# OVERCOMING CRITICAL ISSUES OF INTERNATIONAL CONSTRUCTION JOINT VENTURES IN SRI LANKAN CONSTRUCTION INDUSTRY

Balapuwaduge Lawrence Dilshan Mendis

(189553R)

Degree of Master of Science

Department of Building Economics

University of Moratuwa Sri Lanka

March 2024

# OVERCOMING CRITICAL ISSUES OF INTERNATIONAL CONSTRUCTION JOINT VENTURES IN SRI LANKAN CONSTRUCTION INDUSTRY

Balapuwaduge Lawrence Dilshan Mendis

(189553R)

Thesis/Dissertation submitted in partial fulfillment of the requirements for the degree

Master of Science in Construction Law and Dispute Resolution

Department of Building Economics

University of Moratuwa Sri Lanka

March, 2024

### **DECLARATION**

I declare that this is my own work and this thesis does not incorporate without acknowledgement 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 acknowledgement is made in the text.

Also, I hereby grant to University of Moratuwa the non-exclusive right to reproduce and distribute my thesis/dissertation, in whole or in part in print, electronic or other medium.

I retain the right to use this content in whole or part in future works (such as articles or books).

Signature:	Date:
The above candidate has carried out research for t	the MSc Dissertation under my
supervision.	
Signature of the supervisor:	Date:

### **Abstract**

International construction joint ventures (ICJVs), have become a successful strategy for sustainable development. Numerous studies have highlighted the potential pitfalls leading to the critical situations and even to failure of construction joint ventures (CJVs), ranging from ambiguous partner roles to imbalanced risk-sharing mechanisms and misunderstandings in operational practices. Even though many researches have focused on identifying critical issues in CJVs, there were lesser number of researches which have focused on strategies to overcome those critical issues. Hence, this research was conducted with the purpose of identifying the critical issues in ICJVs and strategies to overcome those issues.

Through the literature review, twenty-eight critical issues and twenty-seven critical success factors were identified. To identify the most significant critical issues and issues that can cause ICJV failure, from the pool of issues, a questionnaire survey was conducted. Forty individuals with expertise of International Construction Joint Ventures (ICJVs) and over five years of experience in the construction industry participated in the survey. The data collected through questionnaire survey was analyzed using Relative Importance Index (RII) to identify the most critical issues. In the view of finding additional critical issues, critical success factors and strategies with practical examples to overcome those factors, ten expert interviews were conducted. The interview data was analyzed using manual content analysis.

Among twenty-eight critical issues, five issues have ranked with highest RII which have significant impact to the ICJV such as ICJV partner selection and exit mechanism, JV management related issues, Inter-organizational difference, Issues related to host country, Risk allocation. Through expert interviews, it revealed three critical factors additionally such as time zone difference, Human resource management and supply chain disruption. Further, it was revealed the economic instability in the country has severe impact on ICJV performance. Finally, probable strategies were proposed to overcome critical issues in ICJV.

**Key Words:** International Construction Joint Venture (ICJV), Critical issues in ICJV, Construction industry Sri Lanka

# **DEDICATION**

# I dedicate this piece of research to

# Beloved Wife & Parents

who encouraged me providing emotional and spiritual effort in this endeavor....

**ACKNOWLEDGEMENT** 

It is my utmost duty to acknowledge the numerous individuals and organizations who

rendered better cooperation to make this dissertation a success. This research study

would not have been possible without the assistance and dedication of those

professionals.

First and foremost, I would like to pay my gratitude to senior lecturer Ch. QS. Dr.

(Mr.) Suranga Jayasena, my dissertation supervisor for his keen interest, continuous

encouragement, invaluable guidance and precious support in making this research

study a reality.

I wish to thank Ch. QS. Prof. (Mrs.) Anuradha Waidyasekara, Head of the Department

of Building Economics, Faculty of Architecture, University of Moratuwa and all the

other academic and non-academic staffs of the Department of Building Economics for

their immense assistance during the course of this study and for the valuable guidance

given throughout the period of preparation my report.

I wish to express my greatest appreciation to all the professionals in the industry who

contributed to this study by actively participating in the data collection process despite

their busy work schedules. Unless for their valuable ideas, assistance and commitment,

this study would not have been possible.

Last, but not least, I express my immeasurable thanks to my wife and parents for their

priceless support to make this study a success.

My special thanks also go to all my colleagues of University of Moratuwa, for giving

me the opportunity for successful completion of my dissertation.

Mendis B. L. D.

March, 2024.

iv

# TABLE OF CONTENT

DECLARATION	I
ABSTRACT	II
DEDICATION	III
ACKNOWLEDGEMENT	IV
TABLE OF CONTENT	V
LIST OF FIGURES	VIII
LIST OF TABLES	IX
LIST OF ABBREVIATIONS	X
LIST OF APPENDICES	XI
CHAPTER 01	1
1.0 INTRODUCTION TO THE RESEARCH	1
1.1 Background	
1.2 Problem Statement	
1.3 Aim and Objectives	
1.4 Research Methodology	5
1.5 Scope and Limitations	
1.6 Chapter Breakdown	
CHAPTER 02	7
2.0 LITERATURE REVIEW	7
2.1 Introduction	
2.2 Nature of Construction Joint Ventures	9
2.2.1 Construction Joint Ventures (CJV) and International construction	on joint
ventures (ICJV)	9
2.2.2 ICJV history in Sri Lanka	10
2.2.3 Types of ICJV	12
2.2.3.1 Consortium	12
2.2.3.2 Equity JVs	12
2.2.3.3 Integrated JVs	13
2.2.4 Formation of International Construction joint venture	13
2.2.5 Motives to form an ICJV	16
2.3 ICJV Agreement	18
2.3.1 Key components of a ICJV agreement	18
2.4 Critical success factors in ICJV projects	22
2.5 Critical issues and failures in ICJVs	
2.6 Critical issues and risks associated with ICJVs and their impa	ct to
the ICJV performance	25
2.6.1 Issues related to ICIV selection of partners and exit mechanism	25

2.	6.2 Issues related to ICJV management	26
2.	6.3 Issues related to Inter-organizational difference	29
2.	6.4 Issues related to host country	
2.	6.5 Issues related to risk allocation	31
2.7	Strategies to overcome issues in ICJVs	37
2.	7.1 Strategies to overcome issues related to ICJV partners selection	and
ex	it mechanism	37
2.	7.2 Strategies to overcome issues related to JV management	38
2.	7.3 Strategies to overcome issues related to Inter-organizational	
di	fference	42
2.	7.4 Strategies to overcome issues related to host country	42
2.	7.5 Strategies to overcome issues related to risk allocation	44
2.8	Failures in International Construction Joint Ventures (ICJVs)	and
stra	tegies to overcome failures	46
CHAPTI	ER 03	50
3.0	RESEARCH METHODOLOGY	
3.1	Introduction	
3.2	Research Design	
3.	2.1 Research Approach	
	3.2.1.1 Available Approaches	
2	3.2.1.2 Selected Research Approach for this Study	
3.	3.2.2.1 Available Research Strategies	
	<u>-</u>	
	3.2.2.2 Selected Research Strategy for this Study	
2	2.3 Research Techniques	
3.	3.2.3.1 Data Collection Techniques	
	3.2.3.2 Data Analysis Techniques	
3.3	Research Process	
3.4	Chapter summary	
CHAPTI	ER 04	61
4.0	RESEARCH FINDINGS AND ANALYSIS	61
4.1	Introduction	61
4.2	Quantitative data analysis	
4.	2.1 Demographic Characteristics of Questionnaire Survey Responde	ents 61
	4.2.1.1 Rate of response	61
	4.2.1.2 Occupational profile of the survey respondents	62
	4.2.1.3 Experience in the construction industry	62
	4.2.1.4 Familiarity with ICJV arrangement	63
4.	2.2 Critical issues of ICJV	64
4.	2.3 Critical issues leading to ICJV failure	66
43	Qualitative data analysis	67

4	.3.1 Demographic Characteristics of Experts	67
4	3.2 Expert selection criteria	67
4	3.3 Profile of the experts	69
4.4	Semi-structured expert interviews	69
4.5	Analysis of expert interview findings	70
4	.5.1 Critical issues in ICJV and best practice to overcome	70
4	5.2 Importance of addressing critical issues promptly	75
4	.5.3 Critical success factors	76
CHAPT	ER 05	78
5.0	ER 05 CONCLUSIONS AND RECOMMENDATIONS	
		78
5.0	CONCLUSIONS AND RECOMMENDATIONS	78
5.0 5.1	CONCLUSIONS AND RECOMMENDATIONSIntroduction	
5.0 5.1 5.2	CONCLUSIONS AND RECOMMENDATIONS	78 78 78
5.0 5.1 5.2 5.3	CONCLUSIONS AND RECOMMENDATIONS	
5.0 5.1 5.2 5.3 5.4	CONCLUSIONS AND RECOMMENDATIONS	

# LIST OF FIGURES

Figure 2.1: Typical ICJV structure	10
Figure 2.2: The development process of JVs	15
Figure 2.3: Motives of forming a JV	18
Figure 3.1: Research process	59
Figure 4.1: Type of Stakeholder	62
Figure 4.2: Occupational profile of the respondents	62
Figure 4.3: Experience in the construction industry	63
Figure 4.4: Familiarity with ICJV arrangement	63

# LIST OF TABLES

Table 2.1: Tasks to be carried out at each stage of the ICJV process	15
Table 2.2: Critical success factors as identified by different authors	23
Table 2.3: Critical issues of ICJV and their impact to ICJV performance	33
Table 2.4: Summary of reasons for failures, consequence and strategies to over	ercome
	48
Table 4.1: Response rate for the questionnaire returned	61
Table 4.2: Ranking of critical issues based on their level of significance	64
Table 4.3: Critical issues leading to ICJV failure	66
Table 4.4: Expert selection criteria	68
Table 4.5: Profile of experts	69

# LIST OF ABBREVIATIONS

CJV - Construction Joint venture

ICJV - International Construction Joint venture

JV - Joint venture

# LIST OF APPENDICES

Appendix A - Summary of Findings

Appendix B - Questionnaire Survey

Appendix C - Interview Guideline