

# Understanding the Water Security in Peri-Urban Hyderabad

2015-2017



## Overview

The southern Indian city of Hyderabad has seen unprecedented growth and is an emerging megacity. Some processes in its rapid urbanisation and development have had serious repercussions and are proving to be a threat to the city and its environs. The provision of basic amenities like water supply for its growing population has been particularly affected in the newly developing areas beyond the city's municipal boundaries. Piped municipal water supply is often sporadic and inadequate, resulting in a widening demand-supply gap, particularly in the peri-urban areas of the city.

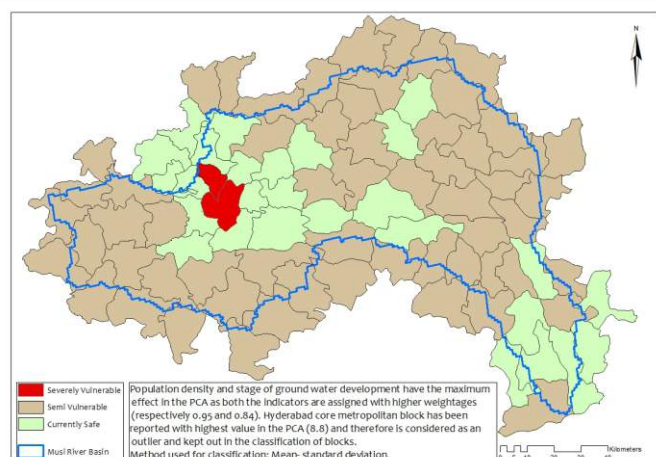
Informal water markets, particularly private tankers, play a crucial role in filling such gaps. However, most of these water trucks or tankers use groundwater as their major water source. They have a well-structured institutional nexus of illegal suppliers and operators. Moreover, tanker-supplied water has tradeoffs that tend to be ignored: energy costs associated with such an inefficient system of transporting bulk water; the health and social costs of the high number of road traffic accidents caused by these tankers; and the impact of their groundwater abstraction on other water users in peri-urban areas. Despite the critical nature of this issue, little is known or documented about this rapidly growing informal tanker market, particularly in peri-urban Hyderabad.

In this context, SaciWATERS has undertaken a two-year project: Understanding the Magnitude of the Tanker-Based Economy and its Implications on Water Resources: A Study of Private Water Tanker Market in Peri-Urban Hyderabad. The research project has been funded by Arghyam and the Bordeaux Urban Community.

## Study Site

The area of study will be Musi basin consisting of 89 blocks that have been identified in 4 districts, covering 1199 villages and the city of Hyderabad. The vulnerability assessment will be carried out at block level by using secondary data sources from Census of India and Telangana Groundwater Department.

Two critical blocks will be identified based on its peri-urban characteristics, ground water condition and prevalence of tankers as a means of drinking and agricultural water supply. The method used to carry out the preliminary analysis is an amalgamation of simple quantitative and qualitative techniques.



## Significance of the Project

Tanker water market plays a significant role in meeting the water security needs of peri-urban Hyderabad, it remains unregulated and undocumented. This is particularly true of the private or informal tanker market. To solve the critical water supply challenges being faced by Hyderabad's rapidly growing peri-urban spaces, it is imperative to understand the operation of the tanker economy, both private and public.

SaciWATERS ongoing water tanker economy study attempts to provide a comprehensive picture of such “rural – peri-urban – urban” water market transfers within the Hyderabad metropolitan region. The project will improve knowledge of peri-urban water security issues as affected by indiscriminate groundwater extraction by public and private water tanker operators. It will also facilitate multi-stakeholder dialogue to foster the equitable and sustainable management of water resources in peri-urban Hyderabad.

### PROJECT OBJECTIVE

- *To map the vulnerable blocks/ mandals within Hyderabad Municipal Development Authority (HMDA) area based on hydrological and socioeconomic parameters.*
- *To understand the sources and the users of the informal water markets in the peripheries of Hyderabad city.*
- *To understand the externalities such as groundwater extraction, quality, and pricing attached with the informal water markets.*
- *To project the sectoral water demand with the future demographic changes for the peri-urban Hyderabad.*

## Key Objectives

**Knowledge and Research:** The project aims to assess the size of the water tanker economy and compare it with the total supply of water in the Hyderabad metropolitan area; map areas which are water stressed; locate areas from where water is sourced; and assess the implications of the water market on groundwater resources. It also seeks to map the vulnerable blocks/mandals within the Hyderabad metropolitan development area, based on comprehensive hydrological and socioeconomic parameters. It attempts to understand the policy scenarios in which water markets operate (including regulations and acts) and determine whether these markets comply with current regulations; investigate the supply chain of both private and public tanker operators from source to end-users within selected peri-urban localities of Hyderabad; and evaluate the environmental and socioeconomic tradeoffs associated with every stage of the supply chain.

**Development:** The project endeavours to understand change processes in urban and water policies, which affect the management of water resources, promote social and cross-projects learning and international collaboration, and create opportunities for institutional transformation.

**Capacity Building:** The project strives to leverage research outcomes and lessons to engage with multiple stakeholders like state actors, professionals and communities, in order to build socially sensitive policies that will regulate the rapidly growing water tanker market in Hyderabad.

## Policy Relevance, Communication and Dissemination

The project endeavours to identify different possible configurations and feasible pathways for a more sustainable use of resources by various competing users. These findings will be presented in multi-stakeholder workshops and consultation meetings with the twin aim of making government officials and NGO representatives more aware of the needs and concerns of local communities, and of recommending possible institutional structures that will enable the establishment of an equitable balance between the needs and interests of peri-urban groundwater users and urban water consumers.

Furthermore, project activities have been explicitly designed to reinforce participatory assessments in which local stakeholders can be engaged to reflect on their own processes of institutional transformation. The use of tools like Participatory Impact Pathway Assessment (PIPA) are geared toward encouraging negotiation processes and similar participatory learning activities among stakeholder groups. The project aims to link the research process and findings with an understanding of how to design and implement approaches that will lead to sustainable water governance, thereby benefitting other communities operating under similar circumstances elsewhere in the world.

The project aims at communicating its objectives, process and outcomes to internal and external stakeholders. As part of a multi-pronged approach, online communication will be undertaken through a dedicated website, project newsletter, blog and social media sites. Print communication materials such as leaflets, posters and brochures will also be developed. Project outcomes will be disseminated through research papers, issue papers, working papers and policy briefs.

SaciWATERS will spearhead the advocacy for the inclusion of the regulation and management of water tanker services within the water policies and governance frameworks; the larger goal is to affect the water security/equitable access to water for all especially the disadvantaged and the urban poor populations.

### For more details, contact

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