

Perception of Procurement on Successful Infrastructure Project Outcomes in Pakistan

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Abstract

In Pakistan, the need for infrastructure is immense while resources, capitals and commodities are scarcely found. This paper explores the methods used in Pakistan to procure infrastructure projects. With the help of archival analysis, in depth case interviews and in light of the literature it discusses the advantages and disadvantages of the methods of procurement used in public sector in Pakistan. The findings reveal that there are two distinct methods of infrastructure project procurement in public sector in Pakistan i.e. the traditional method and the non-traditional method (Public Private Partnership (PPP)). The driving forces for the non-traditional method in comparison to the traditional method are also limited. This paper also discusses the perception of procurement in delivery of successful project outcomes in Pakistan. In addition it provides an analysis of the challenges a developing country like Pakistan face while adopting modern procurement methods and systems; how enabled is the environment in Pakistan to accept new and innovative forms of procurement.

Keywords: Infrastructure Projects, Procurement, Pakistan.

1. Introduction

In Pakistan the need and demand for infrastructure is massive while the resources in Pakistan are not ample to meet this demand (Noor *et al.*, 2012). Not only there is limited fiscal space, there are also huge gaps in public sector capacity to build and operate infrastructure (IPDF, 2010). Procurement of infrastructure projects poses challenges that are not found in other areas of public procurement, the primary reason is that infrastructure is highly complex and customized therefore it requires not only economic but also political, social and environmental

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considerations from a long term perspective (World Bank, 2009). How to use the limited public resources wisely remains an important challenge for governments especially under fiscal pressure (Estache and Limi, 2011). The Government of Pakistan (GoP) estimates that less than half of the infrastructure investment needs can be met with public funds under the Medium Term Development Framework (MTDF) of the Government of Pakistan (IPDF, 2010). The country needs to embark on implementing different forms of procurement to meet its infrastructure needs (Noor *et al.*, 2011). The public sector in Pakistan has taken some steps but there is still more to be done (Noor *et al.*, 2012). A combination of policy reforms, institutional support, incentives and financing modalities are required to encourage private-sector participation in financing, constructing and managing infrastructure projects (IPDF, 2010). In Pakistan, construction sector is an important sector and although it is not working to its fullest potential, it is still of prime significance to the country (Azhar *et al.*, 2008). They state that it is among the largest sectors that generates employment within the country as well as a key driver for economic development of Pakistan. Furthermore, according to them, similar to many other developing countries, Pakistan is also facing critical project management related issues. They also suggest that procurement is a major factor for cost overruns in projects in Pakistan. Saqib *et al.* (2008) found out that procurement related factors such as project delivery system, project bidding method and project contract mechanism were rated as most significant factors and procurement related factors were rated among the top five critical success factor categories in Pakistan. They suggest that there is a need for further study on procurement in Pakistan which will be useful in implementing projects successfully. Much research remains to be done on the links between procurement of projects and its effective implementation in Pakistan (Khan *et al.*, 2008). They expect that further research within Pakistan could reveal more prospective information on the existing mechanisms of procurement of projects in Pakistan and the means for improving the implementation of projects to achieve successful outcomes for the benefits of all the stakeholders and general public (Noor *et al.*, 2012). The aim of this paper is to give a holistic view of the types of procurement of infrastructure projects in Pakistan, the perceptions about procurement and its impact on successful delivery of project outcomes and the challenges a developing country like Pakistan face in implementing new and innovative forms of procurement as well as how enabled is the environment to accept these new forms of procurement.

2. Methodology

The methodology for this research employed qualitative research techniques. The research was carried out in two stages. In the first stage, archival analysis was conducted of government documents and reports including reports by international organisations, policy documents and literature. As a result, it was found that there are two different methods of procurement used for procuring infrastructure projects in public sector in Pakistan i.e. the traditional and the non-traditional methods. This also facilitated in identification of potential case study projects based on the type of procurement method used. During the second stage, case studies were selected based on archival analysis. A total of 6 public sector organisations had been selected as organisational case studies and 8 projects had been selected among these organisations as

project case studies. A total of 24 respondents participated from these 6 organisations. The case studies were analysed using qualitative content analysis techniques of the in depth interviews. Cross case analysis had also been carried out based on looking at the similarities and differences across similar as well as different methods of procurement.

3. Types and Use of Infrastructure Procurement in Pakistan

Figure 1 below provides a diagrammatic explanation of the different types of procurement arrangements and methods for infrastructure projects in Pakistan.

The infrastructure procurement in Pakistan can be broadly classified in two distinct methods of procurement i.e. the traditional method and the non-traditional method. Within the traditional method the normal practice in public sector in Pakistan is to use the general contracting i.e. Design-Bid-Build. In case of no-traditional methods of procurement for infrastructure projects in the public sector in Pakistan the three main types of contractual arrangements are BOO which is under policy recommended for procuring thermal power projects in addition to it being used by the first private sector airport in Pakistan. BOT is most widely used for infrastructure projects across the public sector in Pakistan especially in case of transport sub-sector as almost all the case study projects in this sector have been procured through this arrangement. The only one BOOT project is in the hydropower sector in Pakistan and it is the only BOOT project so far in infrastructure projects in public sector in Pakistan. From the respondent responses, it was quite evident that the predominant method of procurement in case of infrastructure projects in almost all the organisations was that of traditional method of procurement. This is illustrated in the Figure 2 below that all organisations utilise traditional form of procurement except Organisation 2 which employed only non-traditional method of procurement as per government and policy guidelines and is specialised organisation in case of non-traditional form of procurement in Pakistan (Noor *et al.*, 2012).

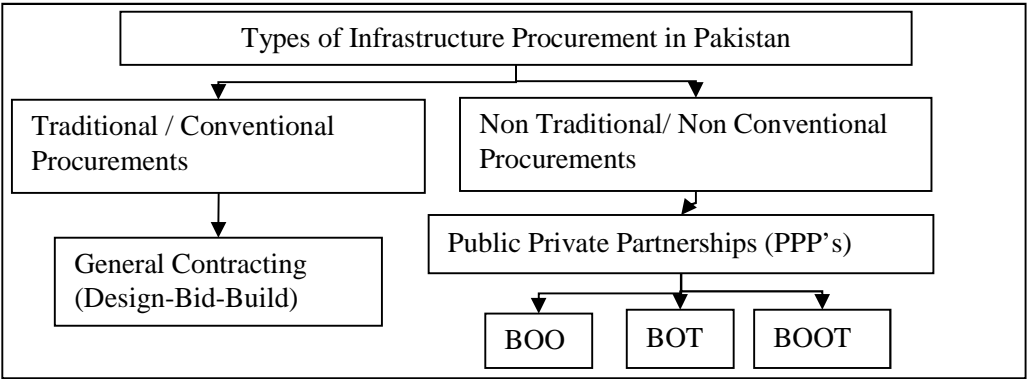


Figure 1: Types of Infrastructure Procurement in Pakistan - Source: Noor et al. (2012)

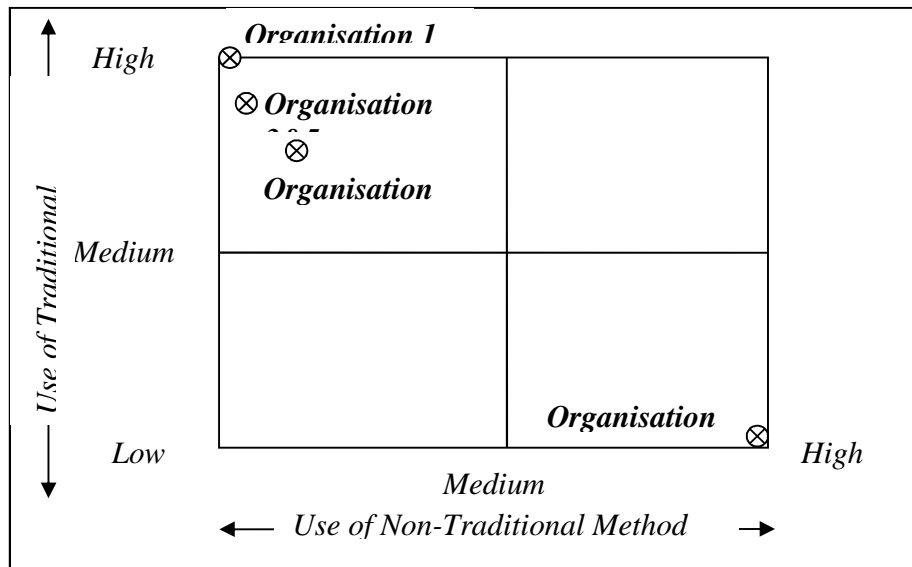


Figure 2: Predominant Use of Method of Procurement across Cases - Source: Noor et al. (2012)

4. Advantages and Disadvantages of Different Types of Procurement in Pakistan

The following sections have been adapted from a study conducted by Noor *et al.* (2012) which discusses the advantages and disadvantages of traditional and non-traditional methods of procurement in light of literature and in the context of Pakistan based on interview responses during case study interviews.

4.1 Traditional Method

General contracting or as it is usually known as design-bid-build is the traditional approach to procurement in construction. The advantages of the traditional method in Pakistan have been reported to be the relative comfort with the approach and ease of use for the public sector organisations, with relative price certainty and targeting at least cost, having fair amount of competition and to a degree transparent which are mandatory for public procurement under the government regulations. The disadvantages have been reported to be cumbersome, time consuming, often resulting in delays in project execution and resulted in adversarial relationship often ending in legal disputes. Both advantages and disadvantages broadly conform to the literature on traditional method of procurement such as Francis and Sidwell 1996; Hughes *et al.* 2006; Morledge *et al.* 2006; Walker and Hampson 2003 and Murray and Langford 2009. This can also be depicted in the force field analysis diagram such as in figure 3 below. Considering the advantages being the forces driving the traditional method and the disadvantages being the restraining forces, also evident from section 3 and figure 2 above, the traditional method of

procurement is the predominant method and is in high use hence it can be inferred that the driving forces are stronger than the restraining forces.

4.2 Non Traditional Method (PPP)

Duffield (2008) defines Public-Private Partnerships' (PPPs) as a contracting arrangement in which a private party, normally a consortium structured around a Special Purpose Vehicle (SPV), takes responsibility for financing and long term maintenance or operation of a facility to provide long term service outcomes. In Pakistan as stated earlier in section 3, Public-Private-Partnership (PPP) is considered as a non-traditional procurement method. The driving forces and advantages of the non-traditional method of procurement and especially Public Private Partnerships in Pakistan have been reported to be the need for efficiency and finances. The restraining forces and disadvantages to this particular method have been reported to be lack of understanding of the method of procurement, the project revenue issues, the long gestation period of PPP projects, resistance to change and the suitability to the present environment of the country. These factors broadly conforms to the literature by authors such as Hughes (1989); Walker and Smith (1995); Merna and Smith (1996); Chu (1999); Walker and Hampson (2003); Hughes *et al.* (2006); Morledge *et al.* (2006); Miller *et al.* (2009) and Murray and Langford (2009). Regarding the issue of lack of understanding as explained by authors such as Nahapiet and Nahapiet (1985); Naoum(1994); Nam and Tatum (1997); Slaughter (1998); Luu *et al.* (2005); Shields (2005) and Miller *et al.* (2009), stress is on the need and the importance of understanding of procurement as well as the increase in the level of understanding with experience and expertise. This lack of understanding as reported was not specific to clients alone but also contractors, consultants and private parties have exhibited the same in case of Pakistan which corresponds to what Naoum (1994) and Luu *et al.* (2005) have stated. It is also interesting that resistance to implement change (Shields, 2005) has also been observed in case of Pakistan. Suitability to the specific environment and the influences of environmental factors such as regulatory, legal, political, economic, cultural, financial etc in which it is being administered conforms to the literature. Although the literature does not particularly elaborated these in the context of developing countries, the findings do confirm that these issues are having a profound negative impact on the applicability of this type of procurement in Pakistan. Considering the above the same can be depicted using a basic force field analysis as done in figure 4 below. Considering section 3 and figure 2 above, non-traditional method of procurement is seen as a sparingly used method. Hence it can be inferred that the restraining forces are stronger than the driving forces in the case of non-traditional method in Pakistan.

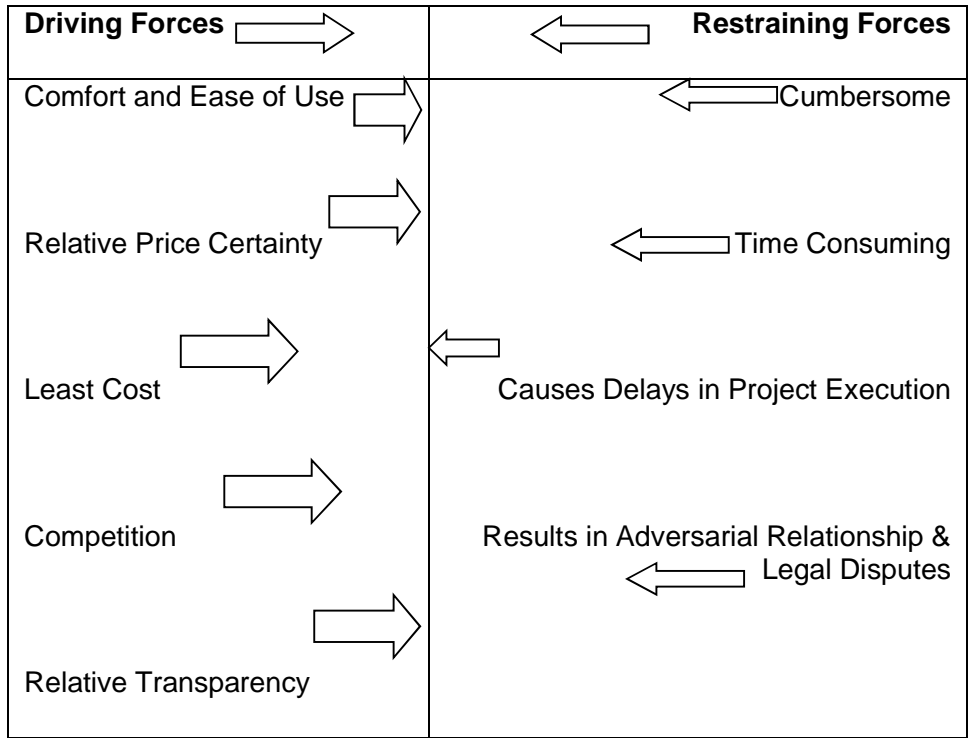


Figure 3: Force Field Analysis of Traditional Method in Pakistan - Source: Noor et al. (2012)

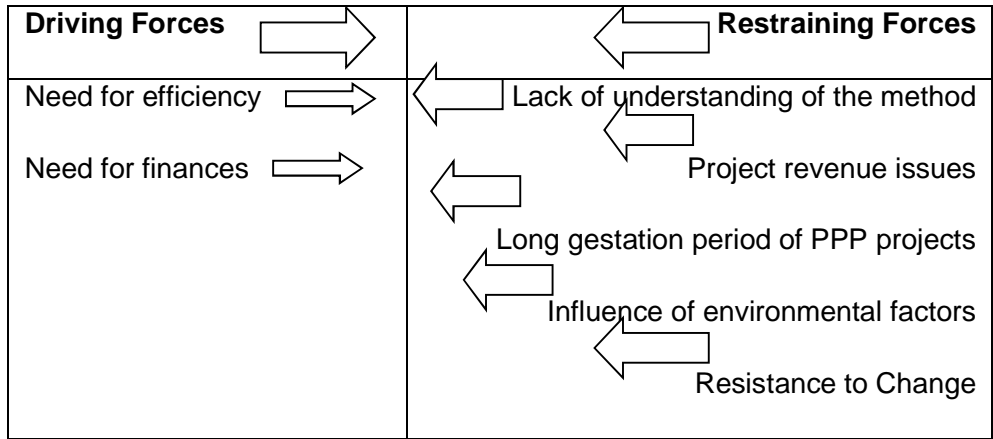


Figure 4: Force Field Analysis of Non-Traditional Method in Pakistan - Source: Noor et al. (2012)

5. Perception of procurement practices in delivering successful project outcomes

Success was defined and perceived as meeting all the major objectives of the project as envisaged prior to execution when the project was constructed and completed. In totality the respondents perceived that procurement had a direct impact on successful outcomes of the project. As it was unanimously stated that the project procurement processes and methods directly impacted the successful outcomes of the projects in the organisations investigated, it was perceived that all the criteria, guidelines and rules etc. were designed to achieve successful project outcomes. It was felt if the process of procurement is followed in letter and spirit there would be no problems in its effective implementation. The criteria for pre-qualification and award of contracts in theory was perceived to be tailored in such a way that these are built in the process for one reason alone i.e. to achieve successful project outcomes. The procurement systems in the organisations studied had a direct relationship and impact on performance and success of the project.

In addition procurement planning and project planning were perceived to be instrumental in achieving successful outcomes. If project planning and especially the prime governmental project document i.e. PC-1 (stands for Planning Commission template 1) was properly prepared in their experience, such projects usually reached successful conclusions. It was felt that for successful implementation both political and organisational will and loyalty including personal will and loyalty to the project, were imperative i.e. how loyal and willing all the project stakeholders are to the project. It was reported that there was much room for improvement in the process and rules which would lead to successful implementation of projects. The due diligence of the process of procurement was also reported to help in identifying who is best suited to handle the project.

6. Challenges in adopting modern procurement methods for developing countries

As Riley and Lewis (2008) state that uncertainty results in large part from imperfect information, the institutions in a society are those that reflect the quality of the information that is available. They further state that adopting new and different procurement processes has a direct relationship with uncertainty. They assert that the greater the uncertainty, the more rigid and limiting the institutional arrangements tend to be, and in the context of construction, the more difficult it becomes to adopt a new and different procurement process that minimizes transactional and enforcement costs. They further state that “the smaller the uncertainty facing the decision maker, the more flexible the institutional arrangements, and the greater the scope for initiative. Hence, developing countries tend to limit the scope for initiative in public sector contract letting (almost always to the lowest competitive bid) whereas more developed countries experiment with various of the newer formats that even allow negotiation (PPP, PFI, BOOT, BOLT etc)” (Riley and Lewis, 2008: P?). The same can be inferred from this research in case of Pakistan that the external environmental uncertainties are quite extensive and massive.

Infrastructure procurement has been found in Pakistan to have forward and backward linkages to a range of external environmental issues and barriers identified during this research. It has been found and can be summarized to state that the current situation of the economy, the instability of the political scenario, the immaturity of organizations and institutions, law and order situation or security situation, legal and institutional frameworks, risks and contract management practices, the level of understanding of other procurement form all are not conducive at the moment towards effective implementation of other forms of procurement. There is weak rule of law and justice; economic situation, policy, political instability, decision making abilities etc; all of these have increased the cost of working with public sector in Pakistan. Although it may be noted that these factors and higher uncertainty affects of the above mentioned factors have had a negative impact on the public sector , they have, on the positive side, pushed the organisations to find other innovative methods of financing and procurement. There is limited number of enablers for implementation of other forms of procurement and large number of impediments. A study funded by the Asian Development Bank in 2007 was targeted in Pakistan for finding private sector constraints to infrastructure investment and resulted in finding of substantial impediments, however efforts for removal of these impediments have had limited success till date.

Overall, there is a need to investigate and explore processes of infrastructure procurement in Pakistan as according to the World Bank study (2007) which states that in Pakistan different processes need to be explored which focus on efficient delivery of the end product, especially large mega infrastructure projects at cost, in time, with quality and functionality (World Bank, 2007).

7. Conclusion

Infrastructure procurement is a fairly complex phenomenon and requires innovation, specialty of skills, expertise including policy, regulatory, financial and governance instruments in place to tackle different eventualities. Although most of the factors driving infrastructure procurement process are common across the globe, it should be granted that local solutions to local problems should be pursued. There is a dire need to innovate in the procurement of infrastructure projects in Pakistan. The Government of Pakistan realises that all infrastructure needs of the country cannot be with public funds, but the fact of the matter remains is how to attract, retain and build investor confidence from the private sectors; how to get the knowledge and understanding of the principles and prerequisites of project finance; what policy measures are required and how to maintain a consistency in policies; how to increase the efficiency regarding management and governance of procurement processes; how to develop a regulatory framework that addresses every aspect of procurement; etc. The policy, regulatory, financial and governance instruments at present in the country are at the stage of infancy regarding new and different procurement forms. They need to evolve to the growing needs of the time. Merely incorporating what has been successful in other countries will not bare fruitful results. A longitudinal study investigating and comparing costs for traditionally procured projects and non-traditionally procured projects might be also worth further investigating. Further research is

required that might more rigorously explore the policy environment on how procurement is supposed to be and how currently it is actually being procured in Pakistan. At policy level, stability and clarity in policy frameworks is required. The unstable political environment of the country, instability in policies, use of political pressure and influence are impediments to the procurement and successful implementation of projects. Measures are needed to reduce the impact of negative political factors and increase the impact of positive political factors such as political will.

There is a need to reduce the higher uncertainty of environmental affects as there are limited number of enablers for implementation of other forms of procurement and large number of impediments which need to be reversed. The concept of partnering, alliances and principles of supply chain management need to be explored, understood and adopted within the context of Pakistan in public sector infrastructure procurement.

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