



**COST OF ACCIDENTS AND INVESTMENT ON
SAFETY IN CONSTRUCTION INDUSTRY - A CASE
STUDY IN SRI LANKA**

MASTER OF BUSINESS ADMIN STRATI ON
IN
PROJECT MANAGEMENT

K.D.S.K.Kindelpitiya
Department of Civil Engineering
University of Moratuwa

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92382



Abstract

Construction accidents cause considerable damages to the contractor as well as the project and employees. It has a direct financial cost to the contractor and other indirect costs as well as social cost to the country. This study attempts to collect and analyze data regarding the safety investment and cost of accidents in construction industry. Altogether, 32 projects and 75 accidents including 9 fatal were investigated to find out the safety investment and the cost of accident in each project. On each site, the safety investment was calculated by dividing the total safety investment by contract sum and accidents loss ratio was calculated by dividing the total financial loss caused to contractor due to accidents by contract sum. The total accident loss ratio was calculated by dividing the total of financial loss caused to contractor and social cost related to accidents by contact sum of the projects.

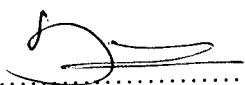
It was found that the average investment on safety in construction projects is 0.66 % of contact sum and the relationship between safety investment and contact sum to use as a guide line to calculate the amount required for safety performance.

The average accident loss ratio, which includes only the direct financial cost borne by the contractor, was found as 0.5% of contract sum and it increase up to higher than 1.2% in 10% of project mostly due to the fatal accidents. The average total accident loss ratio, which includes both direct cost borne by contractor and the social cost related with accidents, was found as 1.98 % of contract sum and it increase up to higher than 4% in 10% of projects. The relationships between accident loss ratio against safety investment ratio were found to have an idea about the effectiveness of safety investment for reducing of accidents

Only the investment of money on safety is not sufficient to reduce accidents. It is also depend on the component of management, worker's attitude and interference of government authority, client and consultant.

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 belief and 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 dissertation, if accepted, to be made available for photocopying and for interlibrary loans, and for the title and summary to be made available to outside organizations”



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.....
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To the best of my knowledge, the above particulars are correct.

UOM Verified Signature

.....
Supervisor

(Dr. (Mrs.) C. Jayasingha)

11-02-2009

.....
Date

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List of Abbreviations

ALR	Accidents loss ratio
CITB	Construction Industry Training Board
CITP	Construction Industry Training Project
GDP	Gross Domestic Products
HRD	Human Resource Development
ICTAD	Institute for Construction Training and Development
ISD	Industrial Safety Division - Ministry of labour
LMIS	Labour Market Information System
SIR	Safety Investment Ratio
TALR	Total Accident Loss Ratio
TC	Total costs of site accidents in a project

