



**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

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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.

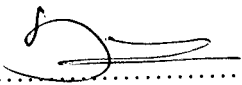
It was found that the average investment on safety in construction projects is 0.66 % of contact sum and the relationship between safety investment and contact sum to use as a guide line to calculate the amount required for safety performance.

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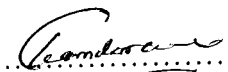
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To the best of my knowledge, the above particulars are correct.

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Supervisor

(Dr. (Mrs.) C. Jayasingha)

.....
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Date

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Contents

1.0 Introduction	01
1.1 Background	01
1.2 Problem Identification	01
1.3 Objective of study	03
1.4 Scope of the study	03
1.5 Main findings	04
1.6 Chapter outline	04
2.0 Literature Review	05
2.1 Construction Industry of Sri Lanka	05
2.1.1 Authority for Construction Industry	05
2.1.2 Skilled Work Force for Construction Industry	06
2.2 Construction Accidents	08
2.2.1 Root Causes of Accident	08
2.2.2 Comparison with Other Industries	09
2.2.3 Category of Accident	11
2.2.4 Causes of Construction Accidents	12
2.3 Costs of construction accidents	14
2.3.1 Accident costs and safety performance	14
2.4 Safety investment in construction Site	15
2.4.1 Safety investments and safety performance	16
2.5 Social cost of accidents	17
2.6 Legal Provisions and Insurance Policies for safety and health in Sri Lanka	18
2.6.1 Awareness among contractors of legal aspects, safety policies and recommendations	19

3.0 Methodology	20
3.1 Data collection	20
3.2 Direct Cost of Accidents	21
3.2.1 Loss due to the injured person	22
3.2.2 Loss Due to the Injured Person even After Resuming Work	22
3.2.3 Loss due to medical expenses	
3.2.4 Fines and legal expenses	22
3.2.5 Loss of time of other employees	23
3.2.6 Equipments or plants loss	23
3.2.7 Loss due to damaged material or finished work	23
3.2.8 Loss due to idling of machinery or equipments	24
3.2.9 Other losses	24
3.3 Social Cost of Accidents	24
3.3.1 Cost of services	25
3.3.2 Loss of future production of injured persons	25
3.3.3 Cost of reflecting pain and grief	25
3.3.4 Other social costs	25
3.4 Safety Investment of Projects	26
3.4.1 Cost of Safety Training and Administration	26
3.4.2 Cost of Supplying of Safety Equipments	27
3.4.3 Time Spent for Safety Meetings and Promotions	27
3.4.4 Cost of Additional Materials	27
3.4.5 Other Relevant Cost	
4.0 Analysis and Discussion of Results	28
4.1 Population and Samples of the study	28
4.2 Relationship between contract sum and safety investment	

4.3 Cost of Accidents	29
4.3.1 Direct Cost of Accidents	29
4.3.2 Social Cost of Accidents	32
4.3.3 Total Cost of Accidents	32
4.4 Relationship between safety investments and cost of accidents	35
5.0 Conclusions and Recommendations	41
5.1 Conclusion	41
5.2 Recommendations	43
6.0 References	46
Appendix – 01 : Summary of Results	48
Appendix – 02 : Questionnaire format no. 01	50
Appendix – 03 : Questionnaire format no. 02	51
Appendix – 04 : Summary of Data from Questionnaire 01	52
Appendix – 05 : Summary of Data from Questionnaire 02	53

List of Figures

Figure 2.1: Percentage of construction accidents in each of event types	13
Figure 2.2: Assumed general shape of accidents loss ratio (ALR) versus safety performance	15
Figure 2.3: Assumed general shape of SIR versus safety performance curve	17
Figure 3.1: Basic statistics of safety investments	30
Figure 3.2: Result of simple regression between safety investment and contract sum.	31
Figure 3.4: Basic statistics of direct cost of accidents	32
Figure 3.5: Basic statistics of total cost of accidents	34
Figure 3.6: Result of simple regression between safety investment ratio and direct accidents loss ratio	37
Figure 3.7: Result of simple regression between safety investment ratio and total accidents loss ratio	38

List of Tables

Table 2.1: Summary of fatal accidents reported to ISD for year 2000 to 2007.

Table 2.2: Summary of non fatal accidents reported to ISD for year 2000 to 2007

Table 2.3: Ratio of fatal and non fatal accidents in construction industry compared to other industries



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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

