

## Case study

### Urban water supply – Nagpur, India

<b>Project Identification</b>	
<b>Where (country/City):</b>	INDIA - Nagpur City
<b>When and contract length :</b>	2012 - 25 years Contract
<b>Goal: Construction and/or operations?</b>	Construction and Operations
<b>Scope: Water/ Wastewater?</b>	Water Supply
<b>Scope: Plant and or Network?</b>	Plants and Network
<b>People served:</b>	2.4 million in 2011, 3.2 million in 2022
<b>Brief description of the project</b>	
Nagpur Municipal Corporation, through a private operator and a PPP, targeted the achievement of uninterrupted water for all with focus on safety, equity and reliability. The project also intended to enhance professionalism of the teams with increase in commercial and technical efficiencies.	
<b>Is this project unusual or different compared to others?</b>	
It is the first PPP project for 24x7 water supply for the entire city in India .	
<b>What have been the major outcomes or success so far?</b>	
<ul style="list-style-type: none"><li>• Coverage increased from 184,000 to 394,000 connections (more than 100%) with an increase in pipeline network length from 2100 KM to 4300 KM. The population served increased by 33% from 2.4 million to 3.2 million in the same period, meaning that access is provided to 100% of the population in the service area.</li><li>• The water quality increased as fit for drinking water from 79% to 97% compliance with Indian CPHEEO standards.</li><li>• Technical Efficiency increased from 33% to 60% and volume billed nearly doubled from 210 MLD in 2011 to 397 MLD in 2022 without substantial increase in water supplied.</li><li>• Collection Efficiency stands at 93% with revenue collection increased from Rs. 72Cr in 2012 to Rs. 178Cr in 2022.</li><li>• Enhancing Customer Satisfaction through 24x7 customer call centre for grievance redressal, online payment facilities for ease of payment, transparency through Photo Meter Billing System generated through SAP.</li><li>• GIS Mapping of entire water supply assets resulting in better planning and monitoring of</li></ul>	

services. installation of EM flowmeters/ FCV/ pressure data loggers at critical measuring points across the city and monitoring the same online through SCADA PLC.

## Has “working in partnership” helped to make the project successful?

The partnership is well structured with Veolia sharing 30% equity of capex works and the rest 70% by Municipal Corporation, State and Central Governments of India. The payment structure is well defined with implementation through Escrow Bank Accounts for reimbursement of collected amounts from consumers.

## Contribution to the United Nations 2023 Conference themes

### 1) What Interactive Dialogue theme does the project contribute to?

Water for Health: Access to safe drinking water, hygiene and sanitation	YES, it is a primary objective of the project to provide safe drinking water. The population coverage hence increased from 65% to 100% of the service area
Water for Development: Valuing Water, Water-Energy-Food Nexus and Sustainable Economic and Urban Development	YES, each drop of water is valuable and is reflected through performance parameters of the projects for increase in technical and commercial efficiencies. The project also targets uninterrupted equitable distribution of water to all resulting in overall sustainable growth.
Water for Climate, Resilience and Environment: Source to Sea, Biodiversity, Climate, Resilience and Disaster Risk Reduction	YES, the source of raw water to project is the surface source of river and dam which are susceptible to climate change. The Client is building resilience, through bigger storage capacity, to provide an uninterrupted supply of safe, clean water by initiatives such as community engagement, preparation of master plan for future water supply, and by improving water supply self sufficient financing and governance.

### What topic of the “Global Acceleration Framework” does the project contribute to?

1. Optimized financing – did you improve targeting or utilize existing resources more efficiently, or mobilize additional funds	YES, with increase in revenue collection (from Rs. 72Cr in 2012 to Rs. 178Cr in 2022) the project covers all OPEX and 30% CAPEX. The Municipal Corporation and the Operator (Veolia) has managed to run the Operations and Maintenance through revenue generated via the collection from the consumers against water supply and services.
2. Improved data and information – how did you use data and information to improve the	YES, there are many initiatives taken by the parties to bring in more transparency and accountability such as Photo Meter Billing System

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service and increase accountability and transparency	generated through SAP, installation of em flowmeters/ FCV/ pressure data loggers at critical measuring points across the city and monitoring the same online through SCADA PLC, GIS Mapping of entire water supply assets including properties resulting in better planning and monitoring of the services.
3. Capacity development - did you create new jobs or developed local people's skills and talents?	YES, it is the first project in India for 24x7 water supply for the entire city on PPP basis. The 24x7 supply is a new concept and required expertise, after initial deployment of foreign expatriates to transfer the knowledge, as of today 100% jobs are handled by locals with guidance from experts across the globe.
4. Innovation – how have you used innovation and technologies to make the service better?	YES, it is the first project in India for 24x7 water supply for the entire city on PPP basis. Commercialization of water is a new concept and is not readily acceptable. The Operator (Veolia) developed a social innovation team to address the local grievances and pacify all the stakeholders by resolving their queries about the project. The satisfaction and acceptance rate of the Consumers is visible by accepting the services provided through a private Operator. Initiatives such as 24x7 customer call centre for grievance redressal, transparency through Photo Meter Billing System generated through SAP etc. have been added to make the service better.
5. Governance – what have you done to maintain and strengthen governance around the project?	YES, Stakeholder management is a crucial part of the project for better governance to the political, social, economic, and administrative systems that influence the use and management of water. The Operator along with Municipal Corporation is working together to deliver the services for betterment of the society with focus on safety, equity and reliability. Apart from the services, any grievances of the stakeholders are appropriately handled in consultation with the Govt Parties.
<b>Has the project in any way supported the development and involvement of young people and/or supported gender equality, and if yes, how ?</b>	
The project has supported in the development and involvement of young people and/or supported gender equality as follows: <ul style="list-style-type: none"><li>• Earlier, the Women/ young girls of the community were drawing water through public taps and to wait for water supply for a particular time of the day disturbing their other productive activity. Now the water is supplied through individual connections and going towards 24x7 which will support them to concentrate on other productive activities.</li></ul>	

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- Self help groups, NGOs, Water Friend with proper gender equality and diversity and has been implemented in the project resulting in efficiency enhancement and supporting gender equality.