Questions	<u>Comments</u>
Have you ever seen a river? If yes, please briefly explain how Adi Ganga is similar or different from the river in your memory. If no, then kindly note down your first impressions of Adi Ganga, from what you have heard in the presentations. Also, is it possible to understand river dynamics without personally associating with it?	Yes, I have seen a lot of rivers while travelling via trains, cars and other means of transport. I remember I used to get excited whenever our train used to pass over the Yamuna river. The river in my memory is much more pristine and holy as my parents asked me to bath in the crystal clear waters of Ganga. Seeing that Adi Ganga reminded me of my recent journeys.But it was not a nice experience to see Adi Ganga's present plight— and I could see people throwing waste into the river. In the river there was more waste and less water. It felt that we were destroying the pure water.
The following ideas were discussed in the presentation: • Messy Assemblages • Historical Geography of the River route • Cartographic Contestations • Intangible Heritage • Shades of Environmentalism In the context of urban river sustainability, which of the above themes seems most relevant to you and why? You can select more than one topic.	All the themes are relevant in the context of Adi Ganga . The Adi Ganga is a messy amalgamation of physical and cultural beliefs which I feel is the most relevant theme. Physical constitutes the bends ,rocks and flow of the river .Cultural constitutes the deep rooted beliefs of the people. Wilson states "One evening whilst the founder of Kalighat performing his devotions by the bank of the Adi Ganga, which was then a great stream flowing south of Calcutta, when suddenly a bright light shone around him, and that same night, when he had gone to sleep, the goddess Kali appeared to him in a dream, and told him that the spot was one of those holy places which had once received a portion of her severed body.The next day he dug up the ground, and proved the truth of his vision. The sacred emblems thus miraculously found were set up for worship in a small wooden house on the bank of the Adi Ganga." The programmatic implication of the precolonial Adi Ganga would be to use a strategy that increases the significance of the channel, within the tangible and intangible domains of the city The Blue Infrastructure of the river along with the messy assemblage of languages lies at the heart of urban river sustainability.

After the presentation, what aspects of the Adi Ganga still lingers on your mind and why?

The destruction of nature, particularly our rivers like Adi Ganga, is one thing that lingers in my mind in particular. We leave scars on our path to the earth as we grow, evolve and move towards urbanizations. On the way from Naktala to Garia in the south of Kolkata, one can not miss the visual and foul feeling of a polluted waterway under Alipur Bridge. The fact that the canals of Calcutta were excavated for two reasons trade transport and drainage sewage sanitation - can partly attribute the neglect of this important water canal.. In contrast to the sewage drain that the Adi Ganga has been reduced to, the 15th to 17th Century version resonates significance at an intangible level as well as a material level, that of transport, trade and pilgrimage. This transformation is the result of human urbanisation and advancement.

Do you think the religious symbolism attached to the river has affected people's awareness of its continuity from a scientific perspective?

Or has it contributed to the river's memory as a 'living heritage'?

I vociferously believe that the religious symbolism of the river clouds the scientific thinking of the communities who regard it as a diety and continue to pollute it for religion's sakes. The practices include throwing the ashes of dead into the rivers for better salvation , bathing in the holy waters for a good life ahead and many other superstitious beliefs. The old practises are extremely damaging to the river and must immediately be abolished.

Our legal system still perceives ecological bodies as resource to be utilized. So, can we still call the practice of river manipulation a colonial thought?

Yes. I believe our legal system in current times is perceiving the ecological bodies in a manner only relevant to colonial era..We are still following the technique of resource utilization in a scavenging manner, which is not sustainable.

Colonialism is a practice or policy of control by one people or power over other people or areas, often by establishing colonies and generally with the aim of economic dominance.This same can be said for our local government which extracts the important resources of rivers for it personal thriftable business.It is all guided by money ,power and domination.

Briefly share your thoughts on the role of activism in the river's preservation.

Do you think it started the discourse on conservation policy in the region or did it enlarge the human-nature divide?

Activism plays a major role in the conservation of the environmental resources. This symbiotic relationship between the two in modern times has taken the form of environmental activism, and is helping shape conservative policies.

I feel that activism which started with conserving the river as its main goal during the initial stages, led to an enlarged gap between human and nature. Despite protests, petitions, and disputes from different sectors of society and in spite of violations of Environmental Impact Assessment (EPA) 1986 and 1994, the Metro project was sanctioned. An archaic section 11 of the Railways Act 1989, which lefts a colonial revision of 1890 which provides railways for construction "...on, beneath or above all land, any river, canal, brooks, streams or any other water..." was the most powerful instrument to facilitate the implementation of this draught against enormous socio-ecological costs. This led to environmental imbalance and affected the lives of squatters.

What are the complexities faced by an urban river?

Which of them, as per your observations, are faced by Adi Ganga?

Significant quantities of major pollutants are found in urban sources, with urban waterways typically badly polluted. Urban pollutants include faecal and nutrient pathogens and toxic metals, hydrocarbons and suspended substances. The ecological well-being of the rivers is given greater priority to the capitalist greed and socio-political agendas. One of the biggest challenges is the use of Adi Ganga to discharge sewerage. The approval of the metro project further exacerbated the river situation.

The channel is usual at first glance. It is a like every stream in contemporary India – the water itself, polluted with wastewater and waste streams, carrying excrement from the city, is hugged by shanty towns. Behind the walls, hidden, it flows throughout its course from very few places. The channel flows downstream, its waters are dark, heavy and stagnant. Large columns of concrete pierce its silent waters here. These columns support contemporary Kolkata's subway system.he canal goes further to the south: concrete, dirt, pollution, succeeds in the battle between the pillars. The bed is still a silent grim reminder of the urbanic effects on the river.

From what you have learned about Adi Ganga, who do you think has the most control/agency on the river and why?

- Local government
- Residents near the River
- Squatters on the riverbank
- Nature
- Others

The local government had the most control over river Adi Ganga. The excavation of the Tolly's canal for tradetransportation and drainage-sewerage-sanitation were the harbingers of the power of local government over Adi Ganga. In the post-independence period it turned into a sewer because the water channel was neither restored, nor maintained. A large number of sewerage drains belonging to the Calcutta Municipal Corporation (CMC) and the Calcutta Metropolitan Water and Sanitation Authority (CMWSA) discharged untreated effluent directly into Tolly's Canal. These networks did not have lock gates to check and regulate the flow of water during high and low tides. However all plans went into disarray when the metro rail was planned between Tollygunge and Garia, the elevated railway tracks going directly over Tolly's Canal. 300 pillars, each at a distance of 20 m from the other, were dug into the canal bed. The metro rail project was sanctioned in spite of protests, petitions and litigations from different rungs of society. Their request was ignored and not paid attention. This reveals the paramount control of the local government over the Adi Ganga river.

According to you who/what is responsible for the present woes of Adi Ganga?

- Government Policies
- Natural fluid dynamics
- Riverine Demography
- Lack of awareness
- River Activism
- Others

Why do you think so?

Inconsisting of patrimony and cultural aspects of this area, I strongly believe that it is the wrong conduction of environmental activism and improper government policies responsible for the present woes of Adi Ganga. The local people in and around an ecological system have a relationship with nature, as we saw and discussed. Without having a clear understanding of the life of the squatters ,thier relationship with Adi Ganga the government framed policies which lead to the demis of the once so holy and shrine river. Paradoxically, this "sewer" is still regarded as a sacred place in the memory of Kalighat and a holy place for countless pilgrims who go to Kalighat and testify to the importance remaining in the modern city. However, there are several problems in the channel, the pollution and misuse being the most important. It is considered to be a largely "dead" way to impose new infrastructure by the government.

There are many intriguing questions due to the inherent tension between the rest of the canal's, but intangible importance and its material problems. The main question is: how did this holy space become an artefact of pollution? The problem I argue is the separation of the tangible from the intangible. Although the Adi Ganga space is still immaterial, its structure and, above all, the living relation to the town are less tangibles or physical.

Which framework do you think is necessary to better understand the river-society dynamic and provide a possible sustainable solution in the context of Adi Ganga? The framework I believe to be most significant today is the socio-political framework, given the current situation, because most of an environmental entity's fate is defined by the policy which the government has developed on it.

This framework shows the Adi Ganga as one of the main streams of the Hooghly River through historic paths from the pre-colonial times to the present day.

Using this approach it shows that the future of the colonial and postspanic Kolkata is being determined by the shift in development perspectives.

As with the Adi Ganga, we must understand who is entitled to adopt legislation and policies. It should be people in a fairly demographic country, but this is not the case, as we all know. I believe that politics controls much of the world today so the social-political actors must understand if we want to save Adi Ganga.

There's no easy solution for solving such a complex problem, but given the political impact we can try, especially during the elections, to divert politicians' attention to the river, because only politicians can try to get the voices from the people.

If you were tasked upon to 'save Adi Ganga', what would you like to save and why?

Also, what possible solutions/ suggestions come to your mind regarding the river's rejuvenation or awareness? I would start making the water clean if I were to save Adi Ganga. It will be useless without cleanliness while storing the water level is also important. And cleaning with incentives after completion is a more achievable goal. We can begin filtering solid waste from the water for cleaning purposes. Subsequently, the chemical water decontamination. We can also cultivate the cleanliness of fish in the river and develop a sustainable ecosystem.

Comments

(Feel free to add any suggestions or queries, which you feel wasn't covered in the Question set or would like us to pursue)

Almost everything about Adi Ganga was covered by slides and presentation. I have no proposals because I felt that the questionnaire was quite elaborate and covered all aspects of the presentation. I think we could have the assignment more credit. I also believe that a class debate should be held based upon the answers received.