

## **Note on PPP in Urban sector**

### **1. Background:**

India has the second largest urban population in the world (about 350 million). With cities offering agglomeration and scale economics benefits in a higher growth economy, India is likely to see significant urban population growth (7-10 million persons on an average annually) over the next two decades. Ensuring quality Urban services to this large, growing population would be critical to realizing India's vision of "livable, inclusive, bankable and competitive" cities ( Planning Commission, 2007).The current situation is concerning though.

Infrastructure Development requires huge resources. Not all investment can come from public resources. Hence, it is imperative that we explore avenues for increasing investment in infrastructure through a combination of public investment, PPPs and exclusive private investment wherever feasible. The, PPP approach, supplements scarce resources, creates a more competitive environment and helps improve efficiencies and reduce costs. The benefits of PPP can now be gauged by the success achieved in the roads and transportation sector. In less than a decade, PPPs have become the default development option in these sectors. Other infrastructure sectors especially airports & aviation, ports and railways (to a limited extent) are being developed through PPP. It may not be out of place to point out that urban infrastructure sector has perhaps witnessed least amount of progress as far PPPs are concerned.

The reasons for low level of PPP in urban infrastructure can be understood if one looks at the deeper causes:

- Urban infrastructure consists of multiple sectors such as water supply, sewerage and sanitation, solid waste management, etc. It is unlikely that a single model that may be applicable for one sector can be replicated to other sectors.
- Urban infrastructure projects such as water, sewerage, sanitation, drainage, etc. can be categorized as "common public goods" or "quasi-public good". If left to the market,

these services are typically under-provided. It is also practically infeasible and even undesirable to exclude certain users who cannot pay user charges for use of these services.

- The culture of levying and collecting sufficient user charges for recovering even O&M costs is not prevalent
- Most of the Urban sector investment involves third tier of government, which increases the perceived political risks for potential investors.
- ULBs, which are responsible for these services are often financially weak and also do not have the institutional and management capacity to undertake PPP projects.

Attracting private sector through PPP is neither easy nor automatic. A key prerequisite is to lay down a policy framework that assures a fair return for investors provided they attain reasonable levels of efficiency, and protects the interests of users, especially the poor. PPPs are useful only if they deliver improved access to quality services at reasonable cost. All these may require the establishment of independent regulatory bodies with an appeal mechanism. An alternative could be regulation through contracts (the Model Concession Agreement route being followed by NHAI in highways development) which transparently detail the rights and obligations of all parties and rely on robust competitive bidding for award of concessions. The route has gained broader public acceptability but needs to be tested further in the Urban Infrastructure sector.

Under JNNURM, the cities have undertaken comprehensive efforts to estimate their long term infrastructure requirements as part of the City Development Plan. Credit rating of cities has also been done. These two exercises have for the first time provided information on the future investment plans of many of the ULBs. Our local bodies will have to make a concerted effort towards promoting PPPs in their respective cities, so as to enable efficiency and investments in bridging this gap.

The Ministry of Urban Development and JNNURM in particular, has provided a window of opportunity for promoting PPPs. As a first steps, ULBs need to screen their basket of projects to determine which projects are most amenable to PPP. The objective behind seeking PPP should be clear, namely,

- Finance capital investment,

- Improve service delivery,
- Introduce new technology or operating systems

Quite often ULBs may seek to achieve a combination of these objectives through PPPs. Clearly, the objective to be achieved will largely determine the key project contours such as – investment, risk sharing, project duration, revenue potential, etc.

The Ministry's Jawaharlal Nehru National Urban Renewal Mission (JNNURM) Strategy clearly delineates PPP as an important mechanism in development, management and financing of urban infrastructure. With the launch of the reform-driven and part-grant financed JNNURM, both the macro-environment as well as project-level micro environment is becoming more and more congenial for public-private partnerships (PPPs) in the urban sector.

To achieve this, the Mission is facilitating cities to undertake reforms for improvement of governance and financial sustainability, which include land and market related reforms. Encouraging Public Private Participation (PPP) models for provision of various services is one of the key reforms under the Mission. The Mission has also prepared a toolkit for cities on preparation of projects on PPP basis.

49 projects have been committed to be implemented under PPP mode under the JNNURM projects

- Under **solid waste management**, 24 have been committed to be undertaken with private partnership under JNNURM. These include cities like Kanpur, Guwahati, Coimbatore, Surat, Vadodara, Rajkot, Jaipur, Dehradun, Agra, Madurai etc.
- **BRTS** projects under PPP mode are being implemented in Vishakhapatnam, Rajkot, Ahmedabad and Surat.
- Under **water supply** about 8 PPP projects have been sanctioned under JNNURM. The partnerships range from capital contribution & BOT in case of Salt Lake, Kolkata, 24 X 7 water supply in Nagpur to performance based contracts as in Mysore. The 11 Sewerage Projects sanctioned under JNNURM are generally service contracts for O&M of Sewerage Treatment Plants.

- Four projects sanctioned under UIDSSMT in PPP mode are in the area of water supply and vehicle parking.

## **2. PPP in WATSAN Sector**

Lack of stakeholder support for water PPP projects has been a significant reason for failure of projects in the past. PPP Projects attempted in the 1990s viz., the Cauvery Bulk Water Supply Project and Selaulim Bulk Water Supply projects, Goa were shelved due to wavering State Government Support. The Pune Water Supply and Sewerage project received initial stakeholder support in favour of private sector engagement. However it was abandoned on account of subsequent local-level political opposition. The water PPP Projects initiated in the 1990s were highly capital-intensive and were dependent on a 100% private financing model. In most of these cases, the implementing agencies could not meet the guarantee required by the private operators. They lacked financial capacity to pay bulk water charges due to weak internal revenues. Severe opposition developed towards these PPP projects as consumers expected water tariff escalation. Inadequate baseline information, lack of clarity on risk sharing and poorly managed procurement processes contributed to difficulties in getting these projects off the ground.

Today quite a few water supply and sewerage projects are being implemented through PPP mode. The emphasis is as much on service improvement as on capital infusion from the private sector. In some of the projects which are in Latur, Chandrapur, Nagpur, Mysore, Madurai, Hubli-Dharwar, Gulbarga and Belgaum, Sonia-Vihar project in Delhi and Navi Mumbai the focus is on upgradation and O&M. Other projects such as the ones at Haldia, Nabadiganta (in Kolkata) and Tirupur are on BOOT/BOT basis.

Analysis of Successful Projects: Water PPPs in recent years have been backed by strong public funding compared to earlier years, when private investment was expected to be the major source of financing. In Salt Lake (Kolkata), Shivpuri and Khandwa (in MP) public funding has addressed substantial part of the project costs, thus allowing tariffs to be maintained at acceptable level. Recent projects have benefited from improved Stakeholder consultation at an early stage of project (e.g. KUWASIP, Salt Lake City). Moreover, against the backdrop of acute water shortage, unreliable supply

and financial losses, stakeholders in cities like Chandrapur, Khandwa and Shivpuri were more receptive to the option of exploring private sector participation as there was a strong demand for better services. The turnaround in services delivered through the KUWASIP project implemented in Karnataka (Belgaum, Hubli-Dharwad and Gulbarga) further strengthened faith in private sector's ability to provide viable solutions for the challenges faced in these towns. However, current successes are still at the project level. Mainstreaming of PPPs in the water sector will require sector level enablers as was done for power and highways (e.g. model concession agreements, New Electricity Act). This process could be initiated by development of common risk sharing principles, a menu of model contracts, public funding options that are conducive to PPPs, and most importantly creation of capacity at the ULB/ state level to structure and oversee efficient PPP contracts. Nonetheless, the extensive dependence on public funding and inadequate movement on tariff reforms raises questions on the long term sustainability of projects.

Some Cities have successfully implemented private sector participation in waste water management e.g. Alundur, Bangalore, Salt Lake (Kolkata), Mudurai, Surat, Kolhapur etc. The activities and sectors of urban transport where PPP model has been followed or is intended are Metro Projects, running of modern city bus service in Indore, Bhopal, Jabalpur, Kota, Jodhpur, Jalandar, Patiala etc, development of bus terminal and parking lots, Foot-over-bridges and road signages, modernization of Bus Terminals, BRTS (Bus Rapid Transit System) under JNNURM where infrastructure is being provided by the Government and rolling stock operation and maintenance is placed through PPP participation. Urban road Projects being developed on PPP basis are Mumbai Trans Harbour Sea Link Project, IT corridor project in Chennai, Chennai outer ring road, Trivandrum city road improvement, Hyderabad Outer ring road, Delhi-Noida Toll Bridge, Delhi-Gurgaon Expressway etc.

### **3. Efforts of the Government of India**

The Government has created a Viability Gap funding arrangement through a window in Finance Ministry. JNNURM has thrown open opportunities for developing PPP projects through grant component. The India Infrastructure Finance Company (IIFCL) is providing long-term debt to project companies setting up infrastructure projects. India Infrastructure Project Development Fund (IIPDF) provides financial assistance for

project Development.

Other efforts being initiated at the MoUD include the following:

- The Ministry is exploring the possibility of establishing a PPP Urban Infrastructure Fund (UIF) in collaboration with the German Bank KfW for capacity building, long term funding and project development exclusively for urban sector.
- Guidelines for Sector Reform and successful PPP in Urban Water and Sanitation have been developed and can be accessed at [http://urbanindia.nic.in/programme/uwss/Guideline\\_PPP\\_WS\\_Sector.pdf](http://urbanindia.nic.in/programme/uwss/Guideline_PPP_WS_Sector.pdf)
- The Ministry is working on models for regulation of the Water and Sanitation sector. A strong and independent Regulatory Authority at the State Level for guiding Tariff fixation and monitoring service levels, including those provided under PPP mode. Such an independent authority can balance the interests of citizen- consumer, ULB and private player, and can also deliberate on issues related to social and environmental sustainability.
- 63 proposals for development of PPP Projects under IIPDF have been examined and cleared by the Ministry. These pertain to water supply, multi-level car parking, Foot-over-bridges, pay and use toilets, sewerage treatment plants, multi- storied car parking etc.
- The Ministry is working together with multi-lateral agencies to develop guidelines, toolkits and models, and provide support to the states and cities on PPP. A Toolkit on SWM has been prepared recently and uploaded on the website of the Ministry. This can be accessed at: [http://urbanindia.nic.in/programme/uwss/Final\\_SWM\\_PPP\\_Toolkit-Volume-I.pdf](http://urbanindia.nic.in/programme/uwss/Final_SWM_PPP_Toolkit-Volume-I.pdf), [http://urbanindia.nic.in/programme/uwss/Final\\_SWM\\_PPP\\_Toolkit-Volume-II.pdf](http://urbanindia.nic.in/programme/uwss/Final_SWM_PPP_Toolkit-Volume-II.pdf), [http://urbanindia.nic.in/programme/uwss/Final\\_SWM\\_PPP\\_Toolkit-Volume-III.pdf](http://urbanindia.nic.in/programme/uwss/Final_SWM_PPP_Toolkit-Volume-III.pdf) and [http://urbanindia.nic.in/programme/uwss/Final\\_SWM\\_PPP\\_Toolkit-Volume-IV.pdf](http://urbanindia.nic.in/programme/uwss/Final_SWM_PPP_Toolkit-Volume-IV.pdf).

Some of the approaches for the future would include the following:

- (i) JNNURM, UIDSSMT have catalysed PPP projects. However the structuring of these projects and governance arrangements to manage these contracts, remain weak.

Moreover, availability of grant has crowded out borrowings. Concerns on low user charges recovery remain high. Only 8 cities are reporting 100% recovery of user charges for water supply and 3 for SWM. There is a need to give a further fillip to reform initiatives, with special emphasis to increase the in-house capacity of ULBs to go for PPP procurement. Leveraging, PPP and financial sustainability should be part of the appraisal process.

(ii) PPPs cannot be delinked from the financial condition of ULBs. With abolition of octroi, property tax is the only source of revenue but it is not a buoyant source of revenue. Attention must accordingly be paid to the overall improvement in governance in ULBs in general and financial position in particular. This would include identification and formulation of a “Local Bodies Finance List”

(iii) It is necessary to create an elaborate, detailed, time-series database on urban services and current performance levels. Specifically in case of water supply and sewage management, updated asset inventories and network maps need to be developed. In the absence of this baseline information and given the challenge of undertaking road digging, it becomes difficult for a private partner to undertake a due diligence assessment of underground pipelines. Moreover, given the absence of basic monitoring instrumentation and network maps, critical data on unaccounted -for- water (UFW), is not easy to come by. There cannot be any informed bid without a reasonable data set.

(iv) There is need for creation of shelf of bankable Detailed Project Reports (DPRs) that can attract private capital in the urban sector. ULBs cannot be expected to prepare the DPRs by themselves since they may not have the skill sets required. Standard Toolkits for engaging Consultants could be a way forward.

(v) Advocacy for PPP projects must be extended to political leadership in the ULBs as well as their staff and officials. Very significant differences have been noticed where the Chairpersons/Mayors/Municipal Commissioners of ULBs have been fully sensitized and involved in development of PPP projects.

(vi) The conventional legislation related to Urban Development and service delivery particularly the Municipal Acts make the service provision the domain of public agencies and don't permit the engagement of private sector. Legal Reforms should be introduced

to enable involvement of the Private sector. There is a need for a Model Municipal Act or Municipal Infrastructure Dev Act with specific reference to PPP projects in Urban sector which should balance the interests of citizens, State Governments. The policies should be sector specific. It must also deal in detail with issues of State support, user charge principles, land for PPP projects, risk sharing framework, Procurement process and dispute resolution etc.

(vii) It is advisable that ULBs should have credible tariff framework well before the PPP project comes on-stream so that there is a history of user charge payments. Introducing user charge/ tariff revisions along with the PPP project increases uncertainty for the operator. In such a scenario it may be better to provide operational grants for an initial period to demonstrate the benefits for the system to users before widespread imposition of user charges. This will help gain support of users for the PPP projects.

(viii) Flexibility in Viability Gap Funding: At present viability gap funding is restricted to a maximum of 40% of the project cost. The principle of viability gap is that a project generates positive externalities, the benefits of which can't be reaped by the project operator. As majority of the urban sector projects generate positive externalities, they should be a provision for providing higher VGF for some of these sectors which are perceived as social goods.

(ix) There are multiple project configurations possible in an urban water supply project and each project is unique. Hence, there should be an effort to identify the most common project configuration and develop an indicative risk sharing matrix for each of those. Such risk matrices will form the basis for preparation of contract documents and also leave sufficient room for adapting to suit the project requirements.