

# **Peri-urban Aquaculture : Constraints and potentials**



**Dr Khabir Ahmed**

**Dr Md. Akhteruzzaman**

## Scope of presentation

---

- Based on the experience and knowledge of Dhaka Urban and Peri-Urban fisheries
  - May reflect the other urban/peri-urban areas
-

# Resources

## Types of water bodies in urban and peri-urban areas

---

**Pond**

Monsoon 86,800 ha

**Ditch**

Pre-monsoon 2,000 ha

Post-monsoon 6,000 ha

**Canal**

Dry Season 780 ha

**Lake**

River 34 km

**Burrow pit**

Canal 59.25 km

**Floodplain**

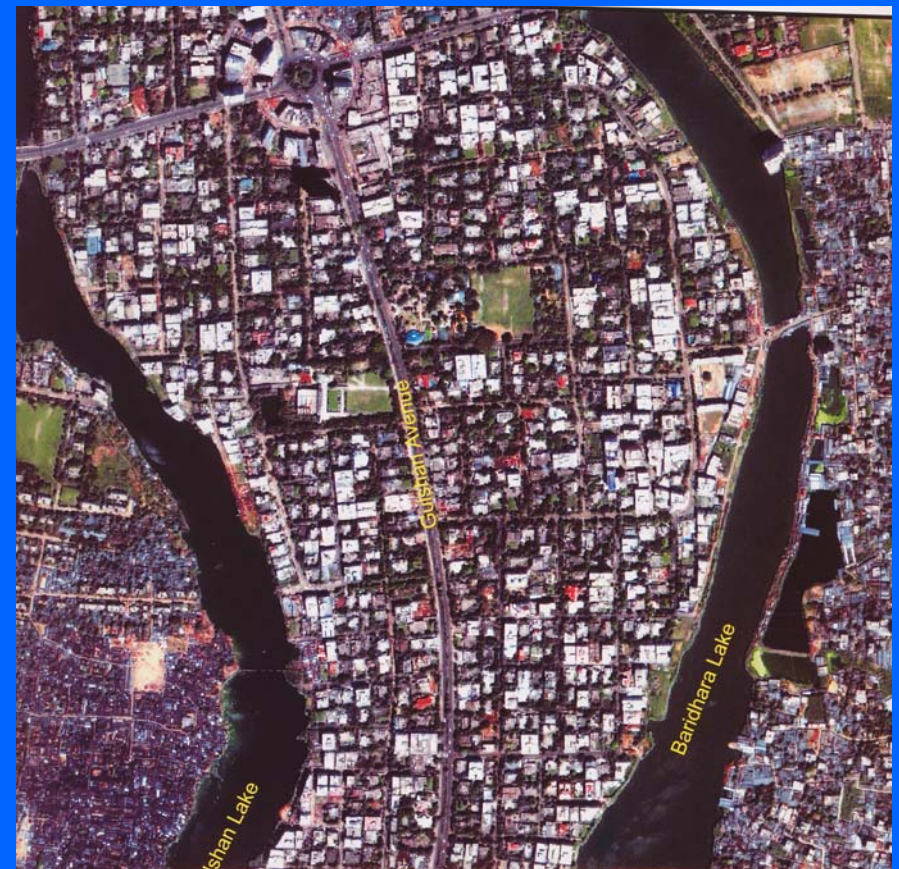
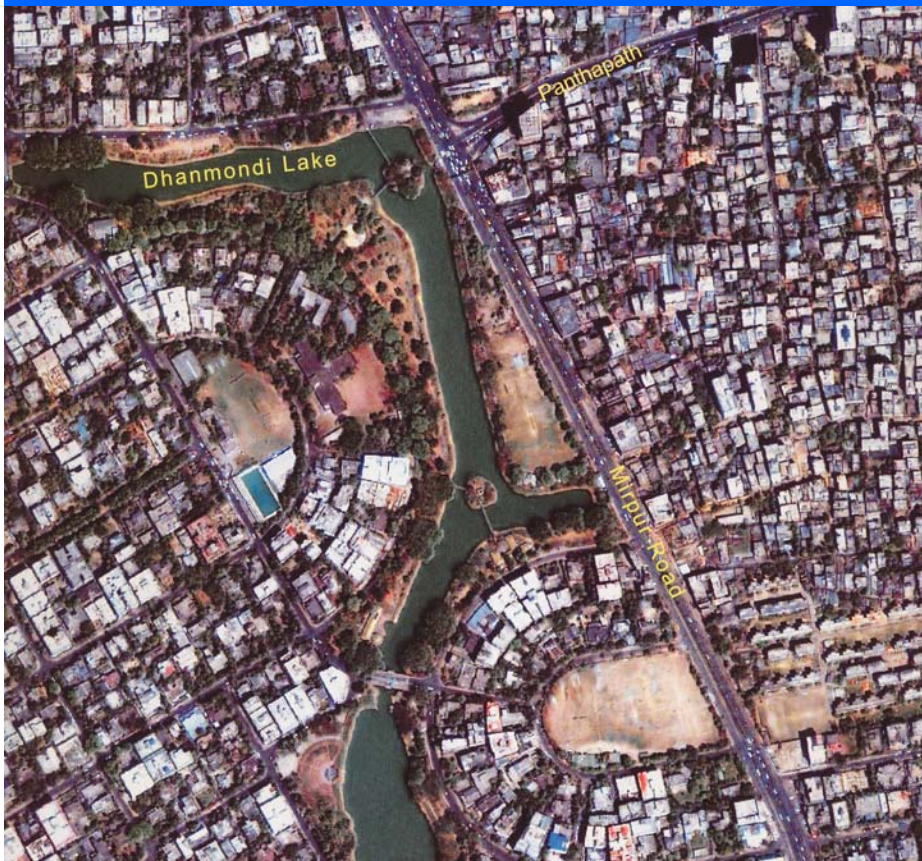
and tributaries

**Rivers**

eastern part of periurban Dhaka

---

## ■ Urban (Within Dhaka city)



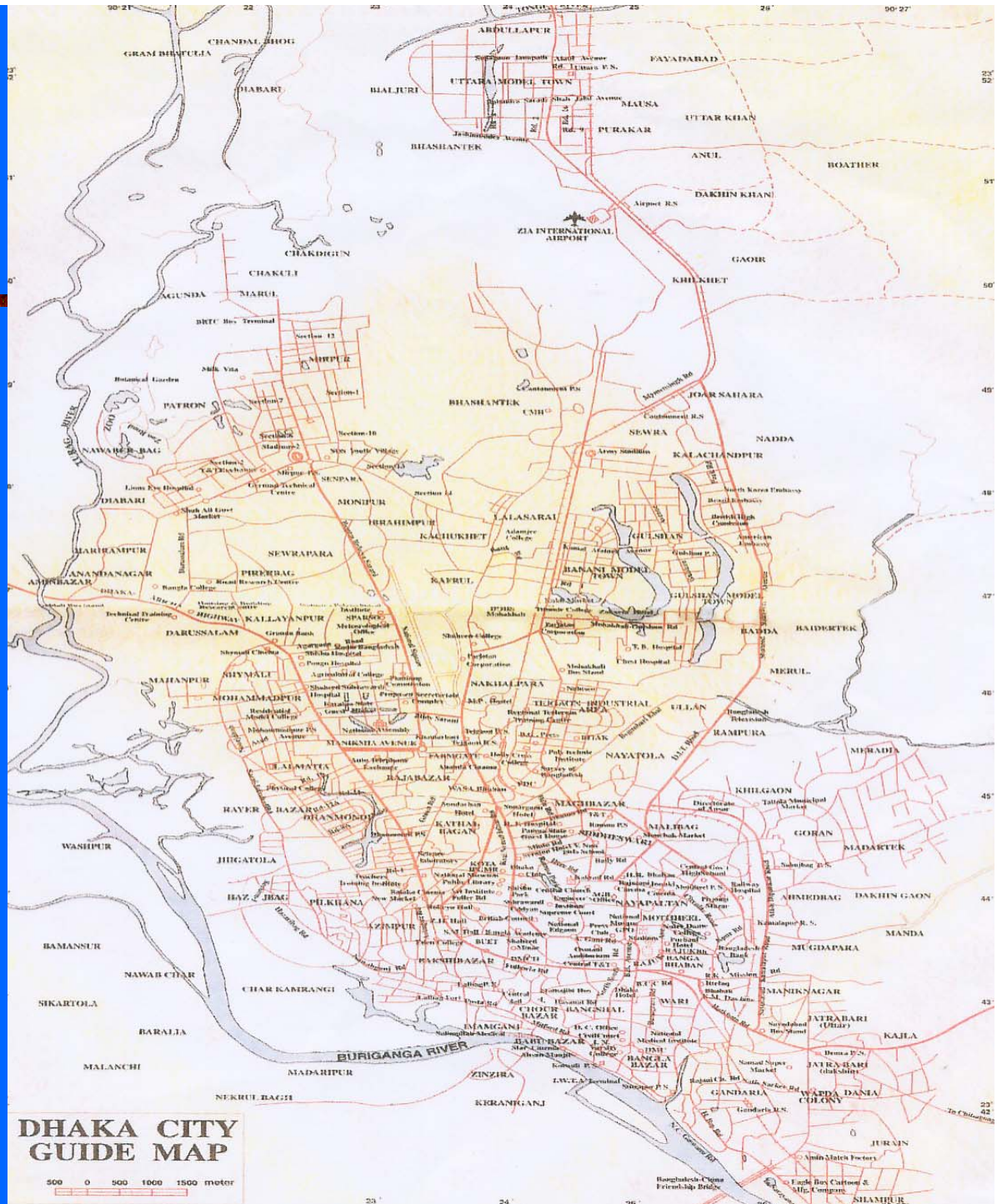


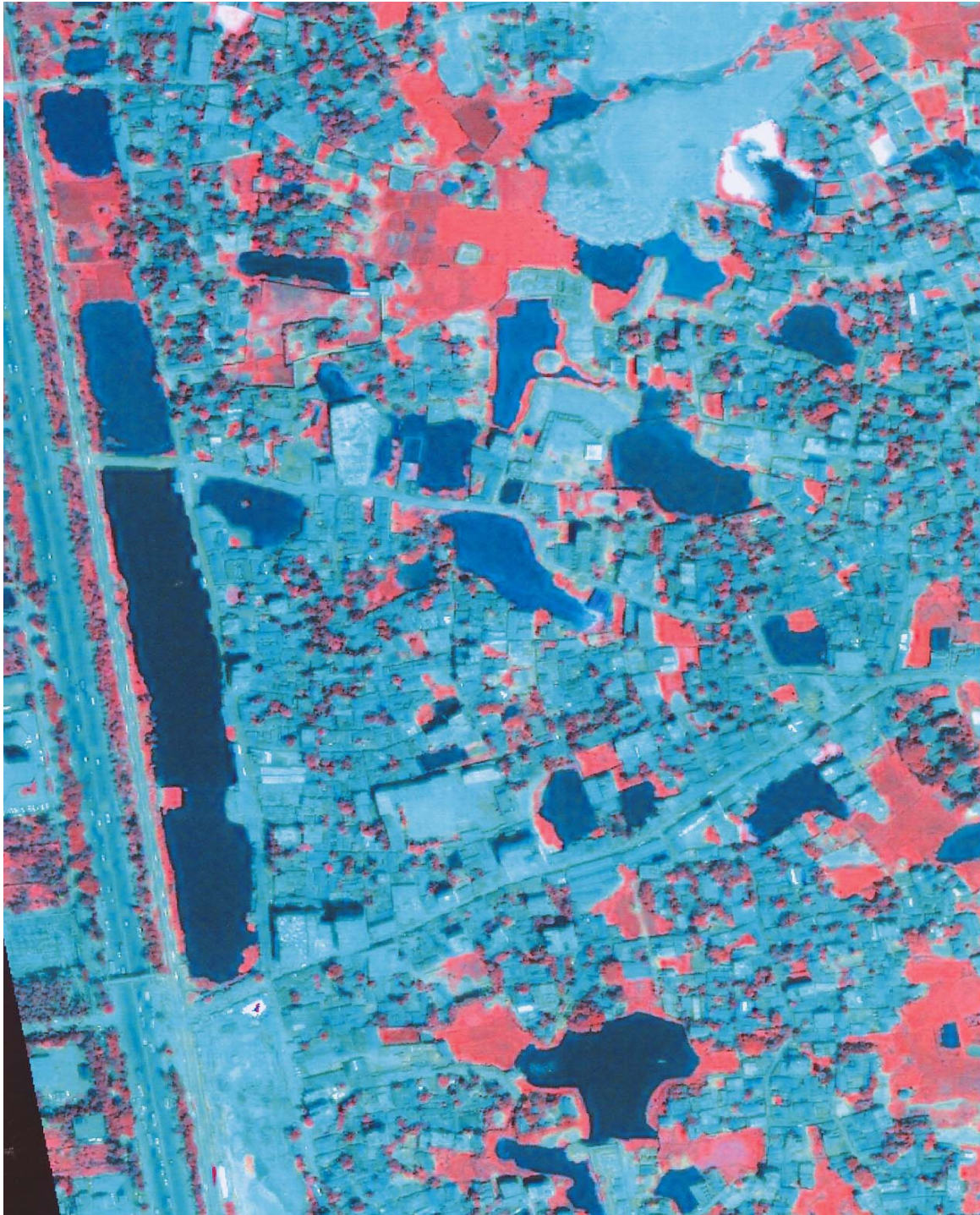
**Banani Lake**



**Gulshan Lake**

# Peri-urban (Outskirts of Dhaka City - Naraongonj, Savar, Gajipur)





**Waterbodies in  
peri-urban area  
near Khilkhet  
(Image map of  
CEGIS)**





**Net gher  
aquaculture  
in peri-urban  
area –  
eastern part  
of Dhaka  
city**

---



**Net gher  
aquaculture  
in peri-urban  
floodplain –  
Amin Bazar,  
Dhaka**

---

## **Fish Farming Activities**

**Since mid 80s the different types of aquaculture activities are going on in urban areas -**

- **“Mini pukur”- Minipond**
- **Cage Culture in Dhanmondi Lake**
- **Dhanmondi Lake Fishery**
- **Ramna Lake Fishery**
- **Fishpond in Kakrail**

# Fisheries Activities Peri-Urban Area

---

- Before 80s peri-urban fishery was basically capture fishery and few cases of gher and cage fishery
  - After 80s due to the expansion of peri-urban areas into the low floodplain, people started different types of aquaculture
  - Flood protection embankments also created the scope for fish culture in some part of peri-urban areas
-

# Threats in Urban and Peri-Urban aquaculture



**Urbanization - land grabbing, encroachment**

# Threats in Urban and Peri-Urban aquaculture



**Pollution**

---

## Biodiversity loss

The Gulshan lake is now full of this exotic – sucker mouth catfish – introduced intentionally by aquarium fish keeper



Fish mortality in Gulshan Lake due to pollution is very frequent

# Prospects

---

- Large and small waterbodies of urban and peri-urban areas can be brought under proper aquaculture
  - Burrow-pits can be used for seasonal (4-6 months) aquaculture with carps, tilapia and barbs
  - Almost all the waterbodies under peri-urban floodplain are suitable for gher fisheries
-



# **Recommendations**

---

**Establish legal ownership of the waterbodies**

**Group formation/Community participation**

**Technology Transfer, training, demonstration  
(Use of sewage water for aquaculture in  
Kolkata, India)**

**Diversification of culture pattern – cage, pen,  
dyke crop, integrated**

---



Thank You