

Mudiali Fishermen's Cooperative Society Limited, Kolkata, India



<u>The Mudiali saga</u>

The struggle

The ancestors of members of the present Mudiali Cooperative Fisherman's Society Ltd. came to Mudiali from Howrah district in the late 1930s and early 40s after they were displaced when the Damodar river dried up.

In the past, erstwhile Calcutta Port Commissioners auctioned rights to raise fish in the area where the fishery currently stands.

In 1956, the impoverished fishermen collected Rs. 26,000 with a lot of struggle to obtain a three year lease as a group. In 1961, a cooperative was formed and rights obtained to carry out fishing in the Port Commissioners lakes. The fishermen's money came from the corpus created by the founding members by saving 25 paisa a day; the shortfall was met by pawning family jewellery.

In the 1960s and 1970s, the water logged wasteland choked with hyacinth – was used for dumping garbage and animal carcasses. Not many dared pass the place frequented by anti-socials.

Until 1985, pisciculture continued in isolated pockets interspersed with mounds of garbage.

In 1985, with Calcutta Port Trust's permission, the motivated and committed fishermen reclaimed the entire derelict area and made it fit for pisciculture. With financial assistance from the Fish Farmers' Development Agency under the World Bank aided inland fisheries project.

They did this under the dynamic leadership of Shri Mukut Roychowdhury, CEO deputed from the Fisheries Directorate.



Shri Mukut Roychowdhury, the first CEO of MFCS is still inseparable from the fishermen members.

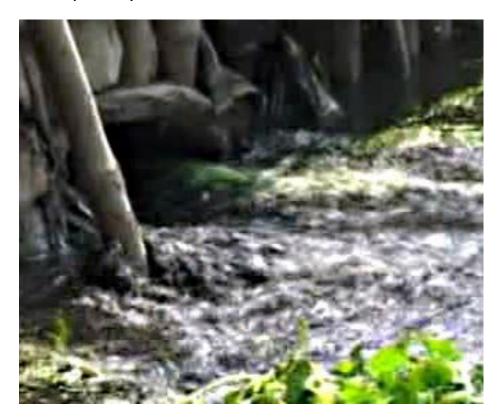
MFCS is an industrial waste water fishery. Industrial waste waters from one of Kolkata's busiest industrial belt near the Port area, in the city's south-west, reach the inlet pond at the waste water fishery.



Industrial waste waters gushing into the inlet pond

Every day, tonnes of untreated industrial waste from the industrial belt, including heavy metals, pour into the inlet pond. Domestic sewage is limited.

The daily quantity pouring in is estimated at 30 million litres waste water per day.



The force of waste waters gushing into the inlet pond.

The incoming waste water quality is reported to have improved somewhat in recent times. There was a case of significant pollution that was traced back to the polluting factory Beco Lawrie and the West Bengal State Pollution Control Board stepped in and took action.

The water moves via stilling ponds – for stilling waters – for solid waste water settling to the bottom – in succession in eight so called anaerobic tanks.

Hyacinth in a plant great at absorbing oil, grease and heavy metals. Hyacinth is a saprophyte plant that grows on and derives nutrition from dead and decaying matter.

Water is moved through tank to tank through hyacinth filled canals, each tank used to rear fish such as singi and magur which withstand pollutants.



Hyacinth filled water canal



Hyacinth filled water canal



Close up of hyacinth in the water canal

Water is treated using biochemicals such as lime.



Fishermen spraying lime in the pond

Water is cleaner with every tank output and comparatively cleaner water is released into the Hooghly river through Monikhal canal.



Fishermen receiving and releasing fishlings (young fishes) into the pond.

MFCS Wetland area is 60 hectares, lease amount paid to Kolkata Port Trust is 10 lakhs annually and fish sales in the year 2015-16 were Rs 1.16 crores. The species cultured are Catla, Rohu, Mrigala and Bata (Indian Major Carp).



MFCS Management

All members of MFCS are fishermen by profession and 98 per cent belong to the same caste. From fishing as the lone income stream, MFCS has encouraged the fishermen to learn other trades also.

The other trades are commercial goat and duck rearing, fish breeding, horticulture, manufacturing paddle boats, managing a Nature Park with facilities such as picnic spots, deer park, boating complex and other attractions.

The cleanliness and natural appeal maintained at the entire Wetland is to be seen to be believed. The Wetland fishermen and staff have inculcated a sense of responsibility about maintaining and increasing the green cover in the entire Wetland area.



Manicured lawns at an industrial waste water fishery.



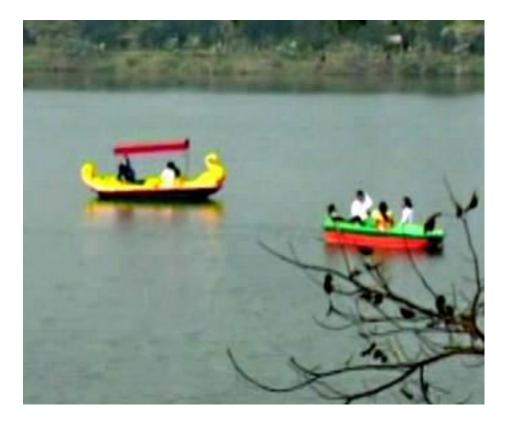
Deers being fed in the Deer Area.



Deers feeding on rations in the Deer Area.



Goat and sheep rearing.



Tourists enjoying boating on the pond.



A big group of tourists enjoying their outing at a dedicated picnic spot.

The transition from a single livelihood to a multi-livelihood existence has not adversely affected the psyche of the members as all the members are firstly made experts in fishing (netting) before they are drafted into other livelihoods.

Social welfare for MFCS members

Apart from involving the members actively in the day to day management of the Cooperative, the notable member welfare measures implemented by MFCS are a homeo clinic, reimbursement of tuition fees and text book costs, coaching classes from Primary to Class X, a hearse for all, Rs 10,000 as marriage contribution in a member's daughter wedding and Rs 5,000 financial assistance and one day's wages of all members in case of a member's demise.



Students of the free Primary to Class X coaching centre at a recognition ceremony.

MFCS Wetland and Biodiversity

- 1. MFCS with its motto Save Wetland Save Human is a model Wetland with unparalleled Biodiversity.
- 2. MFCS is a unique example of sustainable development of fisheries.
- 3. MFCS has planted one lakh trees in a scientific manner. (Annexure One).



Shri Chandranath Sinha, West Bengal Minister for Fisheries leading a tree plantation drive.



Trees nurtured over the years provide shade too, apart from their important Biodiversity functions.

- 4. MFCS is home to many plants (Annexure Two).
- 5. MFCS is a paradise for birds and bird watchers (Annexure Three).



Birds perched high on the trees.



Birds enjoying the quiet waters of the ponds.



Birds flock where there is greenery.

- 6. MFCS also plays host to many butterfly species, underscoring the soundness of the Mudiali ecosystem (Annexure Four).
- 7. Microorganisms present in the MFCS ecosystem (Annexure Five).
- 8. MFCS rears many species of fish (Annexure Six).



Shri Firhad Hakim, West Bengal Minister for Urban Development and Minister for Municipal Affairs, an ardent well wisher of the fishermen members.

Challenges and Unanswered Questions

Despite the fishermen members hard work in their unique efforts at Mudiali through their vehicle Mudiali Fishermen's Cooperative Limited, they have not received much appreciation and recognition.

Hindrances have included Kolkata Port Trust's persistent insistence on scrapping of the annual lease and returning the wetland to them and mind boggling illogical demands of annual lease amounts. It all started in 1992 when matters came to such a pass, that the parties started seeking judicial remedies.

It is not uncommon to hear a member speak with pride about their contribution to the cause of Biodiversity and comparing it with that of a 200 crore sewage treatment plant under the Ganga Action Plan and another member complain that they get no carbon credits.

One member also pointed out that 34 scholars have completed their PhD. at MFCS in some field or the other but not thought it fit to give them a copy of their reports.

Also one can hope that some acceptance has come forth for the Kolkata Port Trust authorities and one can only hope that the same continues in the best interests of Kolkata city's Environment, Biodiversity and Sustainable Development.

We should earnestly see to it the MFCS, a model wetland does not go the way of the East Kolkata wetlands. There the problem has been one of "urban development" and in south west, at Mudiali, it should not become one of irresponsible industrialization and "Port land development".