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**FACTORS AFFECTING TIME AND COST OVERRUN
IN RURAL CONSTRUCTION PROJECTS IN SRI
LANKA**

GRADE-B-
Dept. of Building Economics

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Thesis/Dissertation submitted in partial fulfillment of the requirements for the
degree Master of Science in Project Management

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DECLARATION

I declare that this thesis has been composed solely by myself and that it has not been submitted, in whole or in part, in any previous application published or written by another person or material which is to a substantial extent has been accepted for the award of any other degree or diploma of a University or other institution of higher education, except where due acknowledgment and reference is made in the text.

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Signature

Date : 2021.04.10

This is to certify that Mr. K. B. S. Ruwansiri has done this research dissertation titled “Factors affecting time and cost overruns in rural construction project in Sri Lanka” under my supervision.

Name : Dr. Nayanthara De Silva

Signature

Date

ABSTRACT

Developing countries have identified the importance of the active participation of residential communities in remote areas for a country's economic development. Therefore, several projects are being implemented in Sri Lanka, aiming to develop infrastructure facilities such as internal roads, irrigation structures, and government buildings in rural areas. It helps to uplift the living standards of rural communities. Completion of these infrastructure development projects according to the pre-defined time frame and agreed budget are more critical to developing countries like Sri Lanka. However, time and cost overruns are noted in rural construction projects. Specific factors that influence the time and the cost overrun in projects could be identified in projects operating in rural areas than urban areas. This study investigated the most significant factors influencing the time and cost overrun in rural projects and the mitigation measures to overcome such factors within this context.

A comprehensive literature survey was carried out to identify time and cost overrun factors and their mitigation measures applied in the construction industry. A total of 30 such factors, and 27 mitigation measures were identified and validated through a pilot survey with the participation of 05 experts working in public and private organizations associated with construction projects in the Puttalam District; this region is considered as a rural area and has many ongoing projects. The experts' comments were used to modify the literature findings in particular to rural projects and develop the questionnaire. Accordingly, the questionnaire contained adjusted 25 and 21 time/cost overrun factors and mitigation measures, respectively. Professionals consisted with Project Managers, Site Managers & Engineers, Quantity Surveyors, Procurement Engineers from 12 of ongoing and 25 of completed projects in Puttalam District were considered to draw the sample for the questionnaire survey. The Chi-Square test was employed for statistical analysis of the quantitative data collected through the questionnaire survey. Findings were validated by the same experts who were involved in the pilot survey.

Nine and seven significant time/cost overrun factors and mitigation factors, were established for rural projects in Sri Lanka.

DEDICATION

This study is wholeheartedly dedicated to my beloved parents, who have been my source of inspiration, and who gave me the strength when I thought of giving up, and who continually provide their moral, spiritual, and emotional support.



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LIST OF ABBREVIATION

QS	– Quantity Surveyor
GOSL	– Government of Sri Lanka
GDP	– Gross Domestic Product
CIDA	– Construction Industry Development Authority
NGO	– Non-Government Organization
CDD	– Community Driven Development
QA	– Quality Assurance
QC	– Quality Control
ADB	– Asian Development Bank
UK	– United Kingdom
JICA	– Japan International Cooperation Agency
NWS&DB	– National Water Supply and Drainage Board
NSBS	– Nearest School is the Best School
RDA	– Road Development Authority
CRIP	– Climate Resilience Improvement Project
ABC	– Aggregate Base Course

