arts Commission (DUAC) in its Conceptual Plan-2001 underlined the landscape and recreational potential of the river through proper channelization. Having expressed strong views on the pollution control of the river, the DUAC also realized the need to identify areas on either side of the riverfront for 'three dimensional development'. One recent developmental scheme was the then Union Culture and Tourism Minister, Shri Jagmohan's 'grand plan to remove the dense slum along the Yamuna and develop a massive national and cultural complex' along the river (between the old Shahdara Railway Bridge and the ITO Bridge).



Existing Land Use along a part of the Yamuna River

In spite of all those efforts, today, the river is filthy --- full of plastics, domestic and industrial wastes --- water is not even suitable for animal consumption. As a part of the larger natural systems, here, environmental quality often comes to the public forefront, which requires attention. There is also a contest to occupy a public place like this in the city among various interest groups --- between private profits and public benefits. Conflicting demands to house different functions/activities also come to the fore. The presence of numerous heritage structures and precincts, in this context, raise the issue of what to preserve and how to balance the scope of the conservation with new development opportunities. At the moment, the riverfront is inaccessible for the people of Delhi and, in places, filled with encroached slums. These marginalized segments of populations will certainly risk displacement, as new plans and projects are pushed ahead and that poses the question how can development schemes address social and environmental cause.

At this juncture, it becomes imperative to take stock of the ground situation, present along the river edges, to be able to anticipate/suggest any meaningful proposal in the future. Urban Design research was conducted in two consecutive years, 2003 and 2004, along the 22 km. stretch of Yamuna River from Wazirabad Barrage to Ohla Barrage on either side of the river in order to research, document and map the existing ground reality and explore urban level structural modifications and typological possibilities of developing the Yamuna River Edge.



Existing Landscape of the River

Methodology

- 22 km -long stretch was divided into 20 smaller operative zones
- Zone -wise Documentation of Urban Morphology was done.
- Zone-wise analysis led to identification of issues.
- Intervention areas in the zones were arrived at through suitability mapping by involving layers of demography, land use, image, urban form, movement, open spaces etc.
- All the suitability maps were put together on the whole stretch of the river.
- Two alternative structure plans for the whole river:
  - **Ecological Structure Plan** for the river and its edges
  - **Movement Structure Plan** to connect the river to the city.
- Both the structure plans were discussed, debated and combined together to get the **Final Structure Plan**.
- According to the Final Structure Plan, Urban Typology projects were formulated.
- Design of detail areas were done subsequently.



Final Structure Plan