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Built-Own-Lease-Transfer (BOLT): "A Public Private Partnership Model that Bridges Gap of Infrastructure in Urban Areas"

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Abstract

Public-private partnership (PPP) in urban infrastructure is a relatively new trend in most developing countries of the Asian and Pacific region. Although many governments have considered various steps to promote PPPs in their countries, lack of capacity in the public sector remains to be one of the major problems in implementing PPP projects. This paper canvases the extent to which PPP model in particular the Built-Own-Lease-Transfer (BOLT) model can excel in social infrastructure in urban areas.

This paper focuses on rebuilding the regulatory framework of BOLT model and demolishes the flaws encountered in the past.

The paper acknowledges the broad nature and appeal of the PPP phenomenon, the multiplicity of goals pursued through these strategies and the inherently contestable nature of BOLT's performance domains. The paper seeks to move beyond older debates and address several contemporary areas of BOLT performance which have not yet seen the visibility that they deserve. Multi-disciplinary in its reach, the paper seeks to strengthen research into the PPP phenomenon rather than displace empirical and theoretical contributions till date. Several examples of new areas of research priority are articulated including the role of PPP as governance tool, the influence of PPP on urban and regional planning matters, changing forms of PPP transparency, and the psychological appeal of PPPs to citizens, ministers and markets.

The paper concludes that this new trend will be fundamental to the next generation of PPP. The results from such new research directions will help in excelling the barriers for developing social infrastructure in urban areas.

Keywords: PPP, BOLT, Social Infrastructure, Urban Area.

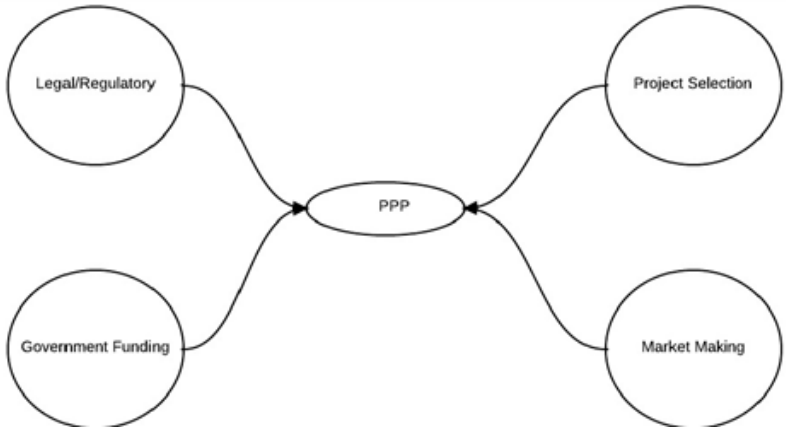
1. Introduction

Poor infrastructure impedes a nation's economic growth and international competitiveness. Insufficient infrastructure also represents a major cause of loss of quality of life, illness, and death. Infrastructure projects have high social rates of return; research indicates that the growth generated by infrastructure investment is pro-poor, with income levels of the poor rising more than proportionately to overall income increases. Yet, whereas the public sector provides the vast majority of financing for infrastructure services, investments have not matched demand, and governments are seeking methods to improve the efficient procurement of infrastructure services. Public private partnership (PPP) in infrastructure is one of the tools in a policy maker's arsenal to help increase investment in infrastructure services and improve its efficiency.

PPPs have become attractive to governments as an off-budget mechanism for infrastructure development as:

- They can enhance the supply of much-needed infrastructure services.
- They may not require any immediate cash spending.
- They provide relief from the burden of the costs of design and construction.
- They allow transfer of many project risks to the private sector.
- They promise better project design, choice of technology, construction, operation and service delivery.

The flowchart below shows the various components of Public Private Partnership:



Source: Public-Private Partnership Projects in infrastructure: Jeffrey Delmon.

Figure 1: Components of PPP.

The table below represents the various PPP models and its brief description stating the characteristics of each PPP model.

Table 1: Types of PPP model.

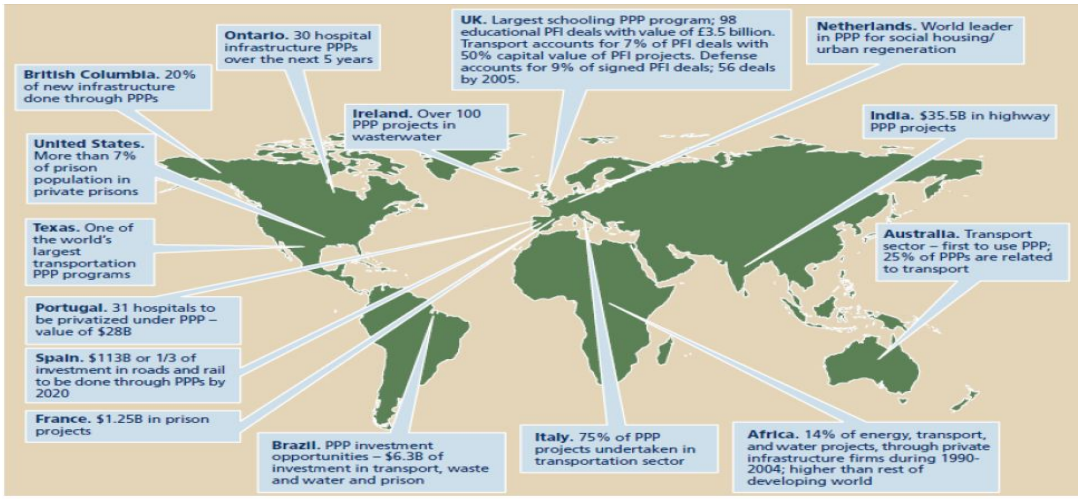
PPP Model	Description
Build, Operate and Transfer (BOT)	The private partner is responsible to design, build, operate (during the contracted period) and transfer back the facility to the public sector. The private sector partner is expected to bring the finance for the project and take the responsibility to construct and maintain it. The public sector will either pay a rent for using the facility or allow it to collect revenue from the users. The national highway projects contracted out by NHAI under PPP mode is an example.
Lease, Operate and Transfer (LOT)	Under this type of PPPs, a facility which already exists and is under operation, is entrusted to the private sector partner for efficient operation, subject to the terms and conditions decided by mutual agreement. The contract will be for a given but sufficiently long period and the asset will be transferred back to the government at the end of the contract. Leasing a school building or a hospital to the private sector along with the staff and all facilities by entrusting the management and control, subject to pre-determined conditions could come under this category.
Build, Own, Operate (BOO) or Build, Own, Operate and Transfer (BOOT)	This is a variation of the BOT model, except that the ownership of the newly built facility will rest with the private party during the period of contract. This will result in the transfer of most of the risks related to planning, design, construction and operation of the project to the private partner. The public sector partner will however contract to 'purchase' the goods and services produced by the project on mutually agreed terms and conditions. In the latter case (BOOT), however, the facility / project built under PPP will be transferred back to the government department or agency at the end of the contract period, generally at the residual value and after the private partner recovers its investment and reasonable return agreed to as per the contract.
Design, Build, Finance and Operate (DBFO) or Design, Build, Finance, Operate and Maintain (DBFOM)	The private party assumes the entire responsibility for the design, construct, finance, and operate or operate and maintain the project for the period of concession. These are also referred to as "Concessions". The private participant to the project will recover its investment and return on investments (ROI) through the concessions granted or through annuity payments etc. The public sector may provide guarantees to financing agencies, help with the acquisition of land and assist to obtain statutory and environmental clearances and approvals and also assure a reasonable return as per established norms or industry practice etc., throughout the period of concession.

Operation Concession	This is a generic term, used to clarify the essential features of PPP arrangements. The PPP agreements which authorize the private partner to recover its investments and expected returns

2. Indian Scenerio of Public Private Partnership

In India in last decade of 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 stated the gap between the public sector outlets and the projected requirements is staggering. Thus in 1991, in India started a policy of reforms and reduced government interventions in certain sectors, at the same time facilitating private sector participation through policy. The issues relating to private sector investments in infrastructure are dealt in India Infrastructure Reports from IIR prepared jointly by IDFC, IIM, Ahmedabad, and IIT Kanpur.

PPP's in Indian infrastructure have occurred for the most part in transportation sector, and are concentrated in relative few states in India. The widespread involvement of the private sector in Indian infrastructure has not happened yet.



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

Figure 2: World scenario of PPP.

3. Need of Social Infrastructure

At present the infrastructure in all the colleges under state universities is very bad, it is of 1980s. Government is giving fund on to give salary of employees, nothing more than that. If the government wants to develop the higher education sector then it certainly needs to bring it in the priority list and needs to look at each and every

problem related with it in a very serious manner then only we can see higher education growing.

During the past eleven Five-Year plans, India has substantially upgraded and increased her health facilities. The country presently has 1, 47,069 Sub-Health Centers (SHCs), 23,673 Primary Health Centers (PHCs), 4,535 Community Health Centers (CHCs) and 12,760 hospitals2 in the Government sector. The evidence on the actual functionality of these facilities, however, is mixed. As per the District Level Household and Facility Survey -III (DLHS 2007-2008), 62% of PHCs are conducting less than 10 deliveries in a month, 10% of CHCs do not provide 24x7 normal delivery services, 34% of CHCs do not have operation theatre facilities, only 19% of CHCs offer caesarean section deliveries, only 9% of CHCs have blood storage facilities3 and of the 4,535 CHCs, only 754 are functional as per IPHS norms.

The private health sector has grown exponentially in the country. From initially providing 8% of healthcare facilities in 1949, the private sector now accounts for 93% of the hospitals and 85% of doctors in India.

Sri Lanka's investment in education, the World Bank report observes, is about 2.8 per cent of national income, whereas lower middle income countries invest an average 4.3 per cent of national income and upper middle income countries invest an average of 4.6 per cent of national income on education. The economic path to a prosperous middle-income Sri Lanka, it emphasizes will be based on knowledge-intensive activities such as information technology and software development, engineering, industrial processing, banking, finance and insurance. At present, the country's capacity and position in these areas are well below the average for comparable developing and exemplar middle-income countries.

It is precisely in these areas that the country has failed to make adequate progress. The recognition of these needs have not been backed by adequate funds, needed reforms and implementation of policies. The difficulties to change outmoded priorities, institutional rigidities and politicization of higher education institutions have impeded progress.

Even performance in basic levels of human development has lagged behind the achievements of other countries. That the country's relative achievements have been unsatisfactory is shown by the fact that although the position of the country on the Human Development Index (HDI) has improved to .759, it has fallen in its relative positioning in the world in recent years. It has fallen from the 89th position among 173 countries in 2000 to the 102nd position among 182 countries in 2008. Economic performance has much to do with this relative decline that has hardly been realized. It is also owing to other countries progressing more rapidly in economic and social development.

4. Built-Own-Lease-Transfer (BOLT) Model

It is a non-traditional procurement method of project financing whereby a private or public sector client gives a concession to a private entity to build a facility (and

possibly design it as well), own the facility, lease the facility to the client, then at the end of the lease period transfer the ownership of the facility to the client.

As a system of project financing this procurement method has a number of advantages the major one being that the private entity, contracted by the client, has the responsibility to raise the project finance during the construction period. What this does is to remove the burden of raising the finances for the project from the client (i.e. the public enterprise) and places it on the private entity. This way the BOLT developer assumes all the risk, the risk of raising the project financing and the risk during the construction period. Of course such risk is not undertaken for free by the developer but comes at a cost, which is passed onto the client. The operational and maintenance responsibility for the facility is the developer's, as the facility is owned by them until the lease period ends.

The lease period will see the client who in essence becomes the tenant of the facility, paying the developer a lease (monthly or annually) for the use of the facility at a predetermined rate for a fixed period of time. The lease payment becomes the method of repaying the investment, and ultimately rewarding the developer's shareholders. At the end of the lease period, ownership of and the responsibility for the facility are transferred to the client from the developer at a previously agreed price.

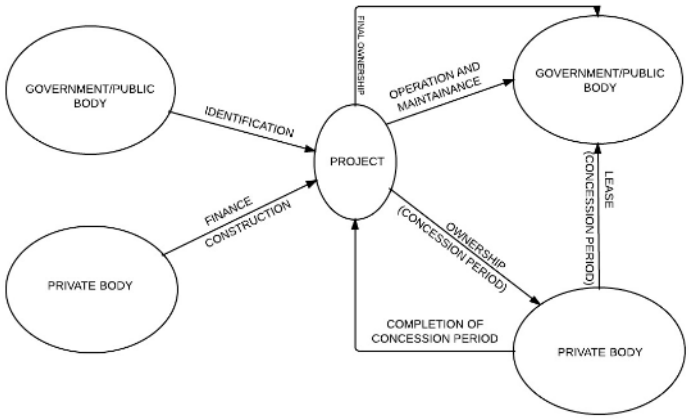


Figure 2: Conceptual Framework.

5. Policies/Regulatory Framework

Using BOLT model for social infrastructure, following policies must be followed by both public and private parties.

- After the identification of the project, the selection of private party should be purely based on negotiations rather than contract bidding.
- The government has to disclose the detail drawing and specifications of materials to be used. Also the duration of the completion of project is to be specified in the agreement.
- The private party should be selected through the negotiations from the contenders who satisfies the required criteria as well as have fair experience in such projects.

- The contender giving the least estimate should not be preferred always but the one giving the best quality of work within the stipulated time should be selected.
- During the construction stage, the State Government agency should monitor the work as per the design drawings and specifications.
- In case of delay in the construction work of project within the stipulated time, the private party may be penalized as per the concession agreement.
- The lease period of the project should start immediately after the project enters into its operational stage.
- The concession period should be between 5-15 years.
- The rate of return to the private body should be at least 15-20 percent per annum according to the type of project.
- Provision of financial security should be there in the concession agreement in case of failure of payment of lease amount of government.
- In any case, including the change of the ruling party there should not be any alteration in concession agreement and the project cannot be terminated before the concession period.
- In case of natural calamities the duration of the construction stage can be altered.
- At the end of concession period the agreement is terminated and final ownership is transferred to the government.

6. Comparison of Different Public Private Partnership Models in Social Infrastructure

Different social infrastructure such as Health care center, Administrative buildings, Educational institutes, Sports complex etc. can be efficiently constructed using various PPP models.

Given below are the tables representing comparison between various PPP models at various stages of the project.

Table 2: Comparison between various PPP models.

	DURING CONCESSION PERIOD							
	PUBLIC SECTOR RESPONSIBILITY				PRIVATE SECTOR RESPONSIBILITY			
	BOT	BOOT	BOO	BOLT	BOT	BOOT	BOO	BOLT
Operation and Maintenance				✓	✓	✓	✓	
Capital Investment /Finance			✓		✓	✓	✓	✓
Construction					✓	✓	✓	✓
Asset Ownership					✓	✓	✓	✓
Commercial Risk			✓	✓	✓	✓		✓

Table 3: Comparison between various PPP models.

	AFTER CONCESSION PERIOD							
	PUBLIC SECTOR RESPONSIBILITY				PRIVATE SECTOR RESPONSIBILITY			
	BOT	BOOT	BOO	BOLT	BOT	BOOT	BOO	BOLT
Operation and Maintenance	✓	✓		✓			✓	
Rehabilitation	✓	✓	✓	✓				
Asset Ownership	✓	✓		✓			✓	
Commercial Risk	✓	✓		✓			✓	

7. Discussions

The above table gives a brief idea of the possible usage of various models in social infrastructure.

- BOT and BOOT models cannot be used efficiently for social infrastructure as all the commercial risks pertain to private sector.
- BOO can also be incorporated in social infrastructure but 2/3rd investment is to be barred by government. But governments of developing nations are incapable of investing such high amounts.
- BOLT is best suitable for such projects as risks are shared by both the parties (private and public) and also government does not have to finance the project.
- In BOT, BOOT, BOO; operation and maintenance is of private sector whereas in BOLT it is of government. Hence, for social infrastructure such as public hospitals, schools, etc.; government is required to operate and maintain in order to serve the people economically.
- In BOO model, the asset ownership is with government during and after concession period, hence there can be financial risk to the private party.
- BOT, BOOT, BOO cannot be effectively used as there is no or less revenue generation, which will not give sufficient rate of return to the private bodies.
- In BOT Annuity model, the maintenance of the project has to be done by the private body during the concession period so it cannot be beneficial in such projects.
- PPP models are generally concentrated in transportation sector but BOLT excels in both transportation and social infrastructure.

8. Conclusion

The current scenario of PPP suggests that it is limited only in transportation sector incorporating BOT and BOT Annuity models in most of the developing countries. But the use of PPP models in other sectors is also very handful. In social infrastructure,

PPP models have failed due to lack of regulatory framework and legal/political issues. With the alterations suggested in the regulatory framework and the discussions about the suitability of various PPP models in social infrastructure projects; BOLT model proves to be the most compatible model than the other models.

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