

**Central Public-Private Partnership (PPP) Development Facility for Enhancing
Government Obligation and Efficiency in PPP Project**

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Central Public-Private Partnership (PPP) Development Facility for Enhancing Government Obligation and Efficiency in PPP Project

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ABSTRACT

The implications of public-private partnership (PPP) concept has gained utmost attention from different governments around the world because of the opportunities inherent in it in terms of overcoming budgetary constraints, improved service quality, enhanced efficiencies in procurement and risk management, and prospects of generating managerial and technical capabilities. The government obligations in PPP projects are often limited to feasibility study, transaction support and implementing linked government or public sector projects which subsequently raise the question regarding how the required funds should be mobilized by the government for these services as upfront development cost. Generally, any government agency driving a PPP project has to secure budgetary allocation from the central authority for performing the government-side obligations, which is often a complicated and time consuming process due to other priorities of the central treasury. To overcome this challenge, establishment of a central PPP development facility by the government is required. The ability to create and manage such a facility within the government mechanism will ensure seamless development and implementation of PPP projects by different government agencies and will contribute to foster a good relationship between the government and the private sector investors.

JEL Classifications: H54, O18, O22

Keywords: Public-Private Partnership (PPP), Infrastructure project, Project Financing, PPP Project, Project management, Project Development Fund (PDF)

INTRODUCTION

A public project is generally financed, owned and operated by government authorities or utility companies. However, in a private infrastructure project or in a public-private partnership (PPP) project, the development, financing, procurement, construction and operation of the project are carried out through a private investor under different schemes such as build-operate-transfer (BOT), build-own-operate (BOO), build-own-operate-transfer (BOOT) etc. In reality, a PPP project is not only a project, but also a business for a long period of time to be carried out by a private investor through partnerships between government and a private firm to provide services formerly supplied by the government alone (UNESCAP, 2005).

Considering the fundamental that investment is meant to come from the private sector in most common PPP projects (though there are some PPP schemes that may not require private sector investment), some upfront activities are required from the part of the government to attract potential investors (Rashed, 2011). Prior to embarking on a PPP project, the government studies the feasibility and benefits of the project, mainly in the areas of serving the interest of the country and the relevant sector with the objective to ensure sustainable and quality services to people (Alam, 2010; Hatefi & Seyedhoseini, 2012). The government considers economic, technical and some commercial factors in its feasibility

study for a comparative assessment of the project proposals (UNESCAP, 2005) and in order to decide the level of regulations to be framed on the business. Both the government and the private investor have some obligations in a PPP project, so the government devises the terms and conditions of the business which is reflected in the contract document, which eventually is used to specify the rights and obligations of the private investor as well as the government (World Bank & Inter-American Development Bank, 1998). The ultimate success of a PPP project depends on the government's obligation to follow-up and on the recommendations of advisors based on the feasibility, design, and manages of the final PPP contract (PPIAF, 2003). Nevertheless, availability of sufficient funds for the government or the specific government body propels fast-track implementation of a PPP project, because it helps to reduce bureaucracy, thus reduces process related lead time.

If these pre-implementation conditions are ensured by the government prior to inviting private investors, it is expected to generate a level of confidence among the potential investors, resulting in quality infrastructure services to the country people. Fulfillment of these pre-implementation conditions is necessary for two purposes – (i) for advisory services that may be needed by line ministries, executing agencies and other government bodies for developing infrastructure projects; and (ii) for implementation of the linked government sector projects which are predecessors for implementing any PPP project. The objective of this paper is to propose a structure of a central advisory facility.

NECESSITY OF THE PROJECT DEVELOPMENT FACILITY

A PPP project is generally different from a conventional public sector project because unlike short-term construction projects, it is a business contract for a lengthy period of time. Depending on the complexity of the clauses of the contract, a PPP project might entice the private investors or drive them away. As a result, the government agency dealing with a potential PPP project has to make an erudite estimate of the feasibility and viability of the project in its very early stage. However, in reality many of the government bodies may not possess the business skills and mindsets that are needed to identify and structure PPP investment propositions such as front-end development of a PPP project. Despite these limitations, essentially the PPP project identification and structuring should be driven by the government (UNESCAP, 2008). Though private investors can identify some potential PPP projects and provide unsolicited proposals to the government, it is the role of the government to determine the feasibility and necessity of such project within its sector-wise plans and may need to go for a competitive process to award the projects. In case of unsolicited PPP project proposals, the proposing firm may enjoy some competitive advantages over others in terms of preferential treatment in pre-qualification status or through some other incentives, but generally every PPP proposal is subject to awarding through competitive tendering process. Generally, the obligations of the government for a PPP project can be categorized as follows:

Defining the Project Capacity or Scopes

Two distinct perspectives are generally taken into account to define the scopes of a PPP project. In one side, after necessary adjustments with the sector-wise plans, the value of the project is determined through market and demand assessment, industry analysis and business and financial assessment, macro-economic and social and environmental impact assessment, etc. In another side, the terms of the contract and minimum equity percentage for the private investor, the minimum expected performance standards, provisions of fiscal incentives and repatriation of profit and capital, defining the mechanisms for establishing tariffs etc. are finalized through defining the capacity of the project (Commonwealth of Australia, 2002).

Completion of Linked Projects and Facilitating Necessary Consents

For the realization of many PPP projects, some associated or linked projects need to be carried out by public funds such as land acquisition, installation of gas pipelines and transmission lines for IPP power plants, supply or relocation of utilities, approach roads etc. In principle, the detailed feasibility report of a PPP project should identify all the linked projects and the estimated cost for their implementation including a complete roadmap or schedule of such implementation. In general, the cost of implementing linked projects for large-scale PPP projects is significantly high, so difficulties often arise to secure funds on time from traditional sources through government budgetary allocation. Moreover, the PPP projects often face difficulties where the private investors complete their obligations but the government fails to meet their part, resulting substantial financial burdens on the private sector. As a result, instead of relying on traditional process of funding linked components of PPP projects, the cost of these linked projects should be incorporated in the main PPP project budget planning of the concerned executing agency.

As per the standard practice, after signing of the concession agreement, the winning bidder secures its finances within a stipulated time period – referring to Condition Precedent Period, which is generally less than six months for large PPP projects – and the government completes its obligations including completion of associated or linked projects. The relevant government bodies should prioritize the implementation of the linked projects and required funds should be made available to finance them as per the contractual obligations. The timely completion of these linked projects and acquiring necessary consents and approvals on time is crucial for the successful execution of any large-scale PPP project; any undue delay may result in a halt to the entire project for an unjustifiable period of time, ensuing significant financial demurrages from the part of the government and delaying the completion of the project. It is imperative that the linked projects must be completed before commencement of the commercial operations of a PPP project.

The proposed arrangement of financing the linked projects also needs to be integrated with the PPP policy framework. Considering the fact that the required funds for all linked projects associated with the PPP projects will be very high in a fiscal year, the government may decide to set aside the project development fund with sufficient allocation for the very first year. After the first year of setting up the fund, the government (a neutral agency that will be responsible for such fund, e.g. ministry of treasury or planning or central PPP Unit; this has been discussed later in this paper) may look at the national PPP project pipeline and planned implementation schedule and can identify the major projects that the government wishes to develop in that particular fiscal year. A broad estimation of costs to be incurred for implementing all the linked projects may be drawn for those selected PPP projects. Such costs may be considered while allocating fund in the proposed facility for linked project implementation. After spending the required expenses for linked project implementation from the PPP development facility, the executing agency may later go toward traditional

government yearly budgetary allocation process for replenishing the facility with equal amount. In such case the executing agency will develop traditional application to the central budgetary allocation authority for replenishment of funds which is used for linked project implementation from the PPP project development facility.

These challenges intensify when several PPP projects are implemented in multiple sectors, exposing the projects to a large variety of circumstances and uncertainties. Under such circumstances the government officials often face a multitude of complex situations with regard to examination, design, development and execution of every project with a close reference to individual project situations. Lack of required skills and understanding of such complex development phases for a PPP project implementation from the part of the government officials further intensify the challenges.

Determining the financial and economic viabilities of a business venture with broad functional specification on technical matters and commercial aspects is one of the most crucial aspects of a PPP project development (Alam & Rashed 2011a; Salari, Yousefi, & Asgary, 2015). The government engages advisors or consultants for preparation of complex feasibility studies and concession agreement documents (ADB, 2008), containing major terms and conditions, broader roles and responsibilities, risk sharing and various regulatory issues such as tariff etc. The feasibility studies and preparation of concession agreement documents by these advisors or consultants incur a considerable amount of cost which needs to be spent on an upfront basis. Likewise, linked project implementations to support the main PPP project also incur an upfront cost. However, the relevant government bodies often face challenges to spend a substantial amount of money on upfront basis due to two reasons:

- a) *Securing funds for advisory fees and linked projects:* For any development (linked projects) and technical assistance (providing advisory support) purpose, typically the governments in developing countries rely on budgetary allocation as approved in the national budget. After the conceptualization of a PPP project, the government agencies generally go through a lengthy and bureaucratic procedure for the required fund allocation. Unlike the government bodies that own a PPP project, in many instances, the central authority of such fund allocation, which has its own priorities of spending the public exchequer, may not realize the importance of that particular project, thus slowing down the entire fund allocation process. All these factors combined together and along with the lack of understanding and transparency in government procedures hamper severely the process of engaging the advisors and completion of the linked projects that subsequently results in lower level of project progression and increased uncertainty for investors and developers that leads to multiply costs or stop projects to move forward (World Bank & Inter-American Development Bank, 1998).
- b) *Hesitation of the government for fear of the project being infeasible:* The government bodies leading the PPP projects often hesitate to spend money upfront particularly for advisory fees considering the fact that the project may turn out to be infeasible for the private sector.

To overcome these problems, a central PPP development facility should be in place to ensure sufficient and timely fund availability for the advisory support and completion of linked government projects. The specific objectives of this facility should be:

- To bring in more private investment in the country's infrastructure development through the provision of rapid technical assistance and expert services;
- To reduce government fund allocation in infrastructure and release more funds for social and poverty alleviation projects;
- To assist the line ministries and agencies in identifying private infrastructure projects;
- To implement government sector linked/associated projects under a PPP project on a

- fast-track basis;
- To develop capability and competency of ministries and agencies for awarding or transacting private infrastructure projects;
- To create a pool of local and regional expertise in private sector infrastructure, which ministries can exploit as required.

EXPERIENCE ON SIMILAR FACILITY

A number of countries have already adopted centralized facilities to gear up PPP project implementation. Most of the governments of countries giving preference to private sector participation in infrastructure development and maintenance have kept provisions for project development support through its legislative structure under PPP policy framework which provide vital upfront project development support for individual or overall PPP development activities.

Some other governments have developed separate institution for providing project development services. Pakistan, for example, has developed a separate institution called Infrastructure Project Development Facility (IPDF) to facilitate the promotion, generation and implementation of PPP projects by the contracting authorities (GOP, 2010). IPDF aims to increase the number and volume of PPP infrastructure transactions through either procuring advisors or providing itself through professional PPP development services for contracting institutions. However, IPDF does not act as a contract signatory to any transaction. The government of Pakistan, under the PPP policy 2010, has also provisioned for the establishment of a Project development fund (PDF) in line with the emerging PPP program. The PDF operates according to standard operating procedures and guidelines issued for PDF managers and users/beneficiaries. The PDF supports the appointment of transaction advisors for undertaking project, transaction structuring, and implementation up to the signing of the contractual arrangements with the private investor(s). This is also considered to be a revolving fund with the third party costs being reclaimable from winning bidders in some instances, particularly where projects reach financial close.

India is another example that has developed separate institution for the same purpose. The government of India (GOI, 2006-2007) has set up 'India Infrastructure Project Development Fund' (IIPDF) for providing financial support for quality project development activities to the States and the Central Ministries. The quality advisory services are fundamental to procuring affordable, value-for-money PPPs, the costs of procuring PPPs, and particularly the costs of transaction advisors, etc. The IIPDF was set up with initial contribution of Rs.100crore. Although it is a revolving fund and gets replenished by the reimbursement of 'investment' through success fee earned from successfully bid projects, it is also supplemented in subsequent years through budget support. The IIPDF assists ordinarily up to 75% of the project development expenses. The IIPDF's primary focuses on potential PPP projects' development expenses including costs of engaging consultants and transaction advisor. Time to time, it also focuses on to set out in guidance issued for identifying PPP projects and preparation for the Department of Economic.

Project development facilities in terms of technical assistance from the government are also available in Philippines, Indonesia and UK. These facilities are government backed assistance to provide support in three categories: a) for overall capacity building on PPP; b) fees for the consultants for conducting feasibility and pre-feasibility studies for project identification and structuring; and c) providing fees for the transaction advisors for preparing various contract documents between government and private sector. The Infrastructure Project Development Facility (IPDF) in Philippines is revolving in nature and directly managed by the local government unit under the Ministry of Finance with donor assistance

from the Asian Development Bank. On the other hand, in Indonesia it is managed by the infrastructure executing agencies.

The importance of the central facility can be realized by looking at the achievements of this facility in different countries. For instance, PDF has played a significant role for infrastructure development in Pakistan. While development of profitable projects was the major challenge in Pakistan for PPP development, IPDF has been successful in developing a rich pipeline of projects worth more than USD \$4 billion. Proper project structuring has been completed for these projects through PDF with detailed feasibility analysis and other due diligence and many of these projects have been progressed at the transaction stages as well. IPDF has supported development of PPP projects in 18 different sectors – eight projects in transport & logistics sector, two projects in health sector, one project in education sector, two projects in hydro-power sector and five projects in other sectors. Similarly, IIPDF has also had a significant impact on the development of a pipeline of projects in various challenging sectors in different states of India – over 25 projects are in different stages of project development, such as water supply and sanitation projects (in Kohlapur, Aurangabad, Indore and Bhopal), education projects (in Rajasthan and Madhya Pradesh) etc. This is considered as one of IIPDF’s major successes as most of these projects are quite small in size (in terms of capital investment) but due to their complexity in project development, the executing agencies generally considered these projects not worthy of “paying off” (as the project development costs, i.e. costs of the transaction advisors are very high for such complex projects) if developed through PPP. The success of IIPDF is also remarkable for other PPP projects in various sectors, especially in transportation.

POLICY RECOMMENDATIONS

Considering the need for project development facility in promoting PPP in a country and following the examples of similar type project development facilities in some other countries, some recommendations have been made in the following section regarding operationalization of the facility especially in terms of modality, formation and administration, procurement and operational model.

Modality of the PPP Project Development Facility

In order for identifying and promoting a PPP project, any ministry, agency or government body responsible for infrastructure development and maintenance may use the facility for general structuring of the project, supporting advisory fees and implementing the linked projects. The specific activities to be covered under the facility are summarized in the following table:

Table 1: Activity Coverage for the PPP Project Development Facility

Project Identification and Structuring	Transaction Advisory Support	Associated/Linked Government Project
Greenfield Project Identification	Preparation of appropriate contract documents, ensuring a fair allocation of risk between the public and the private sector	Facilitation for receiving appropriate consent from relevant authority

Concept Development: Defining the scope of the project	Preparation of tender documents and assistance with tendering	Pursue the government body who owns the associated or linked government project
Pre-feasibility studies: Mode of private sector participation, BOO, BOT, BOOT etc, determining broad project parameters and boundaries	Assistance in negotiations to protect government's interest	Allocate fund for contractor who will develop/remove, such as implement the linked projects
Feasibility studies: Detailed feasibility study (if required to be conducted by the government in special case)	Identification of barriers and process of removal of such barriers for implementing PPP projects	Acquisition of lands for some special cases like Especial Economic Zones through PPP
Commercial framework Development		
Project Specific Capacity Building		
Investment Promotion		
Evaluation of proposals, documents, or other technical, commercial or legal matters in relation to the PPP projects		

The facility can be used for project structuring and transaction advisory through a success fee based model where the fee for the advisor is replenished by the successful bidder, thus allowing the required funds readily available. This method does not charge the executing government bodies for such advisory support directly, but charges the investors who win the projects, where the successful bidder to provide such fees once awarded preferably with a premium (e.g. 2%-5%) on top of the fees of the advisors to cover the risk of any potential infeasible project. For an example, the Infrastructure Investment Facilitation Centre (IIFC) in Bangladesh is one of the government owned entities working in a number of PPP projects as a professional project development service provider to the government based on a success fee basis where IIFC shouldered the risk of the project (if the project does not move forward at later stage) and carried the project forward up to the successful engagement of an investor who subsequently paid fees for IIFC (Islam, 2003), as per the following model:

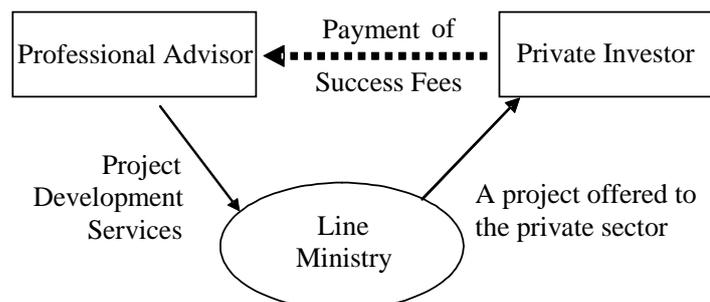


Figure 1: Project Development based on the Success Fee Model

Apart from the specific aspects of project development and structuring, the facility may also provide technical assistance in terms of capacity building of officials from the executing agency who will be involved in such project development activities.

Formation and Administration of the Facility

PPP development facility should be initiated by any neutral government body with respect to PPP project ownership. The neutral agency refers for a government agency that may not be involved in developing and managing PPP projects. Depending on the country, the formation of such a facility might require some regulatory changes to be made (Rashed, 2011). Hence, this paper proposes that the PPP development facility should be developed under any regulatory body of the government. Simultaneously, sufficient funds for advisors and linked projects should be made available – preferably from a single budgetary allocation – for this facility, consisting of several funds from individual donors or from the government’s own budget, while authorizing the execution of the fund under the dedicated unit. Assistance from technical advisors, who have sufficient experience and expertise to understand PPP projects and to evaluate the business behind it, may be sought to support the fund management and to evaluate the applications received from different government bodies and the private sector for the case of unsolicited proposal.

Additionally, the unit with assistance from its own advisors has to be the champion in promoting PPP projects in the country. The unit needs to sort out the priority of different applications based on the merit and importance of the projects and mobilize the required funds accordingly. Depending on the success of the facility, the government may increase the fund in later years through further budgetary allocation or by other sub-fund sources. The proposed steering body should have members from different government ministries so that the proposed PPP project can be evaluated in light of all the sectoral plans and from a macro-economic perspective so that the country may also evaluate the economic rate of return from the PPP project. A member from the private sector should also be included in the steering body to understand the investors’ perspectives about the project. The administration of the proposed facility is described as follows:

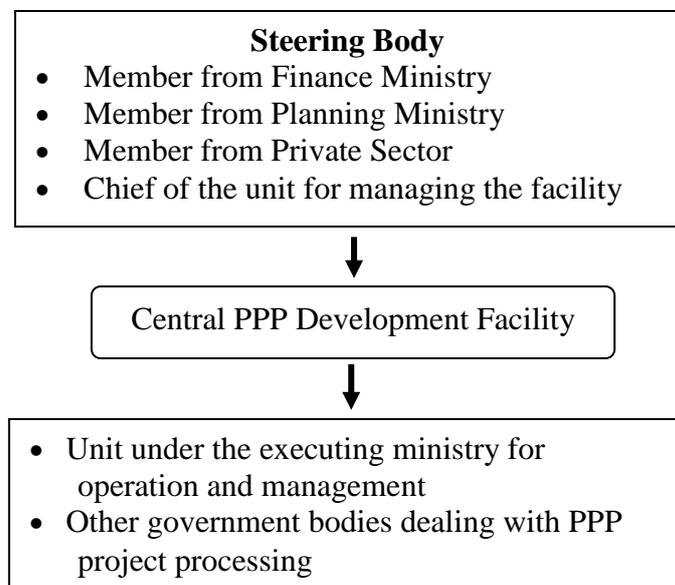


Figure 2: Organizational Structure for the PPP Development Facility

Procurement of Services from Central PPP Development Facility

If any ministry, government body or agency or civic community desires to award an infrastructure project to private investors and they do not possess sufficient experience and manpower to handle the proposed project, they will make an application to the facility (to the unit administering the facility). The PPP development facility will support for the fees of the technical advisors (to carry out feasibility studies) and for the transaction advisors (to prepare the concession document and other agreements) in addition to actively supporting to carry out the activities to implement the associated or linked government obligated projects. In instances where such external consultants are procured from the support of the facility by the government body working on a PPP project (after their application to the facility and the subsequent approval from the unit through the steering body), the responsibility of the unit administering the facility can provide process management services and supervise the procurement and management of the external consultants. On the other hand, for implementing the linked projects, the executing agency for a PPP project will request the facility for support in two areas – (i) facilitating required consent from other government agencies for supply of utility and other related issues; and (ii) providing funds for the construction contractor to be engaged for development of the approach road, site compaction and other ancillary activities as realized from the feasibility studies and through the tender document (which might also have been developed from the support of the facility) and for the land acquisition if required for any PPP project implementation.

Once the unit administering the PPP development facility receives application for any of these linked projects or advisory support, it will precede the request to the steering body with their own analysis on the application along with their recommendations and related justifications. After the approval from the steering body, the unit will make a Memorandum of Understanding (MoU) with the executing agency for using the fund and will exert efforts for receiving consent from other government agencies for relevant utility supply or re-allocation.

Proposed Model of the Facility

The PPP development facility will primarily be used by the line ministries/agencies, local government and communities who will execute the project, such as the government body who owns the project and will make a contract with the investor (Alam, 2011b; Rashed, Alam & Fahim, 2014). The executing agency will then require expert project development services, including technical assistance funds and linked project in the PPP development phase. When implementing agencies need to engage an advisor or will need support for linked projects and other relevant assistance, they will provide application to the facility with their requirement for the use of funds by specifying the name of the project, scope of advisory services (for feasibility, transaction support etc.), duration of such support etc. It also needs to provide the details of the linked project and executing authority for that linked project, nature of the linked project and detailed description of the linked project as derived from the feasibility study and as documented in the concession agreement. The steering body of the facility will provide approval for such application. The modality for using the facility by different bodies is as follows:

difficulties, particularly in developing countries, to manage the obligations under a PPP project due to fund constraints, inherent bureaucracy and lack of understanding. This paper identifies the necessity of a central PPP development facility and proposes a structure for it in order to minimize the challenges faced by governments for PPP project implementation.

This paper recommends that the central PPP development facility should be established within a neutral government ministry like the ministry of finance, treasury or planning, with a dedicated unit under a steering body within the ministry to manage this facility and its day-to-day activities. The facility should have a provision of funds for the PPP project development advisors (to be engaged by the implementing government agency dealing with a PPP project) and for implementing the associated or linked government projects. This paper also suggests a model that establishes a formal procedure for the government agencies to request and receive funds from this facility for upfront development of the PPP projects. This fund should be rolling in nature that will be replenished by the successful bidder. Governments around the world are gradually exploring the opportunities to engage the private sector to provide quality infrastructure services to their respective countries while reducing burdens on the national exchequer. Hand in hand with this vision by the governments to engage the private sector for national infrastructure development, a central PPP development facility will ensure greater government commitment in enhancing the government side obligations for promoting the Public-Private Partnership projects in the country.

REFERENCES

ADB (2008). Public-private participation handbook. Asian Development Bank, Manilla, Philippines, pp.1 and 55.

Alam, M. M., & Rashed, M. A. (2010). Delivering countywide cost-effective and better education services: The models of public private partnership (PPP). *Technics Technologies Education Management*, 5(4), 875-880.

Alam, M. M., & Rashed, M. A. (2011a). Private sector participation in infrastructure development: A non-residence infrastructure fund in Bangladesh. *Journal of Bangladesh Studies*, 13(1), 34-38.

Alam, M. M., & Rashed, M. A. (2011b). The processes of location study for developing economic zones under public private partnership model: Country study on Bangladesh. *Journal of Economics and Business Research*, 17(2), 51-63.

Commonwealth of Australia (2002). Public-private participation: an introduction. Department of the Parliamentary Library, Research Paper No. 1, 2002-03, pp. 4. <http://www.aph.gov.au/binaries/library/pubs/rp/2002-03/03rp01.pdf>

GOI (2006-2007). Scheme and guidelines for India infrastructure project development fund. Department of Economic Affairs, Ministry of Finance, Government of India. http://www.pppinindia.com/pdf/scheme_Guidelines_India_Infrastructure_Project_Development_Fund-English.pdf.

GOP (2010). Pakistan policy on public private partnerships 2010, Government of Pakistan. <http://ipdf.gov.pk/tmpnew/PDF/PPP%20Policy%20FINAL%2014-May-2010.pdf>

Hatefi, M. A., & Seyedhoseini, S. M. (2012). Comparative review on the tools and techniques for assessment and selection of the project risk response actions (RRA). *International Journal of Information Technology Project Management*, 3(3), 60-78.

Islam, N. (2003). Role of the infrastructure investment facilitation centre in the development of private sector infrastructure in Bangladesh. *Transport and Communications Bulletin for Asia and the Pacific*, 72, 77-100.
<http://www.unescap.org/ttdw/ppp/trainingmaterials/MonitoringPPPBangladesh.pdf>

PPIAF (2003). *Toolkit: A guide for hiring and managing advisors for private participation in infrastructure*. Washington, DC.

Rashed, M. A., Alam, M. M., & Toriman, M. E. (2011). Considerable issues for sustainable public-private partnership (PPP) project. *Res Manageria*, 2(4), 57-65.

Rashed, M. A., Alam, M. M., & Fahim, F. (2014). The performances and challenges of public-private partnership (PPP) projects in Bangladesh. *Journal of Bangladesh Studies*, 15(2), 62-71.

Salari, M, Yousefi, N., & Asgary, M. M. (2015). Cost performance estimation in construction projects using fuzzy time series. *International Journal of Information Technology Project Management*, 6(1), 66-75.

UNESCAP (2005). *PPP: Readiness self-assessment*. Bangkok, Thailand. pp. IX and 30.

UNESCAP (2008). *Public-private partnerships in infrastructure development: A primer*. Bangkok, Thailand, pp.9.

World Bank & Inter-American Development Bank (1998). *Concessions for infrastructure: A guide to their design and award*. World Bank Technical Paper 399. Washington, DC, pp.1 and 21.

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