https://doi.org/10.3126/jori.v11i1-2.77826

Time Extension Issues of Public Procurement Contracts at Conflict-Effected Contexts

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Abstract

Most of the public procurement and contract management (PCM) operations particularly in developing countries including the countries affected by the conflict encounter delay problems leading to time extension which creates a lot of controversies, disputes and produce significant impacts on project performance. However, there are very few researches have been conducted in the conflict-affected environment specifically to examine context based key factors those adversely effects the completion of the public procurement contract within the allocated time period. The aim of this research to explore possible key factors responsible for extension of time which affects the performance of infrastructure projects at conflict-affected contexts and evaluate their resolution practices.

Mixed method approach of qualitative and quantitative techniques was adopted for this research work for which case studies of selected health infrastructure projects at conflict-affected situation was conducted. As part of methodological approach for this research, a systematic literature review (SLR), content analysis (CA) of project documents, in-depth interviews and questionnaires survey involving project managers, contractors, suppliers, consultants and facility owners was adopted. Among the several conflict-affected countries in the world, Timor-Leste located in East-Asia was selected on the basis of purposive selection procedure for this research study. A list of key factors that cause time overrun at conflict-affected situation is prepared based on the findings of SLR and content analysis of the project documents. From the selected 10 project sites (cases) at central, regional and referral level, 50 candidates have participated in the questionnaire survey and interviews including project managers and construction in-charges. Research findings includes 23 factors those caused the issues of time-extension of the projects and listed their resolution procedures adopted during project execution process at conflict-effected situations. Findings of this research work will contribute for better understanding of time extension issues and their resolution methods for successful execution of PCM operations at conflict effected situations.

Keywords: *public procurement, project management, time-extension, conflict-affected contexts*

Introduction

Most of the government organizations adopts PCM procedures for execution of the allocated public funds to supply the required goods, works and necessary services for fulfillment of public needs or development requirements. This process is carried out through the approach of public procurement and contract management between a procuring entity and a contractor or supplier. Procurement legal regime (2005) of Government of Timor-Leste and the public procurement act (2007) of government of Nepal has the similar definition of the public procurement contract as the contract entered

into between a public entity and a supplier or a construction entrepreneur or a service provider". Extension of time (EoT) in construction contracts or projects according to LexisNexis Construction Expert (2024) is the provision to provide for the date for completion to be extended where there is a delay without contractor's fault. Generally, (EoT) situation occurs in public sector PCM when there is delay occurred which could not be estimated at the time of contracting process. Among three key components of the construction project as Time, Cost and Quality, time management is very crucial activity in every public infrastructure projects and if not managed properly it adversely affect the cost and specified quality of the deliverables. Shabbar et al. (2017) have pointed out that in construction industries most of the construction projects encounter delay problems that causing extension of time, cost overruns, quality compromises and several other disputes. Issues of time extension directly affects all the stakeholders of the projects which include client, consultant, contractors, suppliers, donors, user groups and others. Razia et al. (2019) and Akhund et al. (2017) have also supported the findings of Shabbar et al. (2017). The issues related to EoT is more complex and adversely affecting the contract performance at conflict-affected situations where public institutions, policies and private sector capacity and all other resources are in very poor state. Project management particularly the management of public infrastructure projects at post conflict or conflict-affected contexts is found very challenging and always risk bounded. scholarly written research papers, reports of international organizations, project document of external development partners and the donors have shown that the reconstruction of social and economic infrastructures in the post conflict countries are essential for sustainable peace building initiatives and bringing changes in the life of the effected population. However, the effective management process of the infrastructure projects at poor resource setting and post-conflict environment has to pass through several factors those affects project performance.

Most of the researches have recommended that to minimize or to manage the time extension issues in construction projects; identification of most significant factors that creates the situation for time extension is essential. Similarly, proper assessment of context based time extension issues, identification of appropriate time extension procedures and necessary steps for mitigation of the adverse effects in the performance of the construction activities are the major steps to be taken while dealing with PCM activities.

Context of the Research

The World Bank (2020) report has showed that, in average 13- 20% of country's GDP is being consumed by the PCM related activities annually. United Nations Office on Drugs and Crime UNODC (2013) has reported that about 15-30% of national GDP annually is being allocated for public procurement operations.The World Bank's bench marking public procurement report (2017) that conducted in 180 countries has pointed out the need of an appropriate regulatory system in this area. As based upon these facts and project execution practices in several contexts, the relevant literatures have shown the importance of proper management of public procurement and public contracts for utilization of public funds and realization of value of money.

Findings of the most of the researches conducted in developed and developing countries have indicated that project delays and cost overrun are very common problems in public construction projects. However, no research has been done about the time extension issues considering the entire project management cycle (need assessment and project planning; procurement and contracting process; contract execution and monitoring; and the project closing, payments and

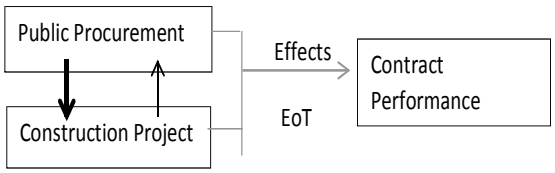
defect liability period) of the public procurement and contract management at conflict effected situation particularly in the context of Timor-Leste and Nepal. This research work has reviewed the PCM operations of health infrastructure projects of Timor-Leste (a nation that badly affected by conflict) to explore the specific issues of time extension and how those issues were managed during the performance of the health infrastructure construction and installations projects.

Objective of the Research and its Contributions

The key objective of this research is to identify the context based and specific factors responsible for extension of time which affects the overall performance of infrastructure projects or contracts at conflict-affected contexts and evaluate their resolution practices. It is anticipated that the research findings will contribute for a better understanding of context based EoT factors and it is hoped that the research findings also helps to fill the research gaps that exists particularly at the conflict-affected environment. The finding of the research will also be helpful in the similar context to review legal frameworks, policies, procurement guidelines, manuals, standard bidding documents, institutional arrangements to make it relevant for efficient PCM system to encourage and support sustainable development of the nation. This piece of research will also be helpful for donor agencies or development partners in order to plan or execute their projects or programs in the area of infrastructure development supports mainly at conflict-affected situations.

Conceptual Framework

Lee and Lings (2008) views that a conceptual framework makes it easy to see what is useful or not to the researcher's study and is based on theory on behavior explanation and prediction. Similarly, Adom et al. (2018) describes that a conceptual framework is an explanation of how the research problem would be explored. As guided by these explanations, the given below conceptual framework has been prepared for this research study purpose.



Literature Review

In order to acquire an overview of existing knowledge, to analyze the research gaps and to know the position of this research within the current body of knowledge literature review was carried out focusing on public procurement and project management particularly at conflict-affected situations in general. Literature review for this research work also incorporates the government laws, policies, plans and guidelines regarding the public procurement, project and contract management including government's comprehensive documents, factsheets/database and credible reports of international organizations involved in development activities and reports of donor agencies. In addition, this literature review includes scholarly written articles, selected research papers, project and contract management guidelines and books. Relevant literature reviews particularly project delays, time overrun, cost overrun during project execution phase in developing and conflict affected countries was carried out to know about the developments in the specific sector and the field of knowledge at global, national, regional and local levels so that the research area clarity canbe gained and build up the confident level in the proposed research field. For this purpose as explained above, issues and factors of project delays in public construction projects as presented by Khuil (2019); Eliseu (2020) Mohammad & Anas (2018); Ahesen & Fahim (2018); Mishra (2019) Rafiullah et al. (2021) Sushanti et al. (2021); Muhammad et al. (2017); Abbas and Noel (2017); Umuhoza (2019), were reviewed to analyze their causes of project

delays and issues of time particularly in developing and conflict affected contexts.

Thai (2017) views that there is need of further grow of public procurement system conceptually and organizationally in entirety. According to Patrucco et al. (2022) the main purpose of public procurement and project management system that administrated by the government is to deliver the required goods, works and services for public consumption. In relation to the PCM system, Kerzner (2009) and Agrawal (2000) have explained that a project have a series of activities and tasks with specific objective to be realized within the parameters of given specifications; time period and defined quality aspects. PMBOK guide of Institute of Project Management has described the key component of project management as initiation, planning, execution, monitoring & control and closing. This research work studied all interrelations of these all phases in order to analyze the issues of EoT with qualitative and quantitative manners to generate new knowledge that narrows the research gaps in this area.

Research Design and Working Framework

Lee and Lings (2008) viewed that research design builds a framework that has a key concern to find answers to the research questions. These views are also supported by the explanation of Bryan (2008) and Kothari and Garg (2019) in this regard. For this proposed research, the following research methodology or research process diagram has been designed.

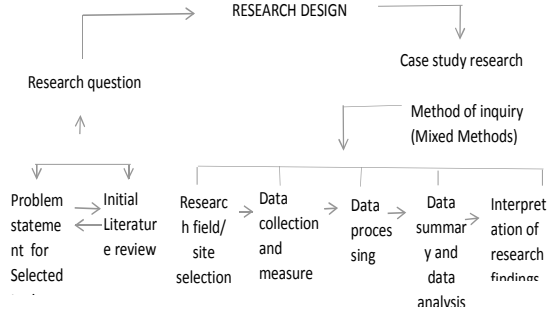


Figure: From the Ph. D thesis of the author (Jayendra Pd. Bhatta, 2023)

1. **Working Framework for Qualitative Driven Mixed Methods:**

In order to find out the answer to the research question to meet the key objective of this research work the qualitative driven mixed methods of qualitative and quantitative has been adopted. Bryman (2008) explained that a mixed methods research model integrates quantitative and qualitative researches in a single project where quantitative and qualitative data as driven from mixed methods are mutually complementing each other towards a single goal. Hesse-Biber (2010) also explained that mixed method research approach is methods-centric concept that is designed to investigate the research problem with the help of two different methods mix approaches called as qualitative and quantitative. In this regards the given below flow-chart or the working-framework has been designed

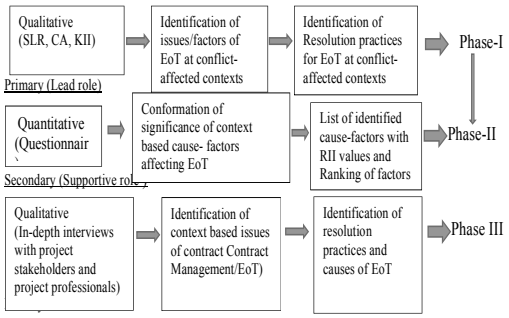


Figure: From the Ph. D thesis of the author (Bhatta, 2023)

Data Collection, Analysis and Interpretation:

Generally the research data those are collected by the researcher adopting a process of measurement, counting or observations using a defined tools and techniques are considered as the raw materials for research. Kothari and Garg (2019) views that the journey of data collection as primary and secondary data starts once the research problem has been defined. For the purpose of this research

a mix methods of qualitative and quantitative research approach has been adopted. Further, the data collection procedure includes quantitative questionnaire surveys, qualitative in-depth interviews, KII and content analysis of project documents as shown in the above mentioned diagram of working framework for data collection and sequencing. For this purpose, the projects case study was done for all completed health infrastructure construction and rehabilitation projects at national, regional and district levels in Timor-Leste during conflict and at post conflict contexts between the periods of 2004-2017. For this proposed research, the raw data collected were then classified into purposeful and usable pre-established categories.These collected data were than processed under pre-established themes or descriptions in order to select the appropriate factors or issues related to the key concern of EoT problems. Similarly, answers or data received through the questionnaire survey were processed, tabulated for analysis, interpretations and to calculate RII of each factors responsible for EoT.

Results and Discussions

Result of this research mainly includes the key cause-factors of extension of time for public procurement contracts of health infrastructure projects at conflict-affected situations in Timor-Leste. In this regards, the identified key 23 EoT factors as listed below are the findings/results of the research study drawn from the process of SLR, KII, in-depth interviews, questionnaire survey including the content analysis of project documents. In order to verify and validate the results the triangulation approach was applied which shows the consistencies and similarities in the outcome of the research findings. Ranking of the results based up on the RII values indicates the importance of the issues that needs to be resolved or managed at the conflict-affected situations. These 23 cause-factors of EoT falls under seven main responsible groups as the factors related to the owner, contractor, consultant/project manager, designer, political/conflict, social and external (environmental/force majeure).

Factors	RII	Rank	Common resolution practices of EoT issues
1. Project manager without full authority for making project site decisions	0.984	1	Donor funded and managed projects follows contract provisions, guidelines, standards. Government managed project depends on decisions by competent authorities.
2. Additional Work, Variation Orders, Change Orders	0.982	2	Better managed in donor administered projects. Poorly managed and delays on decision making by long bureaucratic channels, political decisions in some cases
3. Improper project feasibility study/planning and scheduling	0.965	3	Very weak system in government projects. Most of the project selected on the basis of political decisions and approaches
4. Poor performance of contractor & sub-contractor	0.922	4	Weak public procurement system and poor project monitoring. Donor funded and administered projects have better management and coordination procedures
5. Conflict, war, civil unrest and insecurity to the project team and site	0.914	5	Political/External factors cause delays and affects contract time control. Political decisions on EoT
6. Inadequate project experience of contractor's Project Manager and his team	0.900	6	Weak private sector and weak capacity of contract management cause delays

7. Poor procurement practices (poor documentations, pre-contract negotiations, single source procurement and contracting)	0.885	7	Donor funded projects follows their procurement guidelines and have better time control system as compared to government PCM procedures
8. Unrealistic time and resource estimates	0.882	8	Observed in both Donor and Government projects causing EoT
9. Delays on payment process and approvals	0.856	9	Government projects lack budget and delays on release of project budget on time causing long delays and affecting project progress
10. Payment delays by owner and poor cash flow of contractor	0.856	9	Pending payments to the contractor in government projects cause delays and EoT
11. Late response of project issues during execution phase and long chain of response and approval process in government system	0.852	10	Weak capacity of public project team and long chain of decision mking cause EoT
12. Land acquisition problem and long delays on compensations settlements	0.850	11	Site possession process and issues of land and local resources cause disputes and delays on project completion resulting EoT
13. Late project implementation from the date of feasibility study	0.842	12	Late in budget allocation, procurement, contracting and political decision cause EoT during project execution
14. Frequent change in government policies and structure	0.842	12	Cause overall effects on public PCM system causing EoT
15. Weak progress monitoring, time and cost control	0.830	13	Weak capacity of public organization causing EoT issues settlement
16. Lack of periodic site meeting to resolve site problems	0.826	14	Ineffective project manager and the team results unresolved site problems causing EoT
17. Lack of modern equipment	0.826	14	Old equipment and technologies delays project and results project delays
18. Poor labour productivity and local labour issues	0.812	15	Delays project and create EoT issues
19. Time waste for rework and defect corrections	0.800	16	Delays project and create EoT issues
20. Weak project reporting and documentations	0.788	17	Ineffective EoT management due to improper project documentation and reporting system
21. High level of political/bureaucratic influences to the project	0.766	18	Political decisions effects EoT issues and resolution procedure
22. Delays in Site mobilization by contractor	0.610	19	Cause project delays and disputes on EoT issues
23. Poor judicial system for dispute settlement and long delays on dispute resolution process	0.600	20	Long delays to make decision on EoT claims.

Responses for resolution procedures or actions taken during the project execution for every cause-factors were identified and analyzed through in-depth interviews, KII, and content analysis of the project's reports/ records. Findings as the key resolution practices of the identified cause-factors those were taken for the improvement of the project performance in order to minimize the impacts of contract delays are discussed as below:

In order to minimize the impact of the above mentioned key factors, the respondents have informed that most of the donor funded and the World Bank Administered projects in Timor-Leste have carried out the periodic project monitoring, supervision, and also established the system of regular project supervision and construction management in order to control, minimize or resolved the project issues related to the project delays. During the project execution some poor performing project team members were penalized by replacing the underperforming and unqualified project staff and actions also taken to the contractors and sub-contractors for poor performance and project delays.

In this regards, Project Management Unit (PMU) was established for administration and management of health sector projects and programmes and the PMU has made efforts to improve communication and coordination with local authorities, line ministries and influential political leaders to contribute for the improvement of project environment to check the delays so that EoT related issues and their impacts can be minimized.

The respondents have made the observation that the local project coordinators were appointed and they played an important role to minimize disturbances to the project by local communities, political rebels, local labours and others. Efforts made to create awareness about the timely completion of the project and its benefits to the population in need.

The project managers enforced the system of stakeholders weekly, monthly or as required site meetings for resolution of project problems and to monitor the progress in regular basis. Efforts were also made by the project managers on timely payments and approvals of requests from the project team and contractors on timely basis.

The respondents explained that the situations in the government funded and administered project were not same as mentioned above and observed that poor project executions and poor contract management has resulted serious delays, unresolved EoT issues and cost overruns as compared to the donor funded projects.

Recommendations and Conclusion

Based up on the research findings it is suggested that the good practices of research and evidence-based policy formation and institutional reforms are very essentials for sustainable development and to satisfy demands and needs of public in large. In the area of public procurement and project management there are still not enough research has been done particularly at conflict-affected or resource poor settings. Therefore, it is recommended to conduct such research even to further investigate and resolve every suggested cause-factors responsible for EoT.

Based on the research findings it is concluded that time extension issues of public procurement contract if not resolve properly, they affect the overall performance of the project and creates economic, political and social impacts. Therefore, observed lack of good practices on proper management and operation of PCM activities in all phases of the PCM cycle needs to be addressed. Similarly, identified and possible good practices for the resolution of cause-factors needs to be applied for similar contexts in order to improve the performance of public procurement contracts so that the EoT issues can be properly managed.

References

Kuhil, A.M. (2019). Cause of delays in building construction projects: A case of Addis Ababa administration, Ethiopia. Htpps://www.semanticscholar.org

Dickson, A. (2018). Theoretical and conceptual framework: Mandatory ingredients of a quality research. International Journal of Scientific Research, 8(1). doi: 10.36106/IJRS,

Agrawal. G. (2000). Project management in Nepal. M.K. Publishers and Distributors.

Muhammad, A. et al. (2017). Time overrun in construction projects of developing countries. https://www.researchgate.net

Eliseu, A. (2020). Case study of delay construction project in Bidau Bridge, Dili, Timor-Leste. https://jurnal.narotoma.ac.id

Saad, B., & Anas, C. (2018). Emperical study of schedule delay in Moroccan construction industries. International Journal of Construction Management. https://www.researchgate.net

Bryman, A. (2008). Social research method methods. Oxford University Press.

Government of Nepal. (2007). Public procurement act. https://www.dpnet.org.np

Government of Timor-Leste. (2005). Public procurement act. Ministry of Finance, RDTL.

Kerzner, H. (2009). Project management: Systems approach to planning, scheduling and controlling (10th ed.). John Wiley and Sons.

Kothari C.R., & Garg, G. (2019). Research methodology: Methods and techniques. New Age International Publishers.

Nick, L. & Ian, L. (2008). Doing business research. Sage Publications.

LexisNexis. (2024). Public contracts. https://www.lexisnexis.com/legal

Ahasen, M., & Fahim, U. (2018). Factors influencing the construction time and overrun in Projects: Emperical study in Pakistan.

Mishra, A. K. (2019). Assessment of project performance in terms of time, cost and quality in Nepal. https://www.researchgate.net

Abbas, N., & Noel, P. (2017). Significant factors causing cost overrun in construction industries in Afghanistan. https://www. Researchgate.net

Andrea, S., et. al., (2022). Research perspectives on public procurement: Content analysis of 14 years of publications in the journal of public procurement. Journal of Public Procurement, 17(2), 229-269. https://www.researchgate.net.

Rafi Rafiullah et al. (2021). Delays in construction projects in Afghanistan. https://www.jetir.org

Bahaa, R. et al. (2019). Understanding delays in construction in conflict zones. https://www.researchgate.net

Sushanti, R. et al. (2021). Assessing factors towards construction project delays in Indonesia. https://www.researchgate.net

Haroon, S. et al. (2017). Empirical evidence of extension of time in construction projects Pakisthan. https:. www.acadamia.edu

Thai, V. K. (2016). Global public procurement theories and practices. 7th international public procurement conference (IPPC7), August 3-5, 2016, Bali, Indonesia.

Thai, V. K. (2017). Public procurement today-Global view. South Asia Region public

procurement conference, February 20-23, 2017, Colombo, Shrilanka.

The World Bank Group. (2020). The global procurement data base.

The World Bank Group. (2017). Benchmarking public procurement: Assessing public procurement regulatory system in 180 economies.

Umuhoza. (2019). Delay factors in Building construction projects in Rwanda. https://www.koreascience.or.kr

United Nations Office for Drug and Crime-UNODC (2013). Guidebook on anticorruption in

public procurement and management of public finances. https://www.unodc.org