Samaraweera, P.D.P., Perera, B.A.K.S. and Dewagoda, K.G., 2019. Management of payment delays in government funded construction projects in Sri Lanka. In: Sandanayake, Y.G., Gunatilake, S. and Waidyasekara, A. (eds). *Proceedings of the 8th World Construction Symposium*, Colombo, Sri Lanka, 8-10 November 2019, pp. 411-421. DOI: doi.org/10.31705/WCS.2019.41. Available at: https://2019.ciobwcs.com/papers

MANAGEMENT OF PAYMENT DELAYS IN GOVERNMENT FUNDED CONSTRUCTION PROJECTS IN SRI LANKA

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ABSTRACT

The successful completion of a construction project will depend on the timeliness of the payments made by the employer, which benefits both the project as well as the parties involved in it. If the payments get delayed, the resulting financial burden will go down the supply chain to reach even the subcontractors and suppliers, thereby further complicating the situation. Since payment delays are common in Sri Lankan construction projects as well, especially when the projects are funded by the government, the proper management of payment delays is important. This research was, therefore, conducted to identify how the consequences of payment delays in government funded projects in Sri Lanka could be properly managed. A literature review and sixteen semi-structured expert interviews were carried out to collect the required data, which were subsequently analysed using manual content analysis. The study identified 77 causes of payment delays in government funded projects and 51 strategies that can minimise them. The study recommends the enactment of the Construction Industry Payment Act, enforcement of regulations that make it mandatory to have a sum of money deposited in an independent escrow account, getting the employers to work only within the stipulated budgets, and getting them to provide payment bonds.

Keywords: *Causes; Delayed Payments; Government Funded Projects; Strategies.*

1. INTRODUCTION

Payments are considered as the life blood of construction projects as they often involve very large capital investments (Ameer-Ali, 2006). Francis and Ramachandra (2014) have recognised issues relating to payments as one of the major causes of disputes in the construction industry. Nevertheless, the notion 'early delivery and late payment' has become habitual and routine, specifically in the construction industry (Andalib *et al*., 2018). It has been reported by Badroldin *et al*. (2016) that in Malaysia, the government has received many complaints from contractors and service providers about the delays they experience in receiving payments from government agencies. It is the view of most consultants and contractors that delays in making payments by the employers cause projects to suffer (Shaban, 2008). According to Fong (2005), fortunately there are various options available to overcome the delays in making payments in construction projects and some of the developed countries have already made use of some of these options.

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Ramachandra *et al*. (2013) have found that less developed countries require only the minimum level of construction output for their long term and sustainable growth. United Nations (2018) have also stated that in most developing countries, the capital formation in construction accounts for only 7-13% of the Gross Domestic Product (GDP), whereas in most of the industrialised countries, it accounts for as much as 10-16% of the GDP.

In Sri Lanka, construction is the fourth largest sector of the national economy and the average contribution of construction to the GDP during the last decade has been around 6.7-8.3% (Central Bank of Sri Lanka, 2010; 2016). Although according to Francis and Ramachandra (2014), the government has recently implemented a large number of infrastructure development projects in the country, according to Sirimanna (2012), the government owes the consultants and contractors of these projects billions of rupees. The delays in making the payments have even tarnished the image and standard of the construction industry of the country (Francis and Ramachandra, 2014). Francis *et al*. (2016) have stated that more than 60% of the main contractors and subcontractors involved in these projects have suffered cash flow problems and that consequently there have been delays in the completion of the projects.

When payments for work done get delayed, it will affect almost all those who have been involved in the work (Artidi and Chotibongs, 2005). Often the financial burden passes down the supply chain to reach the subcontractors and suppliers compounding the situation (El-adaway *et al*., 2017). This situation could even cause the entire project to fail by making the contractor bankrupt and insolvent (Amoako, 2011) and compelling him to abandon the contract (Nasser, 2013). The result will be simply a waste of public money. Many researchers in the past have explored the issue of delayed payments in the global context. Only a few researchers have, however, studied these issues in relation to government funded projects in Sri Lanka. Therefore, it is important to identify the factors that cause payment delays in government funded construction projects in Sri Lanka and strategies that can manage those payment delays. Accordingly, the aim of this study was to find ways of improving the management of payment delays in government funded construction projects in Sri Lanka by identifying separately the factors causing payment delays by employers, consultants, contractors and others and the strategies that can minimise those payment delays.

2. LITERATURE REVIEW

2.1 PAYMENT DELAYS

According to Ye and Rahman (2010), payment issues are endemic to construction and have to be recognised explicitly as they tend to recur. Hasmori *et al*. (2012) have found that payments have always been a major concern of the construction industry and that a majority of the contractors handling government funded projects have experienced payment delays with some experiencing them even in privately funded projects. Hasmori *et al*. (2012) have also found delayed payments to be common in government funded projects. According to Francis *et al*. (2016), delayed payments are common in the construction industry of any country, with most of the large-scale government funded projects in Sri Lanka too experiencing such delays. However, according to the National Construction Association of Sri Lanka (2009), the unsatisfactory payment issues experienced by contractors involved in construction projects in Sri Lanka are not specifically dependent on the source of funding of the projects.

Hussin and Omran (2009) have identified delays in making advance payments as a common issue and Singh (2003) has identified that issues arise when there are delays in issuing interim payment certificates. In many countries, the rapid increase in the delays experienced in closing the final accounts of contractors has adversely affected the good image of the construction industry (Zakaria *et al*., 2012). Issues related to the closing of final accounts occur during the rationalisation of rates and when the contract administration team fails to rationalise the rates on time (Sambasivan and Soon, 2007).

2.2 CAUSES OF PAYMENT DELAYS

Delayed payments will never bring justice to any party in the construction industry (Artidi and Chotibongs, 2005). Wiguna and Scott (2005) have found that delayed payments cause construction delays and cost overruns. There can be numerous factors responsible for delayed payments (Nazir, 2006). Hughes *et al*. (1998) believed that delayed payments are basically due to the 'cannot' or 'would not' pay attitude of the employers. Nasser (2013) found that a delayed payment by one party can affect the whole supply chain of payment. This cascade system of payment starts at the financial institution and goes to the main contractor and subcontractor in that order and from the subcontractor moves further down the chain (Ansah, 2011). The insolvency of one party in the payment chain can, therefore, cause severe impacts on parties down the contractual chain (Ansah, 2011).

2.3 STRATEGIES TO MANAGE PAYMENT DELAYS

Several researchers have explored ways of minimising payment issues in various countries. Ramachandra and Rotimi (2011) have identified the strategies used in New Zealand, which included "placing of charging orders and registering caveatable interest on properties, lodging bankruptcy and liquidation proceedings, holding money in trust accounts and getting the sureties to make the payments directly" (p.31). A study conducted in Malaysia has revealed that contractual provisions in the standard forms of a contract, including the right to regular periodic payments, right to a defined time frame for payments and right to a speedy dispute resolution mechanism could minimise payment issues to a certain extent (Danuri *et al*., 2012). Francis *et al*. (2016) have found that in Sri Lanka, contractors tend to use contractual provisions while subcontractors tend to adopt various other strategies. The authors further recommend obtaining a security from the employer through a bank in the form of a 'payment bond' and to use a schedule of payments as a part of the contract to ensure regular payments to contractors.

2.4 IMPORTANCE OF MANAGING PAYMENT DELAYS IN GOVERNMENT FUNDED CONSTRUCTION PROJECTS

The National Construction Association of Sri Lanka (2009) has reported that there are many foreign contractors who are keen on investing in property development projects in Sri Lanka, which could benefit the economy of the country. These foreign contractors can afford such investments as they can obtain financial support from the government through low interest loans. However, any payment delays they encounter can adversely affect their growth and development. Moreover, these contractors are obliged to take care of their employees by providing them with on the job training or in-house training, recreation facilities, welfare facilities, work safety, job security and job satisfaction to ensure the quality and speed of construction. Thus, the management of payment delays in government funded projects in Sri Lanka is critical.

3. RESEARCH METHODOLOGY

Given the benefits and flexibility of the qualitative approach, this research used the qualitative approach to evaluate the management of payment delays in government funded construction projects using expert interviews. Interviews are considered as the best option for data collection as they help to obtain the opinions of the interviewees in detail (Punch, 2014). Fellows and Liu (2015) also believed that expert interviews are best suited to collect data using the experience of the interviewees. This study used 16 semi structured face-to-face interviews. Each interview lasted for 45 to 60 minutes. The interviewees were selected using purposive sampling, based on their exposure to issues related to delayed payments in government funded building construction projects in Sri Lanka. Out of the 16 interviewees selected, 10 were from the quantity surveying field while the rest were from the civil engineering field. The sample represented client, consultant and contractor organisations. All of the interviewees had more than 15 years of experience in large scale building construction and project management in the state sector. Using the literature review findings, a list of general causes of delayed payments and the strategies that can be used to overcome them was prepared and the interview guideline was prepared based on that list to achieve the research objectives. The data collected were analysed manually using content analysis. Content analysis is a technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use (White and Marsh, 2006).

4. RESEARCH FINDINGS

4.1 CAUSES OF PAYMENT DELAYS

One of the major objectives of the study was to identify the factors that delay the payments made by parties involved in government construction projects in Sri Lanka. For this, information that was gathered from the literature was validated through the expert interviews. The interviewees had to go through the literature review findings and identify specifically the causes of delayed payments in the government funded projects in Sri Lanka. Table 1 presents the most significant causes of these delayed payments.

Table 1: Factors causing delayed payments in the construction projects in Sri Lanka

Employer	Consultant	Contractor	Others
Involvement of too many parties in payment certification	Delay in certifying the payment application	Insufficient documentation and information provided for the valuation	Instability of the financial market
Further evaluation of the payment applications made by the contractor	Slow processing of the variation orders	Poor communication among the parties	Frequent changes in the exchange rates
Poor financial and business management	Heavy workload involved in evaluating the work done	Mistakes found in the claims	Political/Policy changes
Delays in payment certification	Frequent design changes	Cost overruns and contract failures	Local payment culture/attitude
Failure to agree on the valuation of work	Disputes over the quality of the work	Delay in submitting claims	Political involvements

Employer	Consultant	Contractor	Others
Government bureaucracy	Not having meetings frequently to address work problems	Failure to agree on the valuation of work	Highly competitive market conditions
Withholding of the payments	Internal conflicts/disputes	Low labour productivity	Legislative procedures (Construction Contracts Act)
Lengthy procedures that delay the granting of approvals by the internal departments	Misinterpretation of the employer's requirement for variation orders	Improper supervision and financial control	Delay in obtaining approvals from external authorities
Budgetary allocations made by the treasury	Disputes over payment claims and responses	Failure to follow contractual procedures	Lack of resources like labour, materials etc.
Underpayment or non-payment of certified payments	Underpaid claims	Main contractor's failure to pay subcontractors	
Contract is too complicated to be understood by the two parties	Standard of the quantity surveyor management system	Improper payment applications	
Assumption that the contractor would finance the project in advance in the event of delayed payments	Poor technical and managerial skills of the staff	Capital lock up/ Cash flow difficulties due to lack of initial capital	
Long internal auditing procedures	Inaccurate bills of quantities	Poor quality of the work	
Contract being not sufficiently comprehensive with regard to payments	Inaccurate preliminary/ engineer's estimate	Delaying of the payments to the subcontractors until the receipt of the interim payment certificate	
Liquidated damages claimed by the employer	Lack of a proper quantity surveying management system	Invalid claims	
Procurement system	Poor coordination between the engineer and employer	Lack of knowledge and experience in the field	
Hidden agenda that facilitates malpractices	Malpractices of the engineer	Acceptance of generous payment terms offered by the employer to win the tender	
Delay in issuing the taking over certificate	Certification of the % payment being not proportionate to the actual work done	Nomination of subcontractors without considering the quality of their work / past experience	

Employer	Consultant	Contractor	Others
Dragging the payment even after its certification	Disregard of the Liability Act	Failure to understand the contract agreement	
Misleading payment procedure due to privity of contract	Inaccurate/erroneous tender document	Lack of qualified staff at the site	
Employer 's representatives disregarding the Liability Act		Delay in submitting interim payment applications	
Failure to return the retention		Misinterpretation of the employer's requirement for variation orders	
Lack of decision making capabilities			
Payments for variations and extra works made only with the final payment			

Introduced at the Expert Interviews

The highlighted factors were identified by the expert interviewees as being of particular relevance to Sri Lanka. Among the factors caused by the employer, budgetary provisions made by the treasury was recognised as a critical factor. In this regard, Francis and Ramachandra (2014) have disclosed that the government does not have adequate funds in the treasury to make the payments and that an extensive procedure has to be followed when making payments. According to the literature and the majority of the interviewees, the most critical factor that causes payment delays is the delay on the part of the consultant in certifying the payment applications. Ramachandra and Rotimi (2015) have highlighted that consultants often make discretionary deductions from the payments due to contractors, withhold their payments unreasonably or delay the issuance of their payment certificates. On the other hand, the two most common causes of payment delays for which the contractors are responsible are the insufficient documentation and information provided for valuation and the submission of erroneous claims. Although most of the past studies have attributed payment delays to the local payment culture/attitude, only nine of the interviewees were in agreement with it. Pettigrew (2005) highlighted that the industry has a 'work first, and get paid later' attitude, which worsens the situation. Furthermore, some of the factors causing payment delays, such as the delaying of the payment certification; failure to agree to the valuation of work; poor coordination among parties; failure to follow contractual procedures related to payments; and lack of an efficient quantity surveying management system were factors common to all the parties involved with all of them having a significant influence on the payment delays.

4.2 Strategies that can be Adopted to Manage Payment Delays

In order to identify the strategies that can be adopted by employers, consultants and contractors to minimise payment delays in government funded construction projects, the strategies adopted in other countries were identified from the literature and the expert interviews were used to ascertain their relevance to government funded projects in Sri Lanka. Table 2 below presents these strategies.

Table 2: Strategies suitable for managing delayed payments

Employer	Consultant	Contractor	Others
Working within the stipulated budget	Setting a defined time frame for payments	Submitting timely and accurate invoices complete with all required documentation	Action taken by professional bodies and government agencies
Understanding and studying the payment requirements of the project	Initiating a speedy dispute resolution mechanism	Negotiating payment terms with the consultant to ensure a healthy cash flow	Introducing payment-related legislation
Negotiating payment terms with the contractor to ensure a healthy cash flow	Removing the "Pay when Paid" Clause in the contract	Using an on account payment	Giving publicity to the poor payment practices of the employers
Using an on account payment	Getting periodic budgetary allocations from the employer	Obtaining a right to slow down work until the payment is received	Introducing standard bidding documents for the main contractors and subcontractors
Taking appropriate security measures in the form of a payment bond	Sticking to the Conditions of Contract and issuing drawings, approvals, instructions, etc., on time	Creating a mandatory trust account or keeping retention money	Amending the possible disputes related to Methods of Measurements
Requiring the owner to provide a payment guarantee or bond	Being punctual and impartial to the employer	Setting a defined time frame for payments	
Eliminating bureaucracy	Allowing flexibility for the minimum payment when payments get delayed	Requesting a right to suspend the work until the payment is received	
Having an appropriate budgetary allocation updated with variations	Defining the level of work done	Charging interest on the delayed payments	
Getting the internal audit unit to have a better understanding of the payment terms	Allowing flexibility for recovering the advance payment when payments get delayed	Applying for a term loan from a bank to cover the consequences of late payments	
Having an advisory team for major contracts	Getting an overdraft facility	Removing the "Pay when Paid" Clause from the contract	
Getting the approvals of the relevant authorities at the		Sending a letter of notice through the lawyer	

Employer	Consultant	Contractor	Others
initial stage of the project itself (e.g.: EIA, TIA etc.)			
Trying to keep the work unchanged or minimizing variations		Chasing the payment relentlessly	
Requesting a credit facility from the contractor in the name of the contract		Transferring funds from other projects	
Using stage payments to simplify payment procedures		Opening an escrow account for the project, particularly for transactions between the employer and the contractor	
Releasing a part payment for the interim payment application when the payment is delayed		Releasing pending payments by getting a bond from the contractor	
Granting an additional advance payment when needed		Including a provision in the contract to refer to the financial status of the employer	
Minimizing the amount of provisional sum stated in the contract		Increasing the interest rate for late payments	
		Monitoring the cash flow of the subcontractors	
		Giving timely notification to the engineer about the additional works required and the lack of details of same	

Introduced at the Expert Interviews

The strategies that are highlighted were proposed by the expert interviewees and the others were those identified from the literature and accepted by the interviewees. The interviewees emphasised the need to provide a payment guarantee or bond similar to what was proposed by Fong (2005), to ensure payments even when there is a default by a paying party. This payment guarantee can be even in the form of a promissory note which is a promise a client makes to the relevant party to pay a specific amount of money upon request or at a specified future date. Several strategies, such as "negotiating payment terms to ensure a healthy cash flow"; "use of an on account payment" and "defining a time frame for payment" were found to be common to all the parties. Amoako (2011) proposed the setting up of a defined time frame for payment as a strategy that can eliminate payment delays. The time frame can be defined under certain conditions based on previous experience. According to Ameer-Ali (2006), many sub-contracts or sub-sub contracts contain “pay when paid” or “pay if paid” clauses. However, according to most of the interviewees, “pay when paid” or “back to back” payment clauses are not contractual and are unofficially used by main contractors and sub-contractors to withhold payments. The interviewees suggested to remove this “pay when paid” clause from the contract being the third most important strategy that will help a client to manage payment delays. They were also of the view that the strategies “right to slow down the work until payment is received”, “right to suspend the work until payment is received” and “charging interest on late payments” mentioned in the literature are general contract provisions which have to be followed by parties involved in any government project. However, they were of the view that the rate of finance charges stated in ICTAD/SBD/02 has to be increased as then the employer will not be hesitant to release the payments without delay to avoid the payment of high finance charges to the contractor. Construction Industry Payment and Adjudication Act, which is expected to be enacted shortly, would help in reducing payment-defaults and increasing dispute resolution (Ameer-Ali, 2006) and the interviewees also highlighted the need to enact this legislation.

5. CONCLUSIONS AND RECOMMENDATIONS

When payments get delayed in a project, disputes can arise among the parties involved in the project. Therefore, the factors that can cause delayed payments by the different parties involved within and outside a contract were identified. These factors can cause a significant ripple effect on the parties, particularly when the projects are in developing countries like Sri Lanka. As the work progresses, the timeliness of payments has to be ensured through a regular flow of cash to ensure that all involved parties are financially stable. Thus, it is important to enhance the management of payment delays in government funded construction projects in Sri Lanka. Based on the research findings, the following recommendations can be made to assist the decision makers in the construction sector to prevent delayed payments in government funded construction projects in Sri Lanka:

1. Speedy formulation and enactment of “Construction Industry Security of Payment Act” to safeguard the construction industry and ensure its advancement.
2. Introduction of a payment bond/promissory note, which basically requires a third party, such as a bank or an insurance company, to guarantee the payment in the event of default by the paying party.
3. Establishment of an overall quality assurance system to be used as a check list to prevent the employer from issuing flawed or poorly prepared tender documents.
4. Introduction of milestones or stage payments whereby a pre-agreed sum is paid when the work has reached a certain milestone.
5. Making it a mandatory requirement to set aside a sum of money in an independent escrow account.
6. Making it a right of the contractor to refer to employer’s financial status during the bidding stage and to be aware of the actual funding provided the project.

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