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DISSERTATION

on
PUBLIC-PRIVATE PARTNERSHIP (PPP): HAS INDIA LEARNT FROM ITS PPP
EXPERIENCE OF A DECADE

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Index	
Executive Summary	2
Dissertation	3
References	10

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EXECUTIVE SUMMARY

This Research paper analyses PPP in Urban Infrastructure, Water supply, Roads , Power and Telecom. It tries to find out the key successes and failures of our privatization policies. After studying the sectoral data and cases following common recommendations can be made for developing successful PPP in India

1. Development of Regulatory Framework

Most of these sectors have regulatory frameworks which developed during the last decade. In certain cases laws are far from perfect. Service standards have not been set in sectors like urban water supply while separation of roles is an issue in Telecom.

2. Rationalization of Pricing Structures

Most privatization projects have faced problems as the present pricing structures are commercially unviable. There is a need to costing to ensure prices do not privatization completely unreasonable as in the case of Enron or commercially unviable as with some the current toll bridges.

3. Development of a Supporting Financial System

There is a need to prioritize financing of infrastructure projects. Domestic debt market and funds from the banking system need to be directed towards the infrastructure sector. Time taken for closure of certain infrastructure projects results in time and cost overruns. Also risks need to be shared between the public sector ideally with public sector bearing regulation and the private sector the commercial risk of the project.

4. The Interface between Public and Private sector

Often infrastructure projects need clearance from multiple committees and commissions. There is need to provide single window clearances to reduce the time taken for approvals.

PUBLIC-PRIVATE PARTNERSHIP (PPP): HAS INDIA LEARNT FROM ITS PPP EXPERIENCE OF A DECADE

In India in last decade of the twentieth century there was a growing realization that it was not possible to generate the funds required for development from state coffers. The Expert Group on the Commercialization of Infrastructure Projects estimated that India needs to invest \$115 billion to \$130 billion in infrastructure from 1996–2001, and \$215 billion in 2001–2006 (NCAER 1996). The Rakesh Mohan Committee in its report 'India Infrastructure Report' in 1996 that the gap between public sector outlays and the projected requirements is staggering. Thus in 1991 Indian started a policy of reforms and reduced government intervention in certain sectors, at the same time facilitating private sector participation through policy. The issues relating to private sector investment in infrastructure are dealt in India Infrastructure Reports prepared jointly by IDFC, IIM, Ahmedabad and IIT, Kanpur

URBAN INFRASTRUCTURE SERVICES

Water Supply

The national target for full coverage of urban population requires minimum future investment of Rs.3.2 billion. About 70% of allocation to this sector comes from government allocations and is highly inadequate. The Drinking Water Mission in 1980 set a target of 140 Liters Per Capita Per Day LPCD for cities & 80 LPCD for slums for 2000. Today the actual availability is 165 to 54 LPCD in cities. The average availability of slums is 27 LPCD.

Tirrupur (Tamil Nadu) was a success story in Private Participation in water supply . The project will supply Tiruppur with 185 million liters of water per day and service nearly 1000 textile units. A public limited company with private sector participation, New Tiruppur Area Development Corporation Limited (NTADCL) was formed in 1995 to implement the project. The NTADCL has contract out the construction and maintenance systems to a Build, Operate and Transfer (BOT) consortium (Mahindra & Mahindra,) USAID provided long term (30 years) loan guarantees for US\$ 25 million with IL&FS to help finance this project.

Solid Waste Management

According to Shekdar(1999) the amount of waste generated per capita will increase at the rate of 1.33% percent every year. The per capita waste will rise to 260 million tones in 2047 from 50 million tones in 1997. The cities of Navi Mumbai, Hyderabad, Surat and Rajkot have experimented with private sector participation in various aspects of solid waste management. In Navi Mumbai private sector participation resulted in cost reduction of 40%. Surat today the cleanest cities in India in Rajkot (Gujarat) private participation for a number of infrastructure services was started in 1993. Privatization of transport services for waste resulted in a cost savings of 23%.

Lessons from Private Participation in Urban Infrastructure

a. **Need for viable Price Structures** : Pricing for infrastructure services hardly cover costs in India. The price structure for water consists of a connection charge, a water tax (some state municipal acts) and a water charge (metered or non metered). The charges vary for agricultural, domestic and industrial usage. The agriculture and domestic prices are highly subsidized making them unviable. Industry is charged 4-11 times the domestic consumption.

b. Most Urban Local Bodies need to have a separate budgetary system for water services.

c. **Need to assure Return on Investment** : Tiruppur ROI is expected to be to 21 per cent. The pricing of water supply determined for industry is five to six times the amount charged to domestic users. Financial closure was achieved in the first quarter of 2002.. The financial incentives need to encourage efficiency. Time taken to arrange financing and achieve project closure is very long

d. **Capacity Planning for the future** : Nationally recognized for its success in management of solid waste, Surat faced a deficiency in its solid waste disposal capacity later with filling up of four dumping sites out of 10

e. **Planning Assistance to the Private Sector** : Though the present systems have lead to huge cost savings due to increased efficiencies, In case of Hyderabad lack of transport plan in case of contractors lead to costs which were avoidable.

f. **Waste as source of Energy and Revenue** : Surat identified firms which could recycle its waste. The city sells its garbage to contractors to be processed using pelletization, energy production and composting. Plants to generate electricity from solid waste treatment plants are coming up in Mumbai, Nagpur and Lucknow

g. **Regulatory Developments** : Municipal Solid Waste (Management & Handling) Rules (MSWR), 2000 require all local self governments to establish solid waste treatment facilities before December 2003. The approved processes include Anaerobic Digestion, Biomethanation, Composting, Vermi-composting & all methods of conversion of waste to energy approved by Central Pollution Control Board.

POWER SECTOR

According to 16th Electric Power Survey⁴ over 1,00,000 MW additional generation capacity needs to be added by 2012 to bridge the gap between demand and supply of power. Electricity distribution monopolies have eaten much of state government revenues and made them unable to perform their major tasks of governance. Inefficient SEBs (State Electricity Board) ensure frequent power cuts and poor quality of supply. Privatization is seen as an answer to a lot of problems of the power sector. Orissa privatized its power distribution in 1997, Delhi last year and Karnataka has been studying proposals for two years.

Lessons from Private participation in Power

a. **Privatization does not bring automatic improvement in service** : In Orissa, the sector remains heavily loss making, tariffs have risen but not availability and quality. Infact all through 1997 and 1998 the transmission losses well 45% well above the acceptable levels of 35%. In Andhra Pradesh, though the state government did its bit in

bringing in new equipment, improved meters and transformers but it did not improve supplies or services. AP government was a beneficiary of some large funds from the World Bank, the state machinery failed at the implementation level. Consumers in the rural belts were left with almost no power supply.

b. **Need for incentives** : An independent agency does not improve operations in the absence of incentives. In Orissa an incentive to increase return by one percent for every percentage point reduction brought transmission losses below 35 percent. The eleven states that participated in Accelerated Power Reforms Development program have cut their losses by more than Rs. 5000 crores. Various states have been given incentives totaling Rs 882 crore during 2003-04 for loss reduction.

c. **Need to safeguard investor interest** : In Orissa only three out of the eleven companies selected finally bid. Transmission & Distribution (T&D) losses were poorly calculated. The money generated by the deal went to the government while huge accumulated liabilities were left with the single seller of electricity. Learning lessons from Orissa Delhi's privatization model set tariffs till 2006-07 to give licensees 16% return. Distributors were compensated for losses due to transmission leakages. T&D loss reduction targets were scientifically calculated. The government also gave its support for law & order. In Karnataka the distributors will be given a distribution margin.

d. **Need for Competition – Power Markets and trading** : State-owned generation companies favour big, state-owned shippers of power over small nimble traders choking real competition. Most private contracts such as Mumbai, Orissa & even Delhi are private distribution monopolies, with long term tariffs contracted with local regulators. These deny consumers the benefits of real price competition, even though the law allows multiple distributors in each circle.

e. **Strengthening Regulatory Framework** :. Several states established regulatory agencies following the Electricity Regulatory Commissions Act of 1998. A regulator is also needed to insulate tariffs from political influences. Electricity Act 2003

allows open access to all generators to distribute and transfers a lot of state powers to the Centre (CERC).

ROADS

Responsibility for India's national highways is shared by the Ministry of Surface Transportation (MOST) and the National Highway Authority of India (NHAI), along with state public works departments.

Private sector Participation

A lot roads, bridges, expressways etc have been built on BOT basis. These include Delhi-Gurgaon Expressway built by Jaypee DSC Ventures on NH-8 worth Rs 555 crore that will finish in 2005. The National Highways Authority of India (NHAI) is in charge of the Delhi-Gurgaon Expressway, which is being constructed at a cost of Rs 555 crore. The project is being executed by Jaypee DSC Ventures Ltd on a BOT basis. The first 6,000 km of the R 540 billion Golden Quadrilateral is expected to be complete ahead of schedule in December 2003 .

Lessons from Private Participation In Roads

a. Need for single handling authority : Handling of Phase-I of BOT road projects worth Rs 40,000 crore by the surface transport ministry lead to repeated delays and cost escalations. There is a need to allow NHAI to handle all highway projects independently as it has the expertise in handling projects of this magnitude and financial complexity.

b. Need for better management of public road projects : A study of road projects reveals that the National Highways Authority of India-funded projects show dramatically higher time overruns than projects funded through PPP. Of the road projects funded by the National Highways Authority of India (NHAI), 68% are facing a completion time overrun versus maximum over run of 6% in PPP projects.

c. Problems of traffic estimates and toll revenues : Subsidized toll rates and traffic leakages are a major problem for road projects. Typical examples of traffic falling short of expectations would be the Mumbai – Pune expressway, Rau-Pithampur stretch in Madhya Pradesh, the Narmada bridge and the Delhi-Noida toll bridge.

d. Need for great involvement of Private sector : Private Participation is the key to efficient road building in the country, especially with the dates of completion for the golden quadrilateral and the North-South-East-West corridors being extended.

e. Greater Involvement and Risk Sharing needed : At present, only 17% of the highways are open to the private sector, translating into 6% of the total costs of the highway program. Private investment is flooding the sector riding on the safety plank of the annuity model. Pure BOT projects, where the investor has to shoulder the traffic risk and other market risks, are still to move to the fourth-gear.

TELECOM

In the Indian telecom scene, Department of Telecom (DOT) is supposed to handle policy while regulation falls under the domain of Telecom Regulatory Authority of India. The privatization of telecom sector has raised the teledensity. The National Telecom Policy of 1999 led to development and liberalization of the sector with competitive market for all telecommunications services.

Private Participation. in Telecom

In 1991, India was divided into telecom circles bided for the private operators.. Telecom circles are divided into A, B and C types with operators sharing twelve, ten and eight percent of their revenues with the government. After the Unified Today BSNL, Reliance, Bharti, Tata Indicom have a national footprint. VSNL and Reliance act as International carriers.

Lessons from Private Participation

a. Need to Assess Revenue Potential : Indian telecom operators were awarded telecom licenses by competitive bidding in various Telecom circles. Operators ended up

paying huge fees for their first licenses in telecom circles in 1994. Though the number of subscribers has been as predicted, the ARPU (Average Revenue Per User) has been low to recover costs.

b. Convergence of Technology : Reliance experience where by virtue of technology it was possible to offer WLL services beyond the SDCA (Short Distance Calling Area) led the way to the Unified License for telecom services. TRAI merged the cellular and basic services (included WLL) to allow a Unified License to enter telecom sector. This allowed the existing cellular operators to offer basic telephony services in their services. Entry fee for the unified license will equal the fee for the fourth cellular license, minus the money already paid for basic/cellular services. Reliance Infocomm, paid a penalty of Rs 485 crore on top of the entry fee for the unified license, (total burden on Reliance Rs 1,581 crore).

c. Need for Smooth Procedures for Investment : Sector needs to move from unified licensing to unified authorization for spectrum access at a nominal processing fee and a revenue share to the government depending on the size of operations. Telecom Projects often get delayed. There is a need to either allow automatic entry or let the market find the appropriate formula.

d. Strengthening the Regulator's role In a case regarding Internet services, a high court ruled that TRAI has no role in the dispute between the license holder and the licensor. TRAI has relatively limited power in disputes between license holders and licensors, and in the granting of licenses. This has led to concerns regarding TRAI's role in deciding the terms of interconnection, since these arrangements are specified as part of the license agreement. These tensions have risen largely because of the DOT's multiple roles as service provider, policymaker, and licensor of the department's private sector competitors

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