IDENTIFICATION AND MEETING OF RISKS IN CONSTRUCTION CONTRACT

b.*

By

S.M.P.SURIYABANDARA B.Sc.Eng.(Hon), C. Eng, MIE(SL)

LINNALWA ES LE

Co Supervised by

DR. G.W. KODIKARA B.Sc.Eng.(Hon), PhD, C. Eng, MIE(SL) & DR.D.GUNAWARDENA B.Sc.Eng.(Hon), PhD

Department of Civil Engineering University of Moratuwa Moratuwa Sri Lanka

April 2005

University of Moratuwa

Theois

624 "0 5" 624 (04 3)

53815

83815

IDENTIFICATION AND MEETING OF RISKS IN CONSTRUCTION CONTRACT

By

SURIYA MUDIYANSELAGE PRIYANTHA SURIYABANDARA

A project Report Submitted in partial fulfilment of the requirement for the Degree of Master of Science in

Construction Project Management (2000/2001)

Co Supervised by; DR. GAMINI KODIKARA & DR. NIRANJAN GUNAWARDENA



Department of Civil Engineering University of Moratuwa Moratuwa, Sri Lanka.

April 2005

Acknowledgement

I would like to take this opportunity to pay my utmost gratitude to Dr. Gamini Kodikara, former Head of the Department, Department of Civil Engineering, University of Moratuwa and Dr. Niranjan Gunewardena, Senior Lecturer Department of Civil Engineering, University of Moratuwa, for their excellent guidance, advice and cooperation given to me in doing this project

It is my duty to remember with gratitude the General Manager, Road Development Authority, Director Training, Road Developemnt Authority, Mr. N.M.Zarook, Director, Project Management Unit, Southern Transport Developemnt Project, Road Development Authority, and Mr. M.S.M. Fasil, Computer Assistant, Southern Transport Development Project, Road Development Authority for their valuable contribution given to complete my Masters Degree Program Successfully.

I must thank all construction firm owners/managers for responding to my questionnaire and for their valuable contribution extended to me through interviews and discussion, which enabled me to make this project a success.

Finally, I wish to express my sincere gratitude to Nomali, my wife, Darshana and Madushan, my sons and my parents for their encouragement and moral support given to me the doing this study.

i

Eng. S.M.P.Suriyabandara Southern Transport Development Project Road Development Authority 3rd, Floor, "Sethsiripaya" Battaramulla Sri Lanka

20th October 2004

CONTENTS

>

٨

•

۶

.

Acknowledgement	i
Contents	ii
List of Abbreviations	iii
Chapter 1 Introduction	
1.0 Background	1
1.1 Scope of Research	2
1.2 Objectives	3
1.3 Research Methodology	3-4
1.4 Main Findings	4-5

Chapter 2; Identification and Classification of Construction Risks.

6
7
7-10
11
12-16
17-27

Chapter 3; Risk Management in The Construction Industry

3.0 Background	28-29
3.1 Risk Identification	29
3.2 Risk analysis	29-32
3-3 Response to the risk	33-37

Chapter 4; Construction Insurance

2

......

>

4

۶

4-1 Introduction	38
4-2 Some basic principles of Insurance	39-43
4-3 The basis of legal liability	43-46
4-4 Available Constructions Insurance	47-70

Chapter 5; Questionnaire Summary on Risk Identification and Insurances

5.0 Introduction	70
5.1 Questionnaires Summary	71-72
5.2 Analysis of Question Summary	72-82
5.3 Risk response	83-87
5-4 Contraction view on present insurance system in Sri Lanka	88-90

Chapter 6; Conclusion and Recommendation 91-93

Reference			94
Appendix	1	The Questionnaire Moratuwa, Sri Lanka, Electronic Theses & Dissertations www.lib.mrt.ac.lk	95-106

List of Abbreviations

CDF	-	Cumulative Distribution Function
CIP	-	Coordinated Insurance Programme
FIDIC	-	International Fed. of Consulting Engineers
ICE	-	Institute of Civil Engineers (UK)
ICTAD	-	Institute for Construction, Training and Development



.

۶

I

.

University of Moratuwa, Sri Lanka. Electronic Theses & Dissertations www.lib.mrt.ac.lk



Dedicated to my loving father & mother



۵

٠

٣

4

×

University of Moratuwa, Sri Lanka. Electronic Theses & Dissertations www.lib.mrt.ac.lk