

**ASSESSMENT ON KEY COMPETENCIES OF SOLID
WASTE MANAGEMENT IN HIGH-RISE
RESIDENTIAL BUILDINGS IN SRI LANKA**

Malaweera Arachchige Nandana Gayan

(188708P)

Degree of Master of Science in Construction Project Management

Department of Civil Engineering

University of Moratuwa

Sri Lanka

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By

Malaweera Arachchige Nandana Gayan

(188708P)

Supervised by

Prof. R.U. Halwatura

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University of Moratuwa as a partial fulfilment of the requirements for the Master of
Science in Construction Project Management”

Department of Civil Engineering

University of Moratuwa

Sri Lanka

June 2024

DECLARATION

I certify that this report does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any other university or institute of higher learning and to the best of my knowledge and believe it does not contain any material previously published, written, or orally communicated by another person or myself except where due reference is made in the text.

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188708 P

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Signature of Supervisor

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Date

DEDICATION

This report is dedicated to my all Teachers, loving Parents, Wife and
My children

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I hope the conclusions of this article will be useful for the construction project management discipline and will provide insight into further research on the subject.

ABSTRACT

Due to inadequate legal framework, improper separation, collection, and disposal methods, and lack of proper procedures, management of solid waste has become a significant issue in Sri Lanka. Residential growth is one of the main causes of the production of solid waste. Due to rapid population expansion, urbanization, and land scarcity in urban areas, the real estate sector has experienced significant growth in recent years, notably in terms of condominium buildings. The quantity of waste that is gathered within these entities is more than that of a single residential home, and the way it is disposed of and collected is unique and intricate. To lessen the strain on the environment, it is crucial to manage and dispose of solid waste in an efficient manner. Present system in solid waste management system has issues even though it fulfills the requirement of the municipalities and authorities. Previously conducted studies on solid waste management have not given effective solution for sustainable management of solid waste in high-rise residential buildings. Reviewing current waste disposal systems with an eye toward increasing functionality and occupant happiness was the main goal of this study. Therefore it is must to assess the key competencies on solid waste management in high rise residential building in order to achieve a sustainable solid waste management goals. This study describes the assessment of key competencies on solid waste management in high rise residential buildings and the relationships among the key competencies assessed. It was found that the communication competency has the highest rating comparing to other two competencies managerial and awareness. Necessity of new framework for communication in terms of solid waste management was initiated with highest rating in communication competency. The findings showed that there were some limitations and annoyances with the current system of solid waste management in high-rise residential buildings.

Key words: Condominiums, Garbage Disposal System, Key Competencies, Quality Function Deployment

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