## Course Name: An Introduction To Urban Ecological Heritage: Theories and Applications

Professor Dr. Jenia Mukherjee Humanities of Social Sciences Indian Institute of Technology, Kharagpur.

Week: 04 Lecture: 15

Case Study 2: Baro Chaynavi Cooperative

East Kolkata wetlands is a complex heterogeneous space, characterized by multiplicities as manifested in the roles and practices of many actors who are associated with three types of fish ponds, locally known as bheris – private, cooperative and government. Furthermore, each bheri has its own story in terms of ownership pattern, administrative position, local networking, fisher's identity and initiatives shaping their own set of challenges and potentials. Although there are instances of cooperatives switching into private bheries, several cooperatives have written successful stories of their own. One of such cooperatives is the Boro Chaynavi Fishery Cooperative Society, locally known as Boro Chaynavi Matsyabai Swamiti.

Where the zealous secretary Gobind Deshardar is able to obtain government support and funds to augment fish production and profitability. Boro Chaynavi covers around 30 hectares and is situated in Bidarnagar Ward No. 36 under the jurisdiction of the South Bidarnagar Police Station in Kolkata. A focused group discussion with members of the Boro Chaynavi Cooperative, followed by a key informant interview with Gobindo Sardar, conducted by several passioned young adults from a government school in the East Kolkata Wetland area, led us to the undulating storied trails that encircle the bheri.

- It is a government registered cooperative.
- It was registered as a cooperative in 2007.
- There are 6 to 8 (registered and unregistered) cooperative in EKW currently.
- Since 2007 the vested wetlands where transformed into government undertaken cooperative with cooperativization replacing private ownership.
- To wastewater ponds and 66 hectares. (180 bighas approx)

- It is one of the success stories of fisheries management involving cooperation between the government and expertise and experience of cooperative members.
- 8 to 10 varieties of fish are cultured in Baro Chaynavi and the main varieties include:

Rohu (Labeo rohita)

Minor Carp bata (Labeo bata)

Catla (Catla catla)

Silver Carp (Hypophthalmichthys molitrix)

Tilapia (Oreochromis niloticus)

Black carp (Mylopharyngodon piceus)

Grass Carp (Ctenopharyngodon idella)

- A single channel functioning as both inlet and outlet instead of a separate outlet connecting the bheri- it affects fish cultivation and fish growth.
- It is necessary to re-excavate defunct channels in order to ensure the inward and outward flows mechanism.
- The cooperatives thrive through a relationship of mutual trust in transactions in the wider cooperative network of EKW.
- In terms of Government support, Baro Chaynavi is better position than private bheris.
- The management through cooperative membership ensures systematic load distribution against expertise of members.
- Livelihood diversification is possible and practiced extensively through vegetable farming, horticulture, poultry, goatery, etc.
- The fishers of Baro Chaynavi has seen the transition from a thatched roof heart to a functional cooperative in the east Kolkata wetlands. Around 500 people have changed their livelihoods in different ways from Baro Chaynavi.

Through immersing himself into the treasure of memory, Gobindoda reflects how the combination of wastewater and cow dung ensured disease-free fish growth in the past.

But with the proliferation of big industries in and around the city, wastewater has become a major part of the life of the bheris. Wastewater is the lifeline of the bheris. And generations of fishers have raised fish in these bheris. Before being discharged into the Bidyadhari River, wastewater is naturally treated in the East Kolkata Wetlands, which is a part of the river's spill basin.

Manifesting the relationship with East Kolkata Wetlands with the larger Ganga Brahmaputra Delta, fishermen of Baro Chaynavi worship Makal Thakur, a locally revered deity of fish in the Indian Sundarbans. The traditional knowledge, skill sets, and wisdom of the fishers, together with the coordinated technical operation for wastewater distribution, contribute to East Kolkata Wetlands being a resource recovery region. And the legacy lives on as the inherited value is acknowledged and appreciated by young adults who are deeply concerned about the sustainability of East Kolkata Wetlands.