Introduction to PPP

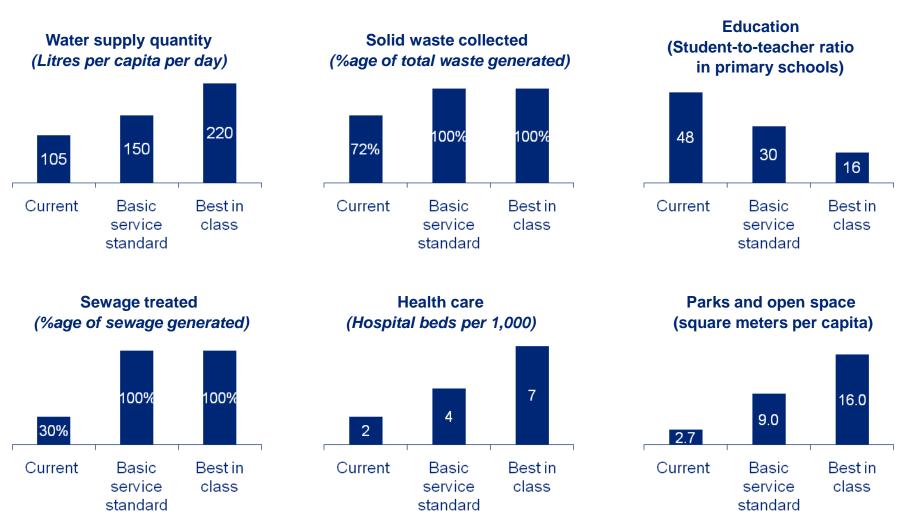
Understanding PPP Concepts and Principles

Dr. V. Deepa Nair Professor & Head, CUDS, DR MCRHRD Institute

Infrastructure scenario: India snapshot existing infrastructure under tremendous pressure

| Sector | Infrastructure deficit at the beginning of 11th FYP |
|----------------|--|
| Roads/Highways | 65,590 km (79,116) of NH comprise only 2% of network and carry 40% of traffic Single-laned: 38% (24) 2-laned: 50% (52) 4-laned: only 12% (24) |
| Power | 13.8% peaking deficit;9.6% energy shortage;40% transmission and distribution losses |
| Railways | Old technology Saturated routes Slow speeds (freight: 22kmph; passengers: 50kmph) Low payload to tare ratio (2.5) |
| Airports | Inadequate runways, aircraft handling capacity, parking space and terminal buildings |
| Ports | Inadequate berths and rail/road connectivity |

Infrastructure scenario: India snapshot existing infrastructure under tremendous pressure



Source: India's urban awakening, April 2010, McKinsey Global Institute

Infrastructure scenario: India snapshot Infrastructure needs

- India is the second fastest growing economy.
- Inadequate infrastructure:
 - significant constraint on India's growth potential
 - retards GDP growth rate by 1-2 % p.a. (estimates)
 - acts as a major barrier to Foreign Direct Investment
 - hinders the objective of Inclusive development
- Eleventh Five Year Plan recognizes that adequate, cost-effective and quality infrastructure is a pre-requisite for sustaining the growth momentum. This is reaffirmed in the approach documents to the 12 FYP

Infrastructure scenario: India snapshot

Infrastructure needs

Requires increasing infrastructure investments

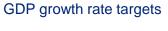
the infrastructure gap in the

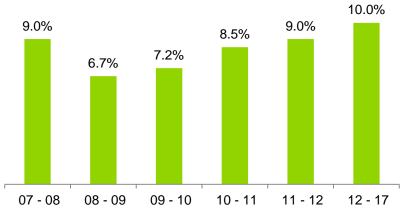
country was holding back economic growth by 1.5-2 per cent every year"

> Mr P. Chidambaram. Former Minister of Finance

Required infrastructure investment in % of GDP

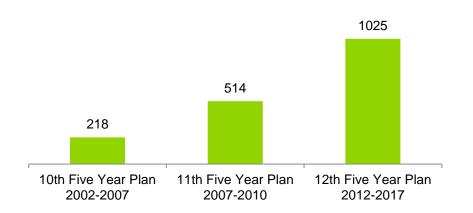


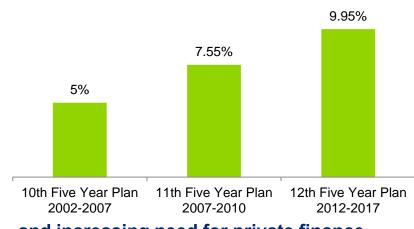






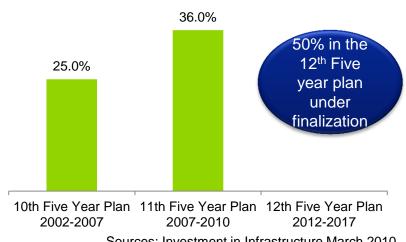
Amount of infrastructure investments in USD billion





...and increasing need for private finance

Private finance as % of total finance need

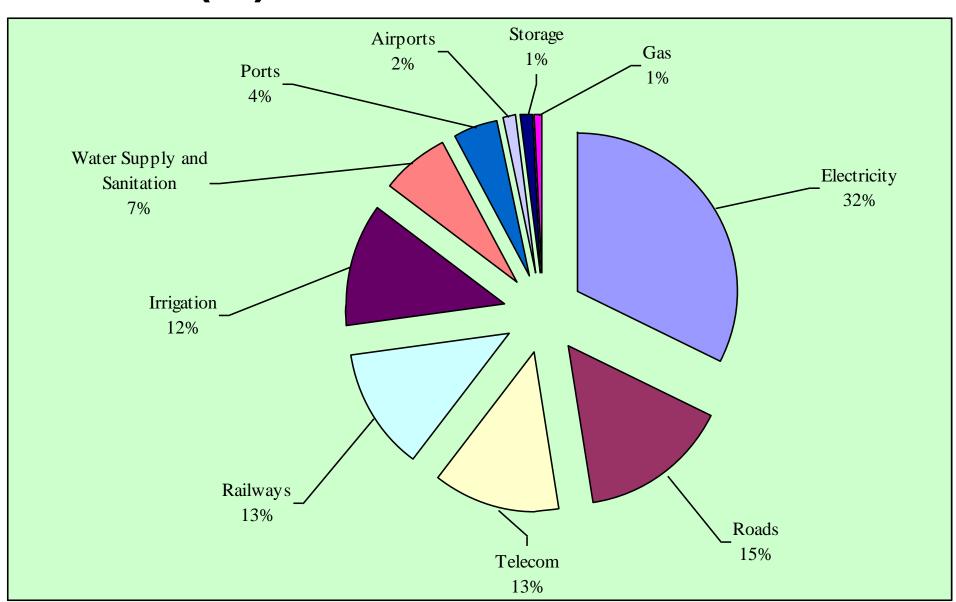


Sources: Investment in Infrastructure March 2010

Projected Investment in Infrastructure

| X | | an | XI Plan | | XII Plan | |
|------------------------------|------------------|-----------|------------------|--------------|------------------|-----------|
| Sectors | US \$ billion | Share (%) | US \$ billion | Share (%) | US \$ billion | Share (%) |
| Electricity (incl. NCE) | 72.96 | 33.49 | 166.63 | 32.42 | 350.1 | 32.7 |
| Roads and Bridges | 36.22 | 16.63 | 78.54 | 15.28 | 175.9 | 16.4 |
| Telecommunication | 25.84 | 11.86 | 64.61 | 12.57 | 181.5 | 16.9 |
| Railways (incl. MRTS) | 29.91 | 13.73 | 65.45 | 12.73 | 123.7 | 11.5 |
| Irrigation (incl. Watershed) | 27.88 | 12.80 | 63.33 | 12.32 | 97.0 | 9.0 |
| Water Supply and Sanitation | 16.20 | 7.44 | 35.93 | 6.99 | 49.1 | 4.6 |
| Ports | 3.52 | 1.61 | 22.00 | 4.28 | 38.0 | 3.5 |
| Airports | 1.69 | 0.78 | 7.74 | 1.51 | 16.9 | 1.6 |
| Storage | 1.20 | 0.55 | 5.59 | 1.09 | 28.6 | 2.7 |
| Gas | 2.43 | 1.11 | 4.21 | 0.82 | 11.2 | 1.0 |
| Total US \$ billion | 217.86 | 100 | 514.04 | 100 | 1072.1 | 100 |
| Rs. crore | 871,445 | 100 | 2,060,193 | | 5,574,663 | 100 |

Projected Eleventh Plan Sector Share (%)



Infrastructure scenario: India snapshot

Infrastructure needs: bridging the gap

"Investment gap"

- Gap between existing and required infrastructure
- Improving the availability of infrastructure by increased investment in the infrastructure assets
- As per the 11th Five year plan, the gross capital formation (GCF) in infrastructure should rise as a share of GDP from 5% in 2006-07 to 9% by the end of the plan period (2011-12)

"Efficiency gap"

Need to enhance quality of service, minimum acceptable standards of service

Options to bridge the gap

Traditional public procurement

Public Private Partnerships (PPPs)

Privatisation

PPPs are an option to supplement scarce public resources and improving efficiencies without necessarily transferring ownership to the private sector

Introduction to PPP

Understanding PPP Concepts and Principles

Objectives of the Training Module

To introduce the basic concepts and rationale for PPPs

Basic concepts of PPPs (What is PPP?)

Key Concepts

- Definition of PPPs
- Common characteristics
- PPPs in comparison with traditional public procurement
- Common myths and concerns related to PPPs

Rationale for PPPs (Why PPP?)

- Key Concepts
 Potential advantages of PPPs
 - Possible concerns of PPPs

**How to do PPP?

| Key Concepts | Common PPP models Critical success factors across PPP Life cycle Common pitfalls to avoid |
|----------------------|---|
| Pedagogical Tools | Case examples explaining different PPP modal variants |

Introducing PPP Structure of the Training

What is PPP?

Understanding the Characteristics of PPPs, common myths & concerns

Effective and
Efficient
Delivery of
Public Services

How to do PPP?

Understanding the Common PPP models and Critical Success Factors

Why PPP?

Understanding the Rationale for PPPs

Basic concepts of PPPs (What is PPP?)

Key Concepts

- Definition of PPPs
- Common characteristics
- PPPs in comparison with traditional public procurement
- Common myths and concerns related to PPPs

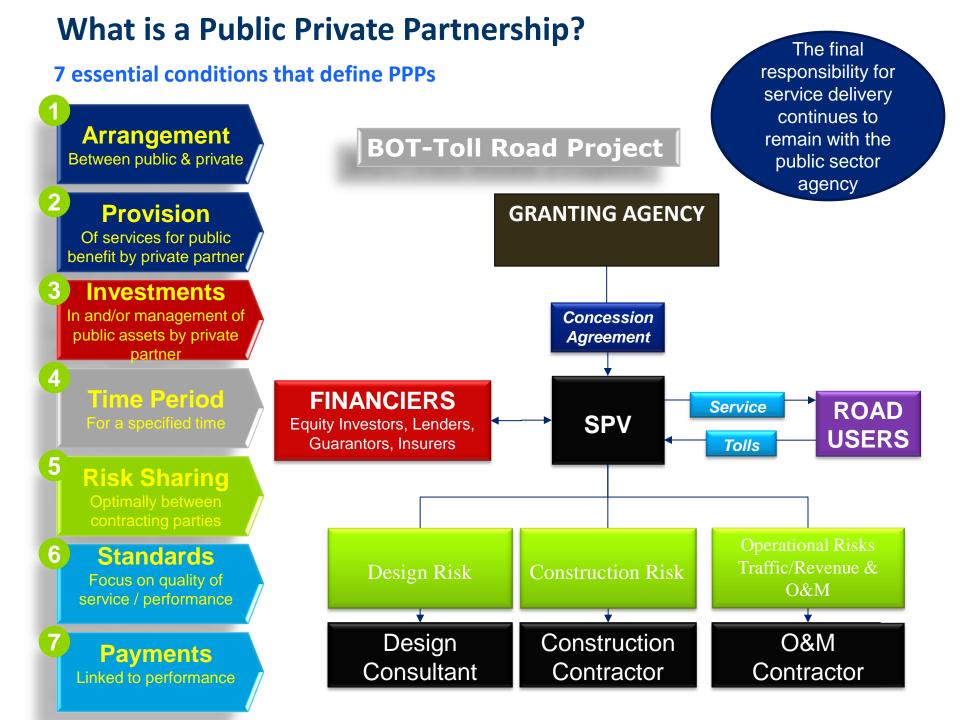
What is PPP? Defining PPPs



Department of Economic Affairs, Govt. of India defines Public Private Partnerships (PPPs) as:

- ✓ An arrangement between government or statutory entity or government owned entity on one side and a private sector entity on the other,
- ✓ for the provision of public assets and/or related services for public benefit,
- ✓ through investments being made by and/or management undertaken by the private sector entity for a specified period of time,
- ✓ where there is a substantial risk sharing with the private sector.
- ✓ and the private sector receives performance linked payments that conform (or are benchmarked) to specified, pre-determined and measurable performance standards.

The above are Essential Conditions in the definition. In addition there are several desirable features or good practices that can be adopted.



What a PPP is & what it is not

- 1. PPP is not privatisation or disinvestment
- 2. PPP is not about borrowing money from the private sector
- 3. PPP is more about creating a structure
- ... in which greater value for money is achieved for services
- ... through private sector innovation and management skills
- ... delivering significant improvement in service efficiency levels
- 4. This means that the public sector
- ... no longer builds roads, it purchases kilometres of maintained highway
- ... no longer builds prisons, it buys custodial services
- ... no longer operates ports but provides port services through world class operators
- ... No longer builds power plants but purchases power

An alternative procurement option

The final responsibility for service delivery continues to remain with the public sector agency

- PPP is only <u>one of the several options</u> available for procuring infrastructure.
- PPPs should not be seen as a replacement of the traditional public procurement.
- PPP should be applied only where it can provide better value for money for the public at large.
- PPPs recognize that both the public sector and the private sector have their own strengths.
- PPPs attempt to balance the strengths of both parties, to create a <u>win-win</u> <u>combination.</u>

PPP is not a panacea to all our infrastructure requirements. It is a tool that should be considered along with other options of procurement.

Traditional public procurement: Role of private sector

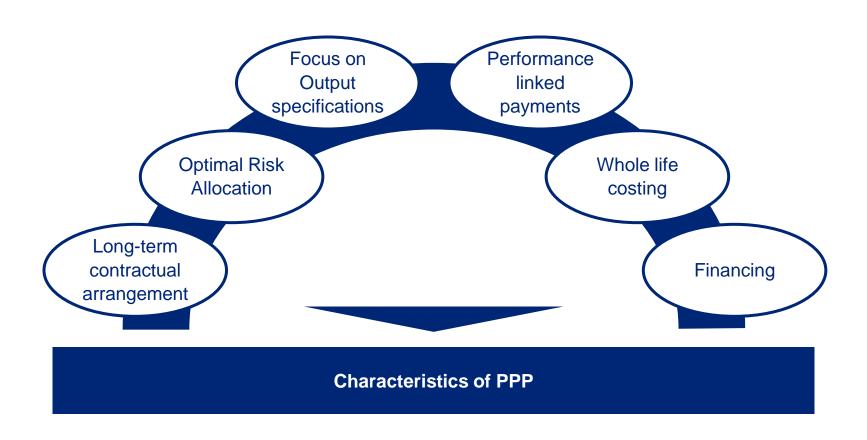
- Public authority is vested with the responsibility of developing the infrastructure
- Responsibility of Public Authority:
 - Design, Build, Finance individual projects
 - Operate and Maintain once the project is completed
- Involvement of Private sector:
 - Public authority utilizes the services of the private sector for Design and Construction, with award of individual contracts.
 - Government generally uses <u>lowest price tender method</u>.

Comparison: Traditional public procurement and PPP

| Characteristic | Traditional public procurement | PPP |
|-------------------------|---|--|
| Focus | Procuring Assets | Procuring Services |
| Project management | Public sector is responsible for all project management roles | Private sector manages overall project - design, construction, operations and maintenance. Focus on project life cycle expected to bring efficiency. |
| Service Delivery | Public sector directly responsible for service delivery to users | Private sector directly responsible for service delivery to users |
| Financing | Public sector responsible for financing the project. Thus financing impacted by budgetary allocations and then actual disbursements | Private sector may contribute finance through debt and equity issuances |
| Risk Sharing | Public sector bears all project risks. Risk sharing limited to the extent of warranties. | Risks allocated to parties which can manage them most efficiently |
| Contractual Arrangement | Short term, generally segregated contracts for asset creation (BOQ based) and maintenance. | Long term contracts- Public sector/users pay for services linked to performance. |

PPP:The public sector procures a service, not an asset, from the private sector.

Characteristics of PPP



Role of public sector: Facilitator and enabler

PPPs: Common Myths/Concerns

| Myth/Concern | Clarification |
|---|---|
| Profit motive of private sector is incompatible with the service motive of public sector | No. The key is to harness private sector's profit motive, by incentivizing them to provide better quality service and earn <i>reasonable return</i> . |
| PPPs increase user tariffs | Not Necessarily. When appropriate safeguards like effective regulation and/or adequate competition are in place. However in sectors where existing tariffs are inadequate to cover costs of specified level of service tariffs may initially require some upward adjustment. Over time efficiency gains expected to rationalize tariffs. |
| Money for PPPs comes from private sector "pockets" | Initially, YES. But private sector would make those investments provided they can recover those investments either from users or the government with reasonable return. |
| Once a private sector partner is brought in, there is little or no role for the public sector | No. Public sector's role changes from direct involvement in construction and service provision, to ensuring that the PPP delivers value for money for the government and better services for users. |

Why PPP?

Rationale for PPPs (Why PPP?)

| Key Concepts | Potential advantages of PPPsPossible concerns of PPPs |
|----------------------|---|
| Pedagogical Tools | Reading Material: Common benefits and objections to PPPs: Extract from Closing the Infrastructure Gap: The role of Public Private Partnerships (A Deloitte Research Study 2006) |

Why PPP?

Availability of Private sector finance (most commonly cited reason):

Through PPPs governments can leverage private sector finances to meet the infrastructure needs.

Achieving greater Value for Money through Efficiency gains:

In principle, PPPs can improve VfM by:

- Incentivising On-Time and Within-Budget delivery
- Optimising the Life cycle costs
- Providing an opportunity to innovate
- Optimizing the risk allocation

Expectations of government & private sector

Government

- Harness private sector efficiencies (on-time, on-budget delivery; access to latest technology etc.)
- Augment government resources
- Provide better value for money
- Facilitate improved access and service delivery

Private sector

- Viable business opportunity
- Fair distribution of risk & responsibility
- Transparency in procurement
- Consistency in legal and regulatory framework
- Stable political and economic environment

Why PPP?

Potential advantages & Possible concerns

Potential Advantages

- Access to private sector finance
- Higher Efficiency
- Increased transparency in the use of funds

Possible Concerns

- Difficulty in demonstrating VFM in advance
- Higher Transaction Costs
- Risk of Contract renegotiation
- Enforcement and Monitoring

How to do PPP?

**How to do PPP?

| Key Concepts | Common PPP models Critical success factors across PPP Life cycle Common pitfalls to avoid |
|----------------------|---|
| Pedagogical Tools | Case examples explaining different PPP modal variants |

How to do PPP?

The essence is partnership



Purpose of Partnership

To deliver a project or a service traditionally provided by the public sector

Principle of Partnership

To allow each party to do what they do best so as to provide greater value for money for the public at large

Role in Partnership

The public sector role is redefined as one of **facilitator and enabler**, rather than being involved in direct management or delivery of services.

Type of Partnership

The type of partnership or the choice of PPP Structures is **limitless** and depends on the <u>extent of risk and responsibility</u> <u>transfer</u> to the private party.

The key is to structure a win-win arrangement

How to do PPP?

Understanding the common PPP Models

- Even under Traditional Procurement Private sector has been involved in developing the infrastructure
- PPP provides another <u>procurement option</u> by increasing the <u>involvement of</u> <u>the Private sector</u> by transferring more <u>responsibility and risk</u>.
- Choice of partnership structure (PPP Models) is limitless and depends on the <u>extent of risk and responsibility transfer</u>
- There is <u>no one generic</u> or best PPP model.
- PPP Structure <u>is tailored</u> to meet the specific requirements of the project.

PPPs come in various shapes and sizes...

PPPs come in many shapes and sizes

Across many infrastructure sectors...

Power

Generation Transmission Distribution Transport
Roads
Airports
Ports
Railways
Terminals

Urban
Water/Sewerage
Solid Waste
Transport
(Metro/BRTS)
Parking Lots

Education

Facilities Mgmt. Service Delivery

Health

Facilities Mgmt
Clinical
Services
Diagnostics

Private Sector can participate through....

- In several ways/forms...
- Performance/management contracts
- Leases
- Concessions (BOT, BOOT, BOO, DBFO, etc..)

- Designing
- Building
- Financing
- Own
- Operation
- Maintenance
- Transfer

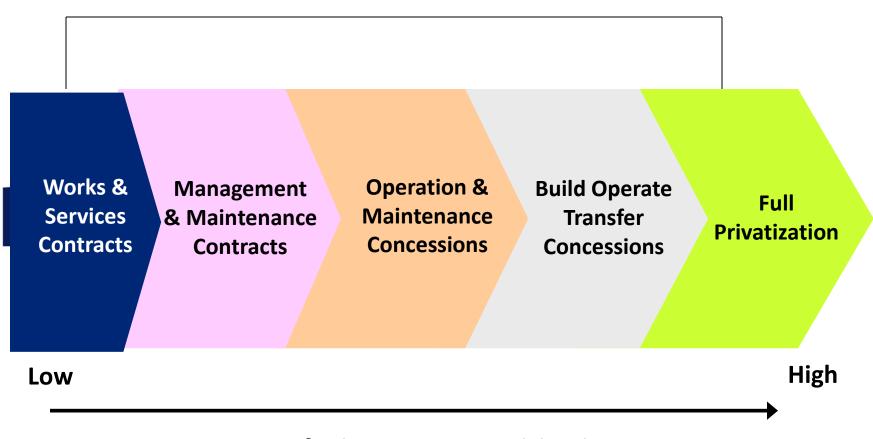
Key Aspects defining the PPP Mode

- Does the PPP involve building new assets to provide the service (capital expenditure project), or are the required services for operations and management only?
- Which roles will the private sector carry out? For example, who will provide finance? Who will design and construct?
- Who will take ownership of the assets?
- What will be the duration of the PPP contract?
- How are the various project risks allocated between the private and public partners?
- What will be the major revenue source for the project? For example, will it be from charges to users (direct tolls), or payment from Government (e.g., annuity)?
- Is demand for the infrastructure service expected to be stable over the period of the contract?

Distinguishing features of the forms of PPPs

| | Key | Different Types of PPPs | | | | |
|------------------|----------------------|-------------------------|----------------------|---|--|-----------------------------|
| | parameter | Contra | cts | Concessions | | |
| | | Manageme nt | Lease | Area | BOT (User Fee) | BOT (Annuity) |
| bility | Asset Ownership | Public | Public | Public | Public & Private | Public & Private |
| Responsibility | Incremental Capex | Public | Private | Private | Private | Private |
| | O&M | Private | Private | Private | Private | Private |
| | Construction | NA | Private | Private | Private | Private |
| Risk | Finance | NA | Private | Private | Private | Private |
| | O&M | Private | Private | Private | Private | Private |
| | Demand | Public | Private | Private | Private | Public |
| Case study/ E.g. | | Latur Water Supply | Columbia Hospital | Macau Water Supply / Delhi power distn. | Interstate bus terminal (Dehradun) | NHAI Annuity Concessions |

PPP Options



Extent of private sector participation

Which of these are PPPs?

PPP Options

Not PPP ← PPP options → Not PPP

| | Works & Services Contracts | Management & Maintenance Contracts | Operation Concessions | Build Operate Transfer Concessions | Full Privatization |
|---------------------|----------------------------|------------------------------------|---|--|-----------------------|
| Asset Ownership | Public | Public | Public | Public & Private | Private |
| Commercial Risk | Public | Public | Private | Private | Private |
| Typical Duration | 1-2 years | 3-5 years | 7-15 years (depends on feasibility) | 10-30 years (depends on feasibility) | Indefinite |

PPP Options

FOR EXISTING ASSETS

Usually with refurbishment obligations

- 1. Lease of assets
- 2. Concessions (licenses)
- 3. Management contracts of whole or significant parts of the undertaking

FOR NEW ASSETS

- 1. Operate-Maintain-Transfer (OMT) Concessions of assets newly built by the public sector
- 2. Sale of a government-owned SPV after project implementation
- 3. Design, Build, Operate, Transfer Concessions commonest form used in India

Concession Terminologies

BOT - Build Operate Transfer

BOOT - Build Own Operate Transfer

BOO - Build Own Operate

BOOST - Build Own Operate Share Transfer

BOLT - Build Own Lease Transfer

DBFO - Design Build Finance Operate Transfer

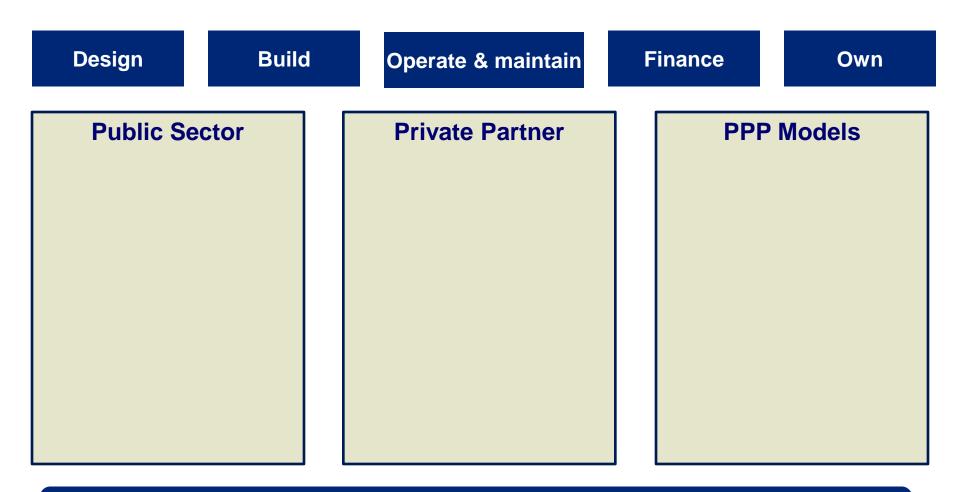
OMT - Operate Maintain Transfer

Contractual Framework

- 1. All intentions are set out in a contract
- 2. Concession Agreement bundle of rights & obligations and consequences in case of non-fulfillment
- 3. Contracting parties: Government Agency Concessioning Authority and Private Party Concessionaire
- 4. Other parties state government, lenders, suppliers of services
- 5. A concession is a license rights enjoyed for obligations performed

Choice of PPP Models

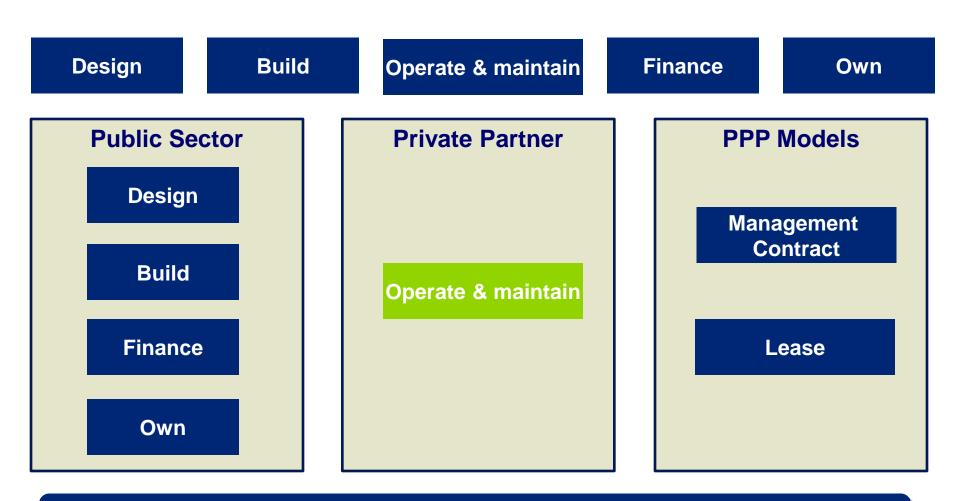
Developing Infrastructure: Components & responsibilities



Various delivery models are possible based on the mix of public and private participation

Choice of PPP Models: O&M focus

For existing assets, usually with refurbishment obligations



PPPs can also be used for existing assets and facilities in addition to creating new ones.

For creating new assets

Design Build **Operate & maintain Finance** Own **Public Sector Private Partner PPP Models** Design O & M Design-Build (DB) **Build Finance** Own

Many PPP practitioners do not classify **Design-Build** as PPP

For creating new assets

Design **Finance** Build **Operate & maintain** Own **Public Sector Private Partner PPP Models** Design **DBO** Build **DBM Finance** O & M Own

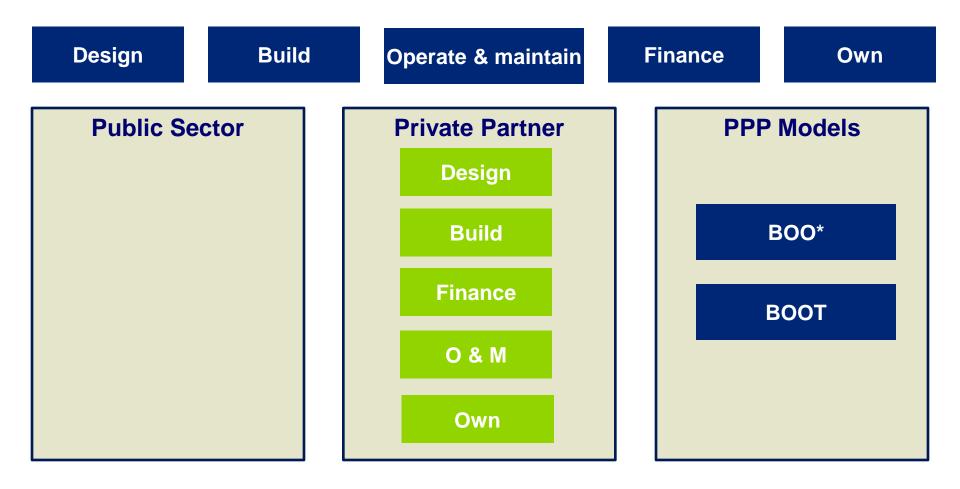
Models aim to optimize life cycle cost while government remains responsible for financing

For creating new assets

Design Build **Finance** Operate & maintain Own **Public Sector Private Partner PPP Models** Design **BOT / DBFO** Build **BOT (Annuity) Finance O&M Concession** (Area concession) O & M Own

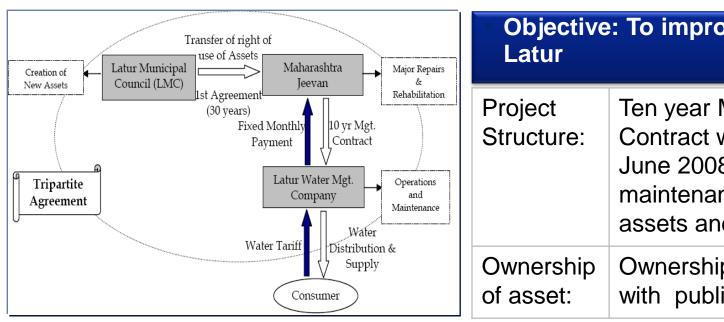
BOT (Annuity): Demand risk is not transferred to the private party

For creating new assets



^{*} Some practitioners state that BOO should not be considered as a PPP model since it is similar to privatization

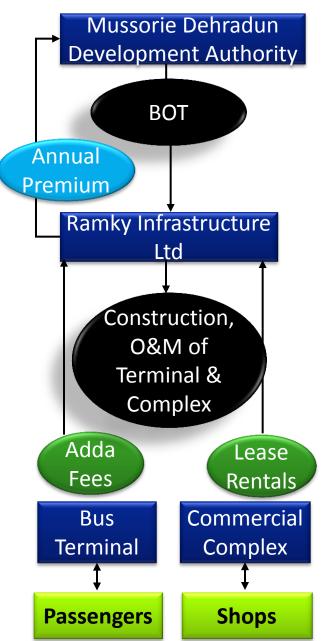
Management Contract. Latur water supply project



| Objective: To improve water supply in Latur | |
|---|--|
| Project Structure: | Ten year Management Contract with LWMC (SPV) in June 2008 for operation, maintenance and repairs of all assets and resources |
| Ownership of asset: | Ownership continued to rest with public agency |

| O&M | Responsibility of concessionaire |
|-------------------------|---|
| Construction / Finance: | Management contract only – operation of existing assets only. The concessionaire did not have any ownership on the assets |
| Commercial arrangement | All operation & maintenance responsibilities with the concessionaire. Under the provisions of the contract LWMC (the SPV) collected water tariffs from users, and in turn paid a fixed monthly fee to MJP |

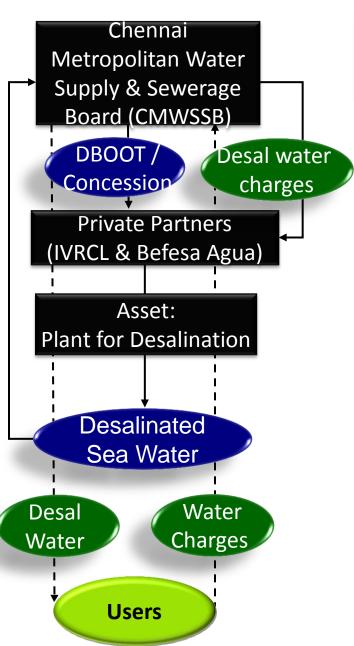
BOT, Interstate Bus Terminal, Deharadun



Objective: To develop a modern Inter State Bus Terminal

| Project Structure: | First BOT ISBT in India, Phase 1- ISBT Complex, Phase 2- entertainment & comm. complex; 20 year concession period, extendable by 10 years |
|-------------------------|---|
| Ownership of asset: | Land owned by authority |
| O&M : | Responsibility of concessionaire |
| Construction / Finance: | Construction and finance by concessionaire. All related risks borne by concessionaire. |
| Commercial arrangement: | -All construction cost by concessionaire - Revenue: Services fees from scheduled 750 buses/day & lease rental from commercial complex; Guaranteed annual revenue of INR 8.1 million/annum |

DBOOT, desalination of Sea water, Chennai



Objective: To augment the scarce water supply by establishing a 100 MLD (Million Liters Per Day) seawater desalination plant

| | Project Structure: | CMWSSB entered into a Bulk Water Purchase Agreement with a Special Purpose Vehicle for 25 years |
|--|---------------------------------|---|
| | Ownership of asset: | Ownership of concessionaire during concession period |
| | O&M : | Responsibility of concessionaire |
| | Design /Construction / Finance: | Design, construction and finance by concessionaire. All related risks borne by concessionaire. |
| | Commercial arrangement: | Long term bulk water purchase agreement between concessionaire and CMWSSB |
| | Other arrangements: | -Uninterrupted power supply ensured to concessionaire -Supply of raw water for treatment responsibility of CMWSSB |

lease contract – state hospital in Columbia

- Country: United States
- Public Partner: State of Oklahoma & Columbia
- Private Partner: Columbia/HCA Healthcare Corporation

Objective: To improve the efficiency of operations in the state hospitals

Key Features and Benefits

| Project Structure: | Operations of state hospital transferred to private player under a 50 year lease. Key objective – to improve the efficiency of operations |
|---------------------------------|--|
| Ownership of asset: | No transfer of ownership |
| O&M Responsibility: | O&M responsibility transferred to private operator |
| Commercial arrangement: | Lease fee: state received up-front payment (USD40 million), annual rent (USD9 million); Profit sharing: between private operator and state for the entire lease period |
| Other - Performance monitoring: | Operator to appoint governing committee to monitor functioning; provisions to replace management in case of non performance |

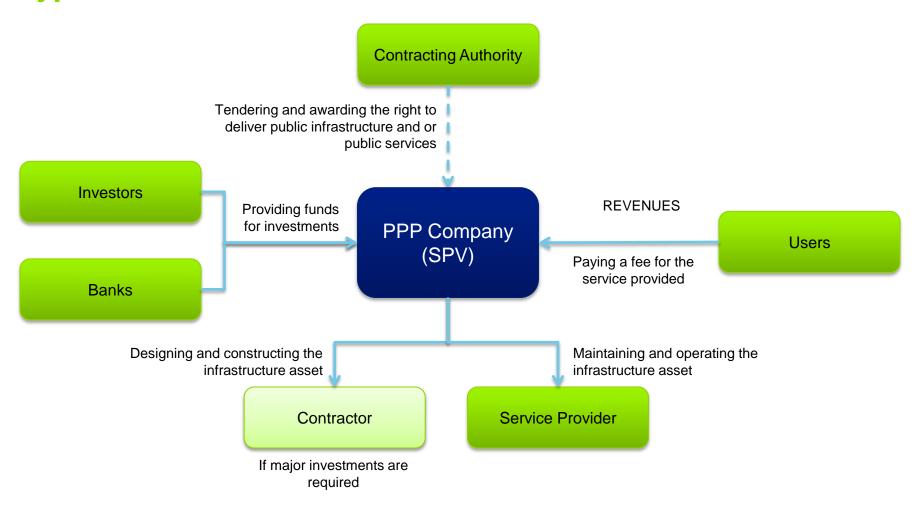
(Area) concession, water supply in Macau

- Country: China
- Public Partner: Civic and Municipal Affairs
 Bureau, Office for Infrastructure
 Development
- Private Partner: Sino-French Holdings
- Objective: To improve the coverage and efficacy of water supply in Macau by involving international companies and using better technology

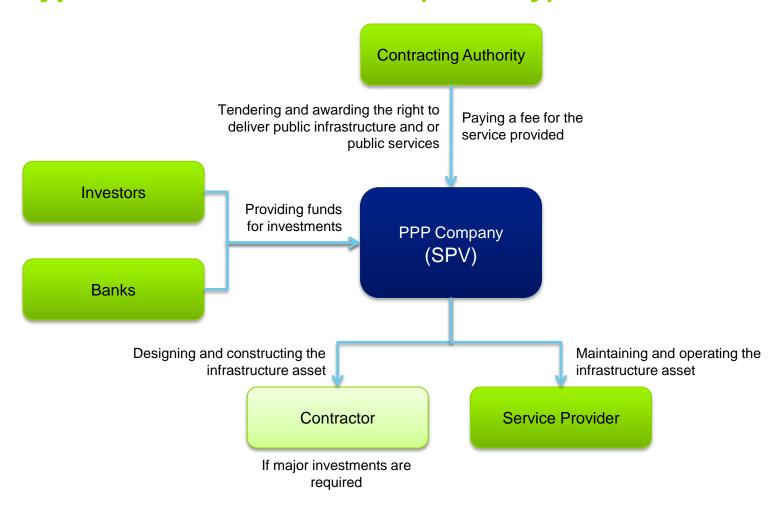
Key Features and Benefits

| Project Structure: | Concession contract for 25 years granted to pvt. operator |
|-------------------------|---|
| Ownership of asset: | No transfer of ownership |
| O&M Responsibility: | O&M responsibility transferred to private operator |
| Construction / Finance: | Works undertaken by pvt. Operator - Private player invested in upgrading water treatment plants, replacing faulty meters, replacing major pipelines and introduce control systems |
| Commercial arrangement: | Source of income for operator was water user's fee. Annual revision of the tariff was done based on the total costs incurred but due to efficiencies and economies of scale, a lower tariff was charged to consumers. |

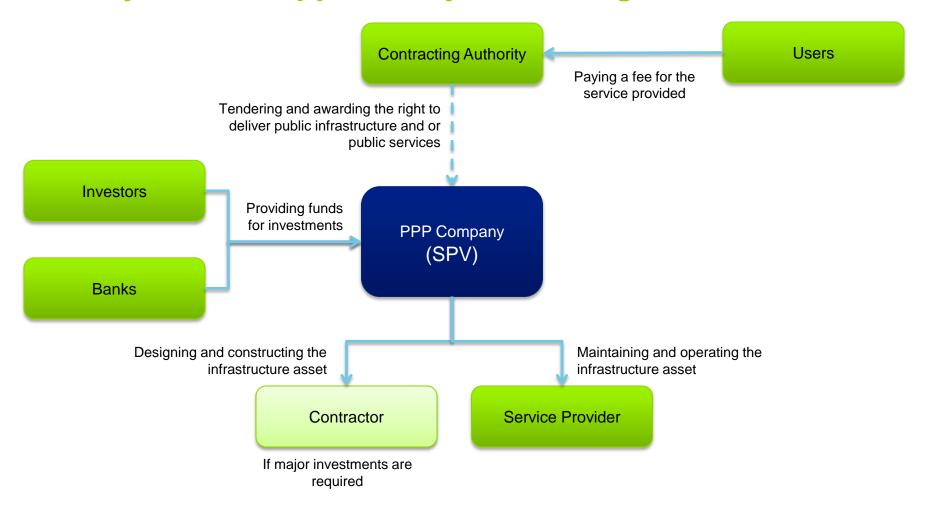
Typical Structure for BOT/ DBFO Concession



Typical Structure for BOT (Annuity) Concession



Annuity can be supported by user charges



Summing up

Design Build Operate & maintain Finance Own

- Key is to structure the relationship between the parties
- PPP model should allow each party to do what they do best so as to ensure that public services and infrastructure are provided in the most efficient manner
- The nomenclature used to describe the PPP Models is not standardized
- Familiarization with the concept is more important than understanding the terms

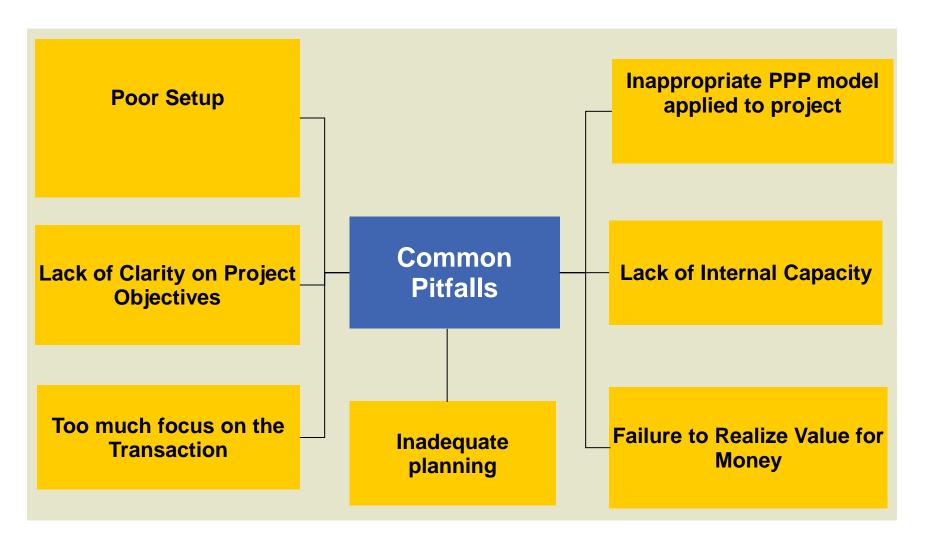
How to do PPP?

Critical success factors

- 1) Careful planning of PPP project
- 2) Solid revenue and cost estimations
- 3) User willingness to pay and communication plan
- 4) Extensive feasibility study with use of PPP experts
- 5) Compliance with contractual agreement
- 6) Strong Legal and Regulatory Framework
- 7) Strong Institutions with appropriate resources
- 8) Competitive and transparent procurement
- 9) Mitigation and flexibility in managing macro-risks

How to do PPP?

Common pitfalls to avoid



Source: Building Flexibility, New delivery models for public infrastructure projects, Deloitte

Awards for National PPP Capacity Building Programme, 2014



EXTREME FOR COMMITTEE COMM

- Individual Award for Outstanding Contribution as PPP Trainer at National level
- Exemplary Performance in conducting PPP Courses
- Exemplary Performance in conducting Basic and Advanced Courses
- Exemplary Performance in number of participants trained

Thank You

Case studies

PPPs in Hospitals

Apollo Hospital, Delhi

- Project involved development of a state-of-the-art multispecialty hospital on a BOT basis
- Government support in the form of land, and capital investment of INR 14.83 crore for funding part of the construction of the building
- Indraprastha Medical Corporation (IMC) Ltd. A JV between GNTCD and Apollo Hospital group - chosen as private partner on a nomination basis
- Private partner responsible for developing the facility, procurement and operation of medical equipment, providing in-patient and outpatient facilities for diagnostics and treatment of a minimum list of disciplines and undertaking management of land and building
- 1/3rd of in-patient beds and 40% of all OPD services reserved for BPL beneficiaries free of cost. Rest to be operated at market rates.
- All revenues from provision of services and letting out of cafeteria etc. accrued to the private concessionaire

Diagnostic Facilities

Mobile health vans, Uttarakhand

- Mobile diagnostic facilities for each of the 13 districts of Uttarakhand
 each van fitted with latest diagnostic equipment for ECG,
 Ultrasound, pathology and x-ray
- Private partners responsible for operations through conduct of minimum number of camps per month covering each district
- User charges at AIIMS rates and free services for BPL patients. Token registration fee for all patients (including BPL) valid for following 5 visits
- User charges accrue to the private partner
- Government support in the form of supply of fully equipped vans (through World Bank support), and through quarterly support payments (bid parameter)
- Private partner also responsible for computerized patient data management

Emergency Response Services Ambulance services, Delhi (not operational)

- To provide a state of the art, pre hospital emergency medical response service in the National Capital Territory of Delhi that offers free service for the poor
- Envisages augmentation of existing services called Centralised
 Accident and Trauma Services (CATS) which includes 39 ambulances
- Private operator responsible for procurement and commissioning of 150 ambulances (141 Basic Life Support and 9 Advanced Life Support ambulances) and 20 First Responder vehicles
- 24 Base Stations for ambulances of private operators and parking for all ambulances (including CATS ambulances)
- Also responsible for setting up an Emergency Response Centre (ERC) a control room with a dynamic database management system, networked to all government hospitals and private hospitals
- Private player would raise the finances but a large portion of the capital expenditure would be reimbursed against procurement

Emergency Response Services

Ambulance services, Delhi (not operational)

- For remaining operating and capital costs (minimum 15%) revenue from fees
- Provision of free service to road trauma patients, pregnant women and poor people - rest to be charged at market rates specified by authority
- The ownership of ambulances and other assets would remain with DoHFW with Government having recourse to take over assets at any point of time
- KPI (response time): reach the patients within 15 minutes of receiving a call at the Emergency Response Centre (ERC) in 70% of the cases and 20 minutes of receiving such call at the ERC in 90% of the cases
- KPI (transport time): reach the nearest appropriate hospital within 20 minutes after stabilizing the patient (triage).
- Maximum of 10 cases of Non Response Default and Non Transport Default together within a period of 3 consecutive months are allowed. However, every default has a penalty and default beyond the maximum limit allowed can result in termination

PPPs in India

Social sectors - Education

Composite Education Services

Government contracts out a composite service to private sector Payment in form of grants, annuities, coupons or vouchers

Infrastructure

- Development of infrastructure for new schools
- Maintenance of newly constructed schools
- Upgradation, modernization and maintenance of existing school infrastructure

Support Services

- Facilities management
- Transportation
- School Meals
- ICT services
- Housekeeping services
- Teaching support
 - Teacher Training
 - Textbook delivery

Pedagogy

- Teaching
- Teaching Materials

- PPPs could be either standalone components or composites
- In addition curriculum design, quality certification, teaching materials/textbooks at a broader level are amenable to PPPs

Vocational Education

Upgradation of Industrial Training Institutes (ITIs)

- 1396 ITIs undertaken for upgradation on a PPP mode throughout the Country
- An Industry Partner (IP) is associated with each ITI such an IP is selected by the State Government in consultation with Industry Associations.
- Institute Management Committee (IMC) registered trust is constituted/ reconstituted with IP or its representative as Chairperson.
- Central Government support in the form of interest free loan of up to INR
 2.5 crore to be given directly to IMC and also to be repaid by it. Private partner to bear all recurring and non-recurring expenses.
- ITIs have the academic autonomy to decide the skill areas of focus depending upon needs of the Industry partner. Candidates from the ITI to be absorbed by IP upon successful completion of apprenticeship
- IMC allowed to determine up to 20% of the admissions remaining by government
- Institute Development Plan (IDP) is prepared by IMC giving KPIs and financial requirements for next 5 years.

Development of Schools

Development of new schools: Strategies

| | Rural Areas | Urban Areas |
|-------|--|--|
| What? | Focus on infrastructure & support services Identify the PPP framework and model of government support | Focus on composite education Unlock commercial potential, but guarantee minimum seats to government Identify the PPP framework and model of government support |
| Why? | Infrastructure is a key requirement in rural areas There may not be a very high private sector interest | Low hanging fruit Private sector interest due to high commercial potential |
| How? | Flexibility Guarantee minimum number of seats for the government and have flexibility to operate the rest Outsource teaching to government and private player to maintain facility Specify minimum standards (e.g., CBSE affiliation, NV standards, etc.) Identify financial framework (e.g., Annuities, etc.) | Operate in 3 shifts: one shift for government and 2 for commercial purposes Specify minimum standards (e.g., CBSE affiliation, KV standards, etc.) Identify the financial framework (e.g., VGF, Revenue Sharing, etc.) |

Development of Schools

Development of new schools: Typical models

NAVODAYA VIDYALAYAS (Rural areas)

Payment for Services Model

- New schools in rural areas
 - Establish standards and performance parameters
 - Government provides land
- Infrastructure provision and maintenance by private sector teachers by government- support services outsourced by private player
- Bidding parameter least annual payment from Government
- Payment terms annual / semi-annual / quarterly equated payments to private party
- Performance parameters Non-instructional facility management standards
- Penalty deductions from the annuity payment for lower quality standards, measured independently
- Independent monitoring periodical / surprise visits / tests conducted by IA

Development of Schools

Development of new schools: Typical models

KENDRIYA VIDYALAYAS (Urban areas)

Viability Grant Model

- New schools in urban areas
 - Establish standards/ performance parameters
 - Government provides land plus a lump sum (per sq. ft.) / annual grant (per student)
- Composite education services by private sector
 - 2/3 shifts 1 shift government prescribed rates open to all, 2nd at market rates and 3rd (optional) for adult / vocational education / training
- Bidding parameter Revenue share/ Least grant
- Payment terms Annual / semi-annual / quarterly
- Performance parameters
 - Instructional No of enrolments, no of dropouts, pass/ performance standards in Class 10/12
 - Non instructional facility management standards
- Penalty Withdraw right to charge private tuition fee and only charge government prescribed fee
- Independent monitoring periodical/ surprise visits/ tests conducted by
 Independent Agency (IA)

Development of Schools Upgradation of existing schools

Strategy

| | Government Schools |
|-------|---|
| What? | Focus on infrastructure and Complementary services |
| Why? | Difficult to implement composite services |
| How? | Handover infrastructure maintenance to private sector Bring in teaching aid / curriculum design from Private Sector Specify minimum standards (e.g. CBSE/State Board affiliation, specs etc) Situation specific - flexibility to hire own teachers |

Typical Model

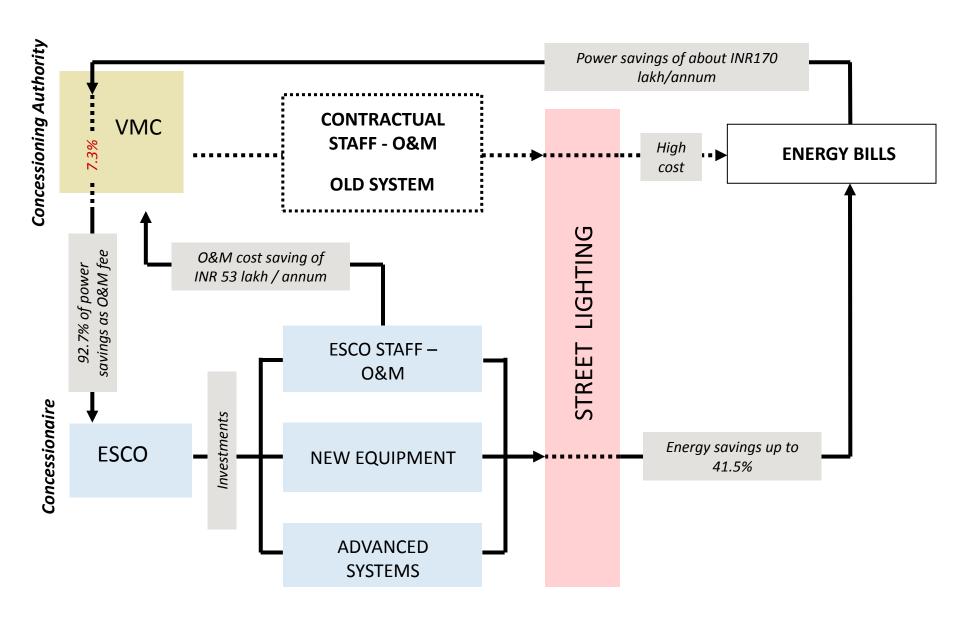
Payment for Services Model

- Takeover of Existing Schools
 - Renovate/ Re-develop to specified standards and ensure performance to educational standards
- Focus on facilities and operations management, teaching aids and material
- Limited commercial exploitation of real estate
- Additional shifts for adult/ vocational education
- In case additional staff is allowed specify process for absorption of teaching/ non-teaching staff
- Bid parameter annuity or least per pupil fee from government;
- Performance Parameters
 - Instructional No. of enrolments, no. of dropouts, pass/ performance standards in Class 10/12
 - Non instructional facility mgmt. standards
- Penalty deductions from payments
- Independent monitoring periodical/ surprise visits/ tests conducted by IA

Street Lighting Vijayawada street lighting

- Energy inefficient existing street lighting system INR 450 lakh annual expenditure on maintenance and energy bills
- Need to introduce an energy-efficient street lighting system, through high quality equipment and high-end technology, and reduce overall energy expenditure of the ULB
- Concessionaire (ESCO) committed 41.5% energy savings and was responsible for system design, procurement of technology and equipment, operations and maintenance of the new system for 5 years
- Concessionaire had to deploy own staff for O&M and was also responsible for addressing citizen grievances
- All investments by the ESCO revenue as a fixed share of savings in energy bills
- Fixed share of savings from energy bills to accrue to ULB ULB share (notwithstanding the performance of the ESCO) not less than INR 12 lakh per annum
- No payment to ESCO If energy savings less than 30% if savings more than 41.5% then 75% of surplus accrued to ULB

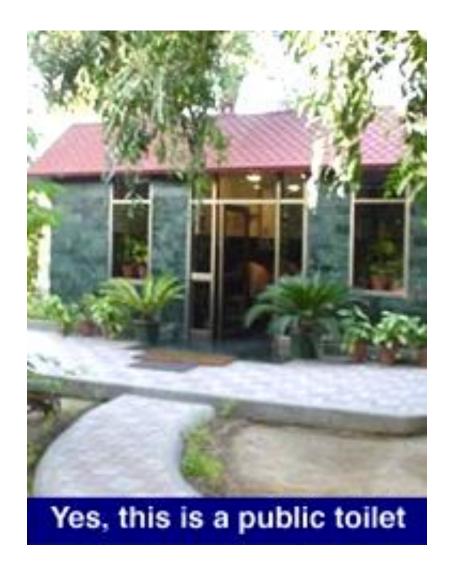
Street Lighting Vijayawada street lighting



Public Conveniences Public toilets, foot over-bridges, bus stops...

- Concession Period: 10-15 years (including construction and O&M)
- Bidding Parameter : Concession Period
 Project Cost: More than INR 10-15 lakh per block
- Revenue sources: User Fees (where possible), Advertising Rights
 In case of smaller towns viability gap funding / annuity models could be used
- Performance Parameters : Output Based
- Monitoring Mechanism : Independent Engineer
- Financing: Typical Debt-Equity Ratio of 1:1 or less
- Government support : Enabling policy measures

Public Conveniences Public toilets, Delhi





Public Conveniences Foot over-bridge, Hyderabad



Public Conveniences Bus stops, Delhi









Transport Infrastructure Multi-level car parking, Delhi

- 5 Multi-level car parking projects were proposed by the NDMC and MCD in Delhi
- Bidding Parameters : Concession payment / grant
- Revenue upsides advertisement rights are offered to improve competitiveness / returns to bidders
- Substitution rights to lenders to improve bankability

Key Learnings

- Access to the sites is an important issue which may not be available when land is available & vice-versa
- Competing low cost options are usually still available in an urban context

Transport Infrastructure Multi-level car parking, Delhi



Transport Infrastructure Foot over-bridges, bus stops, etc....

- Concession Period: 10-15 years (including construction and O&M)
- Bidding Parameter : Concession Period
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Transport Infrastructure Foot over-bridge, Hyderabad



Infrastructure - PPP Concept in AP

- Government of A P is the first state to bring in legislation of Infrastructure Authority Act - Andhra Pradesh Infrastructure Development Enabling Act, 2001.
- This Act would primarily focus on facilitating private developers in securing much needed administrative approvals, arbitrations and fiscal regulations
- Infrastructure would cover
 - Highways including Bridges
 - > Ports
 - Power and Water
 - Communication Net Work
 - Gas Distribution
 - Waste Management
 - Urban Infrastructure would cover Housing, Urban Development, Medicare and Leisure facilities etc.

Major PPP Projects in AP





- OUTER RING ROAD HYDERABAD
- SPV is incorporated as "Hyderabad Growth Corridor Limited""
- Total Length —159 Kms
- Provides orbital linkage to radial arterial roads
- Creates options for development of the further satellite townships
- Provides linkage to the proposed MRTS and Bus system
- Estimated cost —RsRs. 3000

KAKINADA SPECIAL ECONOMIC ZONE

- GoAP have entered into an MOU with ONGC and it subsidiaries MRPL, ILFS & KSPL for setting up of SEZ and Petroleum refinery at Kakinada
- Area: 10,000 Acres of which 1000 acres is for refinery
- Land acquisition is in process
- Total investment is Rs. 8500 crores
- Rs. GoAP 3% -

Jawaharlal Nehru Pharma City Visakhapatnam

- A sector focused project to facilitate location of bulk drug units
- A unique project with support facilities like CETP,
 Marine Outfall Hazardous Waste Management etc
- Part of Pharma City is now proposed to be SEZ
- Total project cost Rs .68 crores Rs.68
- GoAP Rs. 1.98 crores Rs.
- Ramky Infrastructure Ltd Rs .16.02 crores Rs.16.02
- Government of India Rs. 50 crores Rs.

Integrated Township And Convention Centre Hyderabad Centre:



- An integrated Township, 18 hole International standards Golf course.
 And a convention centre with 6000 seating capacity and 300 key Business Hotel
- Projects are executed thru' 3 SPVs with Emaar Properties of Dubai
- Convention centre opened in Jan, 2006
- Township and Golf Projects will be ready by Aug, 2006
- Project cost Rs . 670 crores Rs.
- GoAP 26% -
- Emmar properties 74% –

HITEC CITY: HYDERABAD



- First Major PPP project taken up with L&T
- Project area 156 acres
- Total built up area 18 lakh sft
- Successful and sustainable PPP model and putting Hyderabad in global IT map
- Total investment in Infra Rs 450 crs –
 - •GoAP 11% -
 - •L&T 89% -

HITEX:: MADHAPUR



Hyderabad Integrated
Trade and Exposition
Center

• Equity:

LTIL - 54%
Govt. etc.- 46%

10,500 Sq.Mts. indoor A/c space for exhibitions

• 33,000 Sq.Mts. Open area

MINDSPACE CYBERABAD PROJECT

- Major PPP project taken up with K.
 Raheja for IT & IT enabled services
- Project area 110 acres
- Total built up area 45 lakh sft
- Modular Buildings with built up space of 4 million sft completed
- Successful and sustainable PPP model and putting Hyderabad in global IT map
- Total investment in Infra 600 crs

GoAP - 11%

Rajeha - 89%



Bio Technology Park - Hyderabad







- Bio Technology Park along with Knowledge Park was promoted by the GoAP with Shapoorji Pallonji Group and ICICI
- Knowledge Park has presently 58000 sq ft of built up Laboratory facilities and 15 companies have started their R & D activity
- SP Bio Tech Park is spread over 300 acres and 14 companies have taken up their activities
- A Bio Technology Incubation centre is planned with IICT
- ICMR Animal Resource Facility is planned for clinical trials
- 3rd Phase of Bio Tech Park is proposed at Karakapatla vg about 16 kms from the existing park

Business District & Trade Towers, Manchirevula

- issued Government Orders for development of Business District & Trade Towers (Highrised Buildings) of 60 floors through PPP mode
- Area: 97.00 Acres of Manchirevula Village, Rajendranagar Mandal, R R District: Mandal
- Eol cum RfQ notified on 19-4-2006
- 21 applications received from National / International Developers
- Evaluation & Short listing of bidders is under process
- Estimated cost Rs. 2000 Crores Rs. ,

SPA/Hotel & Training Center At Nanakramguda

- Area 14.94 Acres of Nanakramguda Village, Serilingampally Mandal, R R District handed over to Tourism Department on 7-7-2005
- Government JV with IHHR Hospitality (Andhra)
 Private Limited dt .10-8-2005 vide GO Ms No.38
 YAT & C Dept., .16 -8-2005
- Equity Government: IHHR 26:74
- Estimated cost Rs .100.00 Crore Rs.100.00

Budget Hotel at Madhapur

- Area: 1.593 Acres in Sy .No.64/Part of Madhapur Village, Serilingampally Mandal, R R District.
- Payment to APIIC:
 - i. Lease Rentals 5% of cost Rs .29,86,875/ per annum ii 2nd year onwards 5% escalation at Rs .1,49,350/ per annum
- Land handed over to Tourism Department on 30-1-2006

Thank You