

**PROJECT MANAGEMENT IMPLICATIONS OF
GREEN CERTIFICATION: A FOCUS TO BLUE GREEN
RATING SYSTEM**

D.G.P DASSANAYAKE

189594R

Degree of Master Science in Project Management

Department of Building Economics

University of Moratuwa
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Thesis/Dissertation submitted in partial fulfilment of the requirements for the degree.

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DECLARATION

I declare that this is my own work, and this thesis/dissertation 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 belief it does not contain any material previously published or written by another person except where the acknowledgement is made in the text. I retain the right to use this content in whole or part in future works (such as articles or books).

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The above candidate has carried out research for the ~~PhD/MPhil~~ Master's thesis/dissertation under my supervision. I confirm that the declaration made above by the student is true and correct.

Name of Supervisor: Dr. T Ramachandra

Signature of the Supervisor:

Date: 06.07.2024

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“Project Management Implications for Green Certification: A focus on Blue-Green Sri Lanka”

Amid global environmental apprehensions, the construction industry is undergoing a transformative shift towards sustainability. Central to this evolution is the pivotal role of green certification, serving as a vital tool for assessing the environmental impact of structures. Sri Lanka has positioned itself at the forefront of this movement with its progressive green rating program, emphasizing the incorporation of energy-saving technologies, ecological materials, and waste reduction practices in construction. To achieve sustainability in construction projects, project management implications play an essential role with combining guidance of consultants and expert's involvement. Therefore, this study was focused on explore project management implications for green building certification in Sri Lankan construction projects while focusing on blue-green Sri Lanka.

The research problem was addressed through case study of five building projects in Sri Lanka. The comprehensive literature review was carried out to review the blue-green Sri Lanka and its rating process to comply green building guidelines whereas, findings were verified during case studies. Semi-structured interviews were conducted as main data collection technique during case studies to collect data for accomplishing research objectives. Research findings were concluded based on results from the manual content analysis.

The research findings revealed that key challenges that faced by Sri Lankan building construction projects when comply green building guidelines based on blue-green Sri Lanka. Furthermore, findings revealed these challenges with specifically relating to cost, quality and time of the project. Eventually, it is highlighted that necessity for assigning project manager with significant knowledge on sustainable/ green building practices to coordinate project activities while complying green building guidelines in Sri Lanka to obtain green certification.

Key words: - Project Implications, Blue-green Sri Lanka, Green Building Guidelines and Construction Industry

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LIST OF ABBREVIATIONS

Abbreviation	Description
BREEAM	Building Research Establishment Environmental Assessment Method
CASBEE	Comprehensive Assessment System for Building Environmental Efficiency
CEA	Central Environmental Authority
CIDA	Construction Industry Development Authority
COC	Certificate of Conformity
CO ₂	Carbon Dioxide
EMS	Energy Management System
FIDIC	International Federation of Consulting Engineers
GBCSL	Green building council of Sri Lanka
GFA	Gross Floor Area
GGC	Green Globe Certification
GHG	Green House Gas
LEED	Leadership in Energy and Environmental Design
RCC	Reinforces Cement Concrete
SC	Sustainable Construction
UDA	Urban Development Authority
UN	United Nations
US	United States
USGBC	United States Green Building Council
VOC	Volatile Organic Compounds

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