Mainstreaming Water Conservation

Hydrological, Hydrogeological
Limnological Conservation of Lakes

Issues & challenges

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Jheel Sanrakshan Samiti
Udaipur, Rajasthan.
Absence of IWRM & ILBM Approach
A lake has three basic attributes; Basin, water body and command. All three must be conserved. But the attention is on water body only. Further, the basin management needs priority as a lake is reflection of its basin.
NLCP Objective

- To restore and conserve the urban and semi-urban lakes of the country, degraded due to waste water discharge, land encroachments and waste disposal into the lake and other unique freshwater eco-systems, through an integrated eco-system approach.

But

the officials are merely following a COSMETIC APPROACH
NLCP Criterion Used to Reduce Lake Submergence

4.0 Identification of Lake Boundary:
The State Government/local Administration is to take necessary steps for declaring the lake boundary through a Government Order. The lake boundary is to be decided in relation to the lake submergence area at its full tank level.

NOW Government is Freeing the earlier Notified submergence (which was at Mean Maximum Water Level).
No Naturalization of Shore but a Pucca Road in Submergence
No Thrust on Catchment Improvement

- No Steps to Remove Stream Flow Obstructions
- No Strengthening of Bund (Instead a Park)
- Only Forest Area Covered
Eye Wash on Feeder Improvement
Aqua Culture ??
Water Quality

- No Work On Sewerage System (Last Priority)
- No Control on Solid Waste Disposal
- Washing, Bathing, Immersions
Energy Consuming, Expensive Approaches
Thrust on Beautification Only

No Mix of Eco-Technological Solutions

BUT
Purchase of Big Machines
(White Elephants)
Stakeholder Participation & Capacity Building

ABSENT
Multiplicity of Institutions:
Conflict of Interests & No Accountability

Multiplicity of Policies & Laws:
No Unified, Holistic Policy & Legal Framework

Lake Development Authority Draft: ????????
• NO CONCURRENT EVALUATION OF PROJECT
• NO ENVIRONMENTAL AUDITING BASED ON ECOLOGICAL & HYDROLOGICAL INDICATORS

But
Thrust is on BOOKING of ITEMS
Climatological: Poor Rainfall
Obstacles to Runoff

NO Hydrological Data Monitoring
Disturbances in Local Microclimate
Scanty & Erratic Rains
Let Us Use NLCP Funds Properly for Ecological Improvement of Lakes

Based on

Integrated Water Resources Management &
Integrated Lake Basin Management Approaches
Jheel Sanrakshan Samiti Efforts
Healthy Bio Treatment of Domestic, Industrial & Waste of Udaipur City through Public Private Partnership involving ULB, CBOs & Industries. Based on Integrated Water Resources Management (IWRM) Integrated Lake Basin Management (ILBM)
Waste Water flowing in Ahar river Pollutes Ground Water & Udai Sagar lake
Dialogue with Stakeholders
August 2009 – January 2010
Cleaning -
Layout & Configuration

GB Filter = Stones + Gravel + coarse sand + Biomats

Sand + Soil + Ecofert for Plantation
Material Used

- Screens
- Biomats, 200 Sq Meter
- Bacterial culture 40 Litre
- Ecofert 4 ton
- Rubbles (8”-12”) 125 Cu Meter
- Gravel (2”-4”) 125 Cu Meter
- Coarse sand/gravel (0.5”) 70 Cu Meter
- Sand (Fine) 70 Cu Meter
- Plants/Shrubs/Trees
Moina:

Nitzschia

Different planktonic communities

Oscillatoria
Regeneration of Zooplanktons
Fishes, Snakes and Other Aquatic Life Regenerated
Dr. Kasturirangan visit
Member Planning Commission
Govt. of India 21st May 2010
Together & with nature, we can restore water bodies & rivers