

Sources of Payment Problems in the Construction Industry of Kenya: a Perspective of the National Construction Authority

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Abstract: *The underlying sources of payment problems have not only troubled many countries but have also seen contractors and those below the supply chain blacklisted by the credit reference bureaus. Whilst those who contract in the construction industry expect prompt and regular payments for work done, in reality this happens not to be the case. This paper therefore investigates the sources of payment problems from the perspective of the National construction authority. Besides review of secondary literature, a focus group discussion was employed to collect qualitative data. By a way of themes synchronized with a “black letters” approach, data was analyzed and discussed. The study finds out that sources of payment problems are attributable to client related factors, contractor related, actions of the consultants and the procurement route chosen. It is generally hoped that the awareness created around this subject may trigger industry to commission further research and subsequent action by a way of new regulations.*

Keywords: *Construction industry, Contractor, Payments, construction contracts.*

I. INTRODUCTION

Recent research such as the one conducted by Mbiti, (2008) has shown that the construction industry is both a growth initiating as well as growth dependent in many countries. In Kenya for instance, the sector recorded the best performance out of a survey comparison of five other sectors (KNBS, 2015). The economic survey report further states that this growth was attributed to among other things, a vibrant real estate sector as well as on going mega infrastructure projects. Although the sector has continued to be vibrant, cash flow attributed to payments for work done by those involved in construction works has been rather slow, incomplete or sometimes not paid at all NESC, (2014) and Kenyatta, et al., (2015). This therefore does not auger well for not only the sector sustainability but also for the image of the industry. Regular and timely payment is important for a number of reasons. Firstly, because planned cash flow is critical to construction business, from which it therefore follows that if longer periods for settling payment are known upfront, they can be planned and priced for in advance (Latham, 1994). Further, more if the time for making payment is unacceptably long a contractor might even choose not to tender.

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Secondly, deviations from an original plan will require re-planning of project activities, and can have a knock on effect on many other project activities (Harris & McCaffer, 2006). Failure to pay in a timely manner will often cause the contractor to seek immediate funding to overcome the cash deficit occasioned by payment default. Most of the time, this funding will come at an extra cost thereby eroding the contractors anticipated profits.

The factors that lead to payment default problems are wide ranging, and differ from country to country. From the Malaysian construction industry Danuri, (2006), for example suggests that late and non payments were as a result of employer’s poor financial management practices, delays in certification, underpayment of the certified amounts, disagreements on the value of work done, local culture/attitude, conflict among parties involved, corruption from the consultants or the accounts department, contractor’s invalid claims and delays in releasing retention monies. On a similar vein, Wu, et al., (2008), reported that deficiencies in the credit and legal system, imbalance of the construction market, unfair market conditions as well as weak regulations were factors attributable to payment problems in China. While in the Ghanaian case, it was suggested that payment difficulties were either contractor related, client related or connected to contacts (Ansah, 2011). Whilst the aforementioned studies provide evidence of interest in this subject area, there is however minimal research from the perspective of the government or its equal and equivalent surrogates. This paper thus seeks to find out the sources of contractor’s payment difficulties from the National construction authority perspective.

II. PAYMENT PROCEDURES IN THE CONSTRUCTION INDUSTRY

In the absence of an illegality, misrepresentation or fraud the nature and the intervals of making payments is a matter that is usually agreed between parties. Both Tolson, (2004) and Uff, (2009) for example, opines that the parties to a construction contract may agree on the onset how payments will be calculated, the intervals and circumstances in which payments are to be made - this can be either the usual monthly valuation periods or stage payments. Chitkara, (2011) is however of the view that interim payments should be restricted to a monthly basis and that the predetermined mode of payment incorporated in the contract documents. This timing is informed by the presupposition that supplier’s invoices are mostly due on a monthly basis.

Another advantage of this model is that the administrative work involved in the certification process is also minimized (Ramus & Birchall, 2006). In contrast, Ashworth, (2012) is of the view that it may often be necessary to make payments in a weekly basis if the project is large and maybe involving voluminous earthworks. This same author further suggests that perhaps the quantum should be based on approximate valuations pending the more accurate monthly valuations.

In practice payment, evaluation exercise is generally carried out by measuring the work completed, the work in progress and the materials brought to site by the contractor. Additionally, some standard forms of contract may sometimes provide for payment of materials off site. Therefore, if goods and materials stored off site are paid for, then they become the employer's property and the contractor has no right to move or use them in any other project (Ashworth, 2012). However, this same author further cautions that the contractor will still be held liable for any loss or damage that may occur on the materials and goods offsite. The rationale for valuing and paying for materials and or goods on site and off site is to improve the contractor's cashflow. Usually unfixed materials and goods may sometimes be holding huge capital resources that need to be freed. Wilt the foregoing is the practice, it is not uncommon in Kenya to find those who have rendered work complaining of slow, incomplete and sometimes non payment.

2.1. Previous Research on Sources of Payment Problems

The sources of payments problems are of major concern to both industry as well as academia. Further these problems differ from country to country and sometimes form project to project. Mbachu, (2011), and Ansah, (2011) for instance suggests that sources of payments problems may be attributed to either the employer, contractor or the contract documents used. Similarly the National Construction Association of Sri Lanka NCASL, (2008), for example recapitulated late payment problem in the Sri Lankan construction industry and stated that the following factors were responsible for late as well as incomplete payment;

- a) Lack of available budget
- b) Implementing projects without proper feasibility studies
- c) Imprecise contract clauses
- d) Lengthy payment processing procedures by the client personnel
- e) Raising legal or contractual pretexts in order to get bribes from the contractor
- f) Poor management of variations

Further, the Sri Lankan construction industry was also reported to be plagued by other disguised reasons for payment default. One such veiled aspect is the client officers concerned in processing payments who consider the gross sums due to contractor as his profit. These officers could therefore resort to payment delay tactics in order to get the contractor to part with a portion of the expected payment. In addition, NCASL, (2008), further revealed that prevailing graft conditions in the public sector client were playing a major role in payment delays.

Besides the previous similar works by the current author i.e. Kenyatta, et al., (2015), there has been a rather insufficient research on payment default issues within the

Kenyan industry. However other researchers such as Wahome, (2014), had identified honoring certificates as well as late payments to contractors as factors influencing project procurement delivery in public sector projects. On a similar vein, NESAC, (2014), also carried out a survey on 100 small and medium sized contractors for the period ending 2011, where 85% of the contractors confirmed that they had experienced late payments from their clients. This same survey, further reported that the worse paymasters were the defunct local authorities, government ministries and their departments. However, the factors causing these payment problems were probably beyond the scope of NESAC survey. On a similar note, ProInvest, (2011), evaluated the critical challenges facing Kenyan contractors, and claimed that one such challenge as late payment, which the aforementioned report noted was taking as long as 5 years to be settled in some instances. Just like NESAC, (2014), this report too did not go deeper into the factors that lead the problem, other than pointing out its consequences. This therefore suggests that there is a gap for a comprehensive study in the area of payment default not only from the perspective of the industry regulator but also all industry players.

III. RESEARCH METHODOLOGY

In conducting this study a predominantly qualitative strategy was employed. Creswell, (2003), for instance suggests that this approach is appropriate where the study is more preoccupied with not only the multiple meanings that participants attach to a phenomenon but also where the researcher is also part of the research process as opposed to being an external entity. This is therefore in line with interpretivist's epistemological stance. Further, the rationale for this approach is that among other things allowed concepts in the form of themes and categories, rather than quantitative variables to be generated, employed data as words and extracted quotations rather than numeric presentations. Non random purposive sampling rather than random sampling was adopted. This was mainly prompted by the need to select participants who illustrated experience, availability, willingness and knowledge on the subject matter. According to Silverman, (2010), this enables the researcher to seek out groups, settings and individuals where the phenomenon under study is likely to occur. Besides being the industry regulator, NCA is also legally mandated to collaborate with industry players on research matters affecting the industry (KLR, 2011). The current study therefore has surrogated the NCA as public sector client representative due to its significance in the industry.

Although Bryman, (2012) suggests that focus group discussions should have between six to ten participants per session, the rule is not usually cast on stone. In contrast, Morgan, (2013), opines that this will depend among other factors, the type of topic under discussion as well as how much each participant is likely to contribute. This is particularly significant especially if participants are emotionally preoccupied with the research topic.

This particular focus group comprised of five participants. As much as the participants were typically few in this session, three out of the five showed immense interest for the topic. Focus, communication and frequent reflection was ensured throughout the use of a moderator, although at some point the researcher also played the moderation role.

IV. RESULTS AND DISCUSSION

In furtherance of one of the study objectives i.e. investigating the sources of payment problems to contractors in the Kenyan construction industry, the views of the National construction authority (NCA) were sought. In this regard, a request to conduct a focus group discussion on the subject matter was therefore sought on 22nd December 2014 through the office of the executive director. The request was accepted and permission was subsequently granted on 23rd January 2015. This focus group discussion was subsequently therefore held on 2nd February 2015 at the (NCA) former headquarters at first floor, Hilplaza building – now NCA Nairobi regional office. The session started at around 9.00 hours GMT and lasted for about one hour and thirty-five minutes.

4.1. Participant’s Profiles & Experience

The general profiles, years of experience, designations and professional information of the participants are therefore summarized and presented in table 1 and 2 respectively.

Table 1 Participants’ background

Participant Reference	Participants Background
NCA-PART1	A Civil Engineering practitioner with over 15 years experience in the construction industry. The participant also works as a general manager in the research department of the authority
NCA-PART2	A quantity surveying practitioner and Construction Manager by profession with 10 years experience in the construction industry, also works as a senior researcher with the National Construction Authority
NCA-PART3	A Civil Engineering practitioner with over 15 years experience in the construction industry, also works as a senior investigator with the National Construction Authority
NCA-PART4	An Electrical Engineering practitioner with over 15 years experience in the construction industry, also works as a senior training officer with the National Construction Authority
NCA-PART5	A Civil Engineering practitioner with 10 years experience in the construction industry, he also works with the National Construction Authority as a manager in project registration

Source: Field data (2015)

The information from table 1 is further disintegrated in table 2 into the years of experience, the profession and designations for each participant.

Table 2 Participants years of Experience in years

Experience (Years)	Frequency	Percent	Cumulative Percent
0-5	0	0%	0%
6-10	2	40%	40%
11-15	0	0%	40%
16-20	3	60%	100%
Total	5	100%	

Source: Field data (2015)

Table 2 shows that the participants in this focus group had an average 14.0 years of experience in the construction industry, further 2 out 5 participants had 10 years of experience representing, while 60% (3) had over 15 years of experience. This suggests that their views are likely to be valid. It is further observed that most of these participants had also worked with the defunct ministries of works and roads before joining the NCA upon its inception in 2012. Perhaps this also points to the presupposition that they understand payment behaviors of the both public as well as private sector client.

4.2. Views on the sources of payment problems

The above stated matter is exemplified by the emergence of four sub themes from the conversation and group interaction in respect to sources of payment problems in the form of late payment, payment in installments and sometimes nonpayment.

- a) Client related factors
- b) Contractor related factors and
- c) Consultants related factors
- d) Procurement route chosen

The foregoing factors are therefore analyzed and discussed under their respective sub themes as here under;

4.2.1 Client related factors

The reasons why contractors experience late payment problems in particular could be attributed to the client’s failure to honor his contractual obligation of payment as stipulated in the contract agreements. Participant 2 for example was of the view that the client usually contributes more to the contractor’s payment woes than any party does. He asserted that;

“... truly convinced that actually the problem is with the client, we know 95% could be attributed with the client but we should not ignore that small portion where the contractor could be to blame, and again also the consultants...”

Participant 1 concurred with the above assertion and went further to suggest that due to the fact that clients have a culture of commissioning projects before securing the necessary funding arrangements has prompted the NCA to include payment as one of the principles in its code of conduct. This code governs the affairs of the parties to a construction project in construction industry. The code states inter alia that;



Conduct of the employer

"... Ensure that payments are made regularly and within the agreed time schedule..." (NCA, 2014, pp 3)

Related to the point above participant 1 suggest somewhat very strongly that it is unethical for the part of the client to procure construction works when funding for that project has not been secured. According to this particular participant, it is important for the construction industry to inculcate a culture of payment without unnecessary delay, through prior financial armaments. He thus he pointed out that;

'...for any client to procure any works they need to ensure that they have a budget for the project and this budget is to ensure that payments are done when certain works are complete according to the contract...'

It could appear that the above situation had similarly prompted the office of the Government of Commerce (OGC) in Scotland to formulate what they termed as 'Model for fair payment charter'. The charter provides for inter alia a Project Bank Account (NEC, 2008). This provision requires that the client to open an independent account with an agreed third party commercial bank where project monies are progressively deposited based on the forecsated payment schedules. Although in the scottish case, this condition is not legally binding.

Further, "in constructing the Team" (Latham Report), also cited in Ashworth, (2012). Its particularly noted that it is essential to trust within the cnstruction industry that parties involved not only be paid the correct amounts but also at the right time. To secure this monies, a trust fund project account was thus recommended.

"...Mandatory trust funds for payment should be established for construction work governed by formal conditions of contarct..." (Ashworth, 2012 pp.288)

Another issue related to financial arrangements that emerged was that public sector client organizations often alloctae inadequate funds during burgetory allocations processes. Participant 1 in particular, hypothetically illustrated this point by stating that;

"...The challenge of a 10Billion project in 3 years has been this way, so 10Billion in three years means 3.3Billion per year, by the way of budgeting process the money allocated in that year alone could even be 900million shillings less than 1Billion, so what we are saying is that even in the first year alone we cannot pay the3.3Billion..."

The above practice seems to also be common in other jurisdictions. Ye and Rahman, (2010) for example reported that out of forty-one variables identified the client's ineffective utilization of funds and scarcity of capital to finance projects ranked as second and third most significant causes of payment delays to contractors respectively In the Malaysian case.

Charting forward therefore, participant 3 supported participant 2's point of view, while participant 4 seemed to suggest that funding issues for projects are more serious in public sector projects than private funded projects. However, in relation to budgetary allocations, participant 5

claimed that the County Government projects are the worst hit. Political interference in budgetary allocations process was cited as the main reason for commissioning projects without proper initial financial arrangements. Projects that are commissioned in this manner are therefore likely to experience financial difficulties with inevitable payment defaults. This is substantiated by the comment that;

"...I think in the county governments there is very serious problems you get the contractors are now demonstrating because they have not been paid..."

Elsewhere in South Africa, it was similarly reported that local and provincial governments were the worse paymasters often taking as long as 120 days to honor invoices from the date of receipt (Maritz & Robertson, 2012). An inadequate financial arrangement for the project therefore seems to be a critical factor if the contractor has to be paid in a timely manner. Project funding is usually the owner's primary obligation. When the owner defaults in this obligation then the regularity and promptness of making payment to the contractor will become inevitable

4.2.2. Contractor Related factors

The contractor often plays a role in contributing to payment default risks. Participant 2 for instance alluded to this aspect, with the question that;

'...what is the role of the contractor in payment delays...?'

Although the contractor's contribution to payment delays might not be very significant, nevertheless its contribution ought to be evaluated in respect to overall payment delays.

"...but we should not ignore that small portion where the contractor could be to blame..."

The contractor may therefore be contributing to payment defaults in various ways. Participant 2 in particular, in an extended informal conversation, observed that the contractor may contribute to payment problems by either; (i) submitting payment applications long after the stated contract durations (ii) submitting an exaggerated payment claim and or (iii) poor documentation in supporting his variation claims

That contractors have a role to play in factors causing payment defaults, was also supported by participant. In a similar vein, however participant 5 stated that in order for the contractor to mitigate payment delays he ought to liaise with the NCA during project registration for assistance. This perhaps is in relation to the NCA code of conduct referred to earlier, that requires that as part of ethical principles clients should secure project finance to ensure regular payment obligations as and when due.

4.2.3. Consultant related factors

Consultants are generally agents of the client in a construction projects. Nevertheless, they owe the contractor and client duty of care implying that they ought to act impartially in their certification role of (Uff, 2009). Participant 2 for instance underscored the consultants role in contributing to payment defaults albeit in a relatively a small scale compared to the client's role.

“...we know 95% could be attributed with the client but we should not ignore that small portion where the contractor could be to blame, and again also the consultants...”

The client’s role in payment defaults may be related to the quality consultant’s advisory role. From which it therefore follows that, consultants could be playing a relatively higher role when it comes to factors causing payment defaults to contractors. Participant 2 in particular thus stated that;

“... sometimes also the blame is not with the client because client has agents who are supposed to advising him he has a QS ,Architect or the Engineer who are supposed to be advising him so there also is the issue, when it to the kind of advise that we give to our clients from the consultants perspective...”

Comparatively, similar aspects in relation to the above point were also reported in the Southern Africa construction industry. The delayed payments conference held on 28th September 2010 at the South African Reserve Bank Conference centre particularly concluded that;

“...processing of payments to contractors and the final account requires better practices by consultants in managing projects and their variations...” (Cidb, 2010,pp.5)

Earlier research on the Kenyan case in respect to the consultant’s role to contractor’s payment defaults had found out that 14 out of 82 ministry of public works projects sampled had experienced delay in preparing certificates by consultants (Wahome, 2014). This author noted that;

“...The contractors apply for payment and the certificates are expected to be ready within 14 days according to the contract. However, preparation of certificates had taken longer than this and at times two months later, the payment certificate had not left the ministry to the client for settlement...” (Wahome, 2014,pp.66)

Given that, the consultant’s role in contract management as well as agency role to owners will affect the regularity and timeliness of payment to contractors. It maybe imperative therefore, those consultants remain true to their professional ethics and standards.

4.2.4 The procurement route chosen

Although the scope of this study was limited to, projects procured by a way of the traditional procurement system. In this system design, bidding and construction are usually sequential and separate. Participant 2 for example indicated that, the traditional approach to procuring construction projects is often characterized by late payment problems compared to other alternative procurement systems available in the construction industry. This is captured in the comment that;

‘...is interrogating the traditional procurement. Where there is a very systematic way of commissioning a project, invoicing for interim applications and all that..., we know now we are also breaking away from the traditional procurement of works so that we allow now innovative procurement procedures such as Public Private Partnerships (PPP) and Project

Financing... how will this model affect a project organization based on a creative way like a PPP now that this is quite traditional way has more of this late payment problems...”

An earlier study on the influence of “design bid and build” traditional approach in relation to PPOA in the public sector procurement ranked payment delays and delay in preparing payment certificates by consultants second and fourth out of nine variables influencing projects procurement (Wahome, 2014). As regards honoring payments, this author stated that;

“... Two variables (delay in approving additional funds and honoring payments) are related in that where funding was a problem; payment took too long to be honored...” (Wahome, 2014,pp.65)

The European Union manual for procuring construction projects for example points out project finance as a project risk influenced particularly by procurement route chosen (Warsaw, et al., 2012). Whereas, the traditional route to procuring public sector project may be comparatively good in terms of managing cost risks, holding availability of project funds constant - the risk might be very high if funding has not been secured in advance.

“...the client organization’s business strategy will also have an Influence on selection of the procurement strategy. This is particularly important in terms of funding the construction project...” (Warsaw, et al., 2012,pp 9)

The foregoing report therefore supports participant 2’s view on the impact of the procurement route chosen in relation to payment risks. Participant 4 in particular suggested that Private projects could be better managed when it comes to funding arrangements. Probably due to different financing arrangements hence less payments defaults.

“...I think if the problem is more in the public sector how then is the private sector managed it? How are their funding arrangements...?”

Participant 2 further supported the foregoing view, where he indicated that;

“... It is a whole design team from outside they are the same people who implement the private projects and there, there are no problems. So then we want to say we cannot blame ... it’s now not the issue parse of the private consultants at least it is a common denominator...”

However, this same participant attributes the absence or less impact of delayed payments in private sector to other factors. This could be probably the procurement route chosen, but not consultants.

V. CONCLUSION

Sources of payment problems related to late, incomplete and nonpayment to those for have rendered proper work in the construction industry and particularly the contractors are of major concern to industry players. To identify the sources of these problems from the perspective of the.



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NCA, an investigation was carried out into the various factors that have led to this situation. The study establishes that payment problems and their various manifestations are as a result of the actions of the client, contractor, consultant related and the type of procurement system chosen as well.

Overall, it is hoped that addressing sources of payment problems, may improve the cash flow particularly to those on the lower tier of the supply chain. In addition a smooth flow of funds is also likely to result in timely completion of projects and an improved image of the industry. Interpreted differently, it implies that there is lack of information by the client organizations as well as consultants on the root cause of payment defaults to contractors and the image of the industry. The study outcome may therefore provide a basis for a paradigm shift on the attitude of client organizations as well as consultants on how payment issues are handled. Similarly, it hoped that contractors may gain some understanding into the factors that cause payment defaults and perhaps inform on the precautions to take in order to increase chances of getting paid. The NCA could also consider revising its regulatory framework to include inter alia publishing names of construction clients who abate in poor payment practices. Given that the traditional construction procurement system of design, bid and build was attributed as a reason for the widespread payment default to contractors, it may be a subject of interest to investigate the influence of this procurement option on payment default to contractors, in view of other procurement models.

REFERENCES

1. AngSuSin, T. (2007). Payment issues - the present dilemmas of Malaysian construction industry. Kuala Lumpur: Univeristi Teknologi Malaysia Institutional Repository.
2. Ansah, S. K. (2011). Causes and Effects of Delayed Payments by Clients on Construction Projects in Ghana. *Journal of Construction Project Management and Innovation*, 1(1), 27 - 45.
3. Ashworth, A. (2012). *Contractual Procedures* (6th ed.). New Delhi: Pearson Education Limited.
4. BERR. (2007). *Improving Payment Practices in the Construction Industry: Consultation on proposals to amend Part II of the Housing Grants Construction and Regeneration Act 1996 and the Scheme for Construction Contracts (Scotland) Regulations 1998*. Retrieved from <http://www.gov.scot/Publications/2007/08/28153225/3>
5. Bryman, A. (2012). *Social research methods* (4th ed.). New York: Oxford University Press.
6. Cheng, T., Soo, G., Kumaraswamy, M., & Jin, W. (2010). Security of payment for Hong Kong construction industry. *Proceedings of Institution of Civil Engineers: Management*, 163(1), 17-28.
7. Chitkara, K. K. (2011). *Construction Project Management - Planning, Scheduling & Control* (2nd ed.). New Delhi: Tata McGraw-Hill.
8. CIDB. (2010). *Delayed Payments in the Construction Industry*. Johannesburg: Construction Industry Development Board of South Africa.
9. Creswell, J. W. (2003). *A Framework for Design*. In *research design: Qualitative, Quantitative and Mixed Methods Approaches* (pp. 1-26). Thousand Oaks, London & New Delhi: SAGE Publications-International Educational and Professional Publisher.
10. Danuri, M. S., Munaaim, C. M., Rahman, A. H., & Hanid, M. (2006). *Late and Non Payment Issues in the Malaysian Construction Industry-A Contractor's Perspective*. Sustainable Development through Culture and Innovation, The Joint International Conference on Construction Culture, Innovation and Management (CCIM), 613-623.
11. Fleming, Q. W., & Koppelman, J. M. (2008). Performance based payments (PBPs). *PM World Today*, 10(4).
12. Graham, D. (2006). *Managing Residential Construction Projects - Strategies and Solutions*. New York: McGraw-Hill.

13. Harris, F., & McCaffer, R. (2006). *Modern Construction Management* (6th ed.). Oxford: Blackwell.
14. Hasnori, M. F., Ismail, I., & Said, I. (2012 12-13-March). *Issues of Late and Non-Payment Among Contractors in Malaysia*. International conference on business and economic, 82-93.
15. Kenyatta, M. O., Alkizim, A. O., & Mbiti, T. K. (2015, September). *Recapitulating The Payment Default Effects to Contractors in The Kenyan Construction Industry*. *International Journal of Soft Computing and Engineering (IJSC)*, 5(4), 2231-2307.
16. KLR. (2011). *The national construction authority act no 41 of 2011*. Nairobi: National Council for Law Reporting.
17. KNBS. (2015). *Economic Survey Highlights*. Nairobi: KNBS.
18. Latham, M. (1994). *Constructing the Team*. UK: HMSO.
19. Maritz, M. J., & Robertson, D. C. (2012). *What are the legal remedies available to contractors and consultants to enforce payment?* *Journal of the south african institution of civil engineering*, 54(2), 27-35.
20. Marx, H. J. (2014). *Results of the 2014 Survey of the CIDB Construction Industry Indicators*. Free State: University of the Free State.
21. Mbachu, J. (2011). *Sources of contractor's payment risks and cashflow problems in the New Zealand construction industry: Project team's perceptions of the risks and mitigation measures*. *Construction Management and Economics*, 29(10), 1027-1041.
22. Mbiti, T. K. (2008). *A System Dynamics Model of Construction Output in Kenya*. Melbourne: Unpublished PHD Thesis. Australia: MIT.
23. Murdoch, J., & Hughes, W. (2008). *Construction Contracts: Law and Management* (4th ed.). London: Taylor and Francis.
24. NCA. (2014). *Code of Conduct and Ethics for the Construction Industry*. Nairobi: National Construction Authority.
25. NCASL. (2008). *Report on payment delays in Sri Lanka construction industry - prepared by: national construction association of Sri Lanka (southern branch)*. National Construction Association of Sri Lanka (Southern Branch).
26. NEC. (2008). *OGC fair payment practices for use with NEC Contracts*. London: Thomas Telford Ltd.
27. NESC. (2014). *Credit guarantee schemes: The road to expanding business and investment in Kenya*. Nairobi: National Economic and Social Council with support from USAID Kenya.
28. Prism. (2013). *The Need for Prompt Payment Legislation in the Construction Industry*. Ontario: Reed Elsevier Incl.
29. ProInvest. (2011). *Critical Review of the Kenyan Construction Industry*. Nairobi. Retrieved from www.iqskkenya.org/the-kenyan-construction-industry.pdf
30. Shapiro, B. (2005). *Inherent Conflicts in the Construction Industry and the Structure of Contracts*. The Fundamentals of Construction Contracts. Vancouver, BC; Lorman Education Services.
31. Silverman, D. (2010). *Doing Qualitative Research* (3rd ed.). New York: SAGE.
32. Thomas, R., & Wright, M. (2011). *Construction Contract Claims* (3 ed.). Hampshire: palgrave macmillan.
33. Uff, J. (2009). *Construction Law* (10th ed.). London: Thomson Reuters.
34. Wahome, G. W. (2014). *Influence of Public Procurement Oversight Authority's Standard Tender Document on Public Building Projects in Kenya*. Nairobi: Unpublished Masters Thesis. Nairobi: University of Nairobi.
35. Warsaw, Ankara, Ascot, & Mondavio. (2012). *Strengthening of European Union funds absorption capacity for infrastructure construction projects*. In E. Commission (Ed.), *Manual Procurement Strategy in Construction*. TRAIN TO CAP.
36. Ye, K. M., & Rahman, H. A. (2010). *Risk of Late Payment in the Malaysian Construction Industry*. *World Academy of Science, Engineering and Technology*, 1(41), 538-546.

AUTHOR'S PROFILES



Research.

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