

**EVALUATING THE EFFECTIVENESS OF THE
APPLICATION OF ISO 45001:2018 OCCUPATIONAL
HEALTH AND SAFETY MANAGEMENT SYSTEM FOR
IMPROVING THE HEALTH AND SAFETY PERFORMANCE
OF THE COCONUT-BASED MANUFACTURING INDUSTRY
OF SRI LANKA**

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(198575L)

Degree of Master of Science in Occupational Safety and Health Management

Department of Building Economics

University of Moratuwa

Sri Lanka

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Thesis submitted in partial fulfillment of the requirements for the
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DECLARATION

To the best of my understanding and belief, this dissertation contains original content that has not been previously published or authored by another individual, except where explicitly acknowledged within the text. I affirm that this work is the product of my independent effort and that no materials previously submitted for a degree or diploma at any other university or institution of higher learning have been incorporated into this dissertation without my research supervisor's explicit written consent.

Further, I acknowledge the intellectual contributions and guidance of my research supervisor, Mrs. Piumi Dissanayake, which have been pivotal to the successful completion of this dissertation.

I also grant the University of Moratuwa the non-exclusive permission to publish my thesis or dissertation in its entirety or part, utilizing various mediums such as print, electronic formats, or any other suitable method. I retain the right to employ all or segments of this content in my future publications, including but not limited to my books or articles.

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The above candidate has carried out research for the master's Dissertation under my supervision

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ABSTRACT

ISO 45001:2018 is widely recognized as an effective framework for occupational health and safety (OHS) management (Refer Chapter 2.8.2), yet its specific impact on health and safety performance within Sri Lanka's coconut-based food manufacturing industry remains under-researched. Existing studies have primarily examined general manufacturing sectors, often lacking comparative analysis of safety performance between certified and non-certified entities within specialized industry contexts (Refer Chapter 2.6). This gap indicates a need for a targeted investigation into the benefits and challenges associated with ISO 45001:2018 certification in this niche sector.

This study aimed to assess the effectiveness of ISO 45001:2018 in enhancing OHS performance in Sri Lanka's coconut-based food manufacturing industry. Certified and non-certified industries were compared to evaluate their influence on key OHS performance indicators. Data were collected from 37 respondents representing various management levels across large-scale industries located in the Gampaha, Kurunegala, and Puttalam districts. Responses were analyzed using a five-point Likert Scale (1-5) and SPSS V23.0 software.

Findings demonstrate that ISO 45001:2018 certification significantly improves OHS performance, evident through reductions in workplace accidents, enhanced regulatory compliance, and increased employee participation in safety initiatives. Comparative analysis reveals that certified companies exhibit noticeable improvements in safety outcomes over non-certified counterparts, underscoring the transformative potential of ISO 45001:2018 in fostering safer, more productive workplaces.

The study recommends strategic measures to improve OHS performance in Sri Lanka's coconut-based food manufacturing industries. Key suggestions include bolstering management commitment, strengthening communication and feedback mechanisms, conducting rigorous risk assessments, increasing employee engagement, allocating sufficient resources, promoting ISO 45001:2018 certification, and adopting a continuous improvement approach. Implementing these strategies will not only reduce workplace incidents but also enhance productivity and contribute to the sector's sustainability.

Keywords: *Occupational Health and Safety Management System (OHSMS), Coconut Based Manufacturing Industry, ISO 45001:2018, Occupational Health and Safety Performance Indicators*

ACKNOWLEDGEMENT

Pursuing the MSc in Occupational Safety and Health (OHS) Management at the University of Moratuwa has been a profoundly rewarding journey, enriching my knowledge and capabilities in this essential field. I am sincerely grateful to those who have provided unwavering support and guidance throughout this endeavor.

Firstly, I extend my deepest appreciation to my supervisor, Mrs. Piumi Dissanayake, Senior Lecturer in the Department of Facilities Management, Faculty of Architecture, University of Moratuwa, for her exceptional supervision, constant encouragement, and insightful guidance, which have been invaluable throughout this research. Her expertise and support were instrumental in the successful completion of this study.

I am also profoundly thankful to Prof. (Mrs.) Nayanthara De Silva, Head of the Department of Facilities Management and Program Director of the MSc in Occupational Health and Safety Management, and to the academic and non-academic staff of the Department of Building Economics at the University of Moratuwa, for their continued assistance and encouragement throughout the MSc program.

A special note of gratitude is owed to the panel of OHS experts, whose commitment, strategic recommendations, and validation of the survey questionnaire were essential to the research process. I am equally indebted to Assistant Director of the Coconut Development Authority of Sri Lanka, for his invaluable guidance in accessing operational-level industries for data collection.

My sincere thanks go to the professionals who participated in this research, whose insights and feedback were critical in gathering the necessary data, and to my colleagues for their continuous support and motivation.

Finally, I am deeply grateful to my beloved wife, V. Priyadarshani Peiris, my son, Thehas Thishakya Peiris, my friends, and mentors. Their encouragement has been instrumental in achieving this milestone, and I am forever appreciative of their support.

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LIST OF ABBREVIATIONS

ABBREVIATION	DESCRIPTION
BRC	British Retail Consortium
BSI	British Standard Institute
CDA	Coconut Development Authority
CDC	Centers for Disease Control and Prevention
DCMSME	Development Commissioner Ministry of Micro, Small & Medium Enterprises
EDB	Export Development Board
EHS	Environment Health and Safety
FSSC	Food Safety System Certification
GMP	Good Manufacturing Practice
HACCP	Hazard Analysis and Critical Control Points
HIRA	Hazard Identification and Risk Assessment
HR	Human Resources
HSE	Health Safety and Environment Manager
ILO	International Labour Organization
IRCA	International Register of Certificated Auditors
ISO	International Standard Organization
LTI	Lost Time Injuries
MOC	Management of Change
OHS	Occupational Health and Safety
PPE	Personal Protective Equipment

QA	Quality Assurance
SEDEX	Supplier Ethical Data Exchange
SHE	Safety Health and Environment
SMEs	Small and Medium-sized Enterprises
SMETA	SEDEX Members Ethical Trade Audit
URSA	Universal Rehabilitation Service Agency
WHO	World Health Organization

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