

## **Water PPPs: are they here to stay?**

### **Part 1: Urban water sector**

#### **Introduction**

On June 20, 2011, in New Delhi, the Union minister for Urban Development, Kamal Nath, answering questions at the Reuters Global Real Estate and Infrastructure Summit, said that “the Indian government must lift the lid on privatisation in public utilities, passing the costs on to consumers”. He said, “in our water and waste disposal, we should target at least 50 percent of funds from the private sector”. Barely a week before this, on 15 June, the Empowered Committee of the Delhi government to look into reforms in management and distribution of water, endorsed a proposal by the Delhi Jal Board to enter into a public private partnership arrangement for the management and distribution of water for Malviya Nagar and Vasant Vihar zones<sup>1</sup>. The Indian honeymoon with private water operators is well on its way.

In March 2011, Anne Le Strat, the deputy mayor of the city of Paris announced an 8% cut in water prices effective July 1, 2011 to mark the first anniversary of the return to public management of the city’s water. Beginning 1 January, 2010, the municipal corporation of Paris put an end to the 25-year long management of the city’s water and sewage systems by the subsidiaries of Veolia and Suez. For the first time in over 150 years, the management of Paris’ water became the responsibility of the city municipal corporation. In Uruguay, water and wastewater services have been renationalized after years of partial privatisation. A civil society campaign led to a national vote in which the public demanded that access to water and sewage services be recognised as a basic human right. The wording has been written into the Uruguayan Constitution, with the additional provision that the services be provided through state-owned entities.

Around the world, governments are pulling out of punitive contracts with water multinationals and getting back to the job of supplying affordable water to people. The Remunicipalisation Tracker of the Water Justice Project says that 40 municipalities and urban communities in France alone, the homeland of water privatization, have remunicipalised water services over the last ten years, resulting in cheaper tariffs and improved services. In Paris, the Eau de Paris, the publicly owned entity has announced that it will supply water at 1 euro per kilo litre and will maintain this price till 2015.

Why then is the Indian government pushing for PPPs in the water sector?

#### **The Indian water PPP story**

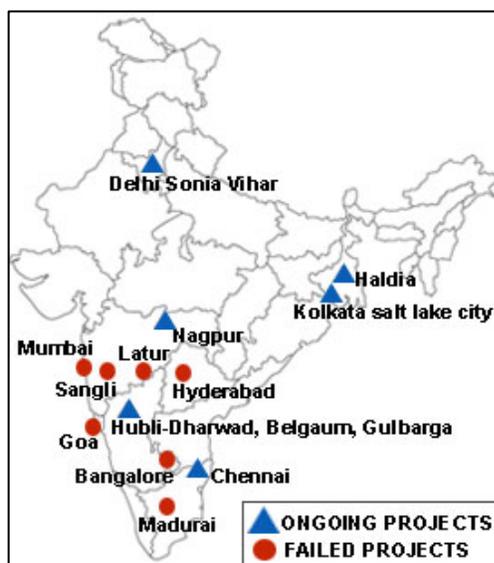
The progress of PPPs in the Indian water sector has not been a smooth affair. This is despite the fact that the National Water Policy, 2002, identifies the involvement of the private sector in the water sector as part of the policy objective<sup>2</sup>. In the 1990s, early attempts for privatisation in the urban water supply sector were stillborn. There was stiff resistance from civil society groups and planned projects in Pune, Bangalore, Goa and Hyderabad had to be abandoned. The Delhi government managed to successfully sign a contract with the French multinational, Degremont, for the design, construction and O & M of the Sonia Vihar Treatment Plant in New Delhi. This

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<sup>1</sup> Indian express.com, In a first, Delhi Jal Board works on PPP model in two South Delhi colonies, June 17, 2011

<sup>2</sup> National Water Policy, 2002, “Private sector participation should be encouraged in planning, development and management of water resources projects for diverse uses, wherever feasible. Private sector participation may help in introducing innovating ideas, financial resources and introduce corporate management and improving efficiency and accountability to users. Depending upon the specific situations, various combinations of private sector participation, in building, owning, operating, leasing and transferring of water resources facilities, may be considered.”

was supposed to be the thin edge of the wedge, paving the way for further privatisation. But a few years down the line, Parivartan, an NGO that works on Right to Information, blew the lid on the project and the role of the World Bank in the planned privatisation. This led to the project being put in cold storage. Elsewhere, people's protests forced the roll back of many of the projects in Mumbai, Bangalore and even in Nagpur, the showcase for 24x7,. The Tiruppur project, mired in controversies is limping along.



### Box: What and where

It is difficult to get an idea of exactly how many PPP projects are on in the water sector. The central agency coordinating PPP projects in the country, the PPP Cell in the Department of Economic Affairs has a database of PPP projects. This database is extremely sketchy and incomplete. For instance, well known projects such as the Sonia Vihar Plant, the Hubli-Dharwar project, the Nagpur project are not listed in the database. Manthan has compiled a database of about 64 projects.

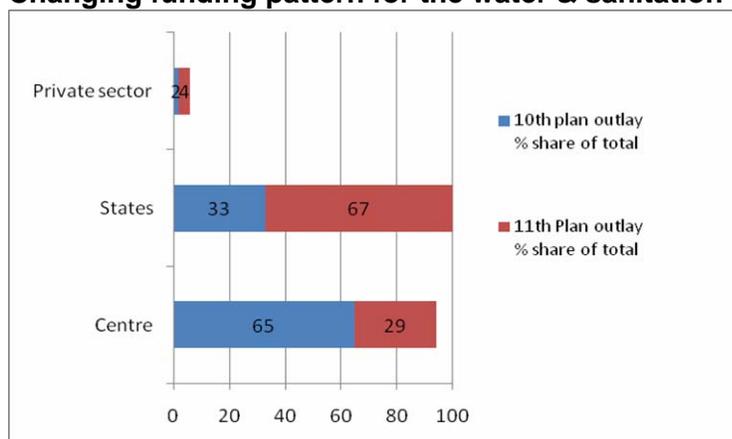
The map at right gives you a selection of water PPP projects. It does not include those in the pipeline.

### The raison d'être for PPP: Ratcheting up of capital costs

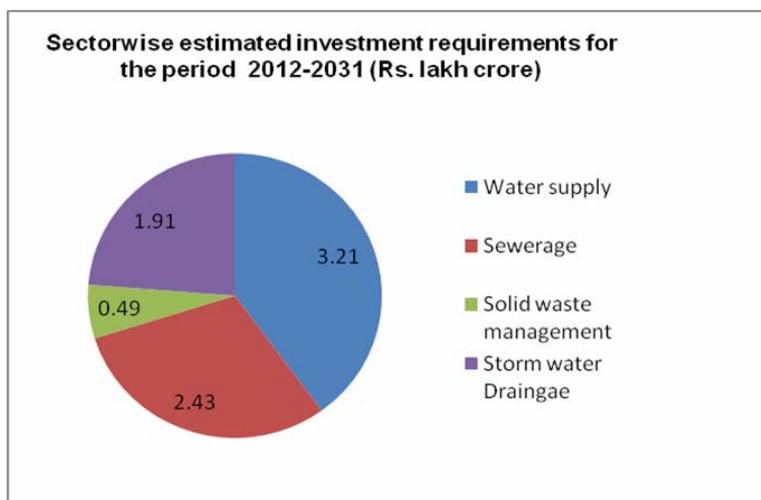
The Eleventh Plan planned outlay for the water and sanitation sector was 1.44 lakh crore which is an increase of 122% over the outlay for the Tenth Plan of Rs. 0.65 lakh crore. According to a position paper prepared by the Department of Economic Affairs in 2009 for this sector, the share of the Centre is set to drop sharply from 65% to 29%, the share of the states to increase from 33% to 67%. In absolute terms, the investment envisaged for the states is an increase of more than 400% from 0.21 lakh crore to 0.96 lakh crore. The share of the private sector is also set to increase from 1.58% to 3.78%, providing an increased investment potential of 530% (from Rs. 1022 crore to Rs. Rs. 5421 crore).<sup>3</sup>

<sup>3</sup> Position paper for the water and Sanitation Sector, October 2009, Department of Economic Affairs, Ministry of Finance

## Changing funding pattern for the water & sanitation sector



The Report on Indian Urban Infrastructure and Services by the HPEC estimates investment requirements for all urban infrastructure sectors for the 20-year period from 2012 to 2031 at 2009-10 prices as 31 lakh crore. Of this the Committee estimates that for share of the water supply, sewerage, and storm water drainage and solid waste management sectors will be 26% or 8.04 lakh crore<sup>4</sup>. This is about 462% more than the Eleventh Plan outlay. In addition, the Committee has separately estimated another Rs. 10.92 lakh crore for operation & maintenance for the same period. Therefore, PPPs are seen to help in “leveraging scarce budgetary resources of the government”.



Urban water supply and sanitation is the responsibility of state governments and Urban Local Bodies or the Public Health Engineering Departments operate and maintain services. Under the 74th constitutional Amendment, the responsibility of local service delivery has been clearly assigned to the ULBs; but a parallel devolution of powers to raise finances has not been done. Therefore, even today, the ULBs are dependent on state or central government transfers for capital expenses and sometimes even the O & M expenses. The position paper on water and sanitation says, “Large investments are needed to develop and upgrade water supply, treatment

<sup>4</sup> Report on Indian Urban Infrastructure and Services, March 2011, Report of the High Powered Expert Committee (HPEC) for Estimating the Investment Requirements for Urban Infrastructure Services

and distribution networks. The investment potential across various sub-sectors is expected to be around Rs 90 billion in 2010 and Rs 170 billion in 2015 with CAGR of 14% in water infrastructure investment”.<sup>5</sup>

The most important supportive tool for the water and sanitation sector has been the Jawaharlal Nehru National Urban Renewal Mission (JNNURM). Encouraging PPPs has been incorporated as one of the objectives of JNNURM. To meet its share of expenses, the ULBs are encouraged to rope in the private sector. In turn, the government of India’s funding is supposed to provide the confidence for the private sector to bring in capital.

### **Do the private operators bring in the moolah in the water sector?**

The experience of PPP in the water sector thus far runs counter to this argument that PPPs are meant as a vehicle to provide additional funding. Most of the projects in the water sector have not brought in any significant equity contribution from the operator. Given below is a list of successful PPP projects that are under operation and the reasons for the success. One of the reasons for success has been identified in these successful projects that the operator does not have investment risks and the projects are funded through other means.

Project	Operator	Reasons for success (with reference to investments)
Chandrapur	Gurukripa Associates	Operator does not have investment risk
Hubli-Dharwad, Belgaum, Gulbarga pilots	Veolia	Capital investments from the Karnataka government and from World Bank as a loan
Nagpur	Veolia	Capital investments not funded by operator
Salt Lake City	JUSCO	Capital investment under JNNURM
Haldia	JUSCO	Leasing of existing assets and investments in new assets (Rs. 100 crore)
Mysore	JUSCO	Investment from JNNURM

Source: Adapted from a compilation of Quick Project Profiles of Successful Projects, Page 15, Exhibit 8, Position Paper on the Water and Sanitation Sector, Department of Economic Affairs).

A recent brochure produced by the JNNURM cell of the Ministry of Urban Development, says that of a sample of 6 water sector PPP projects analysed, only 29% share of capital contribution was leveraged through PPP<sup>6</sup>. The general view is that involving the private sector for managing plant operations and distribution of water is the way to go, rather than expecting capital infusion from the private sector. For instance, in the Mysore 24x7 project, the first city-wide project, there is absolutely no capital coming in from the private partner. All capital investments are by the government and the private partner has the sole responsibility of improving the network to provide 24x7 water.

<sup>5</sup> Position Paper on the Water and Sanitation Sector in India, October 2009, Department of Economic Affairs, Ministry of Finance

<sup>6</sup> JNNURM projects developed under public-private partnerships, 2010-11, accessed from <http://jnnurm.nic.in/nurmudweb/toolkit/PPP-Brochure-032011.pdf> on 4 July 2011

## **Water, an economic good: Will it work?**

The key argument for the PPPs in the water sector is that water is an economic good while those against argue that water is not just an economic good, it is a social good, and, in fact a fundamental right of all peoples. The paradigm of private companies managing water supply is tied to the concept of providing water for profits and in people's minds, is linked to deprivation of water for and/or high cost to the poor. This concept has been rejected even abroad. In 1999, the United Kingdom introduced the Water Industry Act, under which from July 1 1999, water companies cannot disconnect water supplies citing unpaid bills or use devices that would limit the quantity of water supplied.

Civil society groups argue that Right to water has been recognised as a fundamental right by the United Nations and therefore it is the sovereign duty of governments to ensure that every human being is assured of access to adequate and safe water. In many of the high profile projects such as in Delhi, Mumbai, Bangalore, people's protests have firmly nailed the door on water privatisation projects.

This is an important reason why PPPs in the water sector have not really taken off.

## **People's perception of PPPs: Locked behind a wall of silence**

One of the enduring complaints by civil society across the spectrum of PPP projects has been the lack of transparency. Details on the costs, the risks to the operator, to the ULB, performance targets, penalties, tariffs, coverage etc are not made available to the public. In the case of the Tiruppur PPP, a clause in the agreement states that neither party shall divulge any information related to the operations, contracts, commercial or financial arrangements of the project or the contents of the agreement, except under conditions of confidentiality.

In 2007, civil society representatives<sup>7</sup> from various organisations visited the area to study the project and its impacts requested information about the project from the New Tirupur Area Development Corporation Ltd. (NTADCL), which refused to provide information. The civil society representatives met local citizens and during their interactions they were informed that panchayat representatives and local councilors were not given detailed information on the project and its impacts and were not involved in the conception, design and decision making of the project. An RTI application for information on project operational details was rejected by the NTADCL on the premise that it was not a 'public authority'. The Madras High Court however ruled that the PPP is a public authority and ruled that the "PPPs "must explain to the people about their activities". However, the NTADCL has refused to divulge information and the case is still pending in the court. The Times of India reported that deputy chairman of the Planning Commission Montek Singh Ahluwalia rejected the Central Information Commission's suggestion to bring public-private agreements (PPP) under the ambit of the RTI Act<sup>8</sup>.

In the case of the Sonia Vihar Plant, the water from the Plant was to provide water for pilot 24x7 water supply project in South Zones II & III. The details of the contracts were not publicly available and were obtained and disseminated by Parivartan, through an RTI application. The

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<sup>7</sup> Gaurav Dwivedi and Rehmat from Manthan, Roopa M from IELRC, Clifton D'Rozario from ALF and Sukumar M K as mentioned in Tiruppur Water Supply and Sewerage Project - A Reality Check on India's Largest Public Private Partnership Water Project, Preliminary Report by Manthan Adhyayan Kendra

<sup>8</sup> Pvt cos outside RTI purview: Planning Commission, TNN, New Delhi, 4 March 2011

documents revealed that the contract was one-sided and imposed stiff penalties on Delhi Jal Board (DJB) and awarded easy performance standards that were lower than even those set for DJB plants. DJB has to pay Degremont penalties ranging between Rs.50,000 and Rs.80,000 a day if it fails to supply water. The plans for privatizing 24x7 pilots were abandoned when it was found that the World Bank that was providing the loan for the project interfered in the selection of the consultants and dictated the terms and conditions of the contract.<sup>9</sup>

#### **The private sector is more efficient: Factor 4?**

Another reason that is given out for privatisation in the water supply sector is that of efficiency. The ULBs are viewed as highly inefficient: obsolete infrastructure, obsolete technology, poor service leading to poor cost recovery, poor O & M. All this leads to consumer resistance to pay the right price for water. The PPPs are planned to increase efficiency by cutting down on leakage losses and NRW, increase metering, billing and recovery. For instance, data generated after the implementation of the pilot project in Hubli-Dharwad shows that hours of supply increased from 9 hours a week to 24x7, distribution losses decreased from 35 l/connection/day/m head to 5.43 l/connection/day/m head, revenue billed increased four-fold and revenue collections increased almost by eight times<sup>10</sup>.

An evaluation undertaken of the Nagpur pilot project by Administrative Staff College of India (ASCI) presents a mixed picture. The project achieved the target of 24x7 supply only to about 50% of targeted connections. The percentage of Non-Revenue Water (NRW) decreased from 50% to 38%. The target set for increase in billed volume was 10%, but there was an actual increase of about 50%. The ASCI evaluation says that this could have been due to leakages at connection points. The Nagpur Municipal Corporation substantially increased the tariff consumers after initiating the 100 percent metering under the 24X7 project<sup>11</sup>. This was met with widespread protests and the move to increase the tariff had to be withdrawn. (See *Box on Chandrapur's story*.)

#### **Box 3: Chandrapur: Privatisation for efficiency**

Take the case of Chandrapur where the water supply, distribution, billing and collection of revenue has been contracted out for a 10 year period beginning from 2004 to Gurukripa Associates. The objective of this project was to improve efficiency.

The water supply for Chandrapur was earlier managed by Maharashtra Jeevan Pradhikaran (MJP), through contractors. In 1998, the MJP handed over this responsibility to the Chandrapur Municipal Council (CMC). In 2001, the government of Maharashtra issued guidelines to involve PPPs with a view to improve the efficiency of water supply and sewerage management. As per the agreement, the CMC is responsible for providing the bulk water and will retain ownership of the network. Gurukripa is responsible for water supply and O & M of the network and to build 1 km of additional network. Gurukripa will bill and collect tariff from the people and pay Rs. 1.59 crore to CMC over the entire 10-year period. Making further additions to the network is the responsibility of CMC.

<sup>9</sup> Delhi's pipe dream, Aman Sethi, Frontline, Volume 22 - Issue 17, Aug 13 - 26, 2005

<sup>10</sup> The Karnataka Urban Water Sector Improvement Project, 24x7 Water Supply is Achievable, The Water and Sanitation programme, Field Note, September 2010

<sup>11</sup> 24 X 7 Water Supply Project for Nagpur City, Srinivas Chary, Administrative Staff College of India accessed from [http://www.urbanindia.nic.in/programme/lsg/lsg\\_presentation/ASCI/Nagpur%20PPP-dist%20copy.pdf](http://www.urbanindia.nic.in/programme/lsg/lsg_presentation/ASCI/Nagpur%20PPP-dist%20copy.pdf)

A *Frontline* report in 2006 says that water supply situation has worsened and the poor are the worst hit. The government has issued a notification banning new standposts and supply to the existing ones have stopped. The article quotes D.S. Khanke, a retired Forest Department employee as saying, "We haven't got tap water for almost two years. So we let them stop our supply and we have now constructed a borewell". Despite privatization, the situation is as inefficient as it was before. The distribution system has not kept pace with the expanding population and more and more people are resorting to the use of groundwater.

### **24x7: Boon or bane**

The Ministry of Urban Development has set 24x7 water supply for all cities of India and 100% coverage at 135 litres per capita daily (lpcd) for all households as the service level benchmark. The HPEC Report has estimated higher costs for the water supply infrastructure assuming 100% coverage and 24x7 water supply across the country. The first successful baby steps for 24x7 water supply have been the pilot projects in Hubli-Dharwad, Gulbarga and Belgaum in Karnataka and Nagpur in Maharashtra. Today, 24x7 water supply is being discussed in many cities across the country –Mangalore, Mumbai, Puri, Jaipur, Mysore, Guwahati are only some of the cities where 24x7 water supply is being planned.

Across India, urban water supply is characterised by intermittent water supply of a few hours/day, high distribution losses due to leakages and thefts, unreliable water supply due to low pressure, poor water quality and poor cost recovery. Most of these ills are interconnected in a vicious cycle and resource-poor ULBs are unable to find a way out. The prospect of making any improvement is also tied up in another vicious cycle as improvements will cost money and ULBs will have to look for private investments, who in turn will aim at cost recovery through higher tariffs which meet with resistance from people.

(See box; *Why 24x7*)

#### **Box: Why 24x7**

Access and adequacy: Easy and convenient access to water

Health benefits: The constant pressure in the distribution network prevents contaminants from entering the pipes and avoids necessity of large doses of chlorine

Less wear & tear: It has longer life as it is not subjected to shocks from changing pressure.

Avoidance of supplementary investments: No need for investments in tanks, booster pumps, tubewells etc

Environmental benefits: Less use of groundwater

Private operators will use better technology, improve service and ensure better cost recovery.

Despite the compelling arguments for 24x7, the fact remains that whenever any municipal corporation begins to talk about 24x7, there are citizen's protests against the project. A fundamental question that is raised by the public is that, "where will the water come from?" Citizens of Mangalore expressed opposition to the proposed public-private-partnership for 24-hour water supply<sup>12</sup>. In April of this year, after the demo 24x7 has been completed, citizens in Hubli are getting water only once in 5-7 days in parts that are not covered by 24x7 water supply<sup>13</sup>.

**Water for 24x7:** Recent incidents of water conflicts show that water, the most critical input for the entire system can not be taken as a given. Water for cities is almost always drawn from rural areas, leading to farmer protests. Even where there have been no conflicts, drought and failure of rainfall can lead to the failure of the system. In the summer of 2009 Nagpur faced a severe

<sup>12</sup> Activists oppose 24-hour water supply in city, The Hindu epaper, Mangalore, June 25, 2011

<sup>13</sup> Water problem aggravates in summer, Vincent D'Souza, TNN, Hubli, Apr 10, 2011

drought to the extent that police had to be posted to guard water tanks. In Pune, there was shortfall in monsoon rains both in 2009 and 2010, resulting in water rationing.

The Sonia Vihar Plant in Delhi had to go without water for almost three years as the Delhi government could not mobilise the necessary water to run the plant. The Sonia Vihar water treatment plant, contracted in 2000 to Degremont as a PPP based on a design, build, operate (DBOT) basis, has been planned to treat and supply 140 MGD of water. The water from this plant was meant to kick start the 24x7 water supply for the city. The project had a stumbling start – scheduled to be completed by December 2003, it was only completed by March 2005. Even after this delay, water, the most important ingredient for the running of the plant, did not reach the plant. Water for the plant was supposed to come from the Tehri reservoir, which was not completed by the time the Sonia Vihar plant was ready. In August 2006, a portion of the promised water, 65 MGD was released. It took another two years, until September 2008, for the entire 140 MGD water to reach the plant.

The fact is that for 24x7 supply to succeed, the most important determinant is the availability of water. While private contractors are taken on for putting in meters and rehabilitating the network, the entire effort and additional capital investments for the 24x7 supply will come to nothing if water is not provided for. In September 2010, the PPP in Salt Lake Sector V was competed, but the implementation was delayed due to non-availability of the promised 12 MGD of water.<sup>14</sup> Similarly, the Karnataka government is also planning to divert water from river Mandovi for the 24x7 water supply project in Hubli-Dharwad. The Goa government has objected to this and the centre will now set up a tribunal to sort out this dispute.<sup>15</sup>

### **Can 24x7 pilots show the way forward?**

The Hubli-Dharwad pilot 24x7 project that has been recently completed is a successful showcase.

The World Bank-funded pilot projects for providing 24x7 water supply under the KUWASIP project in Hubli-Dharwad, Belgaum and Gulbarga is the first stage of a reform process undertaken by the Karnataka government. The pilot project began in 2005 and was completed in 2010. It has notched up a number of successes. Some of the key results are:

- The number of connections in demo zones increased by 53%.
  - Hours of supply increased from 10hours per week to 24x7
  - Every person gets an average of 91 litres/day
  - Five fold increase in revenue billed and a 80% collection efficiency
- Capital cost of connections are recovered as Rs. 50/month

To address the needs of the poorer sections of the population, the project has developed a Pro-Poor Policy(See website of Karnataka Urban Infrastructure Development and Finance Corporation). As per this policy, those who are residing in houses measuring up to 600 square feet will be identified as poor. They will be provided a number of concessions:

- One-time connection costs will be waived;
- Will be supplied 8000 litres/household /month at concessional rates (to be decided by MC. Proposed Rs. 6/KL)
- Simplified procedures for providing connections

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<sup>14</sup> [http://articles.timesofindia.indiatimes.com/2010-09-25/kolkata/28226197\\_1\\_jamshedpur-utilities-water-supply-jusco](http://articles.timesofindia.indiatimes.com/2010-09-25/kolkata/28226197_1_jamshedpur-utilities-water-supply-jusco)

<sup>15</sup> Karnataka to divert Mahadayi water, Bharat Lal Seth, *Down To Earth*, Nov 30, 2010, accessed from <http://www.downtoearth.org.in/node/2248> on 18 July 2011

- Free water through public kiosks/cisterns/borewells fitted with handpumps to vulnerable sections such as nomads, destitute, homeless poor, coolies, beggars
- Provision for shared connection to those who cannot afford individual connections, allowing sharing of costs for the cost of meter and connection charges.

**Scaling up:** The Karnataka government has now taken a decision to scale up the project and has committed Rs. 735 crore for the three cities of Hubli-Dharwad, Gulbarga and Belgaum. This throws up several issues that need to be carefully considered. The project has been piloted for a mere 10% of the population and this now needs to be scaled up to 100%. There are issues of sustaining the efficiency, pricing and cost recovery, assuring water etc. For a detailed note, (See *Box: Case study of Hubli-Dharwad*)

**Box: Case study of 24x7 pilot project in Hubli-Dharwad, Belgaum and Gulbarga**

Hubli-Dharwad has been a city of chronic water shortages. The main sources of water are the Renukasagar Reservoir and the Neersagar Tank. Upto 2003, water services in these twin cities were very poor and in the summer of 2002, water was supplied for 2 hours every 15 days. In April 2003, the management of the water supply was transferred from the Hubli-Dharwad Municipal Corporation (HDMC) to the Karnataka Urban Water Supply and Drainage Board (KUWSDB). The KUWSDB undertook a number of measures to improve the water supply and as a result, the water supply position improved from once in 8-10 days to once in 4-5 days.

A pilot project to supply 24x7 water supply to 10% of the population was implemented between 2005 and 2010 and the Karnataka government plans to upscale the project on a city-wide scale. The project named the Karnataka Urban Water Sector Improvement Project (KUWASIP) has been promoted by the Karnataka Urban Infrastructure Development and Finance Corporation (KUIDFC) and Karnataka Water Supply and Sewerage Board (KWSSB) in 2003, with World Bank assistance. It covers the cities of Hubli-Dharwad, Belgaum, and Gulbarga in northern Karnataka, with a total population of around 2 million. The pilot zones were selected based on whether the area can be isolated hydraulically; represent a cross-section of consumers with no commercial or industrial consumers; and form about 10% of total population.

The responsibilities of the Operator-Consultant (OC) are: To oversee and manage implementation of the 24x7 water delivery; To set up a customer billing center in the demonstration zones; and, to upgrade and operate the upgraded system for two years through a performance-based management contract. The cost of the project was Rs.237 crore, of which the World Bank Loan component was Rs. 182 crore. The cost of the Pilot project component was Rs. 65.60 crore and Veolia (France) was the OC for the 24x7 pilot project. The tariff for the pilot zones for the pilot period were fixed at Rs. 5.8/KL. There was also a minimum monthly charge component which started at Rs. 45/, increased to Rs. 60/- and which stands at Rs. 90/- today.

An analysis of the project throws up a number of issues.

**Water availability:** As has been shown in other projects, the 24x7 project is only good so long as there is assured supply of bulk water. This is always an extremely unreliable factor, as India is dependent on a good monsoon for its water resources. Some years ago, there was a huge water crisis as the Neersagar had completely dried up. In 2010, a dispute has failed between Karnataka and Goa over water from the Mandovi river, which the Karnataka government wants to divert to provide drinking water for Hubli-Dharwad<sup>16</sup>. Also, when the entire 24x7 project is dependent on assured raw water supply, there is no

<sup>16</sup> Unstarred question no 852 to be answered on 24.02.2009 water dispute on Mhadei river, accessed from <http://164.100.24.167:8080/members/Website/quest.asp?qref=141035> on 6 July, 2011

mention of any rainwater harvesting or any form of recharging activities that will help in augmenting raw water supply.

Cost: The pilot project envisaged only 10% of the population and has been undertaken at the cost of Rs. 237 crore. Of this, the share of the ULB has been zero. The process for upscaling has already begun and Tata Consulting Engineers have been retained to undertake the initial project preparation. The cost for one connection under this project has been a total of Rs. 21615/- (Rs. 11635 for meter and Rs. 9980 for management costs). The World Bank report imputes that such high costs are because of the state of infrastructure in Hubli-Dharwad and it could be as low as Rs. 4500 in other cities of India. What about the costs of upscaling 24x7 to the entire city of Hubli-Dharwad?

Sustained full cost recovery: The total bill consists of (a) volumetric tariff; (b) capital cost recovery. Given the fact that a 25% increase in volumetric tariff has been recommended, the question hangs in balance whether people would be willing to pay such high costs on an ongoing basis and whether the poor can afford to pay these costs. Already, in the past, when the minimum monthly rates were increased from Rs. 48/- to Rs. 60/-, there were protests and the proposal was dropped by HDMC. The HDMC also promised that the tariff will not be raised again. The Karnataka government refused to withdraw rate increases and rates were increased in 2007 with retrospective effect from Rs. 60/ to Rs. 90/-.

Stakeholder involvement: Civil society groups say that a decision has been taken by the government to upscale the project without taking people into confidence and people are not aware of the details of the cost they would be made to bear.

Note: The box on Hubli-Dharwad has been written up by sourcing information from:

- \* The Karnataka Urban Water Sector Improvement Project, 24x7 Water Supply is Achievable, The Water and Sanitation programme, Field Note, September 2010
- \* 24/7, Privatisation and water reform: Insights from Hubli-Dharwad, Priya Sangameswarn, Roopa Madhav, Clifton D'Rozario
- \* Website of KUWASIP and KUIDFC
- \* News clippings from Hindu

### **The other side of the coin: Publicly controlled water**

Today, Paris is just one of the many cases of successful public management of water supply. In Sweden, the water utilities are either managed by the municipal corporation or municipally owned companies who recover nearly 99% of all operational costs by tariffs. Every citizen is entitled to have access to all information about water supply and sewerage system under the Principle of Public Access to Official Records.

The National Water and Sewerage Corporation (NWSC), Uganda is an excellent example what is possible by a government corporation in a developing country. The NWSC was set up in 1972 and is responsible for the water and sewerage services in 22 large towns of Uganda. In 1998, it had a collection efficiency of about 60%, Unaccounted for Water of 60-65%, high operating expenses and a monthly deficit of about \$300,000. In 1998, the NWSC undertook a number of measures to improve efficiency and services. First off, a new Board was created, with representation from a variety of interest groups including professional bodies, local governments and environmental experts. The Board appointed a new Managing Director to drive the changes. A number of operational programmes were initiated:

- 100 Days programme: Revenue collection strategies and cost cutting measures.
- Service and Revenue Enhancement Programme: Customer service centres and front desks

- were put in place, customer surveys to capture customer wants were conducted and amnesty for illegal water use instituted.
- Area and Service Performance Contracts: To ensure that the service providers worked towards commercial sustainability.

By 2008, network coverage had increased by 50%, service coverage increased from 48% to 72%, collection efficiency increased from 60% to 95%, and the annual turnover increased from US \$ 11 million to US \$ 47 million. The NWSC is able to cover its O & M costs, depreciation costs and minor investments.

Today, it is in a position to plan for generating funds for its capital investments by issuing bonds.<sup>17</sup>

This and several other cases around the world prove that it is possible for public authorities to bring about improved efficiency in delivery and collection, provide effective regulation, protect the right of the poor to water, and ensure that water is given its due with the right prices.

### **Going forward**

Whether public or private, the challenge before us is how to provide adequate, safe, efficient and affordable water to all urban citizens. The challenge is huge and there is no one way to address the problem. The challenge can be met, as can be seen by the example of Singapore's, Public Utility Board that manages its water supply, sewerage services and catchments. Singapore has no natural aquifer or an abundance of land. Yet it is poised to become a global water hub. Over the last 40 years, through strategic planning and investment in research and technology, Singapore's national water agency PUB has built a robust and diversified supply of water known as the 'Four National Taps'. The water supply comprises (1) local catchment water, (2) imported water, (3) highly-purified reclaimed water known as NEWater, and (4) desalinated water. It has strategically involved the private sector to achieve its objectives.

Given the government proactive measures to push the PPP concept, it is clear that PPPs are here to stay. If we are to succeed in this experiment, some key issues need to be addressed:

- **Augmentation of raw water:** The planning and preparation of the water supply projects for PPP focus almost exclusively on the coverage of the network, the health and efficiency of the distribution network and cost recovery. What is never a part of the preparation and planning is the issue of sufficiency of water for the system. Indian cities are following the pied piper and opting for expensive solutions that depend on transporting water over long distances. This cost can and must be reduced by mandating urban rainwater harvesting, recycling and reuse of water. For instance, in the case of Hubli-Dharwad, the contract arrangement does not say anything about measures to conserve water, protect water sources and recharge groundwater. This assumes greater importance in cities where the source of water is a lake or tank.
- **Reuse and recycling:** Against the background of growing water demand and shrinking availability, there is a need for greater emphasis on how waste water can be reused with maximum efficiency. This is a sunrise technology and has not yet got the attention it deserves, but will have to increasingly play a greater role in urban water management. We need to set up systems for R&D in this sector.

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<sup>17</sup> Market Finance for Large Service Providers, Dr. William T. Muhairwe, NWSC-Uganda, June, 2008  
 Accessed from [http://www.wsp.org/wsp/sites/wsp.org/files/pa\\_2\\_wm\\_uganda\\_dpdp.pdf](http://www.wsp.org/wsp/sites/wsp.org/files/pa_2_wm_uganda_dpdp.pdf)

- Institutional and regulatory reforms and strengthening human capacities: There is a need for an overhaul of regulatory systems and institutional structures to ensure efficient functioning. The NWSC case proves that efficiency need not be antithetical to providing public services to people. At the same time, the case of Chandrapur showed that when the responsibility of water supply was delegated to the Chandrapur Municipal Corporation (CMC), the lack of capacity within CMC led to the ill-thought through privatization contract to people without prior experience in the field. Whether the ULBs take on the responsibility of water supply and sewerage services themselves or they delegate it to private parties, there is a need for capacity building in areas such as project and financial management, marketing and research & development. .
- Transparency and engagement with the people: The very word private is a like a red flag to the bull and people spontaneously protest against privatisation. In many instances the government bulldozes its way through and details of the contracts and the impacts of privatisation are not made public. There needs to be extensive engagement with the public and related documents providing details financial terms must be made available to everyone.
- Environmental impacts: The scrutiny of environmental impacts has to be greatly strengthened. One of the points of opposition to the Chennai Desal plant has been the impact of the concentrated saline discharge back into the sea and its impact on the fish population.

The largest and most expensive PPP project in India, the Tirupur project was one that based on supplying water at great cost to a polluting industry. Yet, the project did not address the issue of collection and treatment of the effluent from the industry. The fact that the project is limping along with reduced offtake is because of the fact that adequate attention had not been to these issues at the time of design of the plant. When court orders led to industries adopting mandatory cleaning up of the effluents, it led to reduced offtake from the Tirupur plant.