

ANALYSIS OF SAFETY ISSUES IN ROAD
CONSTRUCTION IN SRI LANKA

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ABSTRACT

The construction industry plays a pivotal role in the economic development of any country, with road construction being a key component in enhancing infrastructure. However, the safety concerns associated with road construction projects pose significant challenges that warrant comprehensive investigation. This research report delves into the safety issues prevalent in road construction activities within the context of Sri Lanka.

The study employs a multi-faceted approach, combining literature review, on-site observations, and questionnaire survey with industry executives to identify and analyze the key safety issues in road construction projects across Sri Lanka. 45 construction executives who were involved in road construction projects in Sri Lanka were responded for the questionnaire survey. The study identified several key factors contributing safety of Sri Lankan road construction. These factors are attitudes towards safety, insufficient training, ineffective site management, lack of knowledge among site engineers and technical staff, inadequate provision of personal protective equipment, insufficient attention from top management, and a failure to enforce safety regulations. Based on the findings, allocating funds for safety measures and equipment emerges as the most crucial potential remedy for addressing safety concerns in the Sri Lankan road construction sector. Enforcing penalties for non-compliance with safety measures, offering rewards to companies that prioritize safety in road construction projects, and conducting more safety inspections at road construction sites by authorities all contribute to improving road construction safety in Sri Lanka.

The findings of this research provide valuable insights for policymakers, construction companies, and relevant stakeholders to develop targeted interventions aimed at fostering a safer working environment in the road construction sector in Sri Lanka. Ultimately, the objective is to contribute to the reduction of accidents and fatalities, ensuring the sustainable growth of the construction industry while prioritizing the well-being of its workforce.

Keywords - Road construction, Safety issues, Sri Lanka.

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DECLARATION OF THE CANDIDATE & SUPERVISOR

I declare that this is my work, and this thesis does not incorporate without acknowledgment 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 acknowledgment is made in the text. Also, I with this grant the University of Moratuwa the non-exclusive right to reproduce and distribute my thesis, in whole or in part, in print, electronic, or other mediums. I retain the right to use this content in whole or part in future works (such as articles or books).

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LIST OF ABBREVIATIONS

ADB	-	Asian Development Bank
GDP	-	Gross Domestic Product
HIRA	-	Hazard Identification and Risk Assessment
ILO	-	International Labor Organization
JICA	-	Japan International Cooperation Agency
RDA	-	Road Development Authority
OSH	-	Occupational Health and Safety
OHSAS	-	Occupational Health and Safety Assessment Series
OHSMS	-	Occupational Health and Safety Management System
OSH&W	-	Occupational Safety Health and Welfare
PAHC	-	Polycyclic Aromatic Hydro Carbons
PPE	-	Personal Protective Equipment
PWD	-	Public Works Department
RII	-	Relative Importance Index
SD&CC	-	State Development and Construction Corporation
TCEO	-	Territorial Civil Engineering Organization
WHO	-	World Health Organization