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SS-DPSP: Strengthening Frameworks and Building Capacity for PPPs

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**SS- DPSP : Strengthening Frameworks and
Building Capacity for Improved PPPs in Urban
Water Supply**

(P132155)

Water and Sanitation Program

This synthesis report details the process, outputs and intermediate outcomes of the above technical assistance (TA) which sought to strengthen the achievement of targeted water supply service delivery outcomes, particularly for the poor, in private sector engagements (PPPs) by (i): strengthening processes involved in preparing for water PPP projects, and (ii) providing technical assistance to stakeholders in engaging with private sector

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Executive Summary

1. This synthesis report details the process, outputs and intermediate outcomes of the Water and Sanitation Program - World Bank (WSP) Technical Assistance (TA) Strengthening Frameworks and Building Capacity for Improved PPPs in Urban Water Supply in India (P132155).
2. This Technical Assistance (TA) aimed to inform and strengthen stakeholder strategy for engaging with private sector in meeting the water (and sanitation) service delivery objectives to urban populations, particularly the poor.
3. Specifically, this TA contributed to the following:
 - (a): *Informed stakeholder strategy, through strengthening guidelines, processes and frameworks for engaging with private sector in urban water supply; and supporting the identification of PPP implementation strategies (models) appropriate to the current context of Indian cities. At the request of the Ministry of Urban Development (MoUD), it proposed relevant key principles and approach that should underpin the preparation of water PPPs in India – specifically as related to (a): project identification and detailing (b): project financial sustainability (c): procurement of private sector expertise and (d): institutional structuring – and developed tools to facilitate adoption of the approach in implementation by cities and states. Drawing upon this, , it proposed the mechanism of engagement most relevant and likely to be taken up by the majority of cities in the country in the current context and elaborated this in a contract document for use by cities (ref. below).*
 - (b): *Capacity building of state and local level entities to facilitate adoption and implementation of improved practices in preparing for water supply PPPs. Guidance was provided in identification of project scope, technical and financial feasibility assessments, assessments of financing requirements and financial sustainability, identification of PPP structure, and institutional structuring for implementation, through an engagement requested by the city of Jabalpur (Madhya Pradesh). Additionally, a contract document for operations’ contracts, laying down viable risk allocation, was developed, for reference and easy contextualization prior to use by cities. Inputs on addressing challenges in preparation and communication were also provided to support activities in Coimbatore (Tamil Nadu) and Karnataka (under the 24/7 water supply project) respectively*
 - (c): *Strengthen cross learning through the sharing of experiences among stakeholders and partners, to increase awareness of potential, limitations and challenges; and need for adoption of robust frameworks and realistic models, through knowledge creation and dissemination by (a) undertaking an in-depth review of five on-going water PPPs in the country, and documenting best practices (b): providing advisory support on request, including submissions on integrating performance based implementation approaches in Government of India’s sector reform programs; imperatives and impacts of tariff reform; pro-poor mechanisms in PPPs; and enablers to scale up private sector involvement in the urban sector (c): participation in deliberations and presentations, on various aspects, with various partners and representatives of the Indian water sector, including academia, industry and among colleagues in the World Bank internationally (BBLs...etc).*
4. Given sector complexities, and the limited familiarity with PPPs among stakeholders, advisory support to clarify and structure effective, water sector specific PPP processes and models has been a consistent request from government counterparts at all levels.

Background

5. Accelerated economic development over the past decade has raised aspirations and standards of living, and resulted in a significant increase in demand for improved services and efficient management thereof across urban areas of the country. The 11th Five Year Plan estimated an investment requirement of INR 1292.4 billion (approx. USD 26 billion)¹ for improving infrastructure relating to water supply and sanitation in urban areas, translating to 0.42% percent of the country's annual GDP (2008 figures).
6. While it is recognized that public sector resources alone will not be sufficient to meet these requirements, a twin concern has been to increase the effectiveness of public sector spends. The management and operational efficiencies urgently needed in the water sector are hampered by institutional drawbacks in the current public sector delivery system, making it necessary to pursue alternative systems. PPPs are one option and are being preferred since it is felt that public sector reform has limitations and will not be able to bring in the technical know-how that is required to achieve service delivery standards. PPPs are also perceived as a catalyst to wider sector reform.
7. Thus, Government of India's (GoI's) flagship reform-linked program for urban infrastructure development and service delivery – Jawaharlal Nehru National Urban Renewal Mission (JnNURM – 2005 to 2012) – was structured to promote PPPs through the provision of federal funds to leverage private sector involvement. This led to a sharp increase in the number of water PPPs attempted during the period, most of which are still under implementation. The experience of implementation, however, has thrown up concerns that are common across projects and have a bearing on the achievement of stated objectives, and thus the further sustainability and scaling up of initiatives.
8. In this context, the WSP-World Bank received a request from the MoUD, GoI, for technical assistance to strengthen government stakeholders' capacity in processes relating to preparation of water PPPs through
 - (1) addressing challenges related to project preparatory processes, in a context of weak city level data systems and capacity
 - (2) identifying institutional requirements through different phases of the PPP process
 - (3) developing a contract document to serve as a reference for cities undertaking water PPPs;

The request included extending TA support to cities initiating or already implementing water PPPs, partly in order to validate adoption of improved processes and documentation so as to inform their further development.

Overview of Technical Assistance

9. This technical assistance (TA) has sought to strengthen stakeholder strategy for engaging with private sector in meeting the water (and sanitation) service delivery objectives to urban populations, particularly the poor by (i): strengthening processes involved in preparing for water

¹ 1 USD = 50 INR. This figure includes drainage and solid waste management. However, water supply and sewerage account for over 80% of the investment requirement

PPP projects, and (ii) providing technical assistance to stakeholders, including public sector, Financial Institutions (FI's) and donors in engaging with private sector.

10. The premise underlying the work is that private sector can be an effective instrument to catalyse sector reform, particularly given the inertia associated with public sector reform, resulting in a lack of credible outcomes despite several initiatives towards this (no city provides continuous water supply at specified pressures; and barely a handful of cities are able to recover operating costs on a sustained basis). At the very least, private sector involvement can result in improving the effectiveness of public sector spends.

11.

Results Framework

Intermediate Outcome(s)	Indicator(s)	Project Outputs (Annexures)
<p>Policy / Strategy informed (including Ministry of Urban Development (MoUD) and the World Bank-funded Karnataka Urban Water Supply Modernization Project (KUWSMP)) [Addressing objectives (i) and (ii) in point 9 above.]</p>	<p>Government policy/strategy informed: guidance on project preparatory activities incorporated into program guidelines</p>	<ol style="list-style-type: none"> 1. REPORT ON RAPID ASSESSMENT OF WATER SUPPLY IN THREE CITIES IN INDIA 2. INTRODUCTION AND APPROACH PAPER & TOOL ON WATER PPP PROJECT PREPARATION 3. APPROACH PAPER AND TOOL ON PROJECT FINANCIAL SUSTAINABILITY 4. APPROACH PAPER ON PROJECT STRUCTURING & CAPITAL OPTIMISATION 5. APPROACH PAPER ON DEVELOPING A STANDARD RFQ DOCUMENT FOR WATER PPPS 6. GUIDANCE ON INSTITUTIONAL REQUIREMENTS AND STRUCTURING
<p>Client Capacity Increased [Addressing objective (ii) in point 9 above.]</p>	<p>Design and implementation capacity for PPPs in UWS strengthened at city and state level</p> <p>Standard contract clauses and guiding principles issued</p>	<ol style="list-style-type: none"> 7. OPERATIONS' CONTRACT DOCUMENT(*) 8. STRATEGY DOCUMENT (FEASIBILITY REPORT) FOR WATER PPP FOR THE CITY OF JABALPUR 9. INPUTS TO CITIES IN PREPARING FOR PPPS
<p>Knowledge Deepened [Addressing objective (ii) in point 9 above.]</p>	<p>Regional and state level workshops / exposure visits held to facilitate exchange of best practices between stakeholders</p> <p>Case Studies of PPPs in UWS published and disseminated</p>	<p>10. PUBLICATION ON FIVE WATER PPPS IN INDIA</p>

	best practices	
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(*) This is removed as an output under this TA, pending incorporation of peer reviewer comments received; and finalization in discussion with the Ministry. This is proposed to be undertaken under a new TA

Of the above outputs, Output 1 formed part of a larger PPIAF funded activity (refer para 24)

Process and Stakeholders Consulted

11. Technical support was provided at central government level, to establish the principles and approach for processes in preparing for water PPPs. This included extensive consultations with sector stakeholders, to elicit inputs (below):

Stakeholders Consulted:

S. No.	Designation of Stakeholders	Organisation / Entity
1	<i>Private Operators / Lenders</i>	
	Managing Director, Chief Executive / Operating Officers, Senior Vice President, Director	Veolia Water India, Suez Environment, SPML, IL&FS Water Limited, Tamil Nadu Water Investment Co. Ltd., Vishwa Infra (Also: International Finance Corporation (IFC))
2	<i>Public Sector Officers / WSS Utilities</i>	
	Principal Secretaries, Addnl. Secretaries, Secretaries, Commissioners, CEO, Chief Engineers	State Governments of Madhya Pradesh, Tamil Nadu, Karnataka, Orissa and Andhra Pradesh, Ministry of Finance, Ministry of Urban Development, Delhi Jal Board, city administrative heads, City WSS Depts. / Utilities
3	<i>Think Tanks</i>	
	Advisors, Professors	Centre for Policy Research, New Delhi; IIT Chennai; CEPT, Ahmedabad.

12. Throughout the engagement, a close interaction was maintained with MoUD, through the office of the Economic Advisor, who was the nodal officer for meetings with officials across departments, as well as with the Secretary, who personally chaired two meetings of senior officers to discuss outputs. Following clearance from the Secretary, the approach papers and toolkits were circulated to all state secretaries; and state level feedback workshops were held with five states, viz., Madhya Pradesh

(Feb. 2014), Karnataka (Feb. 2014), Tamil Nadu (March 2014), Orissa (April 2014) and Andhra Pradesh (April 2014).

13. Technical support at the level of states, local government agencies and project proponents for PPP initiatives was in the nature of field assessments, analytical notes, studies and presentations. Support was delivered in the context of existing and proposed projects, as well as government programs for urban infrastructure and service delivery (including water supply), in order to ensure alignment and impact.

Intermediate Outcomes

14. *Informed stakeholder strategy, including Ministry of Urban Development (MoUD) and the World Bank-funded Karnataka Urban Water Supply Modernization Project (KUWSMP)*

Drawing upon the three rapid city assessments undertaken, and the models derived therefrom, the World Bank funded KUWSMP incorporated the following elements in project structuring² (i) allocation of a fixed capital fund with contributions from state, city and development agencies in the form of grants and loans, and to be used by the operator, at his determination, for making capital improvements, in accordance with procurement guidelines set by the state. The amount in the fund is set at the estimated cost of meeting the 24 x 7 target (ii) provision of an incentive to the operator based on efficiency of use of the capital fund in achieving target service levels, i.e., the incentive is a share of any cost reduction in capital investment required to achieve target service levels (iii): responsibility for setting tariffs and standards for the utility remains with government. Payment to the operator is by way of a management fee (iv): establishment of a city water utility (or SPV) owned by the city government, and managed by the operator for the duration of the contract. The utility is established at the very start of the project.

15. The key elements of strategy proposed to the MoUD include (i) a focus on leveraging private sector efficiency over private sector finance, i.e. continued public sector loan or grant support to water PPPs (ii) establishment of base minimum level information to be provided to bidders (iii) mainstreaming assessment of financial sustainability into appraisal process, and to include consideration of all aspects that may impact the project financially, including as a result of project preparation and risk allocation (iv) streamlining expertise sought and evaluation of operators for water PPPs (v) creation of a water PPP market place, through scoring of operators and sharing of project implementation information

With regard to project implementation, the adoption of an operations' model was suggested, including (i) implementation in three distinct phases, allowing for a preparatory phase during which the operator prepares a Project Implementation Plan (ii) incentivizing the operator to minimize capital investment proposed through value engineering inputs (iii) requiring construction activity to be undertaken through third party contractors, in order to focus operator expertise on operations (iv) establishing a management committee with delegated powers to take project level decisions (v)

² These flow from models identified under the PPIAF funded activity "Evaluation of Water Service PPP Options for Mid-sized Cities in India". Technical assistance was extended to the activity through undertaking a rapid assessment of water supply in three cities; and providing inputs to the identification of options.

structuring operator revenue as a two part fee, reflecting key activities and services to be delivered (vi) establishing an objective and fair mechanism for linking operator revenues to performance.

Discussions on integration of the framework / strategy outlined in the approach documents (and tools to facilitate adoption) into the Ministry's reform agenda and upcoming funding program for urban infrastructure and service delivery are on-going with the new dispensation at the MoUD.

16. *Strengthened the design and implementation capacity for PPPs in urban water supply at the city and state level*

A key component of the GoI request for technical assistance on water sector PPPs was for a contract document that comprehensively captured all contractual provisions relevant to water PPPs – including appropriate risk allocation – to serve as a reference for cities undertaking water PPPs. This was seen to be critical in facilitating cities to engage in PPPs, through addressing an area of weakness at the implementation level. In response to this, a document elaborating the terms of implementation under an Operations' Contract, reflecting the key principles outlined above, has been readied. Issuance of the document is awaiting discussion and final decision from the Ministry.

17. Field level assistance as provided to Jabalpur Municipal Corporation (JMC), in Madhya Pradesh, in preparatory activities towards improving water supply service delivery on a PPP basis. The engagement was used as an opportunity to sensitise local stakeholders in the adoption of proposed improved practices, as well as to fine tune the same. Discussions were held on the implications of a PPP, and following the city's decision in favor of moving forward, support for identification of project scope, and feasibility assessments for the same were provided. The practices incorporated in the technical assistance included those relating to (i) project preparation – feasibility assessments were focused on critical elements of data, and highlighted risks to the project due to non-availability of some data sets, for eg., consumer data; adequate information on existing network...etc (ii) financial sustainability indicators relevant to the feasibility assessments were examined, with regard to sustainability of both capital investment required, and O & M expenditure implied (iii) institutional structuring – as a first step, the city constituted a Steering Committee with appropriate representation from technical and financial officials, and staff responsible for data management.

Financial and capacity assessments at the level of the city as well as of the water supply activity indicated that private investment in the initiative may be improbable and undesirable. Preliminary discussions regarding the mechanism of implementation indicate the city's inclination towards an operations' model.

18. Inputs provided to strengthen the communications component of the World Bank supported Karnataka 24 x 7 project include (i) elaboration on issues that have impeded success of water PPPs in the country (ii) matrix presenting the impacts of the issues faced on project implementation, and the implications for forth-coming project design (largely comprising the key principles of the strategy proposed to MoUD). These enabled the KUWSMP project team to provide clear rationale for the approach and components of the project design to stakeholders.

19. The city of Coimbatore has reviewed the project scope and preparatory activities towards implementation of a continuous water supply initiative under a PPP arrangement. On the basis of a rapid assessment undertaken by WSP and subsequent inputs provided, the city has re-examined

proposed interventions, resulting in significant impact on capital cost envisaged; and has formally approached the Tamil Nadu Water Investment Company Ltd. (TWIC) to undertake an assessment of non-revenue water in the city to further inform the project. The assessment is currently underway.

20. *Deepening Knowledge of Experiences in Water Supply PPPs in India and other developing contexts among stakeholders*

An in-depth review of five on-going water PPP projects in India has been completed, the findings of which have been published and widely disseminated. The study comprises the first of its kind in the country, covering six of eight contracts with a full city distribution focus awarded in the country up to end 2011. Given its coverage and depth, the findings provide solid evidence base to inform corrective measures by stakeholders to strengthen water PPPs. Discussed extensively with and accepted by stakeholders in the MoUD, the study is hosted on the official website of the Ministry for reference and use by cities. It underpins all further work, including capacity building and inputs to project initiatives, undertaken with the Ministry, states and cities and other stakeholders among think tanks, development partners ...etc

Outputs

1. Strengthening Processes in Preparing for Water PPP Projects

21. In the current sector context in India, PPPs hold the potential to bring about a much needed reforms to support a shift towards improved water supply service delivery. An overview over the past two decades reveals that water sector PPPs have overcome first level challenges, the most important of which have been (a): a clear shift in focus from bulk supply creation to distribution and to service delivery and b) recognizing that private sector efficiencies are more relevant than private sector investment, thus paving the way for substantial public funding for PPP projects.
22. Current initiatives under implementation, however, have thrown up issues common across projects, such as related to robustness of project preparation, financial sustainability, adhocism in contractual provisions, and deviations in procurement criteria and practices. These pose a real threat to the continued relevance of PPPs in the sector: experiences from other sectors³ point to weaknesses with regard to ensuring benefits to consumers and the exchequer, on account of inadequate attention to the above aspects. Moreover, there is evidence from the sector and elsewhere that such issues are acting as a deterrent to market interest, thus hurting further growth and development.
23. In order to continue being relevant, scale up and demonstrate success, water PPP projects must meet the second level of challenges – through sound project preparation, balanced contracts and transparent procurement. In so doing, they must reflect sector priorities: maintain a focus on service delivery while optimizing existing assets (making best use of scarce public funds); target financial sustainability in the medium to long term; and aim to build institutional capacity through the term of the contract, and subsequently, in order to sustain service delivery improvements after the life of the PPP. In the above, critical attention is to be given to the tension between the operator's need for new infrastructure to reduce operating costs and the asset owner's aim of minimizing capital investment.

³ Notably roads, ports and airports

Initiatives to facilitate scale up of processes towards greater inclusion must also, per force, pay greater attention to the capacity to multiply from individual initiatives to something approaching the scale of need. This requires the standardization of practices with appropriate political and financial processes.

This TA sought to support these objectives in the following ways:

- Analytical support to identify water service PPP options appropriate to the context of cities in India, to inform the World Bank-funded Karnataka Urban Water Supply Modernization Project (KUWSMP) **[Output (a)]**
- Analytical work to identify key principles and approach appropriate to urban water PPPs with regard to (i) project preparation (ii) assessment of financial sustainability (iii) project structuring and capital optimization (iv) operator expertise and (v) institutional structuring, in order to inform Government of India reform agenda **[Outputs (b), (c), (d), (e) and (f)]**

(a): Rapid Assessment of Water Supply Services (WSS) in Three Cities in India

[ANNEXURE (OUTPUT) 1: RAPID ASSESSMENT REPORT]

24. Contributing to a larger PPIAF funded activity to assess PPP options for mid-sized cities in India⁴, assessments were undertaken in the cities of Belgaum (June 2012), Bhubaneswar (July 2012) and Coimbatore (August 2012) to provide the context of WSS in typical Indian cities towards the identification of suitable PPP options. All three cities were proposing water supply improvement initiatives, of which two (Belgaum and Coimbatore) were considering PPP. Visits were undertaken and discussions held with commissioners, engineering and finance staff of the water supply department / PHEO, and state level officials. The key observations, highlighting unique challenges with implications for PPP options are presented below:

Aspect	City Level Observation	Challenge
Current Operations	<ul style="list-style-type: none"> ▪ In Bhubaneswar and Belgaum, operating budgets independent of revenue ▪ All three cities lack effective water supply information management systems ▪ Link between operations, cap-ex planning and financing is weak in all three cities 	Poorly structured utility / service provider
	<ul style="list-style-type: none"> ▪ Cost recovery in Bhubaneswar and Belgaum are 36.5% and 72% respectively ▪ Coimbatore implements a cess property tax to fund water services 	low operating cost recovery
	<ul style="list-style-type: none"> ▪ Supply in Bhubaneswar is two per day and in Belgaum two every three days ▪ Coimbatore daily hours of supply are not reported consistently 	Poor service standards
	<ul style="list-style-type: none"> ▪ Bhubaneswar is overstaffed, with 39 staff per 1000 connections ▪ Bhubaneswar and Belgaum have complete absence of metering; 	Low commercial and staff efficiency

⁴ “Evaluation of Water Services Public Private Partnership Options for Mid-Sized Cities in India”

Investment to meet Current Demand	<ul style="list-style-type: none"> None of the cities has completely mapped networks, or make use of GIS system 	Poor & uncertain data on asset stock condition
	<ul style="list-style-type: none"> NRW is between 50 to 60 % in Bhubaneswar and Belgaum, there is no data for Coimbatore The methodology to assess NRW remains questionable 	NRW unknown and often underestimated
	<ul style="list-style-type: none"> Network replacement is estimated 60% in Bhubaneswar and 80% in Belgaum Coimbatore lacks data on network condition Rehabilitation expenditure projections vary from city-to-city with Coimbatore's at US\$8 and Belgaum's at US\$152 per capita 	Capital expenditure for rehabilitation large and unknown
	<ul style="list-style-type: none"> Interconnected network, expansion/augmentation without consideration of hydraulics leads to inefficiencies 	Poor hydraulic design of networks
Investment to meet Future Demand	<ul style="list-style-type: none"> Urbanization/migration would depend upon economic growth of the city making it difficult to assess the population growth 	Population growth is high but unknowable
	<ul style="list-style-type: none"> Poor physical planning practices hamper the forecasting of physical development 	Geographic distribution of population is unclear
	<ul style="list-style-type: none"> In all cities, the DPRs made inconsistent assumptions about NRW and future water demand No city can cover cap-ex estimated through it's own budget 	Cap-ex planning is weak, and sources unclear
	<ul style="list-style-type: none"> State level water entities, as well as city involved in WSS in all three cities 	Institutional fragmentation

Drawing from the above, targets for PPP models for the sector were identified as:

- Building a ring-fenced, well managed, efficient utility
- Effectively control NRW levels through (a): active leakage detection (b): improved billing and collections' systems
- Be robust to uncertainty about the costs of achieving service improvements, by allowing for time and resources for information collection
- Improve information management and accountability
- Access to funds for asset improvement, with declining reliance on concessional terms over time. Create strong incentives tied to achieving financial sustainability.

These inputs fed into the generation of two PPP models viz., (a): Phased Performance Based Contract and (b): Joint Venture Partnership, which were discussed with stakeholders to inform development of the KUWSMP implementation model.

(b): Project Preparation for Water Supply Projects

[ANNEXURE (OUTPUT) 2: PROJECT PREP. NOTE & CHECKLIST]

25. Data management systems for urban water supply have typically been poor or non-existent – resulting in considerable inadequacies in the contours of projects that are put to bid, and problems

during implementation. This emerged as a key issue in projects reviewed, and as expressed by various stakeholders. Inputs from operators, consultants and project proponents were sought, and best practices reviewed in order to propose appropriate principles and approach to guide project preparation for water PPPs in the current context. These are elaborated below.

26. Project preparation for PPP initiatives must be in alignment with the performance or output based nature of PPP arrangements. Conventional project (engineering) reports prepared by the city and prescribing input parameters may be inappropriate since the operator is expected to bear responsibility for performance at specified standards. Preparation for PPP projects must also take cognizance of (a): the up-front lack of reliable information at city level, and (b): the lack of familiarity of consultants engaged in project delineation with operations, i.e., the importance of assessments or inputs from professionals familiar with operations (operators) in determining interventions to improve system performance

Detail Project Reports (DPRs) are required to fulfil two key requirements:

- provide relevant and adequate system information to private operators, in order to inform bid preparation and bid price; and
- arrive at an estimation of capital investment required for the purposes of determining financial sustainability and arrangements for financing

27. An important aspect of water PPPs as currently undertaken in India is that, in a majority of cases, the capex is being provided external to the PPP process. This makes the provision of a base level of reliable input parameters or information critical for success. This is irrespective of the output based nature of PPPs. Hence, project preparation for water PPPs should focus on establishing accurate data and information on the current assets, operations and consumers of the city's water supply system. In order to facilitate this, the minimum base level information required prior to engaging in a PPP has been specified; and credible methodology for procuring this has been suggested, making the risk associated with the data transparent. Support may be extended to cities towards meeting expenditure involved (towards surveys, investigations) in collecting data. The city should then use this information to further prepare a Detailed Project Report, elaborating on proposed interventions to improve water supply services and the consequent capital investment plan. The DPR will also specify parameters of the water supply system that may not be subject to change – such as design norms for service levels, design horizon for assets, asset type and pipe material.

28. The DPR (including all base data) will form the basis of the bid process to select the operator. Subsequently, the selected private operator takes over the city water supply system operations, and is allowed an adequate period of operating time typically 9-12 months, based upon which (and his expertise), the operator proposes a Project Implementation Plan (PIP), which may incorporate modifications to the DPR, and details (a) the project implementation plan and (b): the final revised capital cost estimate. The objective is to establish the operator's ownership of the project, and hence accountability for deliverables.

(c): Assessment of Project Financial Sustainability

[ANNEXURE (OUTPUT) 3: NOTE ON ASSESSMENT OF FINANCIAL SUSTAINABILITY & CHECKLIST]

29. Financial sustainability is the back-bone of any credible PPP project. Several water PPP projects in India have faced financial stress, as project preparation has focussed only on service delivery improvements; and financial sustainability has not been addressed. The financial difficulties that water PPPs have encountered are related to the underlying poor financial status of WSS sector. Tariffs are below cost recovery and not revised regularly, leading to poor operating cost recovery. As a result, cities are unable to meet increased O & M liabilities of improved and augmented services. In all water PPPs reviewed (barring Khandwa), the operator's payment is de-linked from tariff, and is dependent on city finances.
30. While project capital investments are typically grant (central and state) funded, grants do not cover full capital costs – the city is expected to meet a share of costs – and do not meet cost escalations. Moreover, water supply projects are vulnerable to change in scope; and have an on-going need for future capital investments for network augmentation. The financial sustainability of water PPP projects thus needs to be assessed with regard to requirements (and assignment of responsibility) for meeting
- Capital costs including unforeseen cost escalations or change in scope of work
 - Operational costs whether paid for by the city or by the operator
 - Future capital investments

It is thus proposed to deepen (but not replace) the financial model undertaken for water PPP projects, and extend assessment of financial sustainability beyond estimation of project IRR and equity IRR, into investigating *if the PPP project design ensures availability of finances for sustained service delivery*. A financial sustainability assessment (diagnostic) tool has been developed for this purpose, and is proposed to be integrated into PPP decision making processes. It is fully recognised that the design of tariff is central to the issue of financial sustainability, and achieving a fair deal for the poor. While this aspect has been stressed in all discussions, it remains the responsibility of the public sector asset owner. The impact of tariff on financial sustainability, however, is captured in the diagnostic tool.

31. The tool comprises financial, operational, risk-allocation and implementation related parameters and may be used by the city or appraisal agencies (a): at a very early stage of project development, broad project costs are available, to make a summary assessment of the suitability of the PPP approach, given the costs, existing tariff and city finances; (b): further at the DPR stage, to assess the ability of the city to meet the capital costs and operating subsidies. The probability for variations in project cost can also be assessed based on the quality of preparation underlying the DPR; and (c): at the appraisal and approval stage, to rapidly evaluate the impact of changes in project configuration, design and structuring on project financial viability – to enable development of a PPP project that is in line with the objectives and financial wherewithal of the city (d): still later at the bidding stage, when the PPP structure is finalised and a risk sharing framework is designed, to assess if the risk sharing terms are aggravating the financial risks.

It is proposed that the tool be incorporated in the city's DPR, submitted to funding agencies, so as to facilitate an evaluation of the financial sustainability and the risks of the project. The assessment can be regularly updated in further stages of the PPP project – for example, after the Operator prepares a Project Investment Plan, it may be updated to reflect the data gathered by the Operator and the final investment plan.

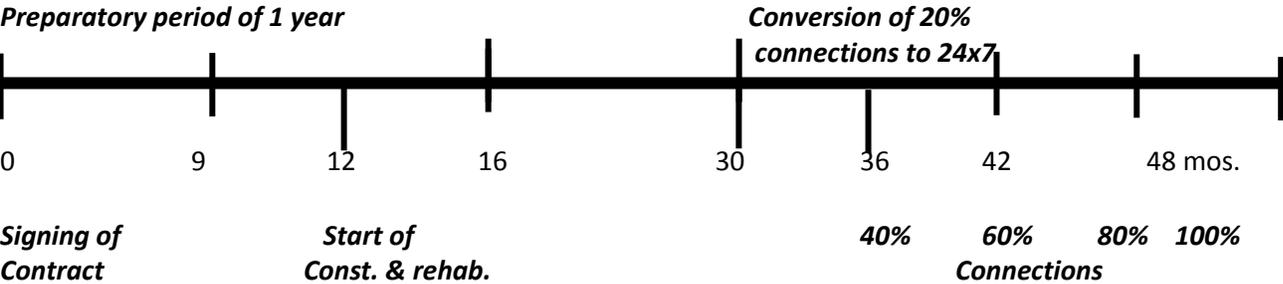
(d): Project Structuring and Capital Optimisation

[ANNEXURE (OUTPUT) 4: NOTE ON PERFORMANCE TARGETS, LINK WITH OPERATOR REMUNERATION & CAPITAL OPTIMISATION]

- 32. Since the private operator would be responsible for delivering on all (pre-determined) performance parameters in a PPP, having clear and realistic performance targets is imperative to objectively assess performance at the end of any time period of the contract. Moreover, once realistic targets are determined for different activities under the contracts, the private operator should be incentivised for the achievement of these performance targets. This is important to ensure that serious operators bid for projects, and bring in their entire expertise to deliver on targets. Yet very few, if any, PPP projects have seen a set of balanced performance targets and a clear linkage to operator revenue, which is significant enough to incentivise operator performance, while not being too stringent. This has contributed, among other, to discouraging bidders, disputes in implementation and a focus on construction activities (as against improvement of consumer service).

- 33. A study of several water PPP contracts was undertaken to assess target setting and phasing; and effective (quantum of) linkage of performance to operator revenue to inform framing of an appropriate mechanism for the same in the context of Indian water PPPs. International experience revealed that (a): given the poor data on underground assets, utilities have handed over services to the selected private operator in order that he may evolve an implementation plan to achieve pre-established performance standards (b): adequate time – depending on network length and complexity – is allowed for implementation (c): the achievement of targets is phased through the implementation period (d): the incentives and penalties are linked to very objective metrics with respect to each performance parameter, and are (to a certain extent) proportional to achievement of annual targets. In the event that the operator delivers performance above a certain base level, he is entitled to getting a proportional level of incentive

- 34. These principles were adopted to propose a mechanism of implementation for Indian water PPPs in three distinct phases(see below) – the Preparatory Period; the Rehabilitation and Construction Period and the Operations’ Period – incorporating performance targets with each phase of implementation, that are in alignment with Gol’s service level benchmarks for the sector.



A proposed mechanism for setting / establishing incentives is structured in a manner that may be contextualised to reflect city priorities and project objectives, by

- establishing a target level of performance, at which no incentives are applicable

- assigning scores depending on the operator's actual performance relative to target performance; and
- assigning weightages to specific scores while assessing overall performance, to reflect city priorities

The final performance score may thus be evaluated objectively, and linked to a segment of the operator fee to an extent which is again determined by the city – although the upper limit for, and segment of fee impacted is proposed.

35. This is accompanied by a recommended fee structure, the key principles of which are below:

- The fee should comprise two parts – fixed fee (linked to fixed costs) and variable fee (linked to operational costs)
- The fee structure would vary across the three distinct periods of the contract, reflecting activities to be delivered in each period
- The fee should be linked to Operator performance through the fixed fee, but to an extent that the operation of the system (and service delivery) is not affected
- The Operator should get his base costs (as quoted in the bid) at a performance level that is acceptable and achievable
- The fee structure should be amenable to change in a transparent and objective manner, in case of change in project parameters – particularly consumer base; and network length

(e): Developing a Standard RfQ for Water PPPs

[ANNEXURE (OUTPUT) 5: NOTE ON DEVELOPING AN RFQ FOR WATER PPPs & RFQ DOCUMENT]

36. Indian water sector PPPs have been seen to show a mixed record in bidder interest. The number of financial bids has been low in most projects (averaging 2.6 in 12 projects studied). Few adopt the internationally practiced two stage process in selection (only 4 of 12 projects studied). In three recently awarded projects in Delhi (2012), two projects received only two bids and the third received three. While a mix of nine domestic and international firms were shortlisted in Aurangabad (2009-10), only two bids were finally received.

An adequate number of diverse bids, at the initial stage and at the financial proposal stage, indicate that the project profile is attractive, the PPP contract is well designed and the procurement is on a level playing field. Repeated instances of poor bidder participation lead to a perception that water sector PPPs in India are unattractive. This in turn reduces bidder interest in investing in the Indian market and undertaking business development efforts. Civil society opposition also grows as a perception of cartelization is created.

37. Key problems identified in the existing approach are a) restrictive and inconsistent criteria; b) requirement for all partners to invest in the Project SPV, which discourages some international bidders; c) poor project structure or project potential; and d) rushed procurement process including the use of a single stage process. Each of these factors successively reduce bidder interest, leading to limited competition.

38. A model Request for Qualification (RFQ) document for water supply PPPs in India has thus been proposed. The model RFQ recommended by the Government of India for infrastructure sectors has been suitably adopted for the water sector. The proposed adaptations are a) greater emphasis water sector PPP experience, b) specifying requirements for a project team with operational experience, c) requiring O & M experience in continuously pressurised water distribution system, which may be demonstrated by the Lead Bidder; or brought in by an O & M partner (who need not take an equity stake in the bidding consortium) or by including a team of experts at the bidding stage itself who have the required experience.
39. Bidder interest could be further facilitated by conducting an annual scoring exercise similar to the exercise conducted by the National Highways Authority of India (which is non-exclusionary). Project proponents will be able to use these scores directly, when bidding out a project. Similarly, bidders may apply for a score at any stage, to reflect new associations or consortia. An electronic PPP market place may also be created to promote transparency and information sharing regarding forthcoming projects.

Together, these measures will serve to standardize the qualification criteria and process; and also provide adequate avenues for both domestic bidders and international operators to participate. Most importantly, standardization of the shortlisting process will also help interested bidders to gain confidence in the potential of water PPPs in India and encourage them to develop an India business plan.

(f): Institutional Requirements in Water PPPs

[ANNEXURE (OUTPUT) 6: GUIDANCE NOTE ON INSTITUTIONAL ISSUES IN WATER PPPs]

40. A PPP project introduces several changes within a city authority: a) it requires several preparatory steps which are different from conventional procurement, b) the responsibility of the public authority changes from an input focus to an output focus, except for the capital funding, provided either by loan or grant c) the authority needs to perform new roles such as that of facilitator, counter-party and contract manager; and d) it needs to manage increased expectations among customers and other stakeholders. The city authority will not be able to manage these roles in the business as usual approach. It needs to put in place several institutional mechanisms to navigate the preparation and implementation of a PPP project.
41. The guidance note on institutional arrangements seeks to familiarise cities with this changing role and the steps they need to take at different stages of the PPP project to successfully manage the change. The guidance focuses on specific requirements at each step of the PPP process, viz., a) project preparation, b) PPP design, c) procurement, d) contract award and start of PPP, e) contract monitoring and f) long term planning outside the scope of PPP. It illustrates the key tasks the ULB is expected to perform at each stage of the PPP process and the organisational structure that may be required towards this, including skills to be inducted and options for outsourcing of activities. The

note draws on the guidelines provided by the Department of Economic Affairs, Government of India and the Planning Commission⁵.

42. Additionally, the note also provides guidance to cities on two institutional aspects that are critical in a water PPP project
- re-deployment of employees – different mechanisms for deploying existing employees in the water supply function depending on the nature of PPP contract and the scope of PPP operations.
 - delegation of decision making – PPP projects require that cities successfully co-ordinate with the operator on a day-to-day basis, resolve disputes that may arise and help the operator co-ordinate with other public authorities. This requires cities to delegate hitherto centralised decision making powers to specific committees that should be set up for these purposes.

This guidance note is expected to sensitize cities towards the institutional changes that will be triggered by PPPs, in order to help them prepare and implement PPP projects better.

2. Providing Technical Assistance to Stakeholders in Engaging with PPPs

43. In seven years spanning 2005 – 2012, sixteen water PPP projects were attempted, and fifteen awarded, representing a significant increase in PPP activity over the previous decade. Several more projects are under preparation, promoted by Government of India's increasing push towards performance based implementation mechanisms for improving urban service delivery, including water supply. Recent initiatives, however, have faced similar hurdles as projects before them, a reason being lack of awareness of improved / appropriate practices, and weak capacity to improve on processes. The objective of the TA was to support stakeholder initiatives, on-going or proposed, in water PPPs, in order to (a): provide assistance in the adoption of improved practices to strengthen the outcomes of water PPPs; and (b): validate improved practices and tools proposed, and make necessary revisions if required, based on field experiences.

The activities taken up under this component included:

- Developing an Operations' Contract Document, for reference and use by cities, [Output (a)] – removed from deliverables under the TA (refer footnote 6).
- Support to the city of Jabalpur in undertaking technical and financial pre-feasibility assessments for improving water supply services on a PPP basis [Output (b)]
- On demand support to cities / other stakeholders in processes in preparing for PPP engagements [Output (c)]
- Review of Water Supply PPPs in India, and dissemination of the same [Link Provided]

⁵ PPP toolkit, Department of Economic Affairs, Institutional Mechanism for Monitoring of PPP projects, Planning Commission

(a): Operations' Contract Document for Water PPPs in India⁶

[ANNEXURE (OUTPUT) 7: CONTRACT DOCUMENT]

44. The review of five water PPP projects in India revealed significant gaps in the PPP arrangements and in contracts.
1. The projects were oriented towards expensive asset replacement programs rather than focusing on optimum use of existing assets through rehabilitation
 2. Contracts were based on poorly prepared projects and did not have mechanisms to allow the Operator to diagnose existing conditions and propose a project scope
 3. Though the projects were focused on service delivery, the contracts did not measure and link operator revenue to performance standards
 4. Risk sharing was not standard or balanced across contracts.
45. Other infrastructure sectors in India have overcome similar challenges by developing model contract agreements. In infrastructure sectors which involve green-field asset development, such as in highways and in ports, this approach has been impactful. It has standardized project structures and risk sharing and thus resulting in increasing the comfort of lenders and developers. Project development cycles have shortened and bidder interest has increased.
46. The availability of a similar standard contract in water sector was felt necessary (as requested by MoUD) to help scale up the number of PPPs in the sector and improve the quality of PPP projects being offered. However, the extent of standardization that is possible in water sector is comparatively lower. While addressing sector specificities, standard contract documents for water supply are also required to accommodate several context specific changes in a brownfield situation. They will also have to reflect far greater focus on O & M and service delivery aspects, as compared to green-field, asset (construction) based projects.
47. In line with this, a standard contract document has been developed with inputs from review of several ongoing water supply PPP contracts. The document includes all provisions that are relevant to water supply PPPs in India. The World Bank supported Karnataka Urban Water Supply Improvement Project (KUWASIP) project structure and contract agreement were found the most relevant for the approach that is envisaged, and was used as a starting point. Best practices from ongoing water PPPs, international water operating contracts and model concession agreements from other sectors in India were also drawn upon.
48. The standard contract document is designed keeping the requirements of cities with a population of 2 lakhs and above in mind, since private sector interest may not be forthcoming in smaller cities due to limitations of size. However, if smaller cities choose to pursue PPPs, these contracts are relevant for them also.

⁶ This is removed as an output under this TA, pending incorporation of peer reviewer comments received; and finalization in discussion with the Ministry. This is proposed to be undertaken under a new TA

An operations (non-investment) contract has been chosen as the most likely mode for private sector participation in the water sector in India at this stage. This is since cost recovery in water services is poor and ULBs are reluctant to revise tariff to a level where capital investments can be recovered, even partly, from customers. Therefore, investments are likely to be fully funded by cities, through grants (from Central and State Governments or from the municipal budget) or by raising commercial loans (which may be repaid from the general budget of the ULB). Therefore, an operations contract, with no private investment, is more suited to the current context. In the next phase, if cities commit to undertake measures required attracting private sector investment, concession type contracts could also be developed. However, this pre-supposes the implementation of a cost recovery tariff structure, or a robust mechanism for locking in operational subsidies derived from surpluses in the city's general budget. In the absence of this, it is unlikely that private sector operators will be prepared to take the risk of funding capital investments when recovery of such an investment seems unlikely for the foreseeable future.

49. In the proposed PPP structure, the entire responsibility for financing the capital expenditure rests with the city (using grants from State or Central Government and through own contribution). The contract envisages three phases. During a Preparatory Phase, the private operator is responsible for undertaking a diagnostic study of the existing system. Based on the findings the Operator would propose a rehabilitation plan reflecting ground conditions. The operator will be provided an incentive for utilizing existing assets and minimizing capital investments. In the Construction and Rehabilitation phase, capital expenditure will be carried out by third party contractors to minimize conflict of interest (with the operator); and to incentivize the operator to optimize capital expenditure. On conversion of the entire service area to continuous pressurized supply, the Operations Phase will commence which would be for a period of 4 to 8 years. The revenue to the operator will be linked to performance, which will include quality of service to customer, operating efficiency and revenue collection efficiency. During the operations period, existing assets retained by the Operator will be replaced at the cost of the city.

The city will retain the right to set and revise tariffs. Upon migration to continuous supply, the tariff structure will be an increasing block volumetric tariff, with adequate protection to the poor, to provide incentives for water conservation. The tariff may be fixed at, above or below the cost of service provision by the ULB. Any gap between revenue collection and Operator fee will be met by the ULB through its own general budget or through other sources.

The contract also envisages a Management Committee which will interface with the Operator regularly and will be a single point decision making arrangement related to the project. A monitoring agency will assist the Management Committee and will also be tasked with some independent responsibilities.

50. Within this broad model, ULBs may customize the PPP structure which could involve adjustments such as geographical scope of the project; source to tap or only distribution; method of redeploying ULB employees; implementation of capital works etc. While the standard contract is based on country systems, provisions that may be required to access international financial institutions are also separately highlighted. Flexibility has also been provided for ULBs to customize other contract parameters such as phasing of rehabilitation, extent of performance linkage to revenue, weightage for performance parameters, timeframes for obligations etc. The contract incorporates good industry practices for other standard provisions such as payment security, performance guarantee,

change in scope, force majeure, change in law, events of default, termination, indemnities, insurance and dispute resolution.

(b): Feasibility Support to Jabalpur Municipal Corporation

[ANNEXURE (OUTPUT) 8: JABALPUR CITY PPP STRATEGY]

51. Jabalpur Municipal Corporation (JMC), a city of approx. 1.1 million, has recently completed (Dec. 2013) implementation of a water supply improvement project, focussing on augmentation of bulk water assets, and extension of distribution network. However, the city was unable to translate the investment made into improvements in service delivery – a process further complicated by the existence of a substantial segment of old distribution network – and service efficiency. Supply is limited to 3 hours daily; operating cost recovery is a low 30%, and extent of Non-Revenue Water (NRW) is estimated at over 50%. Handicapped by weak technical capacity, the city was inclined towards introducing private sector involvement, with an objective to (a): undertake requisite operational and service delivery improvements (b): establish Management Information Systems (MIS) to enable efficiency in water supply operations (c): build an appropriate institutional structure with adequate capacity to sustain improvements in the long term.

52. At the request of the city, TA support was extended to the city in the following areas:

- Understanding PPPs and their implications, through presentation of case studies to the commissioner and his team; and elected representatives
- Identification of Project (geographic) Scope – four options were examined and evaluated, ranging from a small pilot to full city. The final decision to address the command area of the newly commissioned Ramnagara WTP as a first phase was guided by the capital investments already undertaken (ensuring that additional cap-ex requirement would be minimal); the size of the project, which covers 40% of the city population; the profile of the area, which incorporated newly developing areas, as well as proportional representation of slums; and the extent of old network in the area, which was a third of the total distribution network.

Subsequent to this, the city was advised to constitute a Steering Committee, headed by the Commissioner, and comprising key technical and financial officials, and staff responsible for data management, to lead the feasibility assessments required to develop project contours and implications for further presentation to and approval of the City Council.

- Technical and Financial Assessments, based on collation and assessment of base data related to the city and water supply system in the Project Area. The key findings of these assessments were (a): an investment of approx. Rs. 72 million is required to undertake requisite improvements in the network (coverage and rehabilitation; house service connections) (b): in the current context, the city may be able to finance only a small component of this through own resources, and options for financing the balance through state grants or lending entities have been suggested for further follow up (c): a realisation of approx. Rs. 10/KL would be required in order to ensure that operational costs are fully met under a private operator (d): this may be achieved through a re-casting of water tariff on a volumetric basis, ensuring that up to 70% of

consumers in the Project Area (incl. the poor) do not bear any additional burden, while receiving significantly improved services.

The assessments remain vulnerable to missing data, particularly with regard to customer data base; and condition of old distribution network. This has been highlighted to the Steering Committee, which has initiated measures to help bridge the gaps until transaction advisory services are procured (refer later).

- PPP Structuring – given the city’s key requirement for operating expertise, a ten year Operations’ contract has been proposed
- Adoption of a City Water Policy, including clear policies on connections and disconnections; connection modalities for the urban poor (incl. identification of poor; options for connections and handling of connection costs); water tariff structure, including determination of life-line supply at subsidized rate...etc.
- Institutional requirements of a PPP, going forward. This outlined capacity requirements at the city level for delivering the project and further contract management

An elected Council has recently taken office in the city, and the Steering Committee is preparing for a meeting with the body for further discussion and approval for appointment of a transaction advisor to take the process forward. In the interim, the city has been advised in implementing two initiatives to further inform the project:

(a): NRW Assessment in the service area of one Elevated Service Reservoir (ESR), through installing a bulk meter at the outlet of the reservoir, and retail meters at all house service connections, and public stand posts supplied by the ESR. The initiative covers an area of 4.3 sq. kms, and a population of approx. 63,000 (9200 house service connections), supplied through 5.1 kms of old (existing) distribution network. The initiative provides for recording meter readings for a period of one year after commencement, scheduled in April 2015 (3000 meters had already been installed in end-February).

(b): Arrears Recovery Drive, to clean up outstanding arrears of over Rs.103 Crores (\$ 16.5 million). A significant quantum of this is attributable to erroneous customer and billing records (non-existent customers, duplicate bills...etc), and the drive is expected to help establish a more accurate base line in respect of these aspects. As reported in end-February, the drive has resulted in recovery of approx. Rs. 6 Crores (\$ 1 mil.) in arrears, while eliminating over Rs. 24 Crore in erroneous demand, and resulting in the regularization of over 12,000 connections within 2-1/2 months of commencement.

(c): Support to Cities / Stakeholders in PPP Engagements

[ANNEXURE (OUTPUT) 9: SUPPORT TO PPP ENGAGEMENTS]

53. Communication to stakeholders plays a key role in water PPPs, and may often have a determining influence on the acceptance of initiatives. Providing a clear rationale for project arrangements, drawing upon the experience of previous initiatives, is an important aspect of this. A matrix comprising issues faced in water PPP projects reviewed, their impact on project implementation and objectives; and implications on design of future initiatives was prepared to support the communications’ component of KUWSMP. This enabled the project team to clearly highlight

mechanisms incorporated in the project design that were in alignment with the learnings from previous experiences. An extract is presented below:

S. No.	Issue / Challenge Faced	Consequence /Impact on Project	Implications for forthcoming project design	KUWSMP Response
1	Project preparation (data and design) has been weak, since cities lack reliable data on underground assets or operational performance	Estimates of network rehabilitation required have changed, and project costs have increased	(a): Recognise the limitations of project design prepared by consultants who are not in a position to access data; allow Operator a role in system diagnosis and design (b): incentivize project cost optimization (c): strengthen city water supply data systems (d): ensure access to additional finances to meet cost increases	<ul style="list-style-type: none"> • Extensive studies by reputable consulting firm (Tata) • Operator to submit a Service Improvement Plan in the first year after studying existing system, with annual updates to capture better information • Execution of capital works through third party contractors eliminates incentive to overload capital expenditure • Operator has incentive in the form of gain share based on savings in capital expenditure • Creation of asset database and condition assessment included in project design • Project investment budget set based on findings from the extensive studies noted above.

54. As part of the rapid assessment of the city’s water supply services, a review of the Detailed Project Report (DPR) for improvements proposed, and to be implemented on a PPP basis, was undertaken. On the city’s request, inputs were provided at subsequent discussions with the project preparation team, highlighting areas requiring strengthening under

- **Diagnosis of Current situation and PPP Approach:** The DPR proposed implementation of 24 x 7 in two pilot areas. Contradictions and gaps were noted in the assessment of the current water supply system, including the ambiguity on current service levels and around NRW; and the proposal for substantial asset replacement without clear rationale. It was suggested that the private operator be incentivized to establish a detailed baseline service level, thorough diagnosis and options for capital investments.
- **Institutional Strengthening:** The water supply operations in Coimbatore were fragmented functionally – with revenue collection, budgeting and operations handed by different

departments – and lacking adequate technical staff. It was suggested that the city start dialogues on setting up a municipal owned utility in charge of water supply and sanitation, as other had been established by several cities at a comparable stage of growth.

- Financial Sustainability of Operations: The city was going through complex transformations, including expansion of its jurisdiction, take-over of functions from the state level water utility, and implementation of large sanitation and sewage projects. Given the scale of investments in water supply and sanitation, it was suggested that Coimbatore city make a long term assessment of the financial resources needed to sustain water and sewage operations, and implement a credible financial and operating plan for water supply and sanitation

(d): Review of Water Supply PPPs in India

<http://www.wsp.org/sites/wsp.org/files/publications/Running-Water-in-India-Public-Private-Partnership-Initiatives.pdf>

55. Although water PPPs in India have been on-going since the early 1990's, there is little information available in the public domain on the process and implementation experience of projects that may serve to inform further initiatives for PPP, or Government of India direction to the same. In order to address this gap, an in-depth review of recent water PPP initiatives was undertaken. The five projects reviewed represented all PPP initiatives in urban water supply undertaken in the country between 2005 and the end of 2011 with a full city distribution focus (only 8 were operationalized; 2 were dropped; and of 2 identical projects, only 1 was taken up for review). The review resulted in a publication that was disseminated widely, and very much appreciated by the MoUD, which has hosted both the Executive Summary and the full document on its official web-site.
56. The learnings and inferences emerging from the study are being taken up as part of the emerging reform agenda of the Government of India, which is seeking to mainstream a performance based approach to improving water supply and sanitation service delivery improvement. It has been discussed with various partners and representatives of the Indian water sector; and has formed the basis for much of the further work undertaken under this TA. Inputs provided in deliberations drawing upon cases in the report and international best practices referred to include
 - Presentation to Principal Secretary, Govt. of Madhya Pradesh on Reforms in the Water Sector through Private Sector Participation (intl. cases) – June 2013
 - Presentation in ICRIER's Program on Capacity Building and Knowledge Dissemination on Urbanisation in India (Focus: Issues in Urban Water), with participation from city and state level representatives – February 2014
 - Sharing of findings at Senior Officer's Meeting at MoUD, to establish direction on reform agenda – August 2013

Learning and Recommendations

57. A review of experiences in the past two decades (1991 – 2011) reveals that PPPs in the urban water sector have recognized first level challenges. The most important of these have been a) a clear shift in focus from bulk supply creation to distribution and to service delivery and b) recognizing that private sector efficiencies are more relevant than private sector investment, thus paving the way for substantial public funding for PPP projects. The salience of improved efficiencies in

effecting sector reform has also been an important justification for increased public support: PPPs are being perceived as instruments of sector reform that may be more effective than attempts undertaken (over several decades) through public sector entities. Thus, while “cities could, in principle, improve their management skills and deliver better quality of services, given the complex web of relationships, often infusion of a new organization, or private participation, tends to catalyze success.”⁷ It is this perception that underlies Government of India’s increasing push towards performance based implementation mechanisms, through private sector, for improving urban service delivery, including water supply.

58. However, the complexities of PPPs are also well recognized: projects contracted so far are largely still under implementation, and multiple issues with regard to project sustainability and contract management have been experienced and reported. These are related to both quality of preparatory processes, as well as capacity of public stakeholders in engaging with private sector. This TA sought to address these aspects through assistance to the Ministry of Urban Development in developing tools to facilitate robust PPPs; and engaging with states and cities to build capacity for adoption of improved practices in initiatives under preparation. Progress on both aspects of the work was constrained by the ambiguity associated with the Ministry’s funding program after the completion of the JNNURM; and elections at national level. The funding issue remains, as the new national government has yet to announce the contours of a program for municipal infrastructure and service delivery. All indications so far, however, point to a renewed and deeper focus on engaging with private sector.
59. Thus, while principles have been discussed and agreed with stakeholders in the Ministry; and tools developed to facilitate uptake, these have, as yet, not been integrated into implementation mechanisms. At the state and city level, progress was interrupted due to the same reasons, compounded further by state and municipal elections in Madhya Pradesh and Maharashtra (where, despite interest and a strong request, headway could not be made). However, the proposed principles and tools found significant acceptance, as evidenced in the feedback workshops held in five states – Karnataka, Tamil Nadu, Madhya Pradesh, Orissa and Andhra Pradesh – and request received to take up implementation on the proposed basis in Bhubaneswar, Orissa. A key lesson of the interactions at state level was that significant buy-in may be generated for implementation, when a clear direction is perceived as being established at national level, which is still flexible to state contexts and preferences (i.e., state feedback). Valuable feedback was received during the workshops towards such contextualization.
60. A follow on TA would thus support the implementation of principles and tools through national government funding programs; and the development of further options – specifically in relation to contract documents – to address varying situations. Discussions with the Ministry have evidenced an interest in this. Such a TA would also focus on building state and city level capacity to take up recommended practices, with requisite contextualisation. This would inform the further refinement of the tools. As mentioned earlier, support to implementation could make significant headway / impact, if backed by the strength of a national program (as envisaged).

⁷ High Powered Expert Committee Report on Urban Infrastructure in India, 2011

60. While the current work addressed areas agreed upon with (and of immediate interest to) the Ministry, water PPPs can benefit from further shifts in approach. These may be addressed by further TA, and include
- a. A rethinking of the tenure and manner of Gol funding that may enable cities to leverage operator expertise through alternate options for improving water supply services (such as phased improvement plans)
 - b. Embedding phased cost recovery for water sector programs as a pre-requisite for Gol funding for city initiatives in PPP.
 - c. Seeking financial sustainability as a goal of city water PPP projects, building on the current interest (evident in both MoUD and from cities) – and addressed by the financial sustainability tool – to examine whether a PPP project would be financially sustainable.