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SECTOR ANALYSIS: ANNUITY MODEL WHETS APPETITE FOR INDIAN WATER PPPS

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An authority linked to the River Ganges has tweaked a procurement model better known for roads to create a flow of water PPPs. But payment problems, as seen in India's power sector, need to be addressed too, reports Rouhan Sharma

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An Indian river rejuvenation programme that started life in 2011 is ushering in the country's first large-scale public-private partnerships (PPP) for wastewater treatment.

Known as the National Mission for Clean Ganga, it has tendered 27 wastewater projects over the past five years, worth close to INR 95bn (USD 1.3bn) in total.

But to do so it has used a procurement model better known in the roads sector: the hybrid annuity model.

According to an analyst at the mission, a mindset shift is taking place among government and in how India's water sector is being viewed by investors.

"Any more federal programmes that may be introduced will involve the private sector because the mindset in government has shifted from just asset procurement to also service procurement," says Madhava Kumar at NMCG.

The shift will soon be followed by states including Rajasthan, Haryana and Madhya Pradesh which all have shown interest in adopting the model.

Making waves

Starting out as a project implementation arm for water conservation to clean up the river Ganges, NMCG received a boost after the ruling government that came into power in 2014 announced federal funding for the programme of close to USD 3.5bn.

But the government quickly realized it needed to go further and converted NMCG into an authority.

A procurement model followed, and the hybrid annuity model was tweaked to attract investors, resulting in seven or eight bidders for each project including foreign developers.

"These were European or Middle East-based companies whose resource costs were higher and moreover, they placed a huge premium on their experience and expertise as well as a country risk premium which we did not and do not agree to," says Kumar.

The officials went back to the drawing board and amended tender conditions further to encourage more Indian developers. Indian companies such as the transportation infrastructure-focused Adani and Shapoorji Pallonji groups entered the fray. Adani has won two projects to date with Budapest-headquartered Organica which has 120 plants worldwide that are

operational or under construction. Organica considers India to have the potential to be the largest wastewater market in the world with well over a billion people and wastewater coverage of less than 10% of the entire population.

“Such tie-ups will be more frequent as procuring authorities roll out projects in the hybrid model where the cash flows are assured,” says Shibvanshu Chauhan, partner and leader of urban infrastructure at PwC India.

However, for other companies more focused on pure-play PPPs, difficulties in securing a long-term revenue stream may be an obstacle.

Stream of revenue

Despite the success of NMCG, there is still no nationwide regulatory framework or comprehensive policy to ensure an integrated approach to water.

“Water, as a resource, belongs to the states which makes it their responsibility to regulate and manage it but the existence of multiple entities and regulatory bodies with overlapping and sometimes conflicting scope of work has slowed progress,” says Krrishan Singhania, managing partner at K Singhania & Co.

For instance, under the Environment Protection Act, the Central Ground Water Authority can issue guidelines to the states but in some states, some regulations related to water distribution, conservation and dispute resolution are still derived from colonial era rules such as the claim of landowners over groundwater, under common law principles.

“Although there is a push from the federal government to convert utilities’ water departments into self-sustaining entities through volumetric billing of consumers based on consumption, most of the cities and local authorities override these directives and still opt for a flat or fixed billing because it is easier to manage,” he adds.

Water is also prone to social and political influences and is not always “purely a business sector,” says one investor source.

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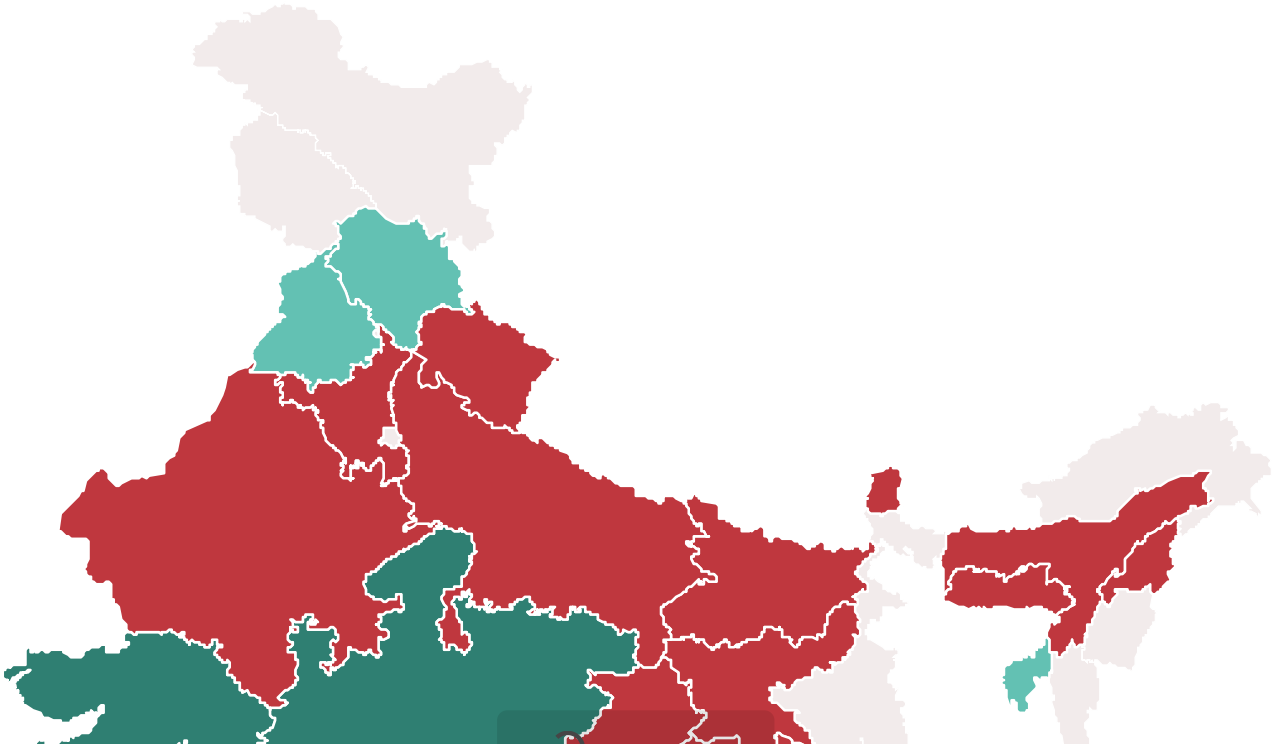
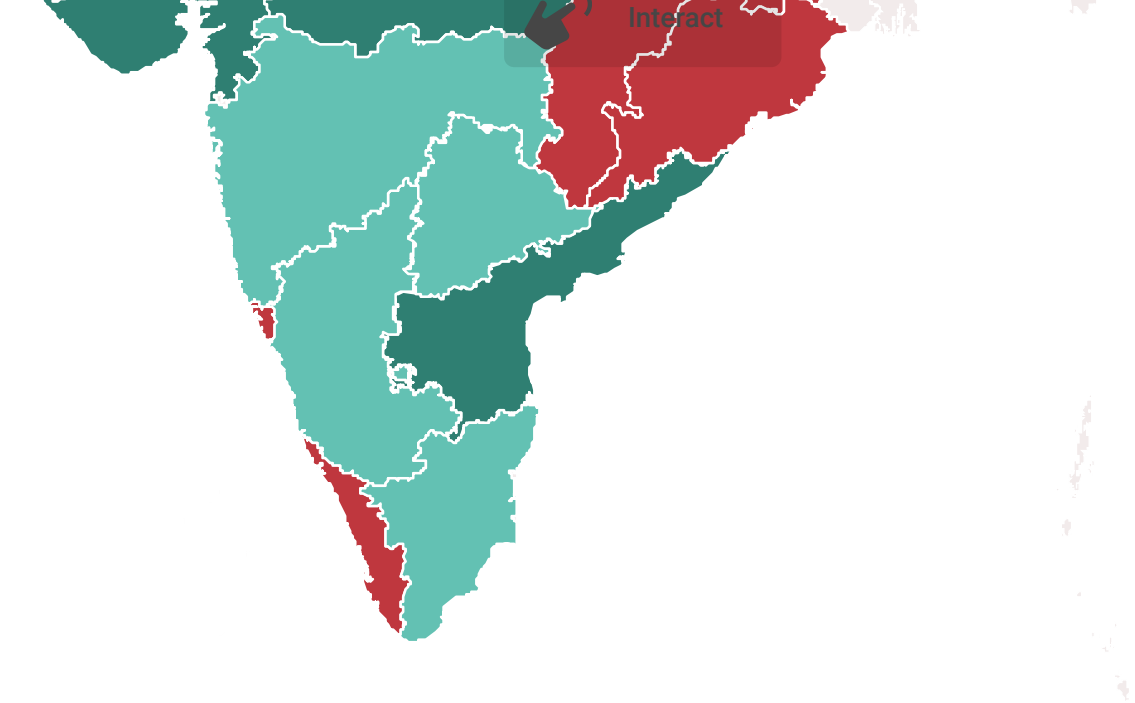
Where investment may flow
How Indian states currently perform on water resource management





High (Score: >65) Medium (Score: 50-65) Low (Score: <50)

According to Chauhan at PwC, pure-play PPPs in city level water supply and sanitation will continue to remain a challenge in the Indian market, says Chauhan, adding that issues relating to commercial viability and counterparty risks need to be addressed before the many companies will aggressively pursue opportunities.

One solution is for the government to classify the water and sanitation segments as a priority sector, making it mandatory for banks to lend a minimum of 40% of their total loans to the sectors at slightly concessional rates, says Rajneesh Chopra, global head of business development at VA Tech Wabag.

Chennai-headquartered VA Tech Wabag – an Indian water-treatment firm with a presence in over 20 countries – tied up financing for two sewage treatment projects in the NMCG programme earlier this year, one of which was debt-financed by the International Finance Corporation. Eversource Capital – a joint venture between Singapore-based Everstone Group and UK's Lightsource BP – was also an investment partner in the project.

Securing the priority sector classification is an important issue also because user charges for water vary from state to state and are typically not enough to cover the operational expenses of the treatment facilities, distribution and resource management, says Chopra.

When payments run dry

One of the biggest barriers to collecting payments is the inability of well over half the 3,000 or more urban local bodies to invoice customers accurately and consistently in coordination with a well-functioning supply framework.

"The challenges that local bodies face in water billing range from lack of modern technological know-how, absence of byelaws and effective policies, people's perception of water as a natural resource which should be free and a multitude of illegal operators who are reaping the benefits of inconsistent and loosely enforced laws," says Shishir Thakur, founder of Cranberry Analytics, a Pune-based tech-enabled analytics firm working in the area of water measurement.

The situation is similar to India's power sector, where incidences of wire-hooking and theft are common and proper payment collection can fall short, particularly in rural areas. The loss of revenue from unauthorized and non-metered consumers, as well as network leakages have contributed to the poor financial health of many urban local bodies.

Engaged by the Pimpri Chinchwad Municipal Corporation in Maharashtra state in 2012 to iron out water distribution and billing issues, the tech firm helped the local authority to increase its revenue to INR 450m from INR 180m by increasing the number of bills to 8,50,000 per year from 45,000 previously.

A possible solution could be to set up a payment security system whereby the federal government could establish a fund that can be used by the state-level procuring authorities to offer insurance.

This will ensure that if they default on payments, insurance can be claimed. “In such a mechanism, we, as concessionaires, have no objection to paying the insurance premiums but what this will do is it will enable many states to develop their water infrastructure faster than before,” says Chopra.

But the payment guarantee mechanism of the state governments and urban local bodies depend on the financial health of their balance sheet and this is a concern for lenders and financial institutions, says Wabag’s Chopra.

Potential financial investors too flag the lack of creditworthiness of urban local bodies as a significant risk.

Similar to the state-owned distribution companies that are responsible for collecting payments, urban local bodies can also lack the technology, or be financially weak or unable to either plug network leakages or collect adequate payments.

“The counterparty risk is one of the main factors we are cognizant of in the Indian market,” says Sridhar Sampath, India regional director for Kansas-headquartered WaterEquity, who is responsible for identifying investment opportunities and monitoring WaterEquity’s investment portfolio.

The asset manager which has so far made a “small” investment in India in a faecal sludge management project, has also evaluated the NMCG programme, he says. The assurance of annuity repayments and the government’s contribution to the cost of the project, deposited upfront in a neutral account, provide a high degree of comfort, says Sampath.

“Moreover, the NMCG is a federal authority and as such, is a strong and creditworthy counterparty and its programme has been financed by the World Bank,” he says, adding that WaterEquity’s initial evaluation of the programme warrants a closer look to evaluate potential project opportunities.

Tamil Nadu’s solution

Another solution for addressing the disinclination to pay for water could be that the urban local bodies take up a volumetric pricing strategy where the lower socio-economic classes that use less water pay a nominal amount and thereafter, the prices increase proportionately with the increase in consumption, says Chopra.

India’s first PPP urban water supply project in 1995 in Tamil Nadu state – called the New Tirupur Area Development Corporation – adopted a somewhat similar model where the investments were recovered from user-fees via cross-subsidies with municipal households being charged only a fraction of the industrial fees.

The project was implemented by the now defunct Infrastructure and Leasing Financial Services (IL&FS). It involved the development, construction, operations and maintenance of a 185 million litres-per-day capacity water supply project and sewerage facility at a cost of about INR 10.23bn. The project also involved providing low-cost sanitation facilities for slum areas and was India’s first to be financed commercially on a limited recourse basis.

Another urban water supply project meant to supply water to Nagpur city too adopted a model based on cross-subsidies with the operator, Orange City Water Private Limited – a joint venture between French firm Veolia and India’s Vishvaraj Infrastructure – additionally receiving a fee from the Nagpur Municipal Corporation related to performance parameters.

The project got off the ground in 2012 but has achieved limited success: it remains incomplete after the federal government changed hands in 2014 and the then new Narendra-Modi administration killed funding for all projects that were started under a previous programme with less than 50% progress (the government’s contribution was supposed to be 70% of its total cost).

Policy preparation

At present, residents receive continuous water supply only in areas where Orange City Water has run pilot programmes. These are the areas where the company also conducted awareness and education programmes.

“I call it the 4P model where the fourth P stands for people,” says Arun Lakhani, chairman and managing director of Vishvaraj Infrastructure, Veolia’s Indian partner in Orange City Water.

“Willingness to pay is not a challenge as long as you are transparent and communicate correctly and clearly. If we are sensitive to them and communicate the benefits, we do not see a problem in willingness to pay,” he adds.

Chauhan of PwC agrees that direct communication with people will help them understand why they need to pay for a good water supply, as seen in federal programmes such as the Smart Cities mission, which includes projects across urban infrastructure.

However, with only a few examples of PPP urban water supply projects over the last two decades, the government is now planning a different approach to the problem of urban water supply.

The country's top planning body is currently preparing a policy on the reuse of treated wastewater and will also suggest the separation of water generation, transmission and distribution so it becomes simpler to structure PPPs, says Avinash Mishra, adviser on water resources at the Niti Aayog.

The policy will suggest technologies for treating wastewater such as for STPs, oxidation ponds, and use of various enzymes, among others. Wastewater will be treated to varying degrees according to their use for different domestic chores.

The aim is to reduce the country's dependence on groundwater as India already extracts more than the US and China combined, and its use of both ground and surface water is considered inefficient, says Mishra.

Despite the early procurement success of NMCG, this is a problem that will need a solution at much higher level.

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