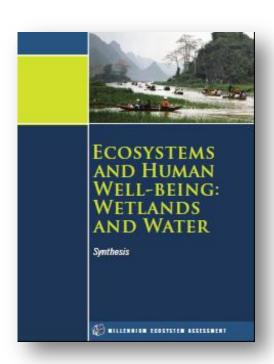
#### Wetland Ecosystem Services and Wise Use

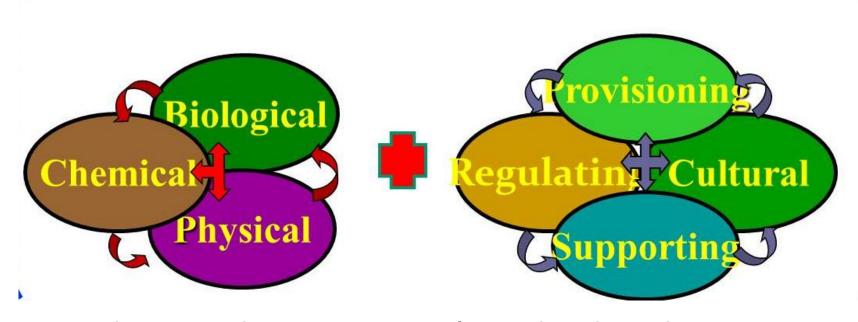


### Wise use and ecosystem services

- Wetlands are managed for wise use
- Maintenance of ecological character through implementation of ecosystem approaches, within context of sustainable development
- Ecological character includes ecosystem components, processes and services

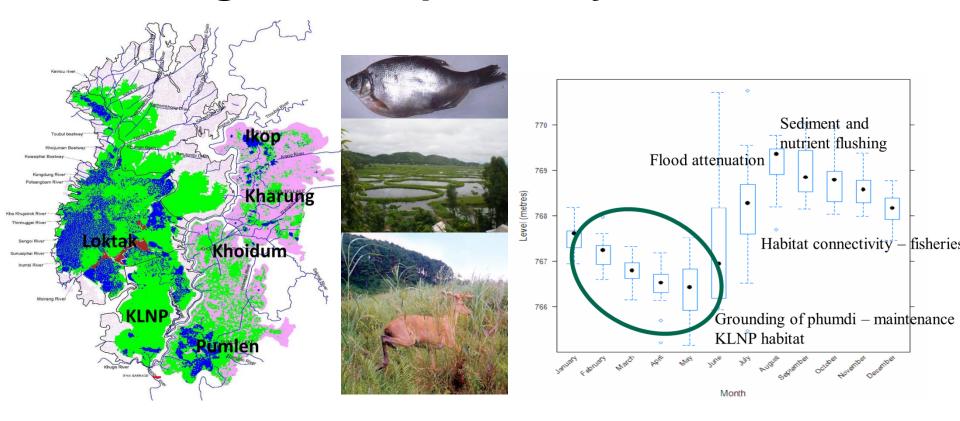


### Wise use and ecosystem services



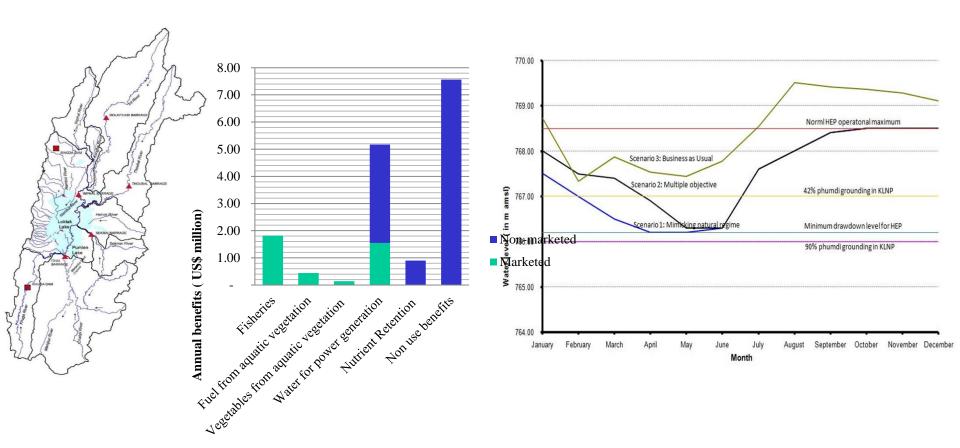
- Needs to consider maintenance of critical ecological components and processes that are required to deliver services
- Changes in ecological character lead to shifts in ecosystem services and vice-versa
- Adaptable management to address dynamism and tradeoffs

#### Planning for multiple ecosystem services



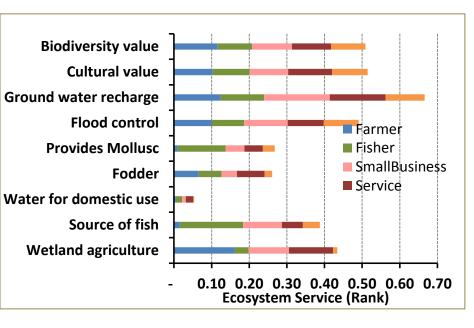
 Natural regime provide multiple ecosystem services governed by changes in water levels and inundation regimes

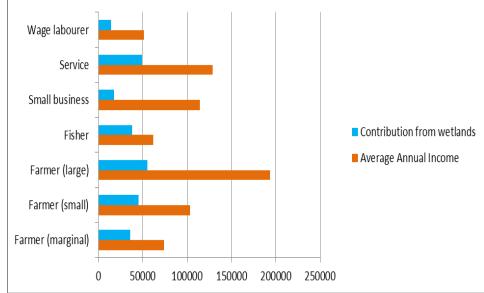
#### Planning for multiple ecosystem services



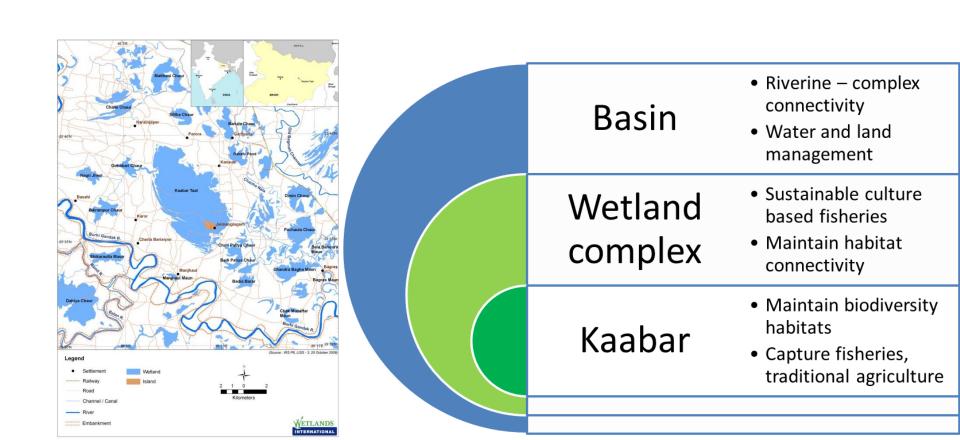
- Regulation of lake levels for increased abstraction for hydropower at the cost of deer habitat and wetland processes
- Lake management includes reoperation of barrage to restore hydrological regimes while accommodating development needs

#### Understanding stakeholder preferences

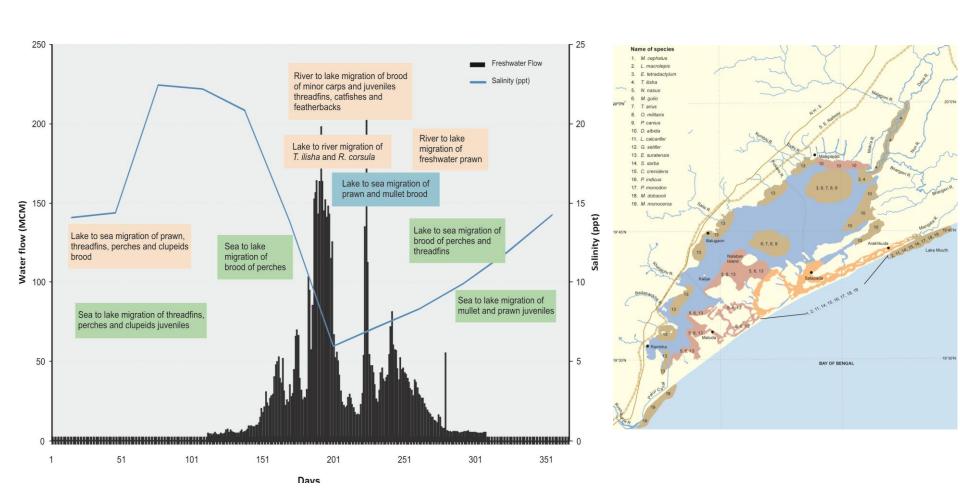




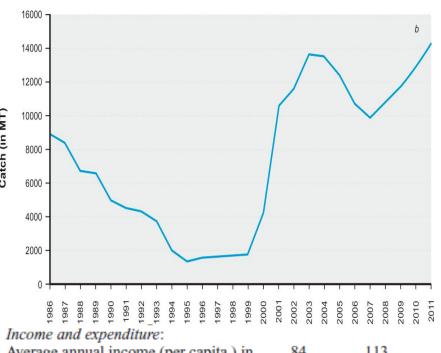
### Integrating value of water and wetlands in decision making



# Ecosystem services, property rights, equity



# **Ecosystem services, property rights,** equity





Average annual income (per capita ) in
US\$ ( at current prices)

Average annual consumption
expenditure (per capita) in US\$ (at
current prices)

Indebtedness:
% households having loan outstanding
% loans sourced from informal sector
71%
70%

398

738

Average amount of debt per fisher

household (US\$)

- Revival of fisher cooperatives and linking with better marketing and credit facilities
- Regulation to protect rights

#### Transforming management approach

- Managing water and wetlands for full range of values
- Capitalizing on link between sustainable wetland management and livelihoods
- Managing conservation development tradeoffs
- Communication and awareness raising

