Water bodies of Kolkata

Mohit Ray, PhD (Engineering)
Lal Dighi – The city of Kolkata was initiated around this pond. British called it Great Tank
The City and Its Ponds
You can swim through Kolkata from one *pukur* (pond) to another. There so many places in Kolkata with ‘*pukur*’ attached to their names; for example *Monoharpukur*, *Ahirpukur*, *Bosepukur*, *Thakurpukur*, *Paddapukur*, *Talpukur*, *Keorapukur*, *Hanspukur*, *Shyampukur*, *Muraripukur*, *Jorapukur*, *Jhamapukur*, *Beniapukur*, *Fariapukur*, *Chunapukur*, *Tanupukur* and more.
The actual number of ponds within KMC area is still a guess. The KMC list of ponds showed 3874 ponds in 2006, 1736 ponds in 1997. A detailed map book of Kolkata containing 284 plates by NATMO in 2006 showed 8731. Counted from Google’s satellite imagery of Kolkata was 4889. It may vary upto 10%, so the number of ponds would vary between 4400 to 5400. This means about 44% of the waterbodies have been filled up in last two decades.
<table>
<thead>
<tr>
<th>Year</th>
<th>KMC 1997</th>
<th>KMC 2006</th>
<th>NATMO</th>
<th>Google</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of Ponds</td>
<td>1786</td>
<td>3873</td>
<td>8731</td>
<td>4889</td>
</tr>
</tbody>
</table>
Urban Pond - A Multiple Resource

• WATER RESOURCE
  # Bathing
  # Washing
  # Receptors for rainwater harvesting,
  # Maintaining local ground water levels.
Urban Pond - A Multiple Resource

ECONOMIC RESOURCE

# Pisciculture

- SOCIETY
  
  # Clubs #
  Community Gathering

# Morning Walk

- SAFETY
  
  # Fire Extinguishing
Low Cost Swimming Pool
Urban Pond - A Multiple Resource

• ENVIRONMENT

# These water bodies serve the purpose of an open space in the crowded urban localities.
# Improving Air Quality
# Controlling Micro-Climate
Urban Pond - A Multiple Resource

• BIODIVERSITY

# In many cases the banks of these water bodies are the only spaces for development of greenery.

# Local natural life – aquatic, avifauna and terrestrial – sustains around these ponds – A major component of Urban Ecology
Urban Pond - A Multiple Resource

- **CULTURE**
  - Temples & Heritage Ponds
  - Fairs
  - Aesthetics

Photo 10  Heritage pond – Sen Dighi – A pond with 700 years of history
All Government Plans for development of Kolkata has bypassed the existence of these thousands of ponds.

Calcutta Environmental Management Strategy and Action Plan (CEMSAP 1997) did not include the ponds in its plan.

KMDA planning of Kolkata: Perspective Plan for CMA: 2011 and Planning for Metropolitan Development 1990 – 2015 have not considered ponds as a resource.

Kolkata Municipal Corporation (KMC) has no department for all these 5000 waterbodies. It has repaired and rebuilt a number of ponds but it has no plan for their maintenance and operation or any overall management plan.

None of the Universities and Technical Institutions of Kolkata has done any meaningful studies on these vital water resources.
People’s Movement to save Waterbodies

• In last two decades the major environmental movement in and around Kolkata has been the movement to save the waterbodies
• Community organisations have led the movement
• There has been no external funding, no central or Foreign NGO intervention.
• There have been a number of success stories. Vasundhara has been a part of this movement, both on field and research level
A book on
HERITAGE
PONDS OF
KOLKATA

Published by
Kolkata
Municipal Corporation
A book by Mohit Ray On Kolkata’s Ponds. It contains the water quality, biodiversity, history, economics, fish cultivation, community management, fights to save the waterbodies, politics of environmental movement, legal aspects and management guideline.
Five Thousand Mirrors
The Water Bodies of Kolkata

MOHIT RAY
In Lieu of Thanks

Rowing Traditional Boat in Restored Pond