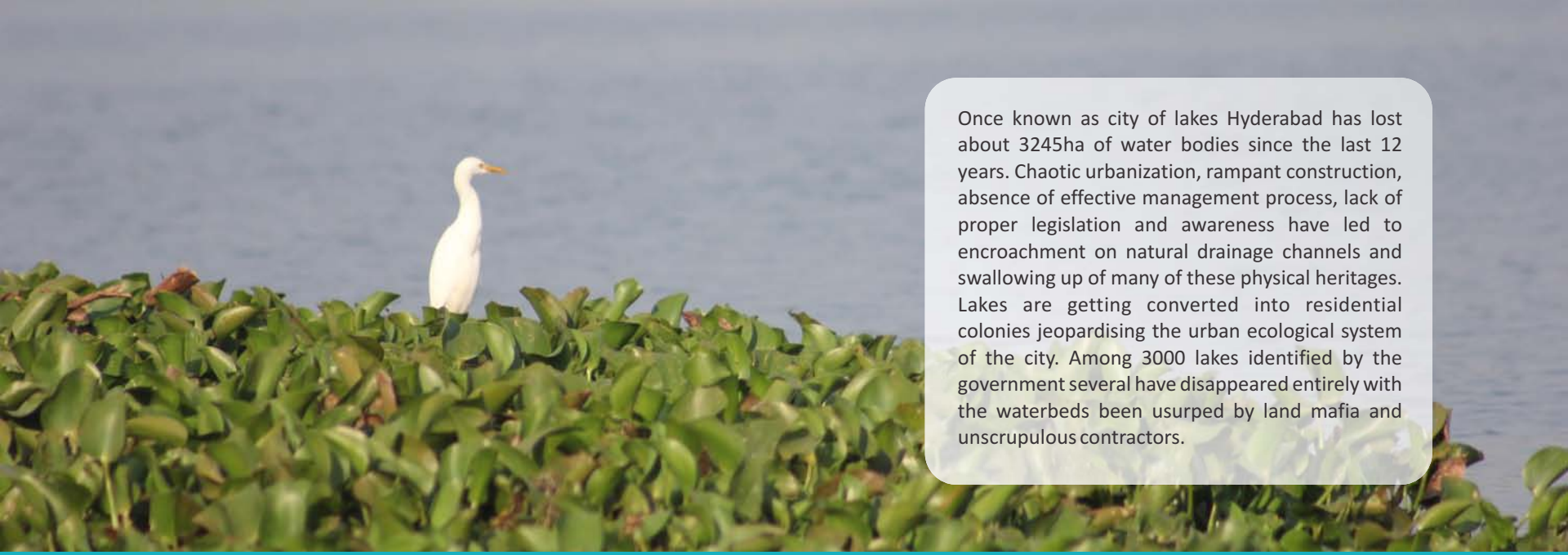
ADOPT A LAKE

REVIVING THE RAVIRALA 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- Historical documents on lakes are in a dilapidated condition and often remain inaccessible.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

⊙ **Ravirala cheruvu** exhibits a typical dried out water body bearing the brunt of unplanned urbanisation and erratic weather patterns.

⊙ Heavy siltation due to illegal sand mining, infestation by weeds has reduced the water spread of the 'cheruvu', which has historically served as a vital source of irrigation for 3000 acres of fertile agricultural land belonging to 4 villages while meeting additional water needs of 10 villages in the region.

⊙ Apart from agriculture, the tank has been a source of livelihood for 'dhobis' washing clothes along the banks of the cheruvu where the water still exists as small pools.

⊙ The lake which was once the lifeline of a number of villages in the area, has dried up almost completely in the last 8-10 years.

⊙ A large number of trees have been cut for constructing the airport, SEZs nearby along with extensive sand mining form the lake bed which has prevented retention of ground water, and led to the drying of the lake.

⊙ This situation has been made worse by extensive sand mining for construction purposes from the tank.

⊙ Scanty rainfall over the last decade (and which has progressively been decreasing year after year) has added to the woes of these farmers.

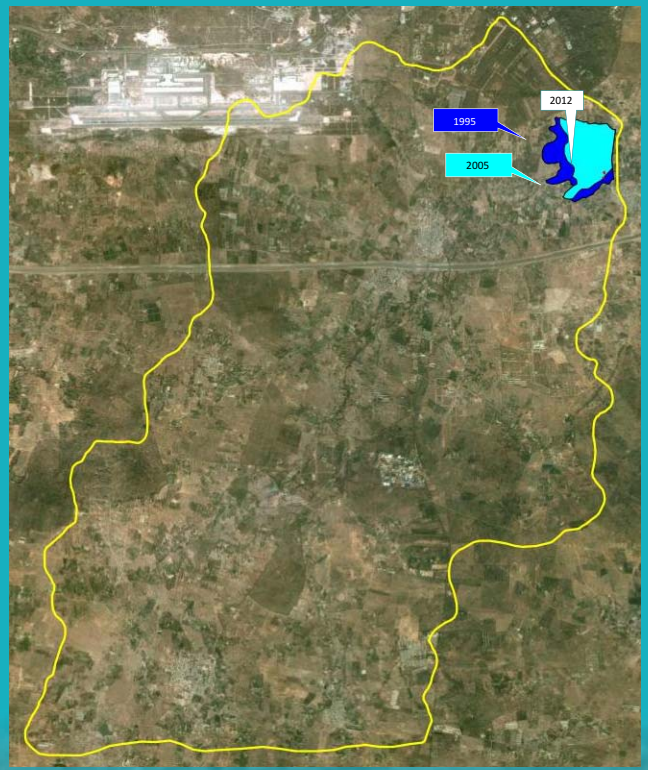
⊙ An empty tank means lower level of groundwater, reduced rainfall only intensifying the problems, in terms of water availability for domestic and agricultural purposes.

PRESENT STATUS

- Rapid urbanisation in the water shed including infrastructural development- construction of Outer ring road, International Airport, SEZs (Fab city and Hardware Park) has disrupted the channels bringing water into the lake.
- Rampant illegal sand mining from the lake bed for construction activities has adversely affected the hydro- geologic conditions of the soil adversely affecting the water table.
- Extensive deforestation during the construction of Hardware Park has led to an increase in the temperature of the village and reduced infiltration.
- The lake bed is used as a ground for dumping municipal solid waste of the village.
- Scanty rainfall and dwindling water table over the last decade (and which has progressively been decreasing year after year) has forced the farmers to cultivate vegetables instead of paddy in the rabi season which was once the primary crop.
- The dependency on bore wells, by farmers and the washerman community has increased which often go dry in the summers and adversely affects their livelihood.

Reasons for Degradation

- No single Government department to administer responsibility of the lake leading to conflicting interest.
- Absence of a clear legal framework regarding violations.
- Absence of an administrative framework to manage the lake.
- Lack of inclusion of environmental planning in the urban planning process.
- Lack of community awareness about the benefits of the lake.



FUTURE IMPACTS

Water crisis: Uneven rainfall pattern ,rise in temperature and over extraction of groundwater for irrigation will further aggravate the crisis . An imbalance in hydrologic equation can affect the quantity and quality of water resources available threatening local resources and future water supplies.

Drought conditions: Reduction in soil moisture will reduced the infiltration of water and reduce replenishment of the groundwater table leading to drought like condition.

Degraded water quality: On depletion of ground water reserves due to over extraction, the residual water that remains is often of inferior quality. This is a result of the leakage of saline or contaminated water from the land surface, the confining layers, or the adjacent water bodies that have highly concentrated quantities of contaminants.

Dumping of municipal waste in the catchment areas of the Lake will eventually contaminate the ground water reserves.

Increased costs for the user: As depth of the water table increases, the need to dig deeper for access of water will require to use pumps to lift water with more energy to operate the pump,which will be expensive.

PROPOSED INTERVENTIONS

REVIVAL AND RESTORATION

Engineering measures

- Demarcation and identification of Lake Boundaries and Full Tank Level.
- De-silting of the lake bed(silt and garbage) which will help in uniform accumulation of water during rains.
- Identifying and reviving the inlet channels to the lake.
- Interlinking water channels within the village. Construction of canals and small bunds that will help in directing rainwater into the lake.
- The farmers can construct farm ponds within their private lands to aid irrigation . This will also reduce over dependency on ground water and wastage of water.

Reviving and restoring the lake is a three stage process

Social measures

- Revival of the Water User Association.
- Lobbying with the line department in the Government to engage the village community in reviving the lake under the NREGA scheme.
- Training and capacity building for Community participation.
- Encouraging rain water harvesting.
- Increasing community vigilance.
- Launching the **"ADOPT A LAKE CAMPAIGN".**

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