RELEVANT PPP MODELS
FOR
URBAN SECTOR

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BACKGROUND

- There is no universal definition of PPP and the specific nature of partnership depends upon the type of project, scope of services, duration, responsibilities of parties and the allocation of risks between public and private sectors.

- Service Contract, Management Contract, Build-Operate-Transfer (BOT), Design-Build – Finance-Operate & Transfer (DBFOT), Build-Own-Operate & Transfer (BOOT), etc. are different forms of PPP arrangements (models).

- Assessing commercial viability is a crucial step in the PPP process as it will highlight important financial parameters relating to the project, which would help the ULB to change the project configuration if required or to consider the most suitable financing option for the project.

- Ability of define performance standards is a crucial element of successful PPP design. Services that involve greater degree of human interaction pose greater challenges to definition of performance standards.
**BACKGROUND**

- The main characteristics of a PPP model of public infrastructure and service delivery are:
  
  a. the cooperative partnership between public institutions and the private sector to deliver public infrastructure projects and/or services,

  b. sharing of certain project risks between authority and the private sector on the basis of risk managing capacity, focus on project outputs rather than project inputs, and

  c. introduction of private financing.
BACKGROUND

Accordingly, the scope of PPP projects includes one or more of the following:

- Preparation of designs
- Construction of infrastructure asset
- Transfer of any proprietary technology
- Maintenance of assets
- Delivery of services to citizens, if applicable
- Collection of user charges.
Background

Parameters for Evaluation of PPP Models

- Operational Efficiency
- Potential Incentives for Private Players
- Access to Finance
- Investment Requirement

Project Viability
BACKGROUND

- Depending upon the project scope, project cost or estimated investments, allocation of roles and responsibilities, project duration and risk allocation framework, a range of PPP models could be applied. These vary from simple service contract which could be renewed every year to long-term concession contracts which could extend up to 25-30 years.

- It emerges that the suitability of PPP models would depend on several factors such as the authority’s financial strength, the city-specific context, maturity of private players in the sector and the level of control that the authority wishes to maintain in the system.

- While no single model can be judged as the most appropriate model, the city needs to weigh the pros and cons of all the models and then choose the model that best suits its specific requirements.
While conceptualizing a PPP project, a proper due diligence of the Project along with related risk identification has to be done and the following things needs to be looked at prior to tendering:

1. Clarity in objectives – The objective of seeking private partnership should be clear right at the outset. It could be for development or construction of the project, or maintenance and service delivery, or technology transfer or for a combination of these. The specific objective would determine which mode of PPP would be most suitable.

2. Improvement in service delivery – It covers increasing the coverage of the service to hitherto uncovered areas as well as improving the quality of services currently delivered. If the performance benchmarks are clearly identified it is possible to link payments to actual services and make the system transparent for the ULB and the private party. **Ability to define performance standards is a crucial element of successful PPP design.**
### Project Arrangements

#### A few Examples:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Construction/ investment</th>
<th>Service delivery</th>
<th>Monitoring and regulations</th>
<th>Payment for services</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Solid Waste Management</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary collection</td>
<td>private</td>
<td>Directly by the private party</td>
<td>Best monitored locally by RWA</td>
<td>Directly by the users</td>
</tr>
<tr>
<td>Secondary collection</td>
<td>Private</td>
<td>Private</td>
<td>ULB. Community groups could monitor timely waste collection.</td>
<td>By the ULB based on actual volume of waste.</td>
</tr>
<tr>
<td>Treatment and disposal</td>
<td>Private</td>
<td>Private</td>
<td>ULB</td>
<td>Directly by the ULB backed by user charges.</td>
</tr>
<tr>
<td><strong>Water Supply</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development of water treatment plant</td>
<td>Private</td>
<td>Private</td>
<td>ULB</td>
<td>ULB</td>
</tr>
<tr>
<td>O&amp;M of water supply</td>
<td>Some investments by private and some by ULB.</td>
<td>Private</td>
<td>Through regulator / state govt</td>
<td>Direct users (with some risks shared between ULB and private party)</td>
</tr>
<tr>
<td><strong>Urban transportation</strong></td>
<td></td>
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<tr>
<td>Corridor development for urban bus transport</td>
<td>Private</td>
<td>Private</td>
<td>ULB/ State govt</td>
<td>payment by ULB based on annuity</td>
</tr>
<tr>
<td>O&amp;M of urban bus service</td>
<td>Private</td>
<td>Private</td>
<td>ULB/ independent regulator</td>
<td>Directly by users. (Operating subsidy if required)</td>
</tr>
<tr>
<td>Construction of bus terminals</td>
<td>Private</td>
<td>Private</td>
<td>ULB</td>
<td>Share of ticket revenues, use of real estate</td>
</tr>
<tr>
<td><strong>Sanitation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction of public toilets</td>
<td>Private/ Public grants</td>
<td>Private</td>
<td>ULB</td>
<td>Directly by users. (Advertising revenue if necessary)</td>
</tr>
</tbody>
</table>
Each of the above combinations refers to various models of PPP which entails different degree of investment by the private party, risk sharing, time duration, etc. These models range from simple service contracts to long-term concession agreements as well as Build-Own-Operate arrangement.

The project may entail different risk return trade-off for various stakeholders and this could be serious impediment to progress on the project. Project structuring is essential to balance the costs and benefits from the projects among various stakeholders.
Project Structuring

- Project structuring involves allocation of roles and risks for various modules and activities (such as construction, operation and maintenance, etc) under the project to different stakeholders. The preliminary project viability and analysis of project arrangement options form an important input into determining the project structure.

- If initial assessment highlights that the project cannot bear the capital cost of certain components, the scope and structure of the project could be modified to lower the capital costs that will be taken up under PPP format, keeping some capital costs for public funding.

- The project may entail different risk return trade-off for various stakeholders and this could be serious impediment to progress on the project. Project structuring is essential to balance the costs and benefits from the projects among various stakeholders.

- Inputs from the commercial viability assessment will highlight certain changes in project structure that could make it financially viable. This will entail a different risk sharing arrangement than initially envisaged and will require further stakeholder consultations.
**RISK MANAGEMENT**

Four steps in risk management are:

1. Identify key risks to the project;
2. Assess impact of key risks;
3. Allocate risks to parties most capable of handling; and
4. Take measures to mitigate/reduce risks.

The value drivers of PPP transactions include the transfer of operational and commercial risks to the private sector, efficient management as well as innovation that is encouraged by an output specification set by the public sector.
Each project has its own unique set of risks. However, they could be broadly classified into construction risks, financing risks, demand risks, political risks and regulatory risks. The impact of a risk is a function of the likelihood of its occurrence and its severity. The most important step is to allocate the different risks across the stakeholders on the basis of who is best suited to handle and mitigate the risk.

- If the private party is asked to bear a high degree of risk due to procedural delays, absence of legal framework, lack of clarity for tariff revisions, demand uncertainty, etc., the return expected by the private party would also be higher.

- Optimal allocation of risks across stakeholders will reduce the overall cost of bearing the risk and thereby lower the project cost.
**PPP MODELS**

The choice of suitable PPP model would be determined by the specific circumstances and details of a project. However, the following principles should be used as a guide for determining the most suitable PPP model for a project.

1. **Match the PPP model to objectives**: This should be the building-block for determining the most suitable PPP model.
   a. If private sector financing of infrastructure investments is a priority then concessions, BOT and its variants are most suitable.
   b. On the other hand, if the objective is to realise efficiency gains from stand alone activities such as meter-reading, pipe-laying, street sweeping, drain cleaning, etc. and/or to bring down costs in these activities then service contracts would be the ideal option.
   c. Management contracts and lease would be more suitable for bringing about efficiency improvements in inter-related parts of the activity chain through superior private sector management skills, risk and thereby lower the project cost.
2. **Quantum of preparatory work required:** Service contracts can be implemented with very little preparatory work whereas higher order PPP models such as management contracts, concessions and BOT require more preparatory work.

- Such preparatory work may include details project preparation, establishment of baseline date and tools for monitoring private sectors' performance, a conducive regulatory and legal framework that would insulate the private party from change in political regime.

- For example, a concession for a water supply project will require a clear multi-year framework for tariff revision.

3. **Institutional disruption and adaptability:** Models such as concession and lease deal with improving efficiency of present operations and would involve the ULBs and state government institutions to undergo a sizeable shift in the scope of their activities.
The staff in these institutions may need to acquire new skills. If the institutional landscape is not amenable to such changes then models such as service contracts and simple forms of management contracts may be more suitable.

Notable exceptions to this principle are projects which involve a specific activity or set of activities that are not being undertaken by the ULB or can be ring-fenced from the ULB’s present operations. Typical examples include new water treatment plants, waste processing plants and landfill sites.

4. **Benefits commensurate with private sector responsibility:** As the scope and responsibilities of private sector is increased, there is greater scope for achieving efficiency gains and expanding the benefits from the project. However, higher benefits go hand-in-hand with need for more preparatory work, wider political will for reform, and ability of ULBs to adapt to change.
5. Need for complementary sector reforms: If there is need for fundamental reforms in the sector, then certain forms of PPP may even contribute to precipitate a crisis.

- For example, a BOT project for water treatment plant and supply of bulk water to ULB may lead to higher revenue deficit if the cost of water is higher than the user tariffs.

- A contract for primary collection and transportation municipal solid waste will increase pressure on the landfill site unless parallel effort is taken to encourage source segregation, waste minimization, recycling and suitable processing and disposal of waste.

- In such situations, the impact of PPP on the sector and the ability of ULB to take-up complementary reforms should be an important determinant while choosing the PPP model.

The choice of appropriate PPP model should emerge out of analysis conducted in the earlier stages.
THANK YOU