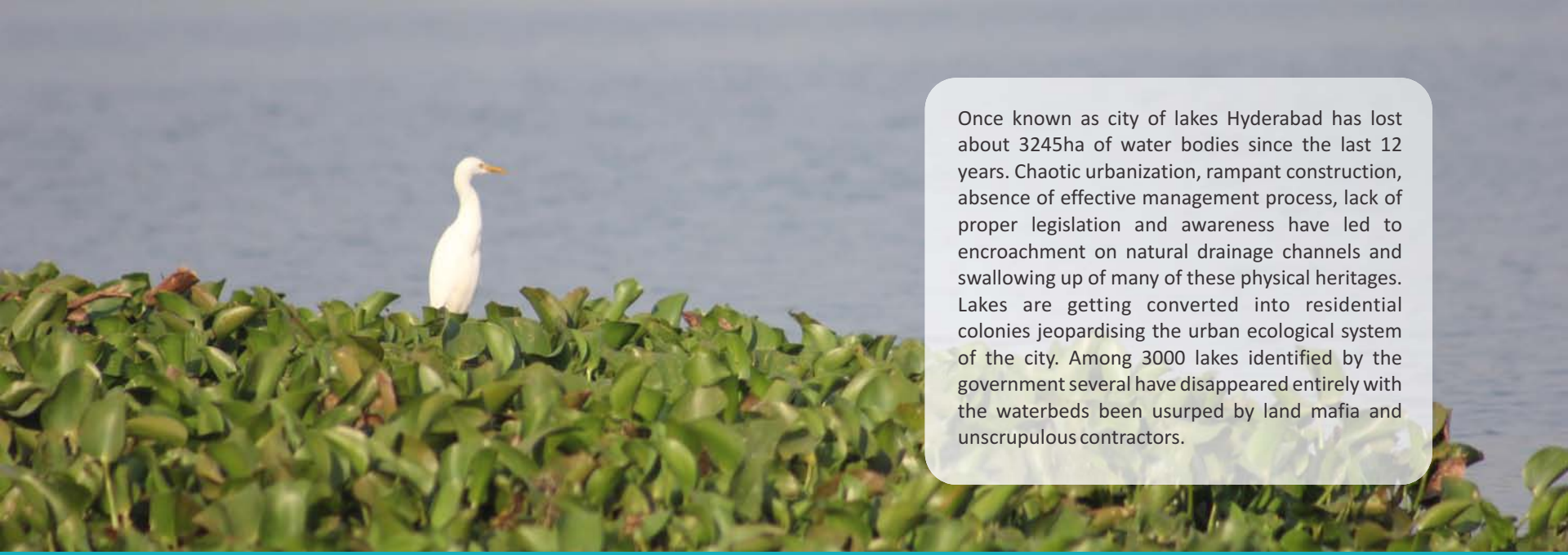

ADOPT A
LAKE
RESTORE AND REJUVINATE
THE HAMEED KHAN KUNTA
(Taj Banjara Lake)



Once known as city of lakes Hyderabad has lost about 3245ha of water bodies since the last 12 years. Chaotic urbanization, rampant construction, absence of effective management process, lack of proper legislation and awareness have led to encroachment on natural drainage channels and swallowing up of many of these physical heritages. Lakes are getting converted into residential colonies jeopardising the urban ecological system of the city. Among 3000 lakes identified by the government several have disappeared entirely with the waterbeds been usurped by land mafia and unscrupulous contractors.

CONTEXT

- Disappearance of these recharge points, which otherwise served as an insurance against droughts and floods, made a considerable pressure on the already strenuous hard rock aquifer.
- Their revival an indispensable component for providing water security to the city.
- Considering the criticality of the problem, some efforts have been made from the policy makers, researchers and practitioners in rejuvenating them but with limited success.
- Historical documents on lakes are in a dilapidated condition and often remain inaccessible.
- Substantial research gap lies in identifying, mapping and space. It has been increasingly realized that policies, acts or institutional restructuring at the governance level would not be adequate to safe guard these resources implicitly.
- It is a dire need of the community to take active action in restoring and rejuvenating these water bodies.
- The action is desperately needed in a city grappling with a rapacious land mafia, the indiscriminate disposal of sewage and the lack of legal action against such activity.

BACKGROUND

⊙ **Hameed Khan Kunta,** is a man made tank (4.17 ha) with a maximum depth of 5.0m (average 3.0 m) constructed in 1930 by royal elites located in the lake precincts.

⊙ Situated in road no 1 Banjara hills, Hameed Khan Kunta, popularly know as Taj Banjara, has long been suffering from pollution, Illegal encroachments and dumping of sewerages from the surrounding commercial and residential colonies.

⊙ In 2002 the lake was adopted for rejuvenation under the National Lake Conservation Programme of Minsitry of Environment and Forest MoEF.

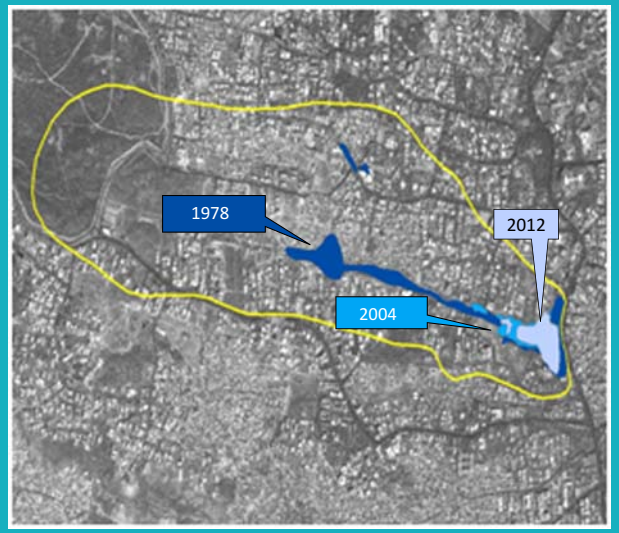
⊙ Since then almost 2 crores has been spent in rehabilitation and rejuvenation of the Banjara Lake with limited success.

⊙ In spite of 800mmdia RCC ring drain and two I & D structures constructed by HMWSSB huge amount of excess solid and liquid waste are being dumped regularly resulting into clogging and contamination.

⊙ According to the A.P pollution control board's report the dissolved oxygen in the lake is far below the standard making it unfit for survival of any aquatic life or irrigation.

⊙ Anaerobic conditions, rapid encroachments and concretization of the lake bed have disrupted the lake hydrogeology, There has been urgent need felt by the researchers, practitioners, resident groups and activist to restore the lake in a non-intrusive manner so as to support and augment the natural recovery process.

PRESENT STATUS



The lake has shrunk over the years due to encroachments and dumping of sewage.

- Large scale encroachments-planned and unplanned / unauthorised, leading to filling up of lakebeds and conversion into built up area.
- Huge amount of solid and liquid waste being dumped regularly resulting into clogging and contamination
- Decline in water quality resulting into eutrophication and algal blooms eventually declining the dissolved oxygen content in the water body making it unfit for survival of aquatic life.
- Excessive foul smell emanating from the lake is felt up to distance of several kilometres and makes the lake aesthetically unfit for the local residents
- Heaps of plastics piled on the water body pose a threat to the slum children who venture into water body for defecation.
- Open burning of municipal solid waste especially plastics is a serious threat to health of the local residents.

Reasons for Degradation

- Absence of administrative frame work to manage the lake
- Conflicting interests of various departments in managing a single lake
- Absence of a proper lake management process
- Lack of community awareness about restoring the lake.

FUTURE IMPACTS

Urban floods and water logging: Obstructing sections of natural channels to the water body will adversely affect the natural drainage system and eventually rainfall with short storms will give rise to local floods or water logging.

Water crisis: An imbalance in hydrologic equation can affect the quantity and quality of natural water resources available threatening local resources and future water supplies

Burden of disease:

- Dumping of municipal waste in the lake bed will lead to decomposition of waste and contamination of the water causing mosquito and fly menace and several other incidence of water borne diseases.

- Incomplete burning of municipal solid waste produces many toxic chemical which have immediate or long term adverse health effect. The ashes generated are equally toxic and eventually settle on the lake bed or percolate into ground water as leachate.

- **Dioxin and Furans** a highly toxic and long lasting compound produced during open burning or incomplete burning of waste are dangerous even at extremely low levels.

Animals feeding on the unburnt waste

Muncipal solid waste piled on the water body

The open drain heading directly to lake

What are Dioxin & Furan?

Dioxins and Furans is the name for a family of toxic substances that share a similar chemical structure.

How can dioxins and furans enter your body?

- Distributed through the air.
- Major source of exposure is by eating contaminated food like poultry, fish as well as dairy products.

Other Source of exposure....

If you work in or live near a municipal solid waste burning yard you can be exposed to dioxins and furans.

Individuals who burn their household waste or burn wood can be exposed as well.

What are the health effects of exposure to dioxins and furans?

It is classified as a cancer causing agent. In addition, it causes severe reproductive and developmental problem. It has the ability to damage immune system and cause skin infection.

Animals exposed to dioxins and furans experienced similar health effects.

SOURCE: US EPA “Factsheet on Dioxin” and CPCB

PROPOSED INTERVENTIONS

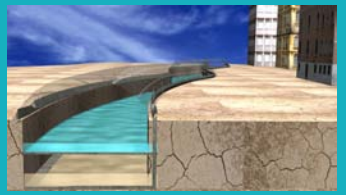
REVIVAL AND RESTORATION

Engineering measures

- Demarcation and identification of Lake Boundaries and Full Tank Level
- De-silting the lake bed and encroachment (mud, garbage dumped)
- Demarcating the boundary of the water body by wire fencing or boulders to prevent further encroachment into the lake beds.
- Pollution level of the lakes to be tackled through bioremediation and surface aeration processes.
- Reviving the screen barriers and silt-traps for inlet channels
- Separating storm water/ other wastewater from the rain water
- Diversion of sewer to direct sewage and take in the monsoon water runoff to the lake.

Social measures

- Training and capacity building of the Community around the lake
- Encouraging management and handling of municipal solid waste
- Increasing community vigilance
- Lobbying with the Government
- Launching the **"ADOPT A LAKE CAMPAIGN"**



Engineering measures

Participatory Approach

Reviving and restoring the lake is a three stage process

ADOPT A LAKE

About the Campaign

The Lakes of Hyderabad have provided numerous services that have fundamentally supported human health and well-being. Exploitation of these water bodies over the years has jeopardised their very existence. The vulnerable ecosystems of these disappearing lakes can't afford to wait any longer. It's time for action to restore what is remaining! The need of the hour is collective effort from all.

The Adopt-a-Lake campaign aims to encourage local civic organizations, individuals, business groups and government to preserve the vanishing waterscapes of the city of Hyderabad. The campaign has two distinct components, first, sensitizing the common individuals about the importance of urban lakes and urgency of protecting them through street plays, distribution of pamphlets, brochures, leaflets and stickers. Second, engage dialogue with the local business groups and government bodies to adopt different segments of lake's shoreline for rejuvenation and rehabilitation.

Protecting the Urban Lakes of Hyderabad

Funded by U.S Department of State, the project titled 'Protecting the urban lakes of Hyderabad' is about knowledge building, awareness generation, sensitization and behavioural change amongst citizens, corporate / industrial houses and government agencies to take proactive measures in protecting the shrinking waterscapes of Hyderabad. It seeks to bring together a large number of key stakeholders through publicity campaigns and social marketing on 'adopting a lake'. Coordinated by SaciWATERs it endeavours to bring key issues and dynamics associated with quantity, quality and lake ecology at the forefront of research, action and policy agenda.

Coordination

SaciWATERs

Funding

U.S.CONSULATEGENERAL
Hyderabad