

## **Procurement Practices in Developing Countries: the need for research**

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### **Abstract**

In the developing countries, the total value of construction work represents around half of the gross domestic capital formation. There is a lack of research on methods used in developing countries to procure construction projects and implement them. For developing countries to make that vital transition to developed countries, it is of paramount importance to have their construction industry research and development intensified. This paper is a part of doctoral study of procurement practices of developing countries. Through literature review it discusses the problems and issues in the procurement practices and a need for more research regarding the procurement of projects in developing countries.

### **Keywords**

Developing countries, construction, procurement.

### **1.0 Introduction**

In the McGraw Hill dictionary of scientific and technical terms (2010) procurement has been defined as the action or process of acquiring or obtaining material, property or services at the operational level. Building Procurement has been identified as the amalgam of activities undertaken by a client to obtain a building (Franks, 1984). Construction Procurement has been defined by the CIB W92 Working Commission on Procurement Systems as the framework within which construction is brought about, acquired or obtained (Sharif and Morledge, 1994). Walker and Rowlinson (2008) suggest that the perception about procurement in project management context of the construction industry is about the acquisition of project resources for the realisation of a constructed facility. Delivering value is the main purpose of project management; sustainable procurement process provides a way that value is generated (Walker et al, 2008). They further state that at the centre of value generation is the decision that involves which parties are best suited, prepared and equipped to undertake the project or specific parts of the project. According to Tookey et al (2001) there is a presumption in today's construction industry worldwide that selecting the appropriate and best suited procurement system for a project will inevitably lead to a 'successful' project outcome, they further go on to state that many clients perceive correct selection of procurement method is central to a successful project.

With respect to the theoretical development of the field, it seems that the body of knowledge is expanding. The literature on project procurement practices and processes is in abundance with

adequate discussion on the effects that procurement may have on success and performance. However, they are all in the context of the developed countries and not in the context of the developing countries. The procurement strategies, practices, routes, methods and systems of the developing countries have been under explored and this paper attempts to investigate and explore the literature regarding procurement in developing countries.

## **2.0 Procurement and Its Importance**

Walker and Rowlinson (2008) state that there is a general misconception that the acquisition of resources is procurement, but in fact as according to them it is only a part of the procurement system and has termed it as “the contract strategy”. Procurement can be stated to have five key principles which are described by Raymond (2008) and includes: 1) value for money (VFM), 2) ethics, 3) competition, 4) transparency, and 5) accountability. Procurement also involves other issues as well such as culture, leadership, management, economics, and environmental, ethical and political issues among others (Walker & Rowlinson, 2008). Although the current industry climate is highly diverse and rapidly evolving, there are still relatively few procurement systems to choose from. Each procurement system that is available delivers project success to a variable degree (Bowen *et al.* 1997; Tookey *et al.* 2001). Evolution of procurement in project management in the construction industry has arisen from a number of factors which have combined and forced the construction industry into a position where it has to change to survive (Walker & Rowlinson, 2008). As Tookey *et al.* (2001) states that today there are a number of different types of procurement routes available to choose from and each different type of procurement (traditional approach, design and build (D&B), build-operate-transfer (BOT), management contracting, Public-Private-Partnership (PPP), etc.) has its own proponents and inherent strengths and weaknesses. The underlying question arises here is that which is the best choice? According to Tookey *et al.* (2001) the selection of optimal procurement systems is difficult, because even experienced clients cannot know all the potential benefits or risks for each system. Because of this they state that procurement is, therefore, a succession of calculated risks. Walker and Rowlinson (2008) suggest that the project procurement choice can be guided by the project typology and the degree of collaboration and integration between the supply chain parties and their relationships. The current process of procurement selection tends to be carried out in a rather unstructured and cursory manner, and this may give rise to the adoption of procurement system beyond the deliberate choice (Masterman, 1992; Luu *et al.* 2003). The result of employing an imprudently selected procurement method can be an impediment to the realisation of certain anticipated benefits associated, and might even lead to project failure (Naoum, 1994; Sharif and Morledge, 1994; Rwelamila and Meyer, 1999; Ambrose and Tucker, 1999; Luu *et al.* 2003). Inappropriate procurement strategies may also lead to cost and time overruns, claims and disputes on projects (Masterman, 1992; Abdel-Meguid and Davidson, 1996). Conversely, appropriate procurement strategies are needed to help achieve optimal solutions in terms of cost, time and quality. They can also contribute positively to other aspects of performance, such as meeting agreed targets, as outlined by Jagger (1995).

## **3.0 Importance of Construction and Procurement in Developing Countries**

According to Hillebrandt (2000) and Ofori (2006) the construction industry is an important sector of the economy which makes a significant contribution to gross domestic product (GDP), capital formation, and employment. It has backward and forward linkage effects with several other sectors. As it produces the nation’s physical infrastructure and other productive assets, the industry is of critical importance in the national development of developing countries (Ofori, 2006). Ofori and Han (2003) observed that the mix of construction demand (and output) changes as an economy develops. Developing countries need to embark on extensive infrastructure provision in order to achieve and sustain economic growth and aspire towards the standards of the developed economies. He further states that the methods used in developing countries to procure projects and implement them are not in tune to achieve successful operation of projects (Quartey, 1996). Lets take the case of Pakistan (a developing country), the construction sector is an important sector although not working to its fullest potential but still of prime significance to the country (Azhar *et al.*, 2008). They further state that growth in this sector is critical for growth in national income as it is among

the largest sectors that generated employment within the country as well as a key driver for economic development of Pakistan. Like many other developing countries, Pakistan is also facing critical project management related issues. Azhar et al. (2008) also suggest that procurement is a major factor for cost overruns in projects in Pakistan and further research should be conducted to find out the impact of procurement on project success. 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 factors categories in Pakistan. They suggest that there is a need for further study regarding research on procurement and project success in Pakistan which will be useful in implementing projects successfully (Saqib et al, 2008). Khan et al (2008) states that much of the research remains to be done on the link between procurement of projects and its effective implementation in Pakistan. They expect that further research within Pakistan could reveal more comprehensive 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 (Khan et al, 2008). From the above discussion it is clear that construction is of great importance in economic development and there is a need for understanding of procurement practices in developing countries for better implementation of projects.

#### **4.0 General Problems Facing the Construction Industry in Developing Countries**

Many writers have identified several inter-related problems facing the construction industries within the developing countries. Ofori (1993) summarises these problems which are a) recurrent shortage of construction materials (b) low level of technological development c) inadequate R&D facilities and programmes, and poor linkage between research and practice; (d) lack of skilled construction personnel, and a poor social image of construction; (e) an operating environment not favourable for construction enterprises, having lots complex procedures and regulations, delays in payments, and unsuitable contract documents; and (e) low and fluctuating overall levels of construction activity (Ofori, 1993).

#### **5.0 Major Problems of Procurement in Developing Countries**

##### **5.1 Problems in Contract and Contract Management**

According to Ogunlana and Sysavath (2000), construction work in many developing countries suffers from administrative and allocation inefficiencies. Because of a lack of sound framework of institutional and legal arrangements, especially that affecting public sector procurement, the industry is not shaped to respond quickly and efficiently to the client's needs (World Bank, 1984). Aniekwu and Okpala (1987) classified the range of problems encountered as either systemic (resulting from the application of systems not suitable to the environment) or structural (resulting from the inherent conditions and practices within the environment). The systemic components can be remedied by adjusting some contract provisions (Ogunlana and Sysavath, 2000). On the other hand, in their view, the structural components can be remedied only by adjustments in the whole societal posture since they are intrinsically tied to the structure of the environment (Ogunlana and Sysavath, 2000). They further say that some of the pitfalls in trying to manage projects effectively and maximize project performance are problems associated with misunderstanding of contract documents especially general and special conditions have tremendous impact on project performance (Ogunlana and Sysavath, 2000). Tutesigensi and Moodley (1999) found that construction contracts affect harmony and levels of profit in the construction industry. Ogunlana and Sysavath (2000) suggest that the positive contribution of conditions of contract to harmony and profit in the industry can degenerate into a dysfunctional one when one or both of the following are exhibited in the system: lack considerable understanding of the conditions of contract by at least one of the participants; and lack of trust and belief in the conditions of contracts by one or all of participants. They also state that many standard contract conditions are 'imported' and originate from variety of sources, having been designed for different social, cultural, political, legal and economic backgrounds (Ogunlana and Sysavath, 2000). In using 'imported' conditions of contract,

therefore, several parts of the jigsaw are clearly missing and the end result is less than optimal achievement (Tutesigensi and Moodley, 1999). The nature of participant relations and contractual arrangements is another management issue of some importance in developing countries (Moavenzadeh, 1978). Moavenzadeh's (1978) suggestion which is still valid that major shortcoming of contractors in developing countries is their lack of managerial skill, especially with regard to competitive bidding as well as their inability to perform accurate cost estimating results in their tendency to frequently underbid in fear of losing the job. The terms and conditions of the forms of contract are unrealistic (Ofori, 1991). He further illustrates this with an example that sometimes in these documentations they may require the contractor to secure items like performance bonds which are not available in all of the developing countries. Ofori (1991) states that projects are sometimes unilaterally suspended or abandoned by the client and contractors are seldom paid promptly for work done: the processing procedure for payment certificates is bureaucratic. Moreover, poor financial management often means that funds are not available to pay the contractor (Wells, 1986). It is the public client whose procedures and practices pose most problems to contractors (Ofori, 1991).

## **5.2 Trend in Adoption of Procurement Practices of Developed Countries**

In the past what was practiced in developed countries was by and large adopted in developing countries (Moavenzadeh, 1978). This is an interesting fact as something similar has been noticed by Morledge et al. (2006) and according to them the procurement approaches used in the UK would have been exported to the developing world as a by-product of nineteenth and early twentieth century colonial development. They suggest that it can therefore be expected to "see clones of the British approach being used in many commonwealth countries ranging from parts of Africa (for example South Africa, Zimbabwe and Ghana), through the Far East (India, Sri Lanka, Hong Kong, Malaysia and Singapore) to Australasia and the western Areas around the Caribbean such as Trinidad, Tobago, Jamaica and Bermuda. It is also evident that similar processes would occur in other 'old world' countries and that the procurement processes that they would evolve might differ in many important respects from those developed in Britain" (Morledge et al., 2006). The contract documentation and procedures adopted on construction projects in developing countries are of foreign origin and are generally inappropriate. The adoption of procedures and practices developed elsewhere (for use in different cultural, administrative and economic contexts) is another major contributory factor (Aniekwu and Okpala, 1988).

## **5.3 Important Factors of External Environment**

McDermott and Rowlinson (1999) states that external environment is a structure of several other systems such as economics, politics, finance, legal, technology, globalisation etc. The also state that procurement selection process is an open system which receives information from its environment, transforms and returns as an output to the environment. From a research conducted in Sri Lanka (another developing country) on external environmental factors influencing the procurement selection in construction Ratnasabapathy et al (2008) found that "a five-factor solution for the formulation of procurement selection criteria was derived. These five factor categories include "Market condition" (Factor 1); "Economic condition and the fiscal policy" (Factor 2); "Technology" (Factor 3); "Socio cultural suitability" (Factor 4) and "Regulatory environment" (Factor 5). Further, it was also found that Market conditions have significant influence on procurement selection compared to others factors. Except the factor 5, all other factors include related variables which reflect the influence of various aspects of the external environment. Therefore, it can be concluded that beside the commonly considered factors in terms of key selection criteria like client's requirements and project profile, clients should take into account of other factors from the operating external environment that influence procurement selection".

## 6.0 Need for Further Research in Construction Procurement within Developing Countries

It has been observed in the literature and research that the established procurement processes in developing countries hinder project success (Frimpong et al., 2003). Further research is required in developing countries at the level of individual construction-related subjects such as procurement (Ofori, 1993). He further states that it is the failure of the research undertaken so far to advance the field of knowledge which is a contributory factor for poor performance of construction industry in developing countries. Many important issues that have been addressed in the literature investigated regarding developed countries have seldom been addressed in the context of developing countries and there are huge gaps and voids to be filled. As procurement and construction itself is an open system and not immune to the effects the operating environment as stated by many authors hence factors such as the culture of the country, business culture, business practices, the political and the economic impacts, the characteristics of the clients, needs of the clients, the construction industry itself and how they all affect procurement needs to be investigated. Also it warrants further research on how enabled is the environment in developing countries to assimilate new and innovative procurement practices that have stemmed up in the developed countries.

During this literature review it has been found that the developing countries have a trend in adopting methods that have come into being in developed countries without considering its origin and how these methods have evolved. “What is practiced in developed countries is by and large adopted in developing countries” (Moavenzadeh, 1978). The project procurement and administrative arrangements currently in use in developing countries have been inherited from developed Western countries which have a different history, culture, collective experience and breadth of construction expertise (Ofori, 2000). Ofori (2000) further notes that it is ironic that the countries of origin of these procurement arrangements have changed their approaches. For example, in the UK Latham (1994) who after a comprehensive review of the UK construction industry, advocated the building of trust and a spirit of partnering in an industry characterised by mistrust, rivalries and adversarialism (Ofori, 2000). According to Taylor et al (1999) “the transactions and activities of human kind have long been modelled on the experiences of the developed world. It has historically been assumed that norms and systems arising from a particular set of experiences in the developed world can be readily adopted by developing countries. They further state that developing countries frequently confirmed the unsuitability of “normative or procedural models whose evolutionary context is not their own” which may be sound in principle but which are founded on inappropriate paradigms (Taylor et al., 1999). They further add that “uniqueness derives from national capacity to respond and the context within which that response occurs” (Taylor et al., 1999). The developing countries should develop and apply appropriate procurement systems which suit their culture and business traditions (Ofori, 2006).

Rwelamila et al (1999) showed that the failure to consider and incorporate cultural traits in the procurement systems of construction project is a major contributor to the generally poor performance of projects in developing countries. There is a need to learn to do things differently, to rethink the process through which construction industries deliver their projects with the aim of achieving continuous improvement in their performance and products (Rwelamila et al., 2000). They further suggest that to achieve the dramatic increases in efficiency and quality that are both possible and necessary there is a need to start questioning current and emerging procurement approaches (*ibid*). They state that it is of paramount importance that there is a need to accept the reality that developing countries construction industries problems need their own solutions and these solutions should be appropriate to their construction environment. There is also a need to find local solutions to procurement problems of developing countries and which can only be achieved with country specific research. Toor and Ogunlana (2008) suggest that more studies should be conducted in other countries to account for the nature and structure of the local construction industry, scale of construction projects, procurement strategies, maturity of the concerned organizations, and local cultural values and norms. Also, ever changing socio-economic and cultural changes have been growingly perplexing and the globalization of the construction industry has posed numerous challenges to the concerned players at all levels (Lewis, 2006; Ofori, 2007;

Raftery et al., 1998). The circumstances of the developing countries should be taken into consideration by researchers (Ofori, 1993). Ofori (1993) notes a lack of progress in the field of construction research in developing countries. He states that there are indications that the field of study has failed to develop.

There is a need to gather data and conduct studies to gain a better understanding of what actually happens in the construction industry in general and project procurement in particular in developing countries. It has also been observed that literature pertaining to developing countries is limited and some of it is 30-40 years old, things might have changed over such a long period of time which needs to be explored. The key idea here that authors cited above such as Ofori state that very little research is done in context of procurement in developing countries. This argument is still very valid as conducting this literature review it has been found that not much research has been done since the authors mentioned it in their publications. The literature investigated also does not address as to the suitability of different procurement methods to cater the needs to country specific issues of developing countries. The researcher has been unable to find academic literature that investigates country specific issues of construction procurement practice in the context of developing countries and especially Pakistan. The above discussion warrants this researcher's rationale and questions that needs further investigation.

## 7.0 Conclusion

There is a general consensus that a well suited and well tailored procurement system influences project success and performance. Again this understanding holds for developed countries. There is limited literature that discusses the foregoing in the case of developing countries. The paper shows that there is dire need for research in developing countries on procurement from their own context. There is need for more research that will be able to explore the different types of procurement practices in developing countries. The further studies conducted in developing countries will enable researchers to investigate and evaluate the nature and extent of the relationship between procurement practices, processes, project success and performance in context of developing countries. More research is required that review how the construction procurement in developing countries is evolving, what is the emphasis of construction project procurement in developing countries. The question which we should be asking is whether the procurement systems at present being practiced in these countries appropriate in the context of development? Investigate a thorough assessment of factors which impact procurement activity in developing. Conduct an investigative analysis of the operating realities of procurement practice in developing countries.

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