

**INCORPORATING SUSTAINABLE  
PROCUREMENT PRACTICES IN THE SRI  
LANKAN CONSTRUCTION INDUSTRY:  
CHALLENGES AND BENEFITS**

**MASTER OF SCIENCE  
IN  
CONSTRUCTION PROJECT MANAGEMENT**

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“This thesis was submitted to the Department of Civil Engineering of the University of Moratuwa in partial fulfilment of the requirements for the Master of Science in Construction Project Management”

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## Declaration

I certify that this thesis does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any university 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. I also hereby give consent for my thesis, if accepted, to be made available for photocopying and for inter library loans, and for the title and summary to be available to outside organizations.

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## **Abstract**

To achieve the Sustainable Development Goals (SDG), new thinking is essential. This applies to every country in the world who is a signatory to the United Nations 2030 Agenda and cuts across all key sectors. In line with the 2030 Agenda, the Government of Sri Lanka adopted the Sustainable Development Goals agenda in September 2015, which includes 17 goals. (Government of Sri Lanka, 2017) The Construction industry dominate the major share in all of the goals. However, the disregard of the triple bottom line (TBL) of sustainability is a major drawback within the current construction procurement practice (Ruparathna & Hewage, 2015). Though sustainable procurement practices are a developing concept within the construction industry, it has the potential to enhance the performance of sustainability requirements within the industry.

There is little to no methodology to incorporate sustainable procurement elements in construction procurement within Sri Lanka. Sustainable procurement is not a popular topic in available literature. An empirical study that focuses directly on this topic in Sri Lanka is still to be carried out. Hence, a study on the sustainable procurement practices in the construction industry within Sri Lanka is timely and necessary. This study attempts to evaluate current practices, challenges and benefits to implement sustainable requirements during construction procurement. For this purpose, an online questionnaire survey covering public, private, semi-government and international organizations was conducted as a means of collecting data. The responses that were received constituted of diverse groups and ages within the construction sector. A statistical analysis software was used to rank the responses and to conduct the cross analysis.

Results of the analysis revealed that “Legislation (Government and regulations)” is the main driver of implementing sustainable factors in procurement while “Lack of funding” and “Unwillingness to incur higher capital cost” ranked as the main barrier for the implementation of sustainable procurement. “Reduction in harmful emissions and waste generation” ranked on top as main benefits of sustainable procurement.

Keywords: Sustainable procurement, Procurement, Construction

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## LIST OF ACRONYMS

Acronyms	Description
ADB	Asian Development Bank
APUC	Advanced Procurement for Universities and Colleges
ASOSAI	Asian Organization of Supreme Audit Instructions
CECB	Central Engineering Consultancy Bureau
CIDA	Construction Industry Development Authority
CMC	Colombo Municipal Council
CSR	Corporate Social Responsibility
EIA	Environmental Impact Assessment
EMS	Environmental Management System
GBCSL	Green Building Council of Sri Lanka
GDP	Gross Domestic Product
GOSL	Government of Sri Lanka
ITC-ILO	International Training Centre of the International Labour Organisation
JICA	Japan International Cooperation Agency
LCC	Life Cycle Cost
NGO	Non-Governmental Organizations
NPA	National Procurement Agency
NWSDB	National Water Supply and Drainage Board
RDA	Road Development Authority
RFP	Request for Proposals
RFQ	Request for Quotations
SDG	Sustainable Development Goals
SEC	State Engineering Corporation
SLN	Sri Lanka Navy
TBL	Triple Bottom Line
UDA	Urban Development Authority
UK	United Kingdom
UN	United Nations
UNEP	United Nations Environment Programme

UNGM	United Nations Global Marketplace
UNOPS	United Nations Office for Project Services
UOM	University of Moratuwa
WB	World Bank
WLC	Whole Life Cycle Cost