



Bangalore is experiencing a water crisis. Demand has outstripped supply, the collection of water from rivers has reached the legal limit, and groundwater is being depleted. The city's urban water planners also lack the knowledge base for informed decisions about existing resources.

The Centre for Public Policy at the Indian Institute of Management and the Stockholm Environment Policy received funding from the Cities Alliance Innovation Programme for the BUMP project.

The project:

BUMP filled key knowledge gaps on water demand and supply in Bangalore. It combines information on water supply and demand in the city with a modeling framework to inform policy makers and citizens on the relevance of integrated water resource management. It also provides open access to information on the city's upgrading projects.



The approach:

BUMP's interdisciplinary team developed a formal framework called urban metabolism to address sustainability and equity challenges for the city's water supply.

The activities:



Groundwater mapping and resource assessment to collect information on the city's water supply.



Development of a water demand function based on household surveys and secondary data that drew patterns and explained drivers of water consumption.



Support to policy making and civil society outreach (publications and presentations on findings).



Creation of an [online information geportal](#) and scenario explorer for water resource management and data on resource use across the city.

Transformative change:



BUMP was Bangalore's largest, most complex domestic water survey of more than 30,000 households (22 months of groundwater measurements at 150 locations).



Bangalore's first good resolution groundwater map highlighted the inequity in water access and cost.



The public could access primary and secondary data on the city's water supply, a transparency that is rare in India.



The project informed policy making by showcasing a best practice of integrated water resource management to different government departments at local, state and national levels.

Sustainability

The project's data is now being used by the Bangalore Water Supply and Sewerage Board.

Several questions from the BUMP survey on water demand were included in the official infrastructure census, ensuring that this information is collected on a regular basis for informed decision making on water management.

Cities Alliance is the global partnership supporting cities to deliver sustainable development.