Public Private Partnerships in India

Ti-UP Resource Centre

WSP International Management Consulting
WSP House, 70 Chancery Lane, London, WC2A 1AF

In Association With

S 85, II Floor, Greater Kailash II, New Delhi, India 110044
TeleFax: +91-11- 41435754 / 29219397
Email: sanjaysaxena@tscpl.com
Web:www.tscpl.com

Contents

Introduction 3
What is Public Private Partnership? 3
Public Private Partnership Models 3
Why Public Private Partnership (Objectives)? 5
Global PPP Scenario and India 6
Global Picture 6
The current scenario 8
Indian PPP Status 10
Government of India Policy and Programmes 12
Key Government Institutions for PPP 13
Priority Sectors for PPP in India 14
Urban Development 15
Education 16
Health 16
General Economic Infrastructure 17
Railways 17
Roads and Highways 17
Ports 18
Airports 18
Telecom 18
Power 19
Key Issues and Challenges for PPP in India 19
Barriers to PPP 19
Key Learnings 21
References 22
Annexure 1 - Government of India (GoI) documents on PPP 23
Annexure 2 - Indian State Urban Development Departments 24

Introduction

This report gives an introduction to the concepts on Public Private Partnership and reviews the status of PPP, especially in India. The full scope of the report, as defined by DFID, is as follows:

#	Topic	Covered in
1	PPP Definition w.r.t. GoI definition	What are Public Private Partnerships?
2	Global Picture and India's place	Global PPP Scenario and India
3	GoI policy and programme commitments	Government of India – Policy and Programmes
4	Key GoI institutions / enterprises, roles, responsibilities	Government of India – Policy and Programmes
5	Industry Sectors where PPP is implemented	Priority sectors for PPP in India
6	Barriers to accelerated progress of PPP's	Barriers to PPP

What is Public Private Partnership?

A public-private partnership (PPP) involves the private sector in aspects of the provision of infrastructure assets or of new or existing infrastructure services that have traditionally been provided by the government.

While there is no single definition of PPPs, they broadly refer to long-term, contractual partnerships between the public and private sector agencies, specifically targeted towards financing, designing, implementing, and operating infrastructure facilities and services that were traditionally provided by the public sector. These collaborative ventures are built around the expertise and capacity of the project partners and are based on a contractual agreement, which ensures appropriate and mutually agreed allocation of resources, risks, and returns.[1]

The Government of India defines a Public Private Partnership as:

"*Public Private Partnership (PPP) Project means a project based on a contract or concession agreement, between a Government or statutory entity on the one side and a private sector company on the other side, for delivering an infrastructure service on payment of user charges.*" [2]

This definition provides the broad framework under which different kind of PPP models can be chosen from. A comprehensive listing of various models is discussed in this report.

Public Private Partnership Models

The range of options for public-private partnerships has expanded enormously over the past 30 years. Agreements between public and private entities take many shapes and sizes for both new and existing services. At one end of the spectrum is a management or service contract, where a private company is paid a fee for a service. At the other end is full privatization or divestiture (outright sale), where a government sells assets to a private company. Outsourcing has become another popular option; here a private company might handle an aspect of service, such as billing, metering, transport, or even cleaning.

[1] Facilitating Public-Private Partnership for Accelerated Infrastructure Development in India. Department of Economic Affairs (DEA), Ministry of Finance, Government of India and Asian Development Bank (ADB). New Delhi : Asian Development Bank, 2006. – Page 17.

[2] Facilitating Public-Private Partnership for Accelerated Infrastructure Development in India. Department of Economic Affairs (DEA), Ministry of Finance, Government of India and Asian Development Bank (ADB). New Delhi : Asian Development Bank, 2006. – Page 17.

Hybrid models of public-private partnership have seen explosive growth in recent years, especially with the development of a more diversified pool of emerging market investors and operators with local expertise. These models often rely on simpler contractual arrangements and blend public and private money to diversify risks.

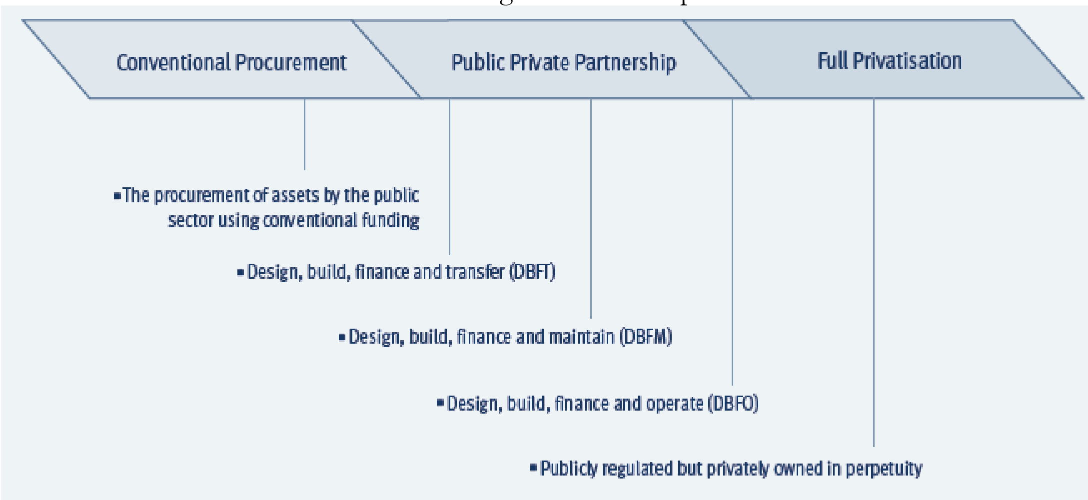
A large variety of PPP formats have been documented by Deloitte[3]:

- **Design Build (DB)**: Under this model, the government contracts with a private partner to design and build a facility in accordance with the requirements set by the government. After completing the facility, the government assumes responsibility for operating and maintaining the facility. This method of procurement is also referred to as Build-Transfer (BT).
- **Design Build Maintain (DBM)**: This model is similar to Design-Build except that the private sector also maintains the facility. The public sector retains responsibility for operations.
- **Design Build Operate (DBO)**: Under this model, the private sector designs and builds a facility. Once the facility is completed, the title for the new facility is transferred to the public sector, while the private sector operates the facility for a specified period. This procurement model is also referred to as Build-Transfer-Operate (BTO).
- **Design Build Operate Maintain (DBOM):** This model combines the responsibilities of design-build procurements with the operations and maintenance of a facility for a specified period by a private sector partner. At the end of that period, the operation of the facility is transferred back to the public sector. This method of procurement is also referred to as Build-Operate-Transfer (BOT).
- **Build Own Operate Transfer (BOOT)**: The government grants a franchise to a private partner to finance, design, build and operate a facility for a specific period of time. Ownership of the facility is transferred back to the public sector at the end of that period.
- **Build Own Operate (BOO):** The government grants the right to finance, design, build, operate and maintain a project to a private entity, which retains ownership of the project. The private entity is not required to transfer the facility back to the government.
- **Design-Build-Finance-Operate/Maintain (DBFO, DBFM or DBFO/M):** Under this model, the private sector designs, builds, finances, operates and/or maintains a new facility under a long-term lease. At the end of the lease term, the facility is transferred to the public sector. In some countries, DBFO/M covers both BOO and BOOT. PPPs can also be used for existing services and facilities in addition to new ones. Some of these models are described below.
- **Service contracts:** The government contracts with a private entity to provide services the government previously performed.
- **Management contract:** A management contract differs from a service contract in that the private entity is responsible for all aspects of operations and maintenance of the facility under contract.
- **Lease:** The government grants a private entity a leasehold interest in an asset. The private partner operates and maintains the asset in accordance with the terms of the lease.
- **Concession:** The government grants a private entity exclusive rights to provide operate and maintain an asset over a long period of time in accordance with performance requirements set forth by the government. The public sector retains ownership of the original asset, while the private operator retains ownership over any improvements made during the concession period.
- **Divesture:** The government transfers an asset, either in part or in full, to the private sector. Generally the government will include certain conditions with the sale of the asset to ensure that improvements are made and citizens continue to be served.

A diagrammatic representation of some of the models by Confederation of British Industry (CBI) is given below:

[3] Deloitte Research. Closing the Infrastructure Gap: The role of Public Private Partnerships. s.l. : Deloitte Rsearch, 2006. available on the internet at: http://www.deloitte.com/assets/Dcom-Panama/Local%20Assets/Documents/sector-publico.pdf. Page 5

The Range of Partnership Models[4]



A range of these models may be suitable for different purposes. Hybrid models may even be adopted combining the merits of different models or to add multiple players.

Why Public Private Partnership (Objectives)?

While many governments have reformed their utilities without private participation, some seek finance and expertise from private companies to ease fiscal constraints and increase efficiency. By engaging the private sector and giving it defined responsibilities, governments can broaden their options for delivering better services.

PPP's can emerge as a win-win for the public as well as the private sector and most importantly, the citizen. PPP's seek to address limitations of both the sectors and the main *raison d'etre* for PPP projects' increased importance are:

- **Limited Resources and Finances:** Limitations of government resources and limited capacity to meet the infrastructure gap.
- **Need for Different institutional mechanisms**: This includes incorporating the spirit of private efficiency into providing services for the public.
- **Equitable risk allocation and mitigation**: Shared risk allocation is a principal feature of a PPP project. PPP projects allow sharing of different kinds of risks between the private and public sector.
- **Complementary roles and drivers:** Putting it somewhat simplistically, the public sector is predominantly driven by the 'public good', the private sector by 'profit'. PPP projects allow both the sectors to cooperate and make these seemingly contradictory goals work together. As an example, land acquisition and environmental clearances are best obtained by governments, and the private sector can deliver much faster, if such clearances are handled by the government.

According to Asian Development Bank[5], the three main needs that motivate governments to enter into PPP's for infrastructure are:

1. **To attract private capital investment (often to either supplement public resources or release them for other public needs);**

---

[4] Confederation of British Industry (**C.B.I.**) *Going Global - The World of Public Private Partnerships.* s.l. : CBI, 2007. www.cbi.org.uk. 978-0-85201-668-8. Page 7

[5] **Asian Development Bank.** *Public-Private Partnership (PPP) Handbook* : ADB, 2008. available online at http://www.adb.org/Documents/Handbooks/Public-Private-Partnership/ Page 3

2. **To increase efficiency and use available resources more effectively; and**
3. **To reform sectors through a reallocation of roles, incentives, and accountability.**

Global PPP Scenario and India

PPPs are not new and have been around for a few centuries. In 16th- and 17th-century France, roads and bridges were concessioned for tolls in return for maintaining the routes. However, PPP's have been more in vogue in the last few decades as a model of financing, especially infrastructure projects that the governments are so interested in.

Global Picture

Investment show diverse trends across regions. Three developing regions saw investment grow to record levels: the Middle East and North Africa, South Asia, and Sub-Saharan Africa. In South Asia most of the growth came from telecommunications and transport. In Latin America investment showed some recovery for the third consecutive year, while in East Asia it remained stable at around US$18 billion. But in both regions, which had led the boom of the late 1990s, investment stayed well below peak levels. In Europe and Central Asia investment fell by more than 30% from its peak in 2005, mainly because of a lack of large projects like those closing in 2005 (such as the divestiture of Turk Telekom).

Trends in the number of projects reaching closure also varied across regions. In South Asia the number of transactions grew to a record level in 2006. In Latin America the number grew for the first time since 2000 but still remained at a third of its peak. In East Asia and Europe and Central Asia the number of projects remained at levels similar to those in 2005. And in the Middle East and North Africa and Sub-Saharan Africa the number reaching closure declined from the record levels in 2005.

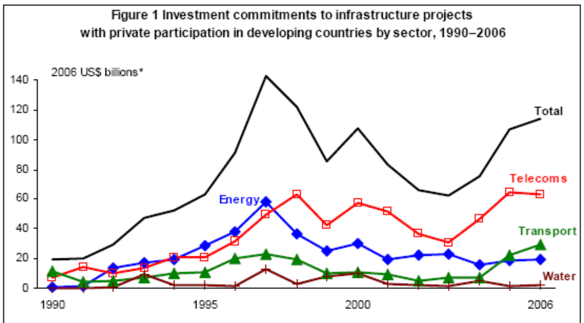


Figure 1 Investment commitments to infrastructure projects with private participation in developing countries by sector, 1990–2006

Source: World Bank and PPIAF, PPI Project Database. * Adjusted by the 2006 US CPI.

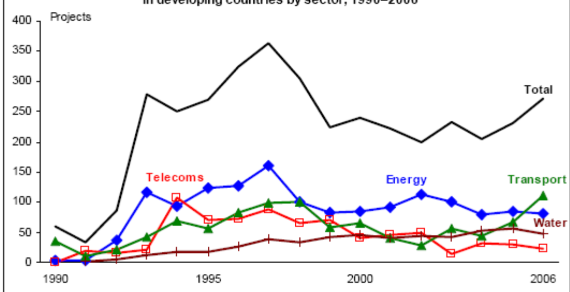


Figure 2 Infrastructure projects with private participation in developing countries by sector, 1990–2006

Source: World Bank and PPIAF, PPI Project Database.

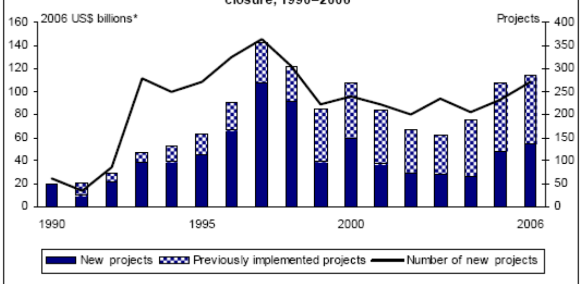


Figure 3 Investment commitments to infrastructure projects with private participation in developing countries by year of financial closure, 1990–2006

Source: World Bank and PPIAF, PPI Project Database. * Adjusted by the 2006 US CPI.

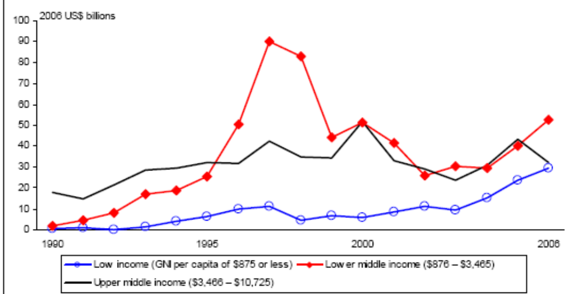


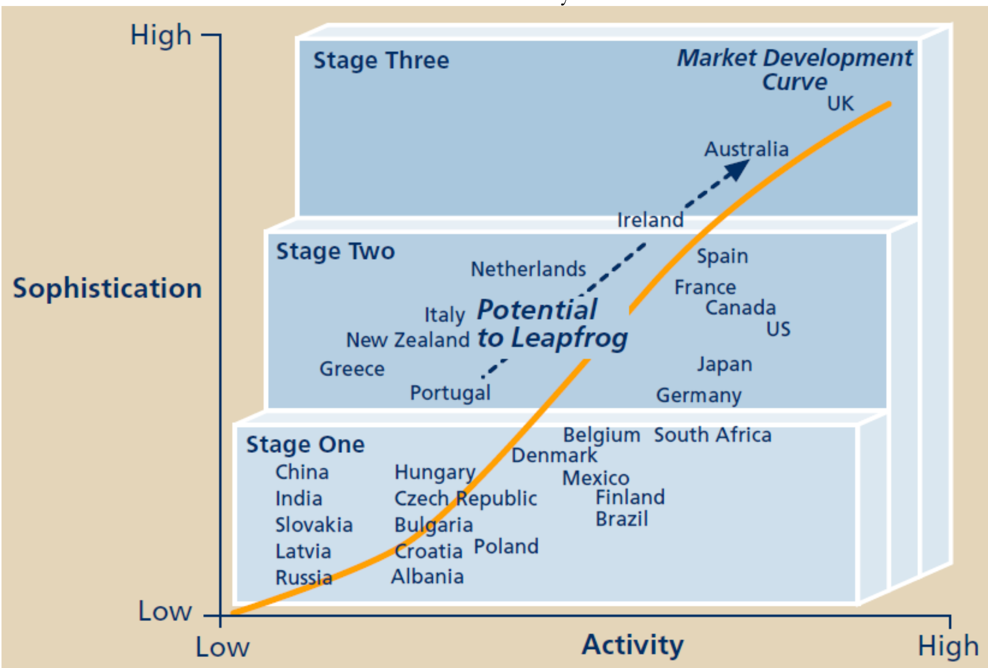
Figure 4 Investment commitments to infrastructure projects with private participation by country income group, 1990–2006

Source: World Bank and PPIAF, PPI Project Database.

An Overview of Global Progress in PPP

A diagram showing different countries in the world according to the stages of sophistication in adopting the PPP model by Deloitte is given below:

PPP Market Maturity Curve[6]



From 1990 to 2006 the Private Participation in Infrastructure Project Database tracked almost 3,800 projects involving private participation in the transport, energy, telecommunications, and water and sewerage sectors of developing countries. Investment commitments to these projects totalled US$1,100 billion.

Table: Investment commitments to infrastructure projects with private participation in developing countries by sector or region, 1996–2006 (US$ billions)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Sector											
Energy	29.4	46.1	29.3	20.9	25.5	17.2	20.2	21.0	15.1	17.8	19.5
Electricity	26.8	42.8	23.3	18.1	23.3	13.8	11.1	16.9	11.9	15.4	15.9
Natural gas	2.6	3.3	6.7	2.9	2.2	3.7	9.0	4.1	3.3	2.4	3.6
Telecommunications	24.6	39.2	51.3	34.9	48.9	45.5	32.7	28.1	43.9	62.7	63.1
Transport	15.6	18.3	15.9	8.1	9.1	8.4	4.6	6.3	7.0	21.7	29.7
Airports	0.4	0.7	3.0	0.5	2.1	1.4	0.2	0.7	0.8	7.5	7.0
Railways	5.9	4.6	3.3	2.9	1.1	1.1	0.2	0.9	1.1	0.9	8.2
Seaports	7.5	9.7	8.1	2.2	3.8	4.7	2.2	2.7	3.5	6.3	10.1
Roads	1.8	3.3	1.5	2.4	2.0	1.3	2.0	2.0	1.6	7.0	4.3
Water and sewerage	1.3	10.2	2.3	6.5	8.6	2.3	1.6	1.5	4.7	1.7	2.0
Region											
East Asia and Pacific	27.2	36.6	10.1	12.2	18.0	12.6	11.4	17.8	13.4	17.6	18.5
Europe and Central Asia	10.7	14.6	11.9	9.8	25.8	14.2	17.3	12.1	17.2	35.8	23.4
Latin America and the	25.6	48.3	68.9	38.0	38.5	33.3	19.3	15.4	17.4	20.6	27.9

[6] **Deloitte Research.** *Closing the Infrastructure Gap: The role of Public Private Partnerships.* s.l. : Deloitte Rsearch, 2006. available on the internet at: http://www.deloitte.com/assets/Dcom-Panama/Local%20Assets/Documents/sector-publico.pdf. - Page 6

Caribbean											
Middle East and North Africa	0.1	5.1	3.4	2.9	4.1	4.4	1.6	1.9	7.4	7.1	11.0
South Asia	5.8	6.2	2.3	4.6	3.5	4.9	6.2	4.0	11.4	14.2	21.8
Sub-Saharan Africa	1.4	3.0	2.2	2.9	2.2	4.0	3.3	5.6	3.9	8.7	11.8
Total	**70.9**	**113.7**	**98.8**	**70.4**	**92.0**	**73.3**	**59.1**	**56.8**	**70.7**	**103.9**	**114.3**

Source: World Bank and PPIAF, PPI Project Database.
Note: Includes annual investment commitments to projects reaching closure in 1990–2006.

According to a World Bank study, more than 15% of GDP is needed in investments to achieve an annual growth rate of 7.5% in South Asia. A sector wise breakup is as follows:

Table: Infrastructure investment needed to meet 7.5 percent annual economic growth in South Asia, 2006–10 (percentage of GDP)[7]

	Electricity generation capacity	Telephone mainlines and mobiles	Paved roads	Rail routes	Improved water	Improved sanitation	Total
New investment	1.8	0.7	2.0	0.1	0.3	0.4	5.4
Capital replacement	0.7	0.4	0.5	0.1	0.3	0.3	2.2
Total	2.5	1.1	2.5	0.2	0.6	0.7	7.6

According to a World Bank[8] study, South Asia has seen a recent surge in investment commitments to infrastructure projects with private participation. Of total commitments in 1990–2006, almost half came in the last three years of the period. Moreover, South Asia is receiving a greater share of the investment commitments going to all developing countries. While it attracted only 5 percent of the total in 1995–2000, its share grew to 13 percent in 2001–06. In 2006 its share was 19 percent.

The current scenario

The global financial crisis has transformed the outlook for infrastructure projects with private participation in developing countries. In the second half of 2009 developing economies are seeing some light at the end of the tunnel, with the crisis easing and investment flows returning. But as was the case with the Asian financial crisis, it is clear that the downturn of 2008–09 will leave a lasting impact on the outlook for private participation in infrastructure long after the crisis has receded.

As the global economic climate trends toward recovery, governments will have to adjust their strategy on public private partnerships to account for an attenuated risk appetite, lower debt-to-equity ratios, and the need for clarity on contingent liabilities. Before the second half of 2008 private activity in infrastructure looked set to continue the encouraging trends of the previous half decade. Investment, once heavily concentrated in profitable telecommunications projects, had become more evenly distributed across sectors. It had also become more diverse geographically, with larger shares than ever before going to low-income countries, particularly in Sub-Saharan Africa and South Asia. And investment was growing robustly. In 2007 (the most recent year for which comprehensive data are available) investment exceeded the 1997 peak for the first time. Investment rose in all developing regions except Africa, where it hovered near record levels. In Central Asia and Europe it grew by a staggering 80 percent.

The global financial crisis has disrupted these trends. Investment in Central Asia and Europe fell by 54 percent between July 2008 and March 2009. Some other regions saw investment fall as well. The Asian financial crisis that began in 1997 was followed by a similar downturn in infrastructure investment. The

[7] **Harris, Clive.** *India leads developing nations in private sector investment.* Washington D.C. : Public-Private infrastructure Advisory Panel, 2008. PPIAF - http://www.ppiaf.org/documents/gridlines. - Page 4
[8] **Harris, Clive.** *India leads developing nations in private sector investment.* Washington D.C. : Public-Private infrastructure Advisory Panel, 2008. PPIAF - http://www.ppiaf.org/documents/gridlines. - Page 1

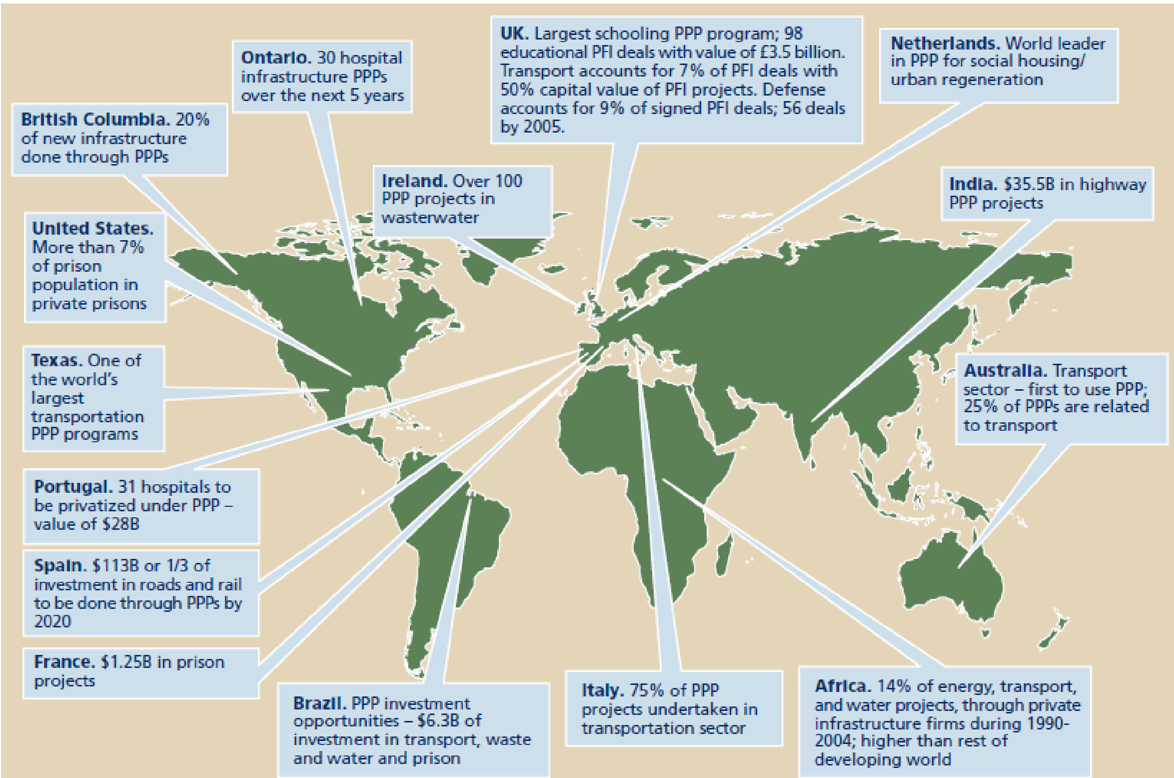
global fallout from that downturn led to a transformation in private investment in infrastructure as investors became far more risk averse. Private operators opted for contracts that were free of the risks associated with customers' willingness and ability to pay for services or that had a variety of risk mitigation arrangements, often paid for by governments and donors.

After years of focus on risk mitigation, infrastructure investment is suffering somewhat less collateral damage this time around. Other factors also point to a better long-term outlook for infrastructure. This time there is broader consensus that maintaining infrastructure investment is critical for recovery and long-term growth. And improvements in fiscal management since the last crisis mean that many countries are better prepared to support investment.

In contrast to past crises, when governments and the private sector retreated in tandem, this crisis seems to have aligned the interests of investors and governments in favor of infrastructure. New private money continues to be earmarked for infrastructure. Institutional investors such as pension funds, burned by toxic securities, are shopping for investments that generate stable, long-term returns. Nevertheless, there are still major obstacles of bankability and financing blocking the flow of private money to new projects.

A few sector highlights of PPP across the world as given by Deloitte Research can be summarised in the figure below

PPP Sector Highlights around the World[9]



International development funds are increasingly being channelled through PPP's[10] – Many governments are now obtaining financing for PPP projects from organisations such as the World Bank, the Organisation for Economic Co-operation and Development (OECD) and the European Investment Bank (EIB). A large part of the funding from these organisations tends to go into infrastructure-based PPP's, such as transport, water and telecommunications. As an example, Chile has succeeded in

[9] **Deloitte Research.** *Closing the Infrastructure Gap: The role of Public Private Partnerships.* s.l. : Deloitte Rsearch, 2006. available on the internet at: http://www.deloitte.com/assets/Dcom-Panama/Local%20Assets/Documents/sector-publico.pdf. - Page 23
[10] C.B.I. Going Global - The World of Public Private Partnerships. s.l. : CBI, 2007. www.cbi.org.uk. 978-0-85201-668-8. – Page 9

increasing its infrastructure investments to a level of 5% of GDP, in good part through encouraging private participation in almost all infrastructure sectors[11].

Indian PPP Status

As per Government of India,[12] the future importance of PPP's can be gauged from the fact that as of 2006, while 86 PPP projects have been awarded, an estimated 500 PPP projects are 'assumed' to exist in India, totalling about Rs 340 billion, in twelve states and three central agencies. Roads and port sectors have dominated in the number and size of PPP's. A study conducted by the World Bank of 13 states in 2005 found only 85 PPP projects awarded by states and select central agencies (not including power and telecom). Their total project cost is Rs 339.5 billion.

Although India has traditionally been among the low ranked raked countries as far as PPP is concerned, as per media reports, both the number of projects as well as the project funding for these have risen significantly in the last 4-5 years. According to a Morgan Stanley[13] report, more than Rs 1000 billion worth of PPP projects are under development in India.

State wise PPP project details in India is given in the following table.

State-wise India PPP project details[14]

(All financial figures in Crore Rupees)

State	Total Number of Projects	Value of contracts by Project Size				Total Value of contacts
		< 100 cr	100 to 250 cr	251 to 500 cr	>500 cr	
Andhra Pradesh	63	1062.93	1554.27	3188.53	33473.7	39279.43
Bihar	2	4	0	418.04	0	422.04
Chandigarh	1	15	0	0	0	15
Chhattisgarh	4	70	304	464	0	838
Delhi	9	95	0	408.2	10374	10877.2
Goa	2	30	220	0	0	250
Gujarat	27	130.06	277.22	3360.9	14943.71	18711.89
Haryana	2	0	0	756	0	756
Jharkhand	6	131	550	0	0	681
Karnataka	95	980.39	1692.55	12203.31	24615.6	39491.85
Kerala	11	114	112	615.5	11131	11972.5
Madhya Pradesh	37	1027.32	1117.28	2694.95	2949	7788.55
Maharashtra	28	118.5	745.5	1099.84	32061.95	34025.79
Orissa	16	235.1	0	500	6888.34	7623.44
Pudducherry	2	0	0	419	1867	2286
Punjab	19	537.26	434.72	572	0	1543.98
Rajasthan	49	523.92	783.79	833	3112.7	5253.41
Sikkim	24	175.59	558	2669	13708	17110.59
Tamil Nadu	30	143.31	555.6	6412.87	5340	12451.78
Uttar Pradesh	5	0	0	1458.57	649.21	2107.78
West Bengal	5	0	200	1214.4	641	2055.4
Inter-State	13	160.45	195	2294.67	5984	8634.12
Total	**450**	**5638.83**	**9299.93**	**41582.78**	**167739.21**	**224175.8**

---

[11] International Conference on Meeting India's Infrastructure Needs with Public Private Partnerships - The International Experience and Perspective. Department of Economic Affairs, Ministry of Finance, Government of India. Delhi : Department of Economic Affairs, Ministry of Finance, Government of India, 2007. – Page 5

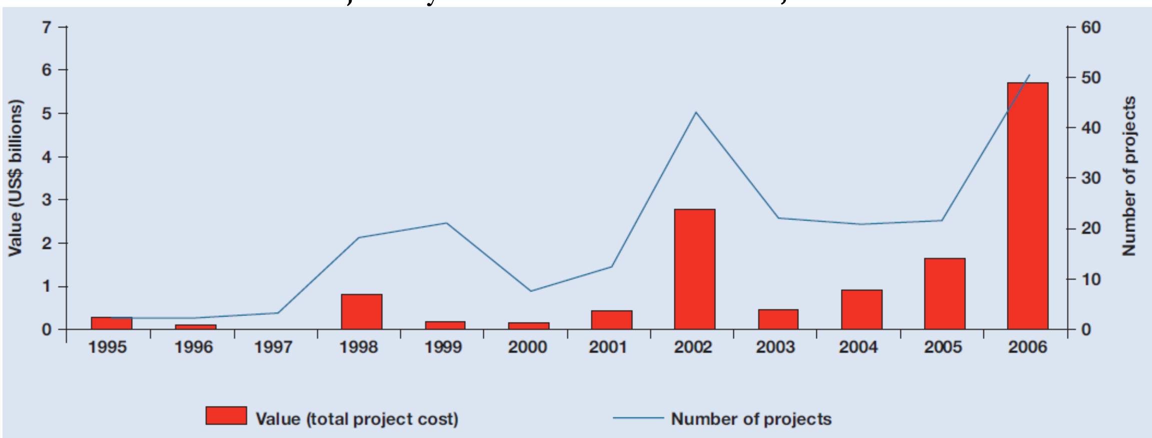
[12] *Facilitating Public-Private Partnership for Accelerated Infrastructure Development in India.* **Department of Economic Affairs (DEA), Ministry of Finance, Government of India and Asian Development Bank (ADB).** New Delhi : Asian Development Bank, 2006.

[13] *Facilitating Public-Private Partnership for Accelerated Infrastructure Development in India.* **Department of Economic Affairs (DEA), Ministry of Finance, Government of India and Asian Development Bank (ADB).** New Delhi : Asian Development Bank, 2006 Page30

[14] NOTE ON PUBLIC PRIVATE PARTNERSHIP (PPP) PROJECTS IN INDIA (As on November 15, 2009), Department of Economic Affairs, Ministry of Finance, Government of India (http://www.pppindiadatabase.com/Uploads/Report1.pdf)

PPP projects in India have witnessed a huge increase in number and in financial value of the projects in the last two decades. A comparative chart by the World Bank is shown below:

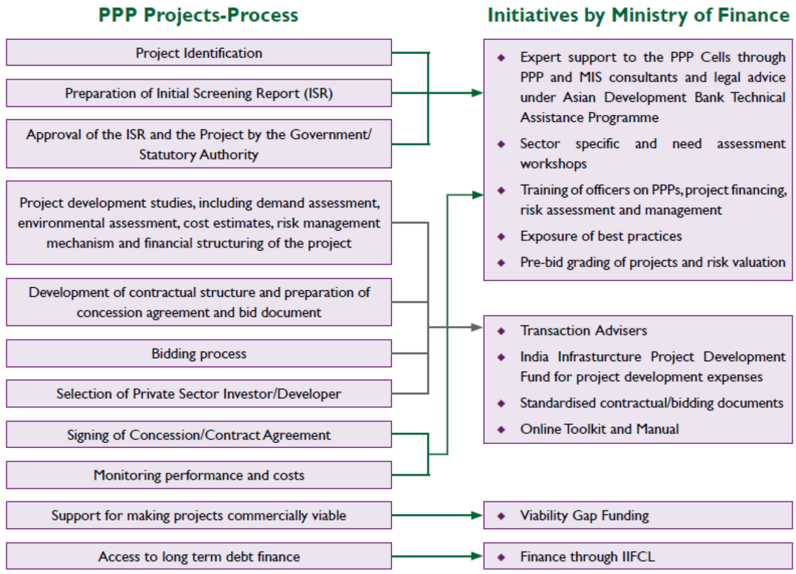
PPP Projects by Year of Financial Closure[15], 1995-2006



According to a World Bank study, it is estimated that India's infrastructure sector could absorb $150 billion of FDI in the next five years[16]. Also India has had the most success attracting more private investment in infrastructure in 2006 than any other developing country[17] and commitments in India were nearly twice those in its nearest rival, Brazil, and well ahead of those in China[18].

A fairly detailed process for PPP project management and initiatives taken by the Ministry of Finance, Government of India is given below:

PPP Projects Process Management[19]



[15] **Harris, Clive and Tadimalla, Sri Kumar.** *Financing the boom in public-private partnerships in Indian infrastructure.* Washington DC : Public-Private Infrastructure Advisory Facility (PPIAF), Dec 2008. Note No. 45 - GRID-LINES. – Page 2

[16] Facilitating Public-Private Partnership for Accelerated Infrastructure Development in India. Department of Economic Affairs (DEA), Ministry of Finance, Government of India and Asian Development Bank (ADB). New Delhi : Asian Development Bank, 2006. – Page 38

[17] . Harris, Clive. India leads developing nations in private sector investment. Washington D.C. : Public-Private infrastructure Advisory Panel, 2008. PPIAF - http://www.ppiaf.org/documents/gridlines. - Page 1

[18] , Clive. India leads developing nations in private sector investment. Washington D.C. : Public-Private infrastructure Advisory Panel, 2008. PPIAF - http://www.ppiaf.org/documents/gridlines. - Page 3

[19] **Department of Economic Affairs, Ministry of Finance, Government of India.** *Public Private Partnerships - Creating an Enabling Environment for State Projects.* New Delhi : PPP Cell, Department of Economic Affairs, Ministry of Finance, Government of India, 2008. – Page 12

However, India is lagging far behind China in infrastructure as discussed in an International Conference on PPP in New Delhi. Investments needed to reach a comparative level are given below:

India would need to spend 12.6% of GDP per annum to reach China's present infrastructure stock by 2015[20]

Electricity generating capacity	Length of paved roads	Telecoms, mainlines and mobile	Water & Sanitation	Total
5.90%	3.81%	2.32%	0.55%	12.6%

Investments in PPP are not without their own success and failure stories. A few of them, especially in consideration to India are as under.

- The private sector invested $750 billion in infrastructure in developing countries in 1990–2001. Of the 2500 projects awarded during this period, only 45 were cancelled, though many were renegotiated[21].
- Notable success through PPP's in the telecom, roads, ports and airports sectors. In the civil aviation sector, preparations are under way to engage the private sector in non-aeronautical activities at 35 non-metro airports, and in the development of Greenfield "merchant" airports and about 300 airstrips. Some of the other areas in which the government is envisaging greater scope for PPP's include power, water and sanitation, tourism and hospitality sectors[22].
- The multilateral agencies have welcomed the recent steps taken by GOI with respect to VGF and IIFCL. Agencies like the ADB and the World Bank could assist GOI in promoting PPPs across sectors and regions of India, through a range of financing and advisory and technical assistance (TA) measures. Most importantly, these agencies would be able to assist governments in tailoring the PPP solutions to specific demands of the individual states, sectors, and projects[23].

Government of India Policy and Programmes

Since the opening up of the economy in the early 1990's, the Government of India and many state governments have taken multiple steps to encourage PPP investment. A few of them are listed as under.

- **Setting up of a Committee on Infrastructure[24]** on August 31, 2004: The committee is chaired by the Prime Minister. Its functions are to initiate policies, develop structures for PPPs, and oversee the progress of key infrastructure projects;
- **Publishing of documents on PPP** by the Government of India. A list of key documents is attached later in this report.
- **Viability Gap Funding (VGF)** scheme: The sectors identified for VGF scheme are Roads and bridges, railways, seaports, airports, inland waterways; Power; Urban transport, water supply, sewerage, solid waste management and other physical infrastructure in urban areas.

[20] *International Conference on Meeting India's Infrastructure Needs with Public Private Partnerships - The International Experience and Perspective.* **Department of Economic Affairs, Ministry of Finance, Government of India.** Delhi : Department of Economic Affairs, Ministry of Finance, Government of India, 2007. p. 51. – Page 48

[21] Facilitating Public-Private Partnership for Accelerated Infrastructure Development in India. Department of Economic Affairs (DEA), Ministry of Finance, Government of India and Asian Development Bank (ADB). New Delhi : Asian Development Bank, 2006. Page 23

[22] International Conference on Meeting India's Infrastructure Needs with Public Private Partnerships - The International Experience and Perspective. Department of Economic Affairs, Ministry of Finance, Government of India. Delhi : Department of Economic Affairs, Ministry of Finance, Government of India, 2007. Page 4

[23] Facilitating Public-Private Partnership for Accelerated Infrastructure Development in India. Department of Economic Affairs (DEA), Ministry of Finance, Government of India and Asian Development Bank (ADB). New Delhi : Asian Development Bank, 2006. Page 12

[24] *Facilitating Public-Private Partnership for Accelerated Infrastructure Development in India.* **Department of Economic Affairs (DEA), Ministry of Finance, Government of India and Asian Development Bank (ADB).** New Delhi : Asian Development Bank, 2006. – Page 31

Other sectors can be added on the approval from the Finance Minster. VGF is to ensure funding for large scale infrastructure projects, where commercial viability is difficult to establish, especially at the beginning of the project.

- Setting up on an **Empowered Committee**[25] for speeding up the approval mechanism and process for PPP projects. [(1) Page 33]
- Setting up of a **committee on Knowledge management and dissemination**[26] under Joint Secretary (Infrastructure), Department of Economic Affairs (DEA), to prepare PPP toolkits for various sectors. The toolkit comprises model concession agreements and prequalification criteria for different sectors, standard terms and conditions, and project preparation manual.
- Assistance for the **creation of PPP cells in various state governments**[27] to act as a nodal agency for PPP projects at the state level.
- **India Infrastructure Finance Company Limited (IIFCL)**[28] is a wholly government owned company with an authorized capital of Rs 1000 crore and paid-up capital of Rs 10 crore set up to fill the gap for long-term infrastructure finance that banks are not in a position to address. It caters for the burgeoning gap in long-term financing of infrastructure projects in the public sector, PPP, or the private sector. IIFCL plays a catalytic role in the infrastructure sector by providing long-term debt for financing infrastructure projects in India. IIFCL raises funds both from the domestic as well as external markets on the strength of government guarantees. An off shore SPV, Indian Infrastructure Finance Company (UK) Limited has been set up to utilise part of foreign exchange reserves for infrastructure development.[29]
- **Model Concession Agreements**[30] have been set up for highways, transport, urban and other sectors to make sponsors and officials more comfortable with PPP projects.
- A **portal for PPP activities** in India has been set up - www.pppinindia.com. The website is a one-stop site on information relating to Public Private Partnership initiatives in India. The site provides links to institutions, websites and resources related to PPP and infrastructure, including contact points and referrals about Government agencies.
- A **database of PPP projects** by central and state governments in India is available online at www.pppindiadatabase.com. The purpose of the database is to provide comprehensive and current information on the status and extent of PPP initiatives in India at the Central, State, and sectoral levels. The database provides essential information on economic sector, host state, collaborating government departments, private investors, capital commitments and total resource commitments.

Key Government Institutions for PPP

Few key government institutions are listed as under to support the PPP initiatives of government in India.

[25] *Facilitating Public-Private Partnership for Accelerated Infrastructure Development in India.* **Department of Economic Affairs (DEA), Ministry of Finance, Government of India and Asian Development Bank (ADB).** New Delhi : Asian Development Bank, 2006. – Page 33

[26] *Facilitating Public-Private Partnership for Accelerated Infrastructure Development in India.* **Department of Economic Affairs (DEA), Ministry of Finance, Government of India and Asian Development Bank (ADB).** New Delhi : Asian Development Bank, 2006. – Page 34

[27] *Facilitating Public-Private Partnership for Accelerated Infrastructure Development in India.* **Department of Economic Affairs (DEA), Ministry of Finance, Government of India and Asian Development Bank (ADB).** New Delhi : Asian Development Bank, 2006. – Page 34

[28] *Facilitating Public-Private Partnership for Accelerated Infrastructure Development in India.* **Department of Economic Affairs (DEA), Ministry of Finance, Government of India and Asian Development Bank (ADB).** New Delhi : Asian Development Bank, 2006. – Page 35

[29] **Department of Economic Affairs, Ministry of Finance, Government of India.** *Public Private Partnerships - Creating an Enabling Environment for State Projects.* New Delhi : PPP Cell, Department of Economic Affairs, Ministry of Finance, Government of India, 2008. – Page 9

[30] *Action Plan and Way Forward.* **Asian Development Bank.** Workshops on Mainstreaming Public–Private Partnerships in the Indian Urban Sector / available at http://www.adb.org/Documents/Reports/PPP-Indian-Urban-Sector/chap07.pdf. Page 67

- **Nodal Officers for PPP in states**: Most states have PPP nodal officers for various activities relating to PPP investment facilitation. A list can be seen in the following website: http://www.pppinindia.com/contact-cells.asp
- **Urban Development Departments**: Almost all state governments have set up departments catering exclusively for Urban development. A list of departments is attached in Annexure 2.
- **Sponsoring ministry**[31]: The sponsoring ministry is responsible for project identification, preparation of feasibility studies, project arrangements, etc. It may take help of technical, economical, legal experts where needed. It also appraises projects costing upto Rs. 5 crores.
- **Public Private Partnership Appraisal Committee (PPPAC**[32]**)**: The PPPAC comprises five Secretaries (Department of Economic Affairs, Planning Commission, Department of Expenditure, Department of Legal Affairs, sponsoring department) and as many co-opted members as may be needed. The Finance Ministry is the nodal ministry
- **PPP Appraisal Unit**[33]**:** Set up under the Planning Commission to prepare an appraisal note for the PPPAC providing specific suggestions for improving the concession terms, where this is possible.
- **Standing Finance Committee (SFC)**[34]: The SFC is the body responsible for initial appraisal of the projects; comprising the Secretary of Administrative Ministry, Financial Adviser, Joint Secretary of the Division and representative from Department of Legal Affairs.
- **Empowered Committee:**[35] The Empowered committee comprises of the four Secretaries of Economic Affairs, Planning Commission, Expenditure and line ministry and have a key role in the sanction of VGF (Viability Gap Funding) upto Rs. 200 Crores.
- **Empowered Institution**[36]: – comprising Additional Secretaries of Economic Affairs, Expenditure, Joint Secretary – Planning Commission, Joint Secretary – line Ministry, Joint Secretary – DEA. This committee play a key role in sanction VGF upto Rs. 100 crores.
- **India Infrastructure Project Development Fund (IIPDF)**[37]: The IIPDF was set up with an initial corpus of Rs. 100 Crore to provide financial support for quality project development activities. The Sponsoring Authority will thus be able to source funding to cover a portion of the PPP transaction costs, thereby reducing the impact of costs related to procurement on their budgets.

Priority Sectors for PPP in India

PPP presents a big opportunity for the private sector The CoI has estimated that India's infrastructure sector could absorb $150 billion of FDI in the next five years. The Tenth Plan projection on the total investment required for the infrastructure sector (at 2001-2 prices) is over Rs 11,00,000 crore (US$250

[31] **Department of Economic Affairs, Ministry of Finance, Government of India.** *Guidelines for Formulation, Appraisal, and Approval of Central Sector Public Private Partnership Projects.* New Delhi : PPP Cell, Department of Economic Affairs, Ministry of Finance, Government of India, New Delhi - 110001, India, 2008. – Page 1

[32] **Department of Economic Affairs, Ministry of Finance, Government of India.** *Guidelines for Formulation, Appraisal, and Approval of Central Sector Public Private Partnership Projects.* New Delhi : PPP Cell, Department of Economic Affairs, Ministry of Finance, Government of India, New Delhi - 110001, India, 2008. – Page 4

[33] **Department of Economic Affairs, Ministry of Finance, Government of India.** *Guidelines for Formulation, Appraisal, and Approval of Central Sector Public Private Partnership Projects.* New Delhi : PPP Cell, Department of Economic Affairs, Ministry of Finance, Government of India, New Delhi - 110001, India, 2008. – Page 4

[34] **Department of Economic Affairs, Ministry of Finance, Government of India.** *Guidelines for Formulation, Appraisal, and Approval of Central Sector Public Private Partnership Projects.* New Delhi : PPP Cell, Department of Economic Affairs, Ministry of Finance, Government of India, New Delhi - 110001, India, 2008. – Page 14

[35] **Department of Economic Affairs, Ministry of Finance, Government of India.** *Public Private Partnerships - Creating an Enabling Environment for State Projects.* New Delhi : PPP Cell, Department of Economic Affairs, Ministry of Finance, Government of India, 2008. Page 7

[36] **Department of Economic Affairs, Ministry of Finance, Government of India.** *Public Private Partnerships - Creating an Enabling Environment for State Projects.* New Delhi : PPP Cell, Department of Economic Affairs, Ministry of Finance, Government of India, 2008. Page 7

[37] **Department of Economic Affairs, Ministry of Finance, Government of India.** *Public Private Partnerships - Creating an Enabling Environment for State Projects.* New Delhi : PPP Cell, Department of Economic Affairs, Ministry of Finance, Government of India, 2008. Page 13

billion). The private sector estimates for investment requirements are even higher. The World Bank estimates that total investments of $425 billion are needed in infrastructure until 2010–11 and that there is a financing gap of $123 billion. Thus involvement of private players in as many sectors as possible including Energy, Telecom, Transport and Water and Sewerage would be an opportunity for all the players.

Sector-wise PPP India Project Details[38]

(All financial figures in Crore Rupees)

Sector	Total Number of Projects	Value of contracts by Project Size				Total Value of contacts
		100 cr	100 to 250 cr	251 to 500 cr	500 cr	
Airports	5	0	0	303	18808	19111
Education	1	93.32	0	0	0	93.32
Energy	24	175.59	558	2669	13708	17110.59
Ports	43	96	970	2440	62992.95	66498.95
Railways	4	0	102.22	905	594.34	1601.56
Roads	271	3162.5	5526.49	32861.87	60453.92	102004.7
Tourism	29	742.56	674.52	0	1050	2467.08
Urban Development	73	1283.86	1468.7	2403.91	10132	15288.47
Total	450	5638.83	9299.93	41582.78	167739.21	224175.8

Below are a few PPP projects and sector highlights in urban development, Education, Health, Infrastructure and services.

Urban Development

- **Urban Development Departments**: Almost all state governments have Urban Development Departments set up specifically for the purposes of promoting urban development through different programmes. A list is attached. For example, the Maharashtra Urban Infrastructure Fund (MUIF)[39] consists of a Trust Fund, a Trustee Company, namely the Maharashtra Urban Infrastructure Fund Trustee Company Limited and an Asset Management Company, namely Maharashtra Urban Infrastructure Development Company Limited. The envisaged functions are Project Development, Capacity Building, Facilitating Finance, and Partial Direct Lending.
- **Jawaharlal Nehru National Urban Renewal Mission (JNNURM)[40]:** The aim of JNNURM is to encourage reforms and fast track planned development of identified cities. Focus is on efficiency in urban infrastructure and service delivery mechanisms, community participation, and accountability of ULBs/ Parastatal agencies towards citizens. It has two major components – the Urban Infrastructure and Governance and Basic Services for the Urban Poor.
- **PPPs in water supply projects**[41] have been through municipal bonds in cities such as Ahmadabad, Ludhiana, and Nagpur
- The **Tirupur project**[42] in Tamil Nadu is a BOOT project, the **first privately financed water and sewerage project in India**. An SPV was set up for the purpose and the project took than ten years from concept to financial closure.

---

[38] : NOTE ON PUBLIC PRIVATE PARTNERSHIP (PPP) PROJECTS IN INDIA (As on November 15, 2009), Department of Economic Affairs, Ministry of Finance, Government of India (http://www.pppindiadatabase.com/Uploads/Report1.pdf)

[39] http://www.muidcl.com

[40] https://jnnurmmis.nic.in/

[41] *Facilitating Public-Private Partnership for Accelerated Infrastructure Development in India.* **Department of Economic Affairs (DEA), Ministry of Finance, Government of India and Asian Development Bank (ADB).** New Delhi : Asian Development Bank, 2006. – Page 30

Education

Education has not been that successful in PPP. A highlighted PPP programme in the education sectors, the Hoshangabad Science Teaching Programme was abruptly ended.

- **Hoshangabad Science Teaching programme (HSTP)** [43] was introduced in 1973 in Hoshangabad district, Madhya Pradesh within participating government schools. In the three decades of its existence it covered over a thousand schools and was regarded as an innovative approach to the teaching of science. However, the sudden closure of this first and most durable non-State initiative in education in 2002 based on an external evaluation that its results at the Standard X level were not of an adequate standards triggered questions about the nature of state and non-state engagement in the provision of education.
- There is a general non-acceptability of profit-based approach in the education sector thus making private players not very enthusiastic about it.

Health

The introduction of PPP in the health sector is a relatively recent phenomena. Although a few projects have been implemented in this sector, their implementation has had mixed success. Some of the projects in which PPP has been attempted are:

- **Yeshasvini Health scheme in Karnataka**[44]: The Yeshasvini Co-operative Farmer's Healthcare Scheme is a health insurance scheme targeted to benefit the poor. It was initiated by Narayana Hrudayalaya, super-specialty heart hospital in Bangalore, and by the Department of Co-operatives of the Government of Karnataka. The Government provides a quarter (Rs. 2.50) of the monthly premium paid by the members of the Cooperative Societies, which is Rs.10 per month. The incentive of getting treatment in a private hospital with the Government paying half of the premium attracts more members to the scheme. The cardholders could access free treatment in 160 hospitals located in all districts of the state for any medical procedure costing upto Rs. 2 lakhs.
- **Arogya Raksha Scheme in Andhra Pradesh**[45]: The Government of Andhra Pradesh initiated the Arogya Raksha Scheme in collaboration with the New India Assurance Company and with private clinics. It is an insurance scheme fully funded by the government. It provides hospitalization benefits and personal accident benefits to citizens below the poverty line who undergo sterilization for family planning from government health institutions. The government pays an insurance premium of Rs. 75 per family to the insurance company, with the expected enrollment of 200,000 acceptors in the first year.
- **Contracting in Sawai Man Singh Hospital, Jaipur**[46]: The SMS hospital has established a Life Line Fluid Drug Store to contract out low cost high quality medicine and surgical items on a 24-hour basis inside the hospital. The agency to operate the drug store is selected through bidding. The successful bidder is a proprietary agency, and the medical superintendent is the overall supervisor in charge of monitoring the store and it's functioning. The contractor appoints and manages the remuneration of the staff from the sales receipts. The SMS hospital shares resources with the drug store such as electricity; water; computers for daily operations; physical space; stationery and medicines. The contractor provides all staff salaries; daily operations and distribution of medicine; maintenance of records and monthly reports to SMS Hospital.

---

[42] *Facilitating Public-Private Partnership for Accelerated Infrastructure Development in India.* **Department of Economic Affairs (DEA), Ministry of Finance, Government of India and Asian Development Bank (ADB).** New Delhi : Asian Development Bank, 2006. – Page 29

[43] *Tilting At Windmills: Public-Private Partnerships In Indian Education Today.* **Fennel, Shailja.** 2007, Research Consortium on Educational Outcomes and Poverty. – Page 12

[44] **KPMG.** Public-Private Partnership's in India. *http://ibef.org/download/PublicPrivatePartnership.pdf.* - Page 1

[45] **KPMG.** Public-Private Partnership's in India. *http://ibef.org/download/PublicPrivatePartnership.pdf.* - Page 1

[46] **KPMG.** Public-Private Partnership's in India. *http://ibef.org/download/PublicPrivatePartnership.pdf.* - Page 2

- **Rajiv Gandhi Super-specialty Hospital, Raichur, Karnataka**[47]: The Rajiv Gandhi Super-specialty Hospital in Raichur Karnataka is a joint venture of the Government of Karnataka and the Apollo hospitals Group, with financial support from OPEC (Organization of Petroleum Exporting Countries). The basic reason for establishing the partnership was to give super-specialty health care at low cost to the people Below Poverty Line. The Govt. of Karnataka has provided the land, hospital building and staff quarters as well as roads, power, water and infrastructure. Apollo provided fully qualified, experienced and competent medical facilities for operating the hospital.

General Economic Infrastructure

The general economic infrastructure includes railways, roads, highways, ports, airports, telecom and power. Sector highlights for each of these are given below. Most of this information is sourced from Ministry of Finance, Department of Economic Affairs.

Railways

- World's fourth largest rail network and the second largest in Asia, Indian Railways has recently attracted immense global attention due to its successful turnaround to profitability.
- Investment in India Railway for 2008-09 was USD 7.91 billion.
- Indian Government is expanding the rail network to increase capacity for domestic cargo. The investment is expected to be about Rs. 22,000 crore (USD 4.525 billion).
- Until now, container movement by rail was the monopoly of a public sector entity, CONCOR. The container movement has been thrown open to competition and private sector entities have been made eligible for running container trains. 14 applicants have submitted the application seeking permission for container train operation, which have been approved.
- Many PPP projects have been announced by the Railway Minister in the current Railway budget including – Medical college attachments to railway hospitals, land and air space utilization, passenger amenities at Rs. 1102 crore. [48]

Roads and Highways

- With an extensive road network of kilometers, India has the second largest road network in the world (3.3 million kms).
- Indian roads carry about 61% of the freight and 85% of the passenger traffic.
- To further the existing infrastructure, Indian Government annually spends about Rs.18000 crores (USD 3.704 billion).
- A large component of highways is to be developed through public-private partnerships
    - Several high traffic stretches already awarded to private companies on a BOT basis
    - Two successful BOT models are already in place – the annuity model and the upfront/lumpsum payment model
- Investment opportunities exist in a range of projects being tendered by NHAI for implementing the NHDP – contracts are for construction or BOT basis depending on the section being tendered.
- A Rs.41,200 crores (US $ 5 billion) project plans to lay 6 lane roads over 6,500 kms of National Highways on the Design Build Finance and Operate (DBFO) basis.
- Prime Minister's Rural Roads Program, National Rail Vikas Yojana, National Maritime Development Program (NMDP), airport expansion programs
- **Delhi-NOIDA Bridge Project** [49] : The US$100 million Delhi-NOIDA Bridge Project, implemented on a BOOT framework on the basis of a 30-year concession, is India's first major PPP initiative.

---

[47] **KPMG.** Public-Private Partnership's in India. *http://ibef.org/download/PublicPrivatePartnership.pdf*. - Page 2
[48] **Minister for Railways.** Railway Budget Speech. *Railway Budget Speech.* New Delhi, India : Ministry for Railways, Government of India, 2010.

Ports

- Indian Government plans to bring a new orientation to encourage the private sector to come forward in developing port activities and operations.
- Many international port operators are invited to submit competitive bid for BOT terminals on a revenue share basis.
- The National Maritime Development Plan (NMDP) has been set up by the Indian government to improve facilities at all the 12 major ports in India. At an investment of about US$ 12.4 billion, by November 2009, many projects are expected to be completed.
- Investment need of $13.5 billion (Rs.60,750 crores) in the major ports under National Maritime Development Program (NMDP) to boost infrastructure at these ports in the next 7 years
- 64% of the proposed investment in major ports envisaged from private players through PPP.

Airports

- Of a total number of 454 airports and airstrips in India, 16 are designated as international airports.
- The Airports Authority of India (AAI) owns and operates 97 airports.
- The Government aims to attract private investment in aviation infrastructure.
- A projected investment of USD 8.5 billion has been planned for the development of Indian airports during the 11th plan.
- Mumbai and Delhi airports have already been privatized. These two airports are being upgraded at an estimated investment of US$ 4 billion for the period 2006-16.
- Passenger traffic is projected to grow at a CAGR of over 15% in the next 5 years. It is estimated that the data will cross 100 million passengers per annum by 2010
- Cargo traffic to grow at over 20% per annum. over the next five years, crossing 3.3 million tonnes by 2010
- 100% FDI is permissible for existing airports; FIPB approval required for FDI beyond 74%.
- 100% FDI under automatic route is permissible for greenfield airports.
- 49% FDI is permissible in domestic airlines under the automatic route, but not by foreign airline companies.
- 100% equity ownership by Non Resident Indians (NRIs) is permitted.
- AAI Act amended to provide legal framework for airport privatization.
- 100% tax exemption for airport projects for a period of 10 years.
- 'Open Sky' Policy of the Government and rapid air traffic growth have resulted in the entry of several new privately owned airlines and increased frequency/flights for international airlines.
- The Greenfield airports at Hyderabad and Bangalore have started operations under PPP initiatives since March and May 2008, respectively. Modernization at Delhi and Mumbai airports is underway while that at Chennai and Kolkata has finally started. [50]

Telecom

- The Department of Telecommunication is projecting a total number of 500 million new connections by the end of 2010.
- Telecom market has grown at about 25% per annum over the last 5 years. Wireless segment subscriber base grew at 85% per annum; fixed line segment at about 10% per annum.
- 74% to 100% FDI permitted for various telecom services
- FIPB approval required for foreign investment exceeding 49% in all telecom services.
- 100% FDI permitted in telecom equipment manufacturing.
- India has a Telecom policy that aims to encourage private and foreign investment, such as
    - An independent regulator – the Telecom Regulatory Authority of India (TRAI)

---

[49] *Facilitating Public-Private Partnership for Accelerated Infrastructure Development in India.* **Department of Economic Affairs (DEA), Ministry of Finance, Government of India and Asian Development Bank (ADB).** New Delhi : Asian Development Bank, 2006. – Page 30

[50] **3i Network.** *India Infrastructure Report, 2009.* New Delhi : Oxford University Press, 2009. p. 283. 978-019806337-7. – Page 275

- Revenue-share model for licences issued by the Government for telecom services in India. Unified access licenses are available for providing telecom services on a pan-India basis
- Planned opening up of National Long Distance (NLD), International Long Distance (ILD) and other value added services.

Power

- Power Generation in India is currently undertaken by State (52.5%), Centre (34%) and Private Sector initiatives (13.5%).
- The government target of over 150,000 MW of hydel power germination is yet to be achieved. By the year 2012, India requires an additional 100,000 MW of generation capacity.
- This has welcomed numerous power generation, transmission, and distribution companies across the globe to establish their operations in the country under the famous PPP programmes.
- There are strong opportunities in transmission network ventures with a total investment opportunity of about US$ 200 billion by 2012. The implementation of key reforms by Govt of India is likely to foster growth in all segments:
  - Unbundling of vertically integrated SEBs
  - "Open Access" to transmission and distribution network
  - Distribution circles to be privatised
  - Tariff reforms by regulatory authorities

Key Issues and Challenges for PPP in India

There are many challenges for implementation of public-private partnership projects:

- **Commercial Viability -** Projects as water supply and sanitation projects are yet to demonstrate their commercial viability to the public
- **Contractual and Capacities Imbalance -** Insufficient experience of the partners, particularly of the public sector while contracting such projects, where we can notice an informational asymmetry operating in favor of private companies, which naturally use their endeavor and potential to negotiate better conditions for themselves;
- **Hidden Debt** - from the macro-economic point of view, we can see a substantial disadvantage in the fact that as a consequence of the long-term character of PPP projects, the mandatory expenses grow and the hidden debt arises, and this debt will exist for a lot of years, and thus it can affect negatively the fighting power of the future governments and burden significantly the future generations.
- **Long Gestation Period -** generally the preparation of individual PPP Projects may take up to 2-3 years (depending on project size and complexity). This long gestation period along with its attendant uncertainties are a big dampener for private sector enthusiasm;
- **Breaking of Partnerships -** considerably negative financial impacts in the case the partnership has to be repudiated;
- **Transfer of Risk -** from the private sector to the public sector possible a new set of risks, e.g. possible risk of bankruptcy of the private player;
- **Focus on Economic Benefits -** PPP Projects tend to focus on the economic aspects of the project, sometimes to the detriment of social and environmental aspects.

Barriers to PPP

Mr. P. Chidambaram (Finance Minister in 2006), in a major PPP Conference[51] listed four major weaknesses in PPP development in India as:

---

[51] International Conference on Meeting India's Infrastructure Needs with Public Private Partnerships - The International Experience and Perspective. Department of Economic Affairs, Ministry of Finance, Government of India. Delhi : Department of Economic Affairs, Ministry of Finance, Government of India, 2007.

- **Weakness in enabling policy and regulatory framework.** Substantial work need to be done in making sector policies and regulations PPP friendly. A large number of these projects are in the States and without the active participation of the States it would not be possible to achieve satisfactory results.
- **Lack of Long Term Instruments** The market presently does not have adequate instruments and capacity to meet the long-term equity and debt financing needed by infrastructure projects.
- **Lack of Bankable Projects** Finding credible and viably structured projects continues to be a challenge. There is a lack of shelf of credible, bankable infrastructure projects, which could be offered for financing to the private sector. Some initiatives have been taken both at the central as well as the states' level to develop PPP projects these tend to be isolated cases and have demonstrated a marked lack of consistency.
- **Limited Capacity to Manage PPP in Public Sector** There is also lack of capacity in public institutions and officials to manage the PPP process. Since these projects involve long term contracts covering the life cycle of the infrastructure asset being created, it is necessary to manage this process to maximize returns to all the stakeholders.

In addition to these, the other obstacles include:

- **Lack of Political Will –** PPP contracts are often seen as government 'selling its jewels'. This myth is perpetuated partly by the political parties for maintaining vested interests, and partly by inefficient or corrupt bureaucracy which is sometimes reluctant to part away with operational control. Paradoxically the honest bureaucrat finds that 'selling' the PPP concept is more hard work than the actual implementation and also makes him / her vulnerable to charges of corruption and nepotism.
- **Varied Institutional Framework** especially the regulatory framework developed by different states. States like Andhra Pradesh, Gujarat, and Punjab have legislation which clearly defines what infrastructure is and how these infrastructure projects are going to be executed by the private sector. Other states have differing administrative (instead of legislative) frameworks in place for decision-making. These divergent institutional frameworks, prevents fast tracking of projects since major clearances are still required from GOI who have to deal with this multiplicity.
- **Non Standardization of Procurement Procedures** Prequalification, bidding, and procurement procedures are not standardized across States, sometimes not even across Ministries. This again slows down the clearances and approval procedures.
- **Need for Balancing Transparency with Expediency** - demand for ensuring transparent relationships and transactions, whether while selecting a partner, or defining the terms and conditions, competences and responsibilities or while concluding contracts itself, makes the PPP contracts' conclusion a very arduous and time consuming process. While RTI is an excellent means to ensure transparency, its misuse in some cases and the perceived threat of persecution, also delays PPP project design and implementation.
- **Absence of Rigorous Project Development**: A key impediment to successful commercialization of projects in India has been the absence of rigorous project development. Many of the projects bid out by the government have been ill defined, inadequately structured, and unsuitable for PPP.
- **Public sector capacity to successfully execute PPPs** – Perhaps the single biggest reason for delays and sub optimal framing of PPP projects has been the public sector's limited skills set and experience in drafting balanced PPP contracts and concession agreements.
- **Need to Address the Risk and Return Concerns of Foreign Investors.** Financing terms generally mean that PPP's are more exposed to interest rate volatility— this causes concern in a period of rising rates and reduced liquidity.
- **Decentralization and Devolution:** Water Supply and Sanitation (WSS) is a state/municipal subject in India, whereby the Constitution mandates that the responsibility of providing WSS services should vest with the respective city Government. However, given the traditional division of roles and responsibilities, and budget flow mechanisms, this responsibility has not been fully

transferred to local bodies in many states. This results in a multi-layered political structure being involved in decision-making in the sector. This is further complicated by political economy issues in the designing of PPP projects in the WSS sector.[52]

- **Inadequate Advocacy**[53] to create greater acceptance of PPP's by the stakeholders.

Key Learnings

As per CBI, a few lessons identified for PPP markets around the world are[54]:

1. Build on models that other countries have tried and tested :
2. Develop high-quality, outcomes-focused public procurement managed by skilled professional staff
3. Understand the needs and capacity of the market
4. Ensure sustainable deal flows through managed markets to encourage new providers
5. Use innovation as a means of delivering service improvements and value for money
6. Create governance arrangements that are fit for purpose
7. Move towards a competitive neutrality model that establishes a level playing field for all providers

[52] Action Plan and Way Forward. Asian Development Bank. Workshops on Mainstreaming Public–Private Partnerships in the Indian Urban Sector / available at http://www.adb.org/Documents/Reports/PPP-Indian-Urban-Sector/chap07.pdf.

[53] Department of Economic Affairs, Ministry of Finance, Government of India. Public Private Partnerships - Creating an Enabling Environment for State Projects. New Delhi : PPP Cell, Department of Economic Affairs, Ministry of Finance, Government of India, 2008

[54] C.B.I. Going Global - The World of Public Private Partnerships. s.l. : CBI, 2007. www.cbi.org.uk. 978-0-85201-668-8.

References

The following sources were referenced during the writing of this article.

1. Facilitating Public-Private Partnership for Accelerated Infrastructure Development in India. Department of Economic Affairs (DEA), Ministry of Finance, Government of India and Asian Development Bank (ADB). New Delhi : Asian Development Bank, 2006.
2. Asian Development Bank. Public-Private Partnership (PPP) Handbook, ADB, 2008. available online at http://www.adb.org/Documents/Handbooks/Public-Private-Partnership/.
3. Deloitte Research. Closing the Infrastructure Gap: The role of Public Private Partnerships, Deloitte Rsearch, 2006. available on the internet at: http://www.deloitte.com/assets/Dcom-Panama/Local%20Assets/Documents/sector-publico.pdf.
4. C.B.I. Going Global - The World of Public Private Partnerships., CBI, 2007. www.cbi.org.uk. 978-0-85201-668-8.
5. International Conference on Meeting India's Infrastructure Needs with Public Private Partnerships - The International Experience and Perspective. Department of Economic Affairs, Ministry of Finance, Government of India. Delhi : Department of Economic Affairs, Ministry of Finance, Government of India, 2007.
6. Public-Private Infrastructure Advisory Facility (PPIAF), including their newsletter GRID-LINES .
7. Department of Economic Affairs, Ministry of Finance, Government of India. Public Private Partnerships - Creating an Enabling Environment for State Projects. New Delhi : PPP Cell, Department of Economic Affairs, Ministry of Finance, Government of India, 2008
8. Action Plan and Way Forward. Asian Development Bank. Workshops on Mainstreaming Public–Private Partnerships in the Indian Urban Sector / available at http://www.adb.org/Documents/Reports/PPP-Indian-Urban-Sector/
9. Department of Economic Affairs, Ministry of Finance, Government of India. Guidelines for Formulation, Appraisal, and Approval of Central Sector Public Private Partnership Projects. New Delhi : PPP Cell, Department of Economic Affairs, Ministry of Finance, Government of India, New Delhi - 110001, India, 2008.

1. KPMG. Public-Private Partnerships in India. http://ibef.org/download/PublicPrivatePartnership.pdf.

Annexure 1 - Government of India (GoI) documents on PPP

A few important Government of India documents available of PPP are listed as follows:

#	Document
1	Guidelines for Formulation, Appraisal and Approval of Central Sector Public Private Partnership Projects
2	Conference Report – International Conference on Meeting India's Infrastructure needs with Public Private partnerships – The International Experience and Perspective
3	Public Private Partnerships – Creating an enabling environment for state projects.
4	Report of the Inter Ministerial Group - Customs Procedures and Functioning of Container Freight Stations and Ports
5	Draft Paper on Project Risk Assessment for PPP Projects sponsored by Government/ Government agencies/PSUs prior to bid
6	Facilitating Public–Private Partnership for Accelerated Infrastructure Development in India - Regional Workshops of Chief Secretaries on Public–Private Partnership - Workshop Report
7	Guidelines - Financial Support to Public Private Partnerships in Infrastructure
8	Scheme - Financing Infrastructure Projects through the India Infrastructure Finance Company
9	Report of the Core Group - Financing of the National Highway Development Programme
10	Guidelines - Formulation, Appraisal and Approval of Public Private Partnership Projects
11	Guidelines for Formulation, Appraisal and Approval of Public Private Partnership (PPP) Projects
12	Guidelines for Formulation, Appraisal and Approval of Central Sector Public Private Partnership Projects
13	Panel of Transaction Advisers for PPP Projects - A Guide for Use of the Panel
14	Report of the Committee of Secretaries - Road Rail Connectivity of Major Ports
15	Scheme and Guidelines for India Infrastructure Project Development Fund
16	The Report of The Committee on Infrastructure Financing
17	Report of the Task Force - The Delhi-Mumbai & Delhi-Howrah Freight Corridors

Annexure 2 - Indian State Urban Development Departments

(Which are principally involved in framing PPP projects in the urban sector)

State	Urban Development Department
Andhra Pradesh	Andhra Pradesh Urban Finance and Infrastructure Development Corporation
Arunachal Pradesh	Department of Urban Development and Housing
Assam	Guwahati Development Department
Bihar	Bihar Urban Development Agency
Chandigarh (UT)	Chandigarh Municipal Corporation
Chattisgarh	State Urban Development Agency (SUDA)
Delhi	Department of Urban Development, Delhi Secretariat
Goa	Government of Goa Urban Development Department
Gujarat	Gujarat Urban Development Mission (GUDM)
Haryana	Haryana Urban Infrastructure Development Board (HUIDB)
Himachal Pradesh	Himachal Pradesh Urban Development Authority (HIMUDA)
Jammu & Kashmir	Housing Urban Development Department (HUDD)
Karnataka	Karnataka Urban Infrastructure Development and Finance Corporation (KUIDFC)
Kerala	Kerala Sustainable Urban Development Project (KSUDP)
Madhya Pradesh	Directorate of Urban Administration,
Maharashtra	Maharashtra Metropolitan Regional Development Authority (MMRDA)
Manipur	Town Planning Department, Govt. of Manipur
Meghalaya	Shillong Municipal Board
Mizoram	Local Administration Department
Nagaland	Department of Town Planning
Orissa	Urban Development & Housing Department,
Puducherry	Town and Country Planning Department
Punjab	State Urban Development Authority (SUDA)
Rajasthan	Rajasthan Urban Infrastructure Finance and Development Corporation Ltd
Sikkim	Urban Development & Housing Department
Tamil Nadu	Tamil Nadu Urban Finance and Infrastructure Development Corporation
Tripura	Department of Urban Development
Uttar Pradesh	Directorate of Local Bodies
Uttranchal	Urban Development Department, Uttarakhand Secretariat
West Bengal	Kolkata Metropolitan Development Authority