

## Public-Private Partnership Projects in Bangladesh: The Performance of Public Sector



Maruf Ahmad<sup>1</sup>, Naznin Islam<sup>2</sup>

<sup>1</sup>Assistant Director, Rural Development Academy(RDA), Bogura, Bangladesh

<sup>2</sup>Professor, Department of Public Administration, University of Dhaka, Bangladesh

---

**ABSTRACT:** The government of Bangladesh recognizes public-private partnerships (PPPs) as a strong catalyst for implementing infrastructure projects. The study conducted to assess the performance of the public sector and measure the cost of service with service quality in infrastructure projects under PPP. The survey focused on 35 government and nongovernment officials from PPP implementing agencies and academicians using a structured questionnaire. The performance of the public sector was assessed with 16 selected indicators. Among them Performances of the public sector in case of land acquisition for infrastructure, exemption of taxes and import duties, linked project, addressing socioeconomic issues were good enough. The findings of the study also revealed that the public sector's performances in coordination, environmental relationship and communications, inter-organizational trust and satisfaction level of the private sector are low. Besides this cost of providing service under PPP projects are increases but customers are satisfied with the higher paid services. Considering the views that starting PPP with weak coordination, lower inter-organizational trust, lower satisfaction level of the private sector, the Government of Bangladesh should take initiative for improving trust through open dialogue with the private sector and through developing a social audit model for PPP implementation.

**KEYWORDS:** Public-Private Partnership, Performance, Public Sector

---

### BACKGROUND OF THE STUDY

Public-Private Partnership (PPP/P3) is getting attention as an attractive field of research during the last few decades (Jiménez & Pasquero, 2005) because PPP is being considered as alternative institutional arrangements and modes of delivery of public goods and services (Jamali, 2007, Wettenhall, 2003, Hodge & Greve, 2005). The primary objective of PPPs is to facilitate the delivery of high-quality public facilities and services by the private sector over an extended period at a cost that represents value for money, whilst at the same time transferring an appropriate level of risk to the private sector (Lane & Gardiner, 2003). PPPs imply a sort of collaboration to pursue common goals while leveraging joint resources and capitalizing on the respective competences and strengths of the public and private partners (Widdus, 2001; Pongsiri, 2002; Nijkamp *et al.*, 2002). PPPs can also work for a range of infrastructures including transportation, water and sewer services, solid waste disposal, municipal parking and social infrastructure such as schools, hospitals and other public buildings.

New Public Management (NPM) has been dominant in public administration since the 1980s. In NPM, governments focus on the formulation of public policy and leave the implementation to the other bodies (private organization or non-profit organization) (Osborne and Gaebler, 1992 in Klijn, 2010). That's why privatization, outsourcing, identification are encouraged and the stronger emphasis is given on the market mechanism and the involvement of private actors (Hood, 1991 in Klijn, 2010). P3 or publicprivate partnership is a contract-often a long-term contract-between a governmental body and a private entity, most often a corporation and the goal of the partnership is to provide some public benefit, either an asset or a service. A key element of these contracts is that the private party must take on a significant portion of the risk because the contractually specified remuneration-how much the private party receives for its participation-typically depends on performance (Rodriguez, J. 2018).

Since 1990, the Government of Bangladesh has also introduced several NPM models including Public-private partnership (PPP) as a governance tool for public infrastructure development and public service delivery. Indeed, the Government of Bangladesh has

## Public-Private Partnership Projects in Bangladesh: The Performance of Public Sector

put relentless effort since 2010 in developing a PPP friendly environment through developing legal, regulatory, institutional and financial arrangements for implementing PPPs.

The government has recently issued a set of PPP guidelines to select and approve projects under PPP initiatives and steps are being taken to establish a PPP office. Therefore, implementation of PPP initiatives, according to the budgetary allocations, the industrial policy, and the PPP guidelines, is now established. But still, there is no clear idea about the performance of the public and private sector in infrastructure projects, quality and cost of services in an infrastructure project in the Bangladesh context. There are many publicprivate partnerships past histories and project experiences to highlight factors critical to the success of future projects. However, no comprehensive study exists to contemplate and measure the performance of the public and private sector leading to an effective PPP project execution in Bangladesh. In the absence of such a study, it is extremely difficult for government agencies, industry personnel and academics to accurately and effectively analyze PPP projects. Little research attempts have been done to find out the quality and cost of implementing such projects leaving the private and public sectors to risk on projects that are costly to both. Furthermore, there exists a need for performance evaluation of the public sector in PPP projects in the Bangladesh context. Thus this study is an effort to learn about the performance of public sector participation in infrastructure development in Bangladesh focusing on the investors' protection, cost and service quality in Bangladesh.

Toward realizing the above mention problems, the objective of the study was undertaken following objectives:

1. To assess the performance of the public sector in the infrastructure project of Public-private partnerships.
2. To measure the costs of services and determine service quality.

### METHODOLOGY OF THE STUDY

This paper has been prepared from both primary and secondary data. The survey was conducted through a questionnaire with 35 professionals involved in the PPP project experience. Though PPP is in its infancy in Bangladesh only a few secondary sources are available. The pertinent secondary information was accumulated from relevant articles, newspapers and action plans of the government and relevant websites. This research has some limitations such as the data was collected only from 35 respondents (Table 1) and secondary sources because of time constraints.

**Table 1: Number of questionnaires administered**

Government	09
Concessionaire	02
Engineer	12
Consultants	04
Contractor	08
<b>Total</b>	<b>35</b>

The questionnaire was structured with a question relating to the objective of the study on a 5-point Likert scale for importance with 5 and 1 being the highest of the rating and the least respectively for measuring the performance of the public sector. Respondents were asked to indicate the importance of each indicator for measuring the performance of the public sector in infrastructure projects under PPP. The outcome of the interviews conducted was absorbed in the questionnaire administered for assessing the performance of the public sector with selected 16 performance indicators for partnerships in infrastructure.

### RESULT AND DISCUSSIONS

#### Selected Characteristics of the Respondents of the study

According to the objectives of the study, data were collected from a sample of 35 respondents who are involved in the PPP project. The findings of each selected characteristic of the respondents are presented in Table 2.

**Table 2: Selected characteristics of the respondents**

Characteristics	Categories	Respondents	
		No.	Percent
Age	Young (Up to 40)	10	28.57
	Middle (41-60)	23	65.71

## Public-Private Partnership Projects in Bangladesh: The Performance of Public Sector

	Old (Above 60)	2	5.72
Educational qualification	General Graduate/ B.Tech./BSc	9	25.7
	Architecture	4	11.4
	Engineering	9	25.7
	M.Tech/MSc,	9	25.7
	LLB	4	11.4
Sector Belongs	Public sector	7	20.0
	Private sector	18	51.4
	Both	6	17.1
	Academic sector	4	11.4
Experiences of Infrastructure projects	5 years or below	9	25.71
	5–10 years	8	22.86
	11–15 years	11	31.43
	Above 15 years	7	20.00
Experiences of PPP projects	1–2 years	12	34.3
	3–5 years	17	48.6
	6–8 years	6	17.1
Type of Project Experiences with	Hospital	1	2.9
	Transportation	17	48.6
	Land Port development	4	11.4
	Water and Sanitary	2	5.7
	Power and Energy	4	11.4
	Housing	5	14.3
	School and Education	1	2.9
	ICT services	1	2.9

The respondents were classified into three age groups: 'young' (up to 40 years), 'middleaged' (41–60) and 'old' (> 60). The majority of respondents belong to the middle-aged category. Based on the educational background, respondents were divided into five groups. The largest proportion (51.14%) of the respondents had engineering and MSc in technical education, 25.7% had Hon's in general education, 11.4% had Architecture and L.L.B background. Regarding sector belongs, 51.4% of respondents working for the private sector followed by 20% with a public sector. One-third of the respondents had 11-15 years of experience (31.43%) in infrastructure development. Respondents selected the various infrastructure projects they have been associated with which were procured through PPP. The highest response amongst the respondents was for transportations projects. Most of the respondents (48.6%) had 3–5 years in PPP.

### Performance of Public Sector in Infrastructure Projects under PPP

Performance measurement is a process or a set of metrics used to quantify and report the effectiveness and efficiency of the action performed towards organizations or stakeholders' objectives (Neely *et al.*, 2005). Strategic objectives form the foundations of performance measurement (Solomon and Young, 2007). PPP infrastructure projects have a common strategic objective: the achievement of best value, which emphasizes efficiency, VfM and performance standards (Akintoye *et al.*, 2003). This strategic objective covers the issues in relation to 'public client's overall strategic plan and mission objectives, private sector's long-term development and payoff strategy, the general public's requirements of quality public facilities and services' (Yuan *et al.*, 2009). A vital role is played by the government in the development as well as management of a PPP project. The complete project may be failed if the government fails to get involved in an appropriate manner. Prime role identified for the government is: to establish

## Public-Private Partnership Projects in Bangladesh: The Performance of Public Sector

enabling legal system, to create favorable investment environment, have a regulatory framework, act and facilitating as a coordinating and supporting authority, to select a suitable concessionaire and active participation in project life-cycle phases. Depending on the role of the public sector, the indicators were selected by the researchers. The performance indicators of the public sector with their ranked were presented in table 3.

**Table 3: KPIs of public sector with their score for measuring performance of public sector in infrastructure PPP projects**

Sl. No	KPIs	Mean score	Standard deviation	% R respondents					
				Not at all	Poor	Fair	Moderate	Good	Very Good
1.	Land acquisition for infrastructure	4.01	1.02724	0	3.6	3.6	18.2	36.4	38.2
2.	Exemption of taxes and import duties	3.45	0.95874	0	5.5	9.1	27.3	50.9	7.3
3.	Linked project	3.34	0.77503	0	3.6	5.5	45.5	43.6	1.8
4.	Socio-economic issues	3.14	0.91121	0	5.5	14.5	43.6	32.7	3.6
5.	Legal Dispute	2.98	0.84964	0	5.5	16.4	52.7	23.6	1.8
6.	Fulfillment of agreement conditions (production, Commercial Operation Date (COD))	2.69	1.03735	7.3	7.3	7.3	69.1	7.3	1.8
7.	On time activities (Proposal to implementation)	2.67	0.87924	3.6	3.6	23.6	60.0	7.3	1.8
8.	Project Monitoring (Quality control, Operation and maintenance)	2.60	1.16428	5.5	14.5	14.5	49.1	12.7	3.6
9.	Procurement plan or procurement system	2.54	1.18350	9.1	9.1	18.2	47.3	14.5	1.8
10.	Risk Shearing (Market and revenue risks, Operating risks, Environmental risks, Political risks, Public acceptance risks)	2.14	1.09575	10.9	14.5	29.1	40.0	5.5	0
11.	Financial incentive for private sector	1.85	0.80319	5.5	23.6	50.9	20.0	0	0
12.	Cost sharing	1.83	0.78796	7.3	18.2	58.2	16.4	0	0
13.	Environmental relationship and communications	1.67	0.80193	5.5	40.0	40.0	14.5	0	0
14.	Satisfaction level of private sector	1.63	0.92405	25.5	43.6	18.2	12.7	0	0
15.	Inter-organizational trust	1.12	0.94388	23.6	50.9	18.2	3.6	0	0
16.	Coordination	1.09	0.90825	25.5	47.3	23.6	3.6	0	0

The study sought to find out whether there were the performances of public sector of infrastructure projects under PPP in Bangladesh. From the study findings, it is clear that the majority 38.2% of the respondents rate the defined land acquisition performance for infrastructure establishment before project commencement as very good while one respondent each rated them as good, moderate, fair and poor. The researcher wanted to find out the opinion of the respondents on the exemption of taxes and import duties, linked projects and socioeconomic issues management as public sector performance monitoring.

The findings indicate that most of the respondents felt that the exemption of taxes and import duties, linked project and socioeconomic issues management as public sector performance was moderate followed by the good fair as well as poorly presented into table 3. The researcher can conclude that in public-private partnerships in Bangladesh there is some form of better performance of the public sector in infrastructure projects under PPP. According to table 3 above fifty percent of the respondents

## Public-Private Partnership Projects in Bangladesh: The Performance of Public Sector

opined that performances of the public sector on the legal dispute, fulfillment of agreement conditions (production, commercial operation date), project monitoring and quality control, procurement plan or procurement system were medium followed by fair and poor.

The study also sought to find out whether the public sector of Bangladesh has any arrangements for risk-sharing. The findings indicate that all respondents agreed that there was some form of arrangements for risk-sharing in infrastructure projects under the public-private partnership. Forty percent of the respondents agreed that the risk-sharing performance of the public sector was moderately followed by 29.1% fair and 14.5% poor. The researcher wanted to find out the performance of the public sector on operation and maintenance, the financial incentive for the private sector, cost-sharing with partners. The study findings indicate that most of the respondents agreed that the operation and maintenance, a financial incentive for the private sector, cost-sharing with partners was fair and poorly manage whereas above quarter percent of the respondents rated the arrangement as the medium. The researcher sought to evaluate the extent of public sector performances in case of environmental relationship and communications with partners, satisfaction level of the private sector, coordination among the partners. The findings indicate that near about 50% of the respondents agree that the public sector has a fair performance in the environmental relationship and communications with partners, satisfaction level of the private sector, coordination among the partners followed by poor and medium as illustrated in table 3.

### Ranking Performance Indicators of Public Sector in Infrastructure PPP

The survey respondents were asked to rate the importance of sixteen identified key performance indicators (KPIs) of the public sector for implementing infrastructure PPP projects. The mean score was calculated and ranked in ascending order of importance as shown in Figure 1.

According to figure 1, the last four main weak performances ranked included:

- ❖ Coordination
- ❖ Inter organizational trust
- ❖ Satisfaction level of private sector (low/ partial trust to public sector)
- ❖ Environmental relationship and communications

Lack of coordination between stakeholders has been reported as the main reason for project failures of PPP projects in several instances. As such, capturing and addressing stakeholder inputs is crucial to the success of the PPP projects (El-Gohary *et al.*, 2006). Therefore, the 16 indicators in the figure have presented the performance of the public sector in infrastructure PPP projects.

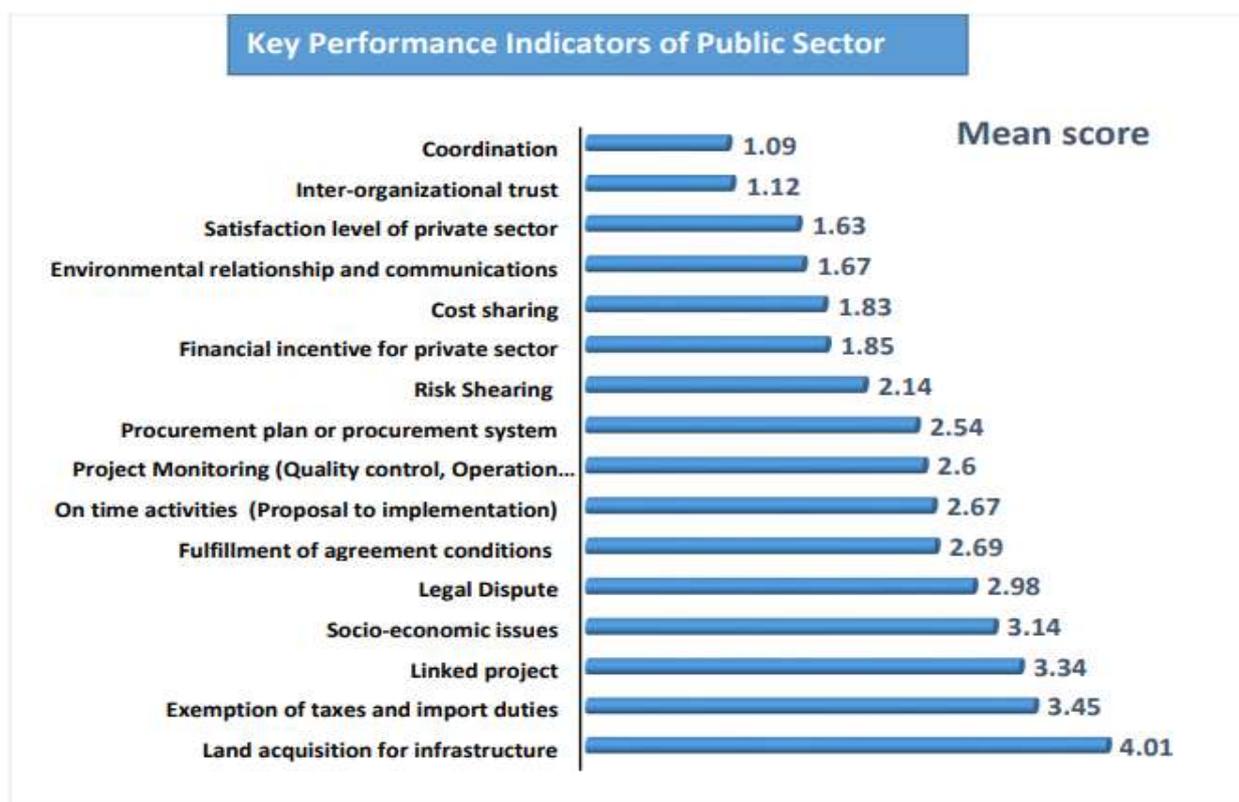


Figure 1: Ranking the performance of the public sector in infrastructure projects under PPP

## Public-Private Partnership Projects in Bangladesh: The Performance of Public Sector

The study shows that the weak performances of the public sector especially in terms of public infrastructure and delivering essential services are coordinated. Proper coordination reduces possibilities for conflicts that might affect PPP success, strengthens interdependence of partners, builds trust, and helps PPPs succeed. Coordination aims to make every part of an organization function without difficulties and achieve its purpose with less friction and maximum collaboration. It produces harmony and equilibrium with aligns organizational functions, structures and resources together for the achievement of common organizational goals (Nwokorie 2016: 2). Inter-organizational trust, satisfaction level of the private sector and environmental relationship & communications are other weak performances of the public sector as found in the study. The attractiveness of PPPs in addressing this problem is fully recognized by stakeholders, which drive the private sector to satisfy the public client to improve social welfare (e.g. price, environment, convenience, the opportunity for a job, etc.) to make society happy (Li *et al.*, 2005b).

Inter-organizational trust is considered as social capital which enhances the strength of cooperation and the possibility of PPP success. Thus, to overcome starting PPPs in a low trust environment it is needed to enhance the trust environment. Though it is the responsibility of both partners public sector has much to do in this regard. First of all, public organizations characterized by rigid culture need to shift their mindset toward bringing more flexibility, adaptability, transparency and change management to avoid unexpected outcomes from PPP initiatives. Agreement with predetermined penalty clauses is a sign of low trust among the partners (Kadefors, 2004, in Khan *et al.*, 2011). Whereas, agreement with incentives mechanism reinforces collaboration and develop trust among partners in the long run (Khan *et al.*, 2011). Thus, the Government of Bangladesh should consider incorporating more incentives in the agreement than in the penalty clauses. Secondly, to overcome the impact of starting a partnership in a low trust environment, it is needed to start PPP with those private partners on whom the public sector places to trust. Thus, it is needed to keep the provision of trust points in the bid evaluation and selection of private partners. This can be done through an online trust survey on the pre-qualified bidders. The highest trustworthy bidder should get an extra point in the bid evaluation. Thirdly, it is expected that through performance-oriented activities the private sector will be able to enhance their trust level. So, continuous dialogue between the public and private sectors on the improvement of private sector performance will be assistive in this regard. The government also needs to share the PPP implementation experience with the private sector from time to time. This will enhance transparency and performance quality in the project implementation stage. Fourthly, PPPs to be successful requires commitment and trust from both the government and the participating enterprises (Enright and Roberts, 2001 in Teicher *et al.*, 2006). Thus, it is also needed to identify the trust decision of the private sector officials in public offices for a better understanding of the future of PPP outcomes. Finally, Government offices should take necessary measures for improving their trust level.

PPPs are a complex procedure and connect with ethical, social and cultural aspects of the partner organization (Ezezika *et al.*, 2013). Ezezika *et al.* (2013) in their study, developed a Social Audit Model for improved management practices, accountability and transparency to develop trust and address risks. PPP implementing agencies of Bangladesh can also develop such a Social Audit Model for building trust throughout the project period and for attaining PPP success. This Social Audit Model will assess the PPP implementation from time to time and report the findings with a comprehensive communication strategy.

In the PPP context, this relationship is extremely more important than in traditional construction methods (Kumaraswamy & Anvuur, 2008). Therefore, a growing body of research supports the view that contractual parties are more willing to cooperate and to build good relationships on longer-term contracts in PPPs. On the other hand, good relationship in the project team (SPV) is mainly used to evaluate team management, interior organization structure and organizational culture, which is expressed by team value and team attitude (Kumaraswamy & Anvuur, 2008).

### Cost of Providing Services in Infrastructure Project under PPP

To ensure customer satisfaction is the main rewards from the partner with the private sector through improvements of program performance, cost-efficiencies, better service provisions and appropriate allocation of risks and responsibilities. In this study majority of the respondents, 78% opined that the cost of the providing services was increased under PPP arrangement than the traditional method are presented in figure 2.

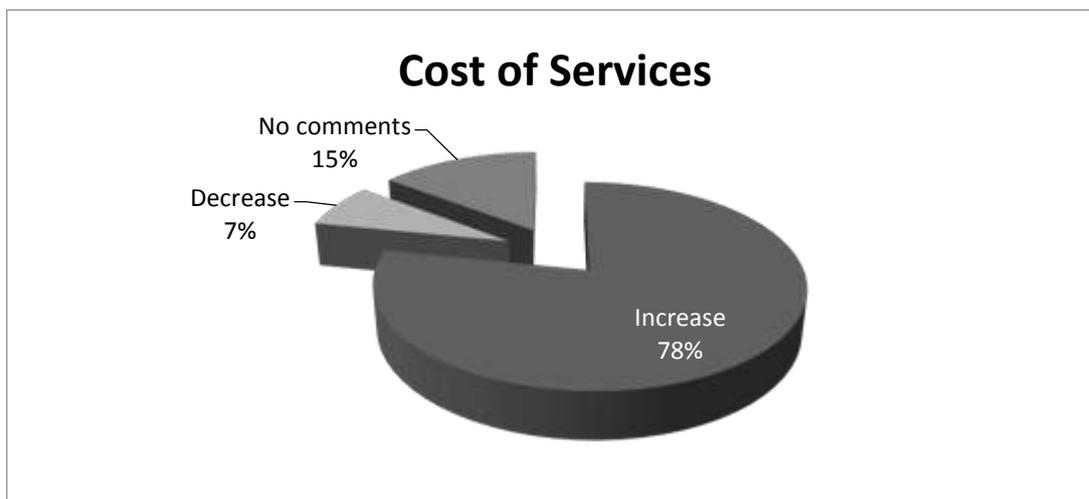


Figure 2: Cost of services of infrastructure projects under PPP

### Service Quality of Infrastructure PPP Projects

Generally one would expect better access to quality service in PPP projects since they can draw on previous experience with the non-operational, state-run PPP infrastructure project.

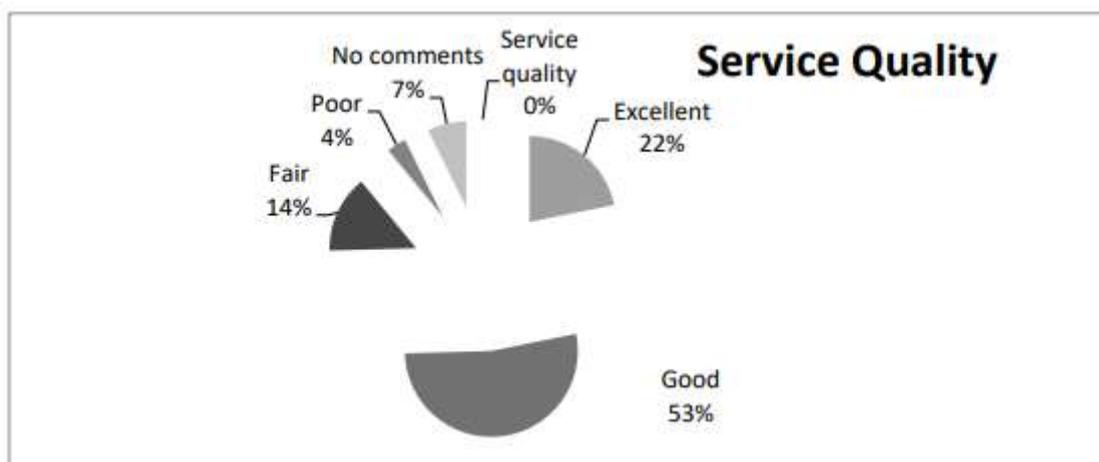


Figure 3: Service qualities of infrastructure projects under PPP

Interestingly, it was observed that 22% of the respondents rate the quality of the service quality as excellent means they are fully satisfied with the services and 53% rate as good means they are also satisfied with the services of PPP infrastructure projects in Bangladesh. Advances in the field of customer satisfaction have been significant. Literature reviews showed that projects implemented under PPP improved the quality of services. Experience suggests that the quality of service achieved under a PPP is often better than that achieved by other traditional procurement (United Nations Development Program, 2010). This may reflect the better integration of services with supporting assets, the introduction of innovation in service delivery, or the performance incentives and penalties typically included within a PPP contract. With most PPP projects, the private sector contractor obtains full payment if the required service standards are met throughout the project. Other benefits of PPP include: maximizing the use of each sector's strength; reduction in public capital investment; better environmental compliance; shared resources between both sectors and mutual rewards for both sectors. Although the cost of providing services under PPP arrangement is increased customers are satisfied herewith paid service.

### CONCLUSION

Coordination, inter-organizational trust, satisfaction level of the private sector (low/ partial trust to the public sector), environmental relationship and communications are the important factors of public-private partnerships which makes PPPs a success through reducing risk-related costs, complying agreement and improving performance. The government of Bangladesh should focus on improving the situation of Coordination, inter-organizational trust, satisfaction level of the private sector, environmental relationship and communications through adopting various measures to overcome the consequences of the

## Public-Private Partnership Projects in Bangladesh: The Performance of Public Sector

environment of low trust. To ensure proper coordination and success of PPPs, many governments establish and staff coordination agencies with specialists to supplement government capacity in awarding and monitoring PPP contracts. The government of Bangladesh should take initiative for improving inter-organizational trust, satisfaction level of the private sector (low/ partial trust to the public sector), environmental relationship and communications through open dialogue with the private sector and through developing a social audit model for PPP implementation. Although the cost of providing services under PPP arrangement is increased customers are satisfied herewith paid service. It is expected that PPP as a policy tool for the government will secure a strong foundation in this country through the lessons learned from this study.

### REFERENCES

- 1) Akintoye, A., Hardcastle, C., Beck, M., Chinyio, E. and Asenova, D. (2003), Achieving Best Value in Private Finance Initiative Project Procurement, *Construction Management and Economic* 21, pp 461-470.
- 2) El-Gohary, N. M., Osman, H. and El-Diraby, T. E. (2006) "Stakeholder Management for Public Private Partnerships". *International Journal of Project Management*, 24: 595-604.
- 3) Ezezi, O. C., Deadman, J., Murray, J., Mabeya, J., & Daar, A. S. (2013). To trust or not to trust: a model for effectively governing public-private partnerships. *AgBioForum*, 16(1): 27-36.
- 4) Hodge, G. and Greve, C (2005), PPPs: An International Performance Review'. Paper presented at the American Midwest Political Science Association Conference, 8-11 April 2005.
- 5) Jamali, D., (2007). "A study of customer satisfaction in the context of a public private partnership", *International Journal of Quality & Reliability Management*, Volume- 24 Issue- 4, pp.370 – 385.
- 6) Jiménez, A., and Pasquero, J., (2005) "Explaining the Endurance of a Permanently Challenged Public-Private Partnership: A Stakeholder Approach", *Management Research: The Journal of the Iberoamerican Academy of Management*, Volume- 3 Iss: 1, pp.49 –61.
- 7) Khan, S., Gul, S., & Shah, A. (2011). A review of literature on the role of trust and partnering in success of construction projects. *African Journal of Business Management*, 5(35), 1354113549.
- 8) Klijn, E. H. (2010). Public-private partnerships: deciphering meaning, message and phenomenon. *International Handbook on Public-Private Partnerships*. Edward Elgar: Massachusetts, USA.
- 9) Kumaraswamy, M. M., and Anvuur, A. M. (2008) Selecting sustainable teams for PPP projects. *Building and Environment*, 43 (6), 999-1009.
- 10) Lane, M. and Gardiner, J., (2003). Risk management and Insurance issues. In: *Public Private Partnerships – a review of key issues*, European Construction Institute, pp. 61-70. (2005).
- 11) Li, B., Akintoye, A., Edwards, P.J. and Hardcastle, C., (2005b), Perceptions of Positive and Negative Factors Influencing the Attractiveness of PPP/PFI Procurement for Construction Projects in the UK, *Engineering, Construction and Architectural Management*, 12/2: 125-148.
- 12) Neely, A, Gregory, M and Platts, K (2005) Performance measurement system design: a literature review and research agenda, *International Journal of Operations and Production Management*, 25 (12), 1228-63.
- 13) Nijkamp, P., van der Burch, M. and Vindigni, G. (2002), "Comparative institutional evaluation of public-private partnerships in Dutch urban land-use and revitalization projects", *Urban Studies*, Volume-39 No. 10, pp. 1865-80.
- 14) Nwokorie EC (2016) Independent regulatory agencies in coordination of public private partnerships and other economic institutions. In: Farazmand A. (eds) *Global encyclopedia of public administration, public policy and governance*. Springer, Cham, pp 1–9. [https://doi.org/10.1007/978-3-319-31816-5\\_2616-1](https://doi.org/10.1007/978-3-319-31816-5_2616-1)
- 15) Pongsiri, N. (2002), "Regulation and public private partnerships", *The International Journal of Public Sector Management*, Volume- 15 No. 6, pp. 487-95.
- 16) Rodriguez, J. (2018), Public-Private Partnership Pros and Cons. Benefits and Disadvantages of P3 Contracts. Available in: <https://www.thebalancesmb.com/public-private-partnershippros-and-cons-844713>
- 17) Solomon, P J. and Young, R R., (2007) *Performance-based earned value*, NY: John Wiley and Sons.
- 18) Teicher, J., Alam, Q., Gramberg, V. B. (2006). Managing Trust and Relationships in PPPs: Some Australian Experiences. *International Review of Administrative Sciences*, 2006; Vol. 72, No. 1, p.85–100.
- 19) Wettenhall, R., (2003). 'The Rhetoric and Reality of Public–Private Partnerships', *Public Organisation Review: A Global Journal*, Volume-3, Issue-1, pp. 77–107.
- 20) Widdus, R. (2001). "Public private partnerships for health: their main targets, their diversity and their future directions", *Bulletin of the World Health Organization*, Volume- 79 No. 4, pp. 713-20.

## Public-Private Partnership Projects in Bangladesh: The Performance of Public Sector

- 21) Yuan, J, Zeng, A Y, Skibniewski, M J and Li, Q (2009) Selection of performance objectives and key performance indicators in public-private partnership projects to achieve value for money, *Construction Management and Economics*, 27 (3), 253-70.