

**A FRAMEWORK FOR MANAGING CONFLICTS IN
JOINT VENTURE CONTRACTS IN INFRASTRUCTURE
PROJECTS IN SRI LANKA**

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Degree of Master of Science in Construction Law and Dispute
Resolution

Department of Building Economics

University of Moratuwa

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October 2020

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Dissertation Submitted in partial fulfilment of the requirements for the degree of
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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.

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Prof. Yasangika Sandanayake

Date

Dissertation Supervisor

Abstract

Construction Joint Venture (CJV) is one of the most commonly used mechanism in Sri Lankan construction industry, as a solution to bridge the gap created due to lack of technical, financial and managerial capacity of local contractors. CJVs are formed with various partners, whose processes, behavioural practices, goals and intentions are varied amongst themselves. Therefore, conflicts among the partners could occur, if not properly managed the CJVs. Hence, this aims to develop a framework for managing conflicts in Joint Venture Contracts in infrastructure projects in Sri Lanka through exploring the causes, root causes, and effects of conflicts of CJVs and proposing an approach for managing conflicts.

Study on those causes and approaches were derived using four case studies, in which interviews were conducted using semi structured interview guideline with the participant from each partner of the CJV entity. CJV agreements were reviewed to study the management and operational procedure of the CJV entity. The collected data were analysed using cross case analysis, content analysis and root cause analysis techniques.

According to research findings, it was revealed that the probability of occurring conflicts at the beginning stage is minimal due to less interaction between partners. In the formation stage, conflicts are frequently occurred due to disagreements on terms of CJV contracts, disagreements within CJV management structure and disagreements on division of profit and loss. In the operational stage, when the interactions between parties are high, there is a high possibility to occur conflicts. Deficiency on contract terms; and disagreement on working culture, performance and providing resources; are the common causes for occurring conflicts at operation stage.

Selecting an appropriate partner and; understanding and aligning objectives of all partners at the beginning stage are important for proper execution of CJV entity. Enter into proper agreement and, proper design of CJV administration structure is important proactive management approaches to practice at formation stage. Having progress meetings and open discussions are the most productive conflict management measures to practice in operation stage. Negotiation is the most common reactive conflict management approach parties practiced on formation and operation stage.

The study finally developed a framework to manage conflicts in CJVs, indicating the causes for conflicts and; reactive and proactive conflict management approaches to be followed in beginning, formation and operation stage of CJV life cycle. The proposed framework would be helpful for industry practitioners to identify causes, root causes, and select suitable approach for managing conflicts in future CJV projects in Sri Lanka.

Key words: Construction Joint Venture (CJV), conflict, conflict management, CJV life cycle, Sri Lankan Construction industry

Dedication

*To My Beloved Husband, Parents, Sister and the Lecturers
who have being the utmost inspiration and light of my
life.....*

Acknowledgement

This research study is an outcome of much dedication and remarkable assistance given by many personnel and organizations, who contributed in ample ways to make this research a success. In fact, there were number of people behind me, who supported and guided me to the correct path and genuinely wished my success. I should say that the following words would not be enough to express my greatest gratitude for their tremendous help which was an enormous strength to me. Nevertheless, I take this opportunity to convey my gratitude to all of them.

First and foremost, I pay my heartiest gratitude to Prof. Yasangika Sandanayake, my dissertation supervisor, for her guidance, advices and encouragement to make this research a successful one. It is her constructive criticisms and valuable advices that guide this research towards the successful completion.

I would like to pay my gratitude to the Head of the Department of Building Economics, and all other staff members of Department of Building Economics for their immense assistance and advice provided during the research period and throughout my academic career. Furthermore, I pay my heartiest gratitude to all non-academic staff members of the Department of Building Economics for the valuable help given.

Special thanks go to all the interviewees and industry practitioners who gave me an immense support and corporation to complete a successful data collection by sharing their valuable knowledge and experiences with me. Last, but not least, I express my heartfelt gratitude to my family, my batch mates and all others who were with me during this study for giving their utmost support, genuine advices and continuously motivating me to carry out the work successfully.

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List of Abbreviations

CJV - Construction Joint Venture

DCJV - Domestic Construction Joint Venture

EOT - Extension of Time

ICJV - International Construction Joint Venture

IJV - International Joint Ventures

JV - Joint Venture

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CHAPTER 01

INTRODUCTION

1.0 INTRODUCTION

1.1 Background

In construction industry, Joint Venture (JV) contracts are commonly used by the contractors with the intentions to enhance the competitiveness by pooling construction resources, sharing risk, to gain access to new markets, to gain access to positional assets, and to obtain and deploy new technologies and organizational capabilities (Pettit & Jelinek, 2019; Mohamed, 2003). According to Kale, Patil, Hiravennavar and Kamane (2019), parties enter into JV contract for the purpose of technology transfer; share of political and commercial risk, and to enhance competition.

JV is a commercial agreement amongst two or more companies to attain one or more common goals, by utilizing shared resources, whilst assisting to improve work easiness (Noorwood and Mansfield, 1999). According to Ho et al. (2009), Construction Joint Venture (CJV) is a collaboration form up through written contract(s) between the contractors, for specific time duration of a single project, to share finance, capabilities, and resources. Construction projects operated through joint venture entity are usually governed by two contract agreements; first, the contract specifies the relationship between partners, and the second agreement is the contract formed between the JV entity and the Employer (Kolebehdahati & Sobhiya, 2014).

Based on the nationality of JV partners, Kale et al. (2019) classified JV as an International Construction Joint Venture (ICJV) and Domestic Construction Joint Ventures (DCJV). In ICJVs, multinational parties are involved, where as in DCJVs, only the partners from single country are involved. Construction organizations widely use ICJVs as a method to exploit international construction market (Mohomed, 2003). ICJV is a common choice initiated in developing countries like Sri Lanka to carry out complex projects, where the domestic contractors have inadequate experience and capacities (Kumaraswamy, 1997).

The entire life cycle of CJV project is consisted of four main phases; (i) beginning phase (ii) formation phase (iii) operation phase and (iv) termination phase (Prasitsom & Likhitrungsilp, 2015). During the beginning phase, it mainly assesses the

investment decisions and selection of a partner (Kale et al., 2019). At the formation stage, parties enter into CJV agreement (Gale & Luo, 2004). Operation phase of CJV project is administrated; the construction project and JV organization. Finally, during the termination phase, the liquidation will be taken place after dissolution of CJV, except if there is any other alteration of possession, which was pre-agreed amongst CJV partners (Kale et al., 2019).

CJV is a collection of entities baring different goals and objectives (Yavaş, Eroglu & Eroglu, 1994). Therefore, conflicts are inevitable in CJVs (Yavaş et al., 1994; Thakore, 2013). Conflict is an incompatibility of goals or values among the two or more parties, who are in a relationship together with attempt by one party to control incompatible feelings towards each other (Fisher, 2000). Further, Popovic and Hocenski (2009) defined a conflict as a struggle or contest between people with contrasting needs, ideas, attitudes, values, or goals. According to Gale and Luo (2004), understand about the potential points, where conflicts will arise is paramount important for the successful operation of CJV.

According to Gale and Luo (2004), ambiguity of clauses, unclear partners objectives, and non-selection of suitable partner are the common causes for conflicts in CJV projects. Studies carried out by Fey and Beamish (2000) and Demirbag, Weir and Mirza (2003) in two different contexts identified that commitment, project intentions or requirements of partners and the extent of control as the frequent causes of conflicts in JVs. Further, Hennart and Zeng (2002) identified, social, political and cultural difference between home and host country, and incompatible cultural and management styles as most common causes for occurring conflicts in ICJVs.

However, both constructive and destructive outcomes can be crafted because of Conflicts (Tjosvold, 2006). Constructive conflicts often lead the way for creative thinking and innovations (Gorse, 2003). Femi (2014) stated that, destructive conflicts can be caused to lessen the trust and generate disrespect over each other, and for numerous adverse effects on the performance and productivity. In addition, destructive conflicts in construction projects can be caused series of problems such as increase in

cost and delays, reduce productivity, loss of profit, and harm on business relationships (Jaffar, Tharim & Shuib, 2011).

Moreover, existence in conflict between CJV partners is more likely to give rise to misunderstandings, distrust, and anxiety, to reduce the level of cooperation, and to result in less than efficient integration of activities, thereby deteriorating the CJV performance (Ding, 1997). Julin (2008) and Fey and Beamish (2000), concluded that there is a high correlation between inter-party conflicts and performance of an IJV. Similarly, Demirbag, Weir and Mirza (2015) highlighted inter-partner conflicts and way of facing those conflicts affected to the CJV performance. On the other hand, existence of conflict, in construction projects result in managers to employ their resourceful time and effort for conflicts management – resolution, rather than to utilize their valuable time on more other productive priorities (Julian, 2008).

Further, if conflicts are not appropriately managed, it will be intensified into a severe stage and become a dispute (Fenn, Lowe, & Speck, 1997). If the conflicts escalate into their severe stage (disputes), it will be ended up with costly litigation or other Alternative dispute resolution mechanism (Adnan, Shamsuddin, Supardi, & Ahmad, 2011).

As conflicts are inevitable in JVs, it is important to strategize properly to mitigate and handle conflicts (Yavaş et al., 2016). Based on studies carried out by Demirbag et al (2003), conflicts should not be avoided; instead those should be proactively welcome and channelled through agreed procedures to reach outcomes in terms of improved processes, procedures and business performance. It is also suggested that if conflicts are well managed, then that will create more innovative and productive positioning of the relevant organisation and the JV (Thakore, 2013). According to Turkalj, Fosic, Dujak and Strossmayer (2008), duly recognition and adequate conflict management leads to series of positive effect like improving creativity and innovation within the company.

Gunarathna, Yang and Fernando (2018) have defined the term Conflict management as “the process of dealing with or controlling conflicts in a way that they will not cause any negative effect on the project success”. As conflicts result in both functional and

dysfunctional consequences, it is essential for management to explore suitable methods and techniques of conflict management (Thakore, 2013). There are wide ranges of conflict management intervention available to deal with conflict at various organizational levels.

Thomas Kilmann Conflict Mode Instrument (1976) suggested that conflicts can be well managed by considering assertiveness and cooperativeness, and introduced characteristic interaction between five conflict management styles namely; competing, collaborating, avoiding, compromising and accommodating. Abd- Karim, Danuri and Mohomed (2014) provided some recommendations in managing conflict as; discussing the problem as open talk, self-patience, endurance and being decisive as well as educating all staffs in handling conflict. However, organizations should develop diverse-but-appropriate-strategies to resolve and manage conflicts as they arise before escalating to unmanageable level (Thakore, 2013).

When the local contractors do not have necessary capacity to carry out complex projects, JVs are commonly form in Sri Lankan construction industry (Kumaraswamy, 1997). Moreover, by way of forming a JV local construction firms are intended to expand their technical and managerial capacities (Weddikara & Devapriya, 2001). However, the conflicts are inevitable feature of JV entity. Therefore, deep understanding about the nature and sources of conflicts are prerequisite for the successful operation of JV (Ding, 1997). Hence, this research aims to investigate the conflict management approaches to be practice in JV contracts in Sri Lankan construction industry.

1.2 Problem Statement

Construction Joints Ventures (CJVs) have become a common form of business in construction industry, due to complexity and challenges associated with the delivery of construction projects (Mba & Agumba, 2018). According to Kumaraswamy (1997), developing counties like Sri Lanka use the Construction Joint Ventures (CJV) as a common form of business to carry out complex construction projects, in the purpose of transferring technology, and to prevent additional project cost incurs due to participation of only a foreign party to perform such complex projects.

CJV projects are governed by two contracts as CJV contract between partners and construction contract between CJV entity and the Employer. Therefore, this complex nature of JV construction projects itself confirms the inevitability of conflicts in CJV projects. Further, due to the involvement of parties who have different goals and objectives, conflicts are inevitable in JV contracts (Yavaş et al., 1994). Hence, Demirbag et al. (2003) highlighted that conflicts between partners, have an adverse effect on the performance of CJV. If conflicts are not managed in initial stage, that will have outcome of claims, counter claims, pains and unproductive relationships between participants (Acharya & Lee, 2006).

According to Abd-Karim et al., (2014), since conflicts are inevitable in JV contracts, construction practitioners should identify the proper approaches to embrace and handle conflicts. Further, Demirbag et al. (2003) highlighted that conflicts should not be avoided, they should be properly managed in a way that improved processes, procedures and business performance. As emphasized by Thakore (2013), due recognition and adequate management of conflicts lead to series of positive effects such as stimulation of creativity and innovations within the company, working quality improvement and prevailed tensions reduction.

However, prior to identification of suitable approaches to manage conflicts, there is a need to identify the root causes for these conflicts. Nevertheless, there are lack of researches, carried out in Sri Lankan context, to identify the causes of conflicts in CJV contracts in Sri Lankan construction industry. Therefore, this study fulfils the current research gap and examines the causes and root causes behind the conflicts in CJV contracts and effect of those conflicts in construction joint venture projects in Sri Lankan Construction Industry. Further, this research investigates existing conflict management approaches and proposes suitable approaches to be followed in each stage of the CJV life cycle to manage conflicts in JV contracts in Sri Lankan construction industry.

1.3 Aim and Objectives

The aim of this study is to develop a framework for managing conflicts in Joint Venture Contracts in infrastructure projects in Sri Lanka.

In order to achieve the aim, following objectives are framed.

1. Review JV contracts, conflicts in JV contracts and conflict management approaches
2. Examine conflicts and their root causes of JV contracts in Sri Lankan construction industry
3. Investigate the existing approaches for managing conflicts in JV contracts in Sri Lankan construction industry
4. Propose suitable approaches for managing conflicts in JV contracts in Sri Lankan Construction Industry

1.4 Research Methodology

A comprehensive literature review was carried out through books, journals, e- books, research papers, past dissertations and articles to obtain basic and clear idea about JV contracts in global construction industry.

This study used qualitative approach. Four cases studies using infrastructure projects, which are carried out through CJV contracts in Sri Lankan construction industry were selected for empirical investigation. Semi structured interviews were conducted with the representatives from each CJV partner. Through these in-depth interviews, causes and root causes for conflicts were found. Further details related to existing conflict management approaches and suitable approaches for management of conflicts were identified through interviews. CJV agreements of the cases were reviewed to study the CJV management and control procedure.

Data collected were analysed using code-based content analysis using NVivo software and cross case analysis. Five-why analysis was used to identify the root cause of conflicts.

1.5 Scope and Limitations

The research problem was discussed considering the CJV projects carried out in Sri Lankan construction industry. This study focused on conflicts arose between the CJV partners. The cases were selected from infrastructure projects; as, the JV contracts are usually used on those projects to minimize the technical and administrative

complexities, which may arise in both civil and building projects. Representatives from each CJV partner who has thorough knowledge about the CJV life cycle was selected for interviews and carried out in depth study with the available time. Due to difficulty on finding data from completed projects, data were collected from the ongoing projects. Therefore, only, beginning, formation and operation stage of CJV life cycle was studied in this research.

1.6 Chapter Breakdown

The dissertation contains six chapters. Brief overview of the chapters contains in Figure 1.1.

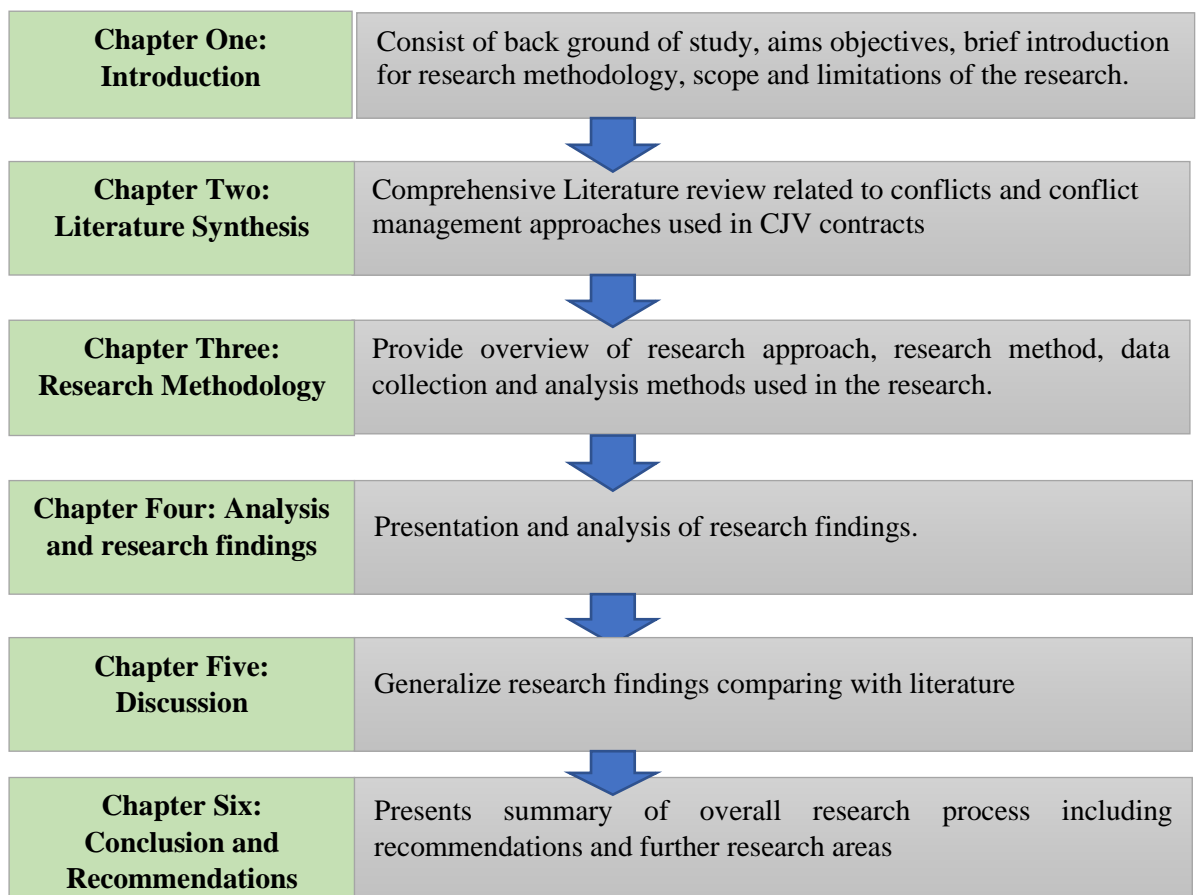


Figure 1.1 : Chapter Breakdown

CHAPTER 02

LITERATURE SYNTHESIS

2.0 LITERATURE SYNTHESIS

2.1 Introduction

Chapter 2 provides a comprehensive literature review in order to identify the prevailing knowledge about the conflicts and conflict management approaches in JV contracts. This chapter structured under headings of JV contracts, types of JV contracts in construction industry, life cycle of JV contract, and advantages and disadvantages of JV contracts. Further, conflicts among JV entities of construction industry were studied in terms of sources, effect of conflict management and strategies for management of conflicts. Finally, this chapter established the need of identification of root cause for conflicts in JV projects and management of conflicts in JV projects.

2.2 The Concept of Joint Venture (JV)

Joint Ventures (JV) have become a dominant form in international business growth for multinational enterprises seeking expansion opportunities in both developing and developed countries throughout the world (Prasitom and Likhitruangli, 2015). According to Kolbehdari and Sobiya (2014), “JV is a type of long-term alliance among partners that creates an exceptional opportunity for combining distinct merits and complementary resources”. Noorwood and Mansfield (1999) state that JV is a commercial agreement amongst two or more companies to reach common goal, and to obtain work easiness and cooperation with the use of shared resources. Hence, Sillars and Kanagari (2004) stated that, JV is a temporary entity formed with the intention of better performing a project.

The strategic intent to enter into JV is access to new markets, to adhere with specific government policy, due to business capacity, technology transfer or economies of scale, share/transfer risk, financial strength and/ or for combination of pool of general resources and special skills (Adnan, 2008; Pettit & Jelinek, 2019). Further, Noorwood and Mansfield (1999) identified that participation for overseas projects, maintain an overseas presence when the local market share is low, spread financial risk, bringing outside experts, and maximize local resources utilization as the motivation factors to enter into JVs. According to Kale et al. (2019), parties enter into the JV as a part of

their competitive strategy, for the purpose of technology transfer, and/or to share and reduce political and commercial risk.

Construction organizations frequently use JVs with the intention of enhancing competitiveness by pooling construction resources, sharing risk and, entering into new markets (Mohamed, 2003). According to Kumaraswamy (1997), JVs are commonly used in construction industry to perform complex infrastructure projects that need diverse resource inputs from multidisciplinary teams. Often, in developing countries, when the contractors are inadequate with necessary expertise or finance to carry out more complex projects, they form JVs with other contractors for the purpose of gaining access to positional assets, technologies and organizational capabilities (Pettit and Jelinek, 2019).

2.3 Construction Joint Venture

There are two types of JVs identified in literature as (a) equity JV and (b) non-equity or contractual JV (Ho, 2009). Equity JVs are formed when two or more parties bring assets to an independent legal entity, whereas contractual or non-equity JVs are formed by having variety of contractual agreements (Hennart, 2002).

According to Ho (2009), there is no straight forward structure of JV, which belongs to either equity JV or contractual JV in construction industry. In construction industry, when an opportunity arises to combine the skills, capacity, resources etc, parties enter into a written JV agreement for duration of the given project (Naylor and Lewis, 1997). There is no new legal entity formed for Construction Joint Ventures (CJVs), but the legal and financial bond in-between JV partners are not less than new entity (Ho, 2009). Further to Ho (2009), in CJVs, all partners are jointly and severally liable for the all consequences of the construction project (Ho, 2009). Figure 2.1 shows the general arrangement of construction projects carried out by the JV entity.

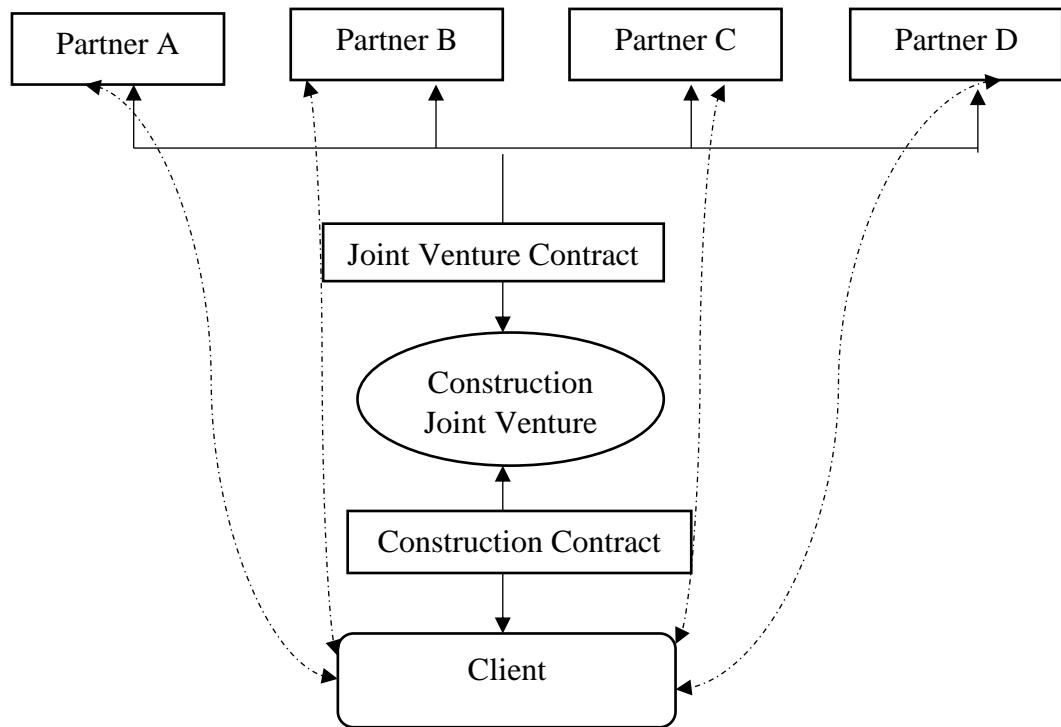


Figure 2.1: Contractual arrangement of projects perform by a JV entity

Source: Kolbehdari and Sobhiya, 2014

As shown in Figure 2.1, JV construction projects govern by two contracts. One contract is to govern the internal relationships among the partners and other contract is to govern the relationship between CJV entity and the employer (Kolebehdahati & Sobiya, 2014; Hong, 2014). Previous studies identified different arrangements for contract within JV partners; depend upon the involvement of each partner.

2.4 Types of JVs Use in Construction Industry

Kale et al. (2019) identified three types of Construction Joint Ventures (CJVs) depend on the method of scope/share distribution among CJV partners as: (a) Integrated, (b) Non-Integrated and (c) Combination CJV. Moreover, Hong (2014) classified JVs into two types as international CJVs and Domestic CJVs based on the nationality of parties involved in JVs. Following section elaborate these different types of CJVs.

2.4.1 Joint Ventures Based on Scope Distribution Among JV Partners

Based on scope or share distribution among CJV partners, there are three types of JV contracts.

- **Integrated CJVs**

CJV partners work collaboratively like a single entity and share resources to deliver the project (Hong, 2014). This type of joint ventures is frequently used for the projects, which are immense in size and problematic in work allocations (Kale et al., 2019). According to Ho et al (2009), integrated JVs governance structure have features such as; all partners do jointly share the profit and risk, management team will take major decisions, which are to be followed by other partners, and where it is required coordination and communication duly through all levels of CJV.

- **Non-integrated CJVs**

In non-integrated CJVs whole scope of work has been divided into separate sections and each partner takes over responsibility to run their own technical and administrative element of work (Hong, 2014). These types of CJVs are used when the total work can be divided into different sections. However, the disadvantage of these types of projects is that certain contractors have to work hard than others; but that may lead to internal conflicts (Kale et al., 2019). According Ho et al (2009), non- integrated CJV governance structure has features such as; each firm is technically and financially liable for its assigned task; each firm takes its own decision on assigned task without the consent of other partners; and coordination and communication are only limited to higher level managers and minimum for individuals.

- **Combination CJV**

Combination CJV is a combination of above two types, where each member takes on specified scope of work and responsibility for profit or lost associated with that scope of work. However, in this method preliminaries and other general conditions related to each scope of work are shared between partners (Kale et al., 2019).

2.4.2 Joint Venture Based on The Nationality of Parties Involved

Based on the nationality of parties involved, there are two types of JVs.

- **International CJVs**

Multinational parties are involved in international CJVs (Hong, 2014). These are commonly used in developing countries in the occasions where the domestic contractors cannot offer with adequate expertise and capacity of finance to undertake complex projects (Hong, 2014).

- **Domestic CJVs**

This is a type of CJV are formed between the partners from a single country. This enables to share resources of the national firms, transfer of expertise technology and adopt global competition (Cariloll, 1996).

2.5 Life Cycle of a CJV Project

The entire life cycle of a construction CJV project consists of four main phases; (a) beginning phase, (b) formation phase (c) operation phase and (d) termination phase (Prasitsom & Likhitrungsilp, 2015). Following sections elaborate these phases.

2.5.1 Beginning phase

The principal of CJV is amalgamation of few contractors, where they mutually agree to enter into a commercial agreement. This phase mainly involves on investment decision and partner selection. Prior to enter into JV, each partner has to take the investment decisions including establishment of objectives, by conducting research of the project, analysing its existing status (eg; assets, financial, amount of work in hand), and evaluating all possible investment options and selection of best partners (Kolebehdahati & Sobiya, 2014).

2.5.2 Formation phase

Once a group of contractors have decided to jointly accept and originate a construction project, a JV agreement is formulated between the parties (Prasitsom & Likhitrungsilp, 2015). In this stage, administrative structure of the JV is decided, pre bid agreement is signed between parties and the tender is submitted to the client as per the requirements specified in conditions (Sathsarani, Gunathilake & Wimalasena, 2016). If the parties are awarded with the contract, formal CJV agreement also signed

at this stage, adhering to requirements specified in conditions of contract (Sathsarani et al., 2016). Depend on the resource contribution of parties, the conditions in the agreement has to be varied (Skaik, & Oweineh, 2019). According to Kwok and Skitmore (2000), at the contract formation stage, parties have to clearly identify and negotiate various critical factors such as profit and loss distribution, contribution of each partner, controls and decision-making policy, risks and liabilities sharing, composition of decision-making body, and dispute resolution procedures to name a few.

2.5.3 Operation phase

Operation phase of JV project contains two administration parts; the construction project and JV organization (Prasitsom & Likhitruangsilp, 2015). Usually, JVs are difficult to manage as parties hold different managerial skills, beliefs, values, and traditions (Ozorhon, Arditi, Dikmen & Birgonul, 2010). Most of the JVs are ended up with the disputes between partners. Therefore, in order to avoid disputes, management control type should be carefully selected.

2.5.4 Termination phase

At the completion of the project, the temporary JV entity form on the specific purpose is terminated. Accordingly, at this stage ending matters are negotiate with parties and dispute resolution is held, if necessary (Sathsarani et al., 2016). After termination of JV, the liquidation of the JV entity has been held, except if any other adjustments on property or possession has been previously agreed between parties upon JV agreement (Prasitsom & Likhitruangsilp, 2015).

2.6 Advantages and Disadvantages of Forming a CJV

Advantages and disadvantages of international and domestic JV applications that were identified by the previous studies are summarized in Table 2.1. It further reviewed common and specific advantages and disadvantages of these two types of JVs.

Table 2.1: Advantages and disadvantages international and domestic JVs

	Advantages	Disadvantages
Common to International JV and Domestic JV	<ul style="list-style-type: none"> • Improvement of JV partners competency and market strength • Pooling of knowledge and resources Gaining reputation within the construction industry • Different parties of JV can have different skills levels such as technical skills, human skills, marketing skills which will be useful in planning, time and quality improvements • JVs make large projects feasible and possible by sharing risk, resource requirements etc. • An ability to select and recruit right staff relatively easily within the existing carder than recruiting from the external market 	<ul style="list-style-type: none"> • Difficulty for the senior management to build up working environment throughout the joint venture. • Difficulties with joint venture financial arrangement • Involvement of number of parties result in decision making become a slow process • Lack of total control of JV • Loss of autonomy • Loss of proprietary information • Unmanageable complexity
Specific to International JV	<ul style="list-style-type: none"> • Technology transfer- Able to acquire new knowledge and technology, in long run it will beneficial to minimize future dependency on foreign expertise and able to use local resources • Enable to access to new markets of the world while sharing the associated risks levels • Ability to take on and maintain an international workload 	<ul style="list-style-type: none"> • Collaboration of parties who has different culture, attitudes may result in conflicts, which eventually result in collapse of JV • Disagreement over the nature of currency payments or form of exchange rate • Project cost will be high when using international resources
Specific to Domestic JV	<ul style="list-style-type: none"> • Rather than hiring from international market greater access for experts available in local market • Rather than using international resources with the use of local resources project cost will be reduced • Reduce the risk of having conflicts due to cultural and language barriers 	<ul style="list-style-type: none"> • Expertise gain through collaboration may create the competitor in local market
Carrillol, (1996); Girmschield and Brockman, (2010); Kale et al, (2019); Noorwood and Mansfield, (1999); Hoskin, McFadyen and Finn (1996)		

2.7 Joint Venture Performance

According to Demirbag et al (2003), interparty culture distance, inter party commitment and inter party conflicts are highly affecting the JV performance. Similarly, conflicts between JV partners are also highly affected for the JV performance (Ding, 1997). Factors contribute to the problems in implementing JV includes; variety of organizational sizes of participating partners, difficulties in establishing inter-partner trust, and mutual understanding and inconsistencies in management practice. Cultural differences are identified as the major cause of failure of international CJVs (Munns et al, 2000). According to Abd-Karim et al (2014), conflicts are the major cause for failure of JV. Research carried out by Reus and Rotting (2009) highlighted that due to great effort taken by Chinese decision makers to minimize the effect of conflicts, by way of avoiding direct confrontation, open criticism and controversial topics, there is less harmful from conflicts for the performance of Chinese JV projects compared to other countries. Conflicts: A general overview

Conflict is a situation of incompatible interests and ideas of few parties involved in one unit (Lee, 2008). Similarly, Popovic and Hocenski (2009) defined a conflict as a competition between people who has contrasting; needs, ideas, attitudes, values, or goals to establish their own desires. Further, Omisore and Abiodun (2014) define, conflict as situation where one party's ideas or interest are opposed by another party. Therefore, a conflict can be defined as a situation where, two or more parties have incompatible approach towards sharing the common goal(s).

According to Verma (1998) and Omisore and Abiodun (2014), conflicts were defined in different ways. First definition is based on the traditional view which introduced conflicts as situations that creates negative impact, and leads to decline performance when the level of conflict increases. The other definition is based on behavioural view, which defines conflicts as a natural and inevitable phenomenon which can have both positive and negative impacts depending on how they are handled. According Verma (1998) and Omisore and Abiodun (2014), on the newest perspective on conflict, the

interactionist view, which assumes conflicts as a necessary component for a project to increase its performance.

2.8 Types of Conflicts

Conflicts encountered in projects can be classified into two categorized as internal and interface conflicts. Internal conflicts experience among project participants, whereas interface conflicts occur between internal and external stakeholders of construction project (Awakul & Ogulan, 2002). Hence, Leung, Liu and Ng (2005) categorize conflicts as those relating to task and relationship. Task conflicts are referred as differences in viewpoints and opinions pertaining to a group task, whereas relationship (or emotional) conflict is usually created due to personality clashes or interpersonal tension characterized by anger, frustration, and other negative feelings (Dirks & Parks as cited in Omisore and Abiodun, 2014).

2.9 Causes for Conflicts in JV Contracts

CJV is a temporary assemble organization with the involvement of various parties who have different goals and needs (Sillars and Kanagari, 2004). Accordingly, the unique set of objectives each partner has inevitably result in conflicts as an inevitable feature of JV (Yavas, Eroglu and Eroglu,1994). According to Hennart and Zeng (2002), when the parties comes from different cultural backgrounds, occurrence of conflicts will be magnified.

On the other hand, conflicts arise in a CJV entity may highly affect for the performance of the particular construction project (Fey and Beamish, 2000). According to Gale (2004), understand about the potential points where conflicts will arise is paramount important for the successful operation of JV. Different studies carried out in different countries around the world have identified various causes that result in conflicts in JV projects. Those identified conflicts are categorized and summarized in Table 2.2 based on the classification identified by Demirbag et al (2011).

Table 2.2: Causes for conflicts

Conflicts	a	b	c	d	e	f	g	h	i
Issues related to terms of CJV agreement									
Objectives of the ventures are vague or ambiguous, and not communicated to all parties in the venture	x							x	
Contractual provisions are not drafted in a proper way that shift project risk for the party who is ready to bare it		x			x				
Ambiguities in contractual clauses		x	x						
Different ways followed by parties in interpretation of terms of JV contract		x					x		x
Disagreement over terms of contract									
Disagreement over making changes in contract					x		x		x
Issues related to management and control of JV entity, division of profit or loss									
Control over key decisions makings									x
Attempt by one party to obtain dominant control									
Disagreement over profit retention and division of benefits		x							x
Disagreements over expanding operations or maintain at a certain size							x		x
Incompatibility or Disagreement over management and operational strategies	x	x		x				x	
Failure of parties to deal with changes and unexpected conditions occurred		x							
Poor communication between project participants	x	x							
Conflict related to control within the CJV entity and link with parent company									
Refusal of parental firm's resource sharing that requires to achieve the goals of JV entity					x				x
Disagreement over hiring policies					x		x		x
Committing large portion of JV output to the parent company							x		x
Partners not provide sufficient leadership and support on early stages	x								
Each partner has different objective on participating for the joint venture and they are not tally with each other		x		x				x	
Imbalance in expertise level and investments or assets provide by each party in the venture							x		x
Disagreements related to role and functions to be performed by each partner in JV					x		x		x
Issues regarding royalties and payments to any of the partners							x		
Issues on separating operations from parent company							x		x
Difference in size of organizations							x		
Emotional factors									
Difference in opinion, stress, complains and frustration, Blaming, sarcasm and uncooperative	x							x	
Difficulty in establishing inter-partner trust, mutual understanding and inconsistencies	x	x						x	
Social and cultural differences from home to host country				x		x			

Conflicts	a	b	c	d	e	f	g	h	i
Issues providing resources and performance of Joint venture									
Disagreement between providing funds required for the operation							x		
Disagreement on performance and performance evaluation							x		
External factors									
Unrealistic expectations of the parties, where parties are unable to achieve them due to employer who have insufficient finance		x						x	
Struggle for limited resources								x	
[a] Demirbag et al (,2003); [b] Adnan et al, (2012); [c] Chan & Suen, (2005); [d] Gale, (2004); [e] Ding (,1997); [f] Julian, (2008); [g] Hennart & Zeng, (2002); [h] Femi, (2014); [i] Yavas et al, (1994)									

The above table contains the causes behind the conflicts identified in key literature. According to above studies, incompatibility of objectives, disagreement over management and operational strategies, disagreement related to role and functions performed by each party to the JV, and cultural difference are some common causes for conflicts between JV entities.

2.10 Effect of Conflicts in Joint Venture Projects

Conflict is an inevitable fact of human existence (Fisher, 2000). According to Ruuska and Teigland (2008), having a conflict sometimes creates greatest challenge and a burden to the construction process. According to Deutsch and Coleman (as cited in Fisher, 2000), conflicts cannot have either good or bad effect, instead based on the way how a conflict is handled that determines it is either as a constructive or destructive conflict. The constructive conflicts aid to achieve the goal of the project, while enhancing the performance, and the destructive conflicts are reducing the group performance and leads to decrease performance (Omisore & Abiodun,2014). The relationship between level of conflicts and level of organizational performance varies as shown in Figure 2.2 (Buchanan and Huczynski, 2001).

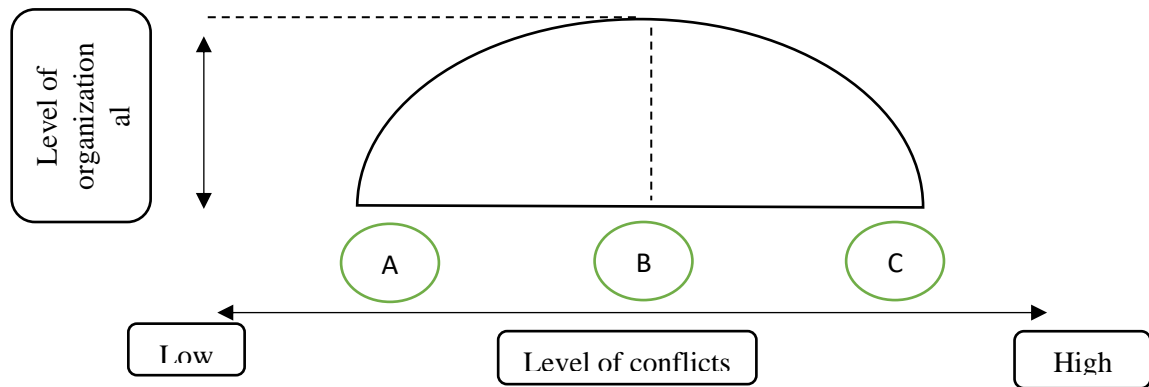


Figure 2.2: Relationship between level of conflicts and level of performance

Source: Buchanan and Huczynski, 2001

According to above Figure 2.2, Level A; low level of conflicts in an organization result in low level of performance. When the level of conflicts landed to optimum level of conflicts marked as Level B, high level of organizational performance can be expected. However, when the conflicts continue to escalate and reached to third level marked as C, level of organizational performance decrease. Accordingly, the above graph highlights that until reaching to the certain level conflicts have some positive effect over the organizational performance.

Further to Julian (2008) and Demirbag et al (2003), if conflicts are not properly managed on its early stages, after a certain point, existence of conflict result in management to spend valuable time and effort in resolving or managing the conflicts, than spending those valuable time on more productive ways. Hence, Dreu and Vianen (2001) stated that if conflicts weaken the relationship between parties, which will result in less productivity and team effectiveness.

In JV contracts, inter party conflicts and conflictual behaviour of partners is highly affecting the JV performance (Demibag, Weir & Mirza, 2003; Ding, 1997). Conflicts in JV projects often creates; dissatisfaction amongst JV partners which ultimately create performance problems, waste of time and capital, and social, economic and political consequences (Cassons as cited in Yavas etal,1994).

If conflicts not managed properly that escalate into disputes, and to resolve these disputes requires expensive dispute resolution (Fenn, Lowe & Speck, 1997). Dispute

resolution with lawyers, judges/arbitrators, and jury members result in wastage of time and money, exceeding the estimated project cost (Thalgodapitiya, 2010).

On the other hand, ultimate effect of the conflict cannot be forecast and, there is a tendency of escalating the conflicts in to sever stage which leads to non-productive results or else productive results (Popovic & Hocenski, 2009). Therefore, though the conflict has the slightest effect, needs to give attention for any type of conflict before it destroys the successful project completion (Omisore and Abiodun, 2014). Further, as conflict is an inevitable phenomenon, thorough understand and effective management of conflicts, pave the way towards increasing both satisfaction and productivity of social relationships (Fisher, 2000).

2.11 Conflict Management

Conflict management is a process of dealing with or controlling conflicts (Sehrawat & Sharma, 2014). According to Rahim (2002), conflict management not only indicates avoidance, reduction or termination of conflict, it also contains design operative macro level strategies to minimize the destructive functions and enhance constructive functions of conflicts.

Femi (2014) recommended that the occurrence of conflicts has to be expected, and need to plan for them, face them and resolve them with adequate conflict management strategies. Tjosvold (2006) stated that managing a conflict constructively will enable to deeply understand the conflict, and reach solutions more productively, while strengthening the relationships of the parties who are related to the conflict. Sehrawat and Sharma (2014) stated that for the effective management of conflicts, heads have to understand; causes, theories, approaches and strategies of conflict management. According to Jameson (1999), selection of suitable strategy depends on the factors such as; content of conflict, relationship between parties and situation.

Literature has identified various conflict management models developed by various parties based on the casual role plays by parties for different conflict situations (Thomas, 1988). Blake and Mouton (1964) proposed the first conceptual scheme for handling interpersonal conflicts. Thus, Blake and Mouton's (as cited in Atteya,2012)

developed two-dimensional management grid which plot the styles forcing, withdrawing, smoothing, compromising and problem solving, in terms of concern for production versus concern for people.

Hence, Thomas - Kilmann (1976) extended this model including intention of parties involved, and classified modes using two dimensions called; assertiveness (concern for self) and cooperativeness (concern for other). Thomas-Kilmann Mode (1976) comprise of five conflict management modes named; competing, collaborating, compromising, avoiding and accommodating. Further, Rahim and Bonoma (1979) developed five conflict management styles based on the modes proposed by Blake and Mouton and Thomas- Kilmann. Rahim and Bonoma (1979) identified five interpersonal conflict handling styles with superior, subordinates and peers as; integrating, obligating, dominating, avoiding and compromising.

Verma (1998) identified three major steps for; proper conflict management. First step is getting ready for the conflict; expecting the conflicts and planning to face the conflict. Second step is facing the conflict by understanding its real nature. Third step is resolving conflicts; look for win-win alternatives, cut the loose when necessary and formulate conflict management strategies. Accordingly, prior to start management of conflicts, proper identification is necessary. Three outcomes are resulting from these conflict management approaches; Win-Lose approach, where one party gains at the cost of other; Lose-Lose approach, where both the parties lose and Win-Win approach, where both the parties gain result (Sehrawat & Sharma, 2014).

2.12 Conflict Management in JV Projects

Different firms to the JV have different goals and ways of operation, and hence, inter-party conflicts often exist in JV entities (Fey and Bemish, 1999). Fail to handle conflicts often result in failure of JV (Naguyen, 2011). Therefore, construction practitioners have to identify proper mechanism embrace and handle the conflicts (Ad Karim et al, 2014). A study of Demirbag et al., (2003) highlights that conflicts between partners, which are less frequent has more adverse effect on the performance of CJV. Moreover, the conflicts which are more frequent but less intensive on operational

matters have a tendency to increase trust and ultimately contribute to improve individual knowledge and strengthen relationship (Demirbag et al., 2003).

Hence, Julin (2008) stated that small amount of conflicts is healthy for a JV, as it forces management to evaluate their decision more carefully. Accordingly, instead of avoiding conflicts, they should be welcomed and directed through agreed path, to generate desired outcomes in way that; improve processes, procedures and business performance (Demirbag et al.,2003).

Further to Karim et al (2014), if conflicts are well managed, that brings the JV entity towards more innovative and productive position (Karim et al., 2014). The proper strategy for management of conflicts highly depends on the cultural background and ownership control position (Nguyen, Larimo & Ali, 2015).

Since conflicts are highly affected to the JV performance, parties need to identify effective strategies for management of conflicts in JV entity (Ding, 1999). Accordingly, to maintain the effective JV relationship, persons responsible for the management of conflict have to identify the suitable strategy for each scenario (Naguyen, 2011). Various studies carried out throughout the world have identified the different strategies or approaches to manage conflicts in JV projects. Table 2.3 summarizes those strategies identified by various researchers. Further, those strategies were classified into two categories as; proactive and reactive conflict management approaches, as per the classification identified by Naguyen (2011) for conflict management in international JVs.

Table 2.3: Summary of approaches to manage conflicts in JV contracts

Conflict management approach	a	b	c	d	e	f	g	h	i	j	k	l	m
PRO-ACTIVE APPROACH													
Selection of suitable partner who fit & compatible on;											x	x	
• Strategic fit		x											
• Organizational fit		x											
• Cultural fit		x											
• Task related features	x												
• Partner related features	x												

Conflict management approach	a	b	c	d	e	f	g	h	i	j	k	l	m
Obtain enough information about partner prior to start negotiation												x	
Identification and align partner's objectives	x									x		x	x
Clear statement of JV agreement												x	
IJV contract design													
• Share/split control			x									x	
• Measuring each partners performance				x						x			
• Agreement on profit/loss sharing considering the gain of all partners										x			x
Building relational quality													
• Trust					x								
• Commitment					x								
• Communication						x				x			
• Establishing conflict resolution procedure							x			x			x
Having trainings for the staff who involved in conflict management									x				
Appointing conflict management team									x				
Discussing problem as open talk, self-patience and endurance									x				
Discuss ways to avoid conflicts										x			x
Empower locally based foreign managers to make decisions													x
RE-ACTIVE APPROACH													
Conflict handling steps	x												
• Assessment	x												
• Acknowledgement	x												
• Action	x												
• Analysis	x												
Selecting right handling strategy													
• Problem solving											x		
• Compromising											x		

Conflict management approach	a	b	c	d	e	f	g	h	i	j	k	l	m
• Forcing									x				
• Legalistic											x		
• Avoiding											x		
• Accommodating									x				
• Competing									x				
• Collaborating									x				
• Integrating											x		
• Obliging											x		
• Dominating											x		
Express understanding of other parties' view										x			x
Expand the ways of view the problem											x		
Phrase problem correctly											x		
Develop high tolerance and understanding for different cultures													x
Post-conflict follows up													
• Real firm commitment								x					
• Rebuilding trust								x					
[a]Naguyen (2011); [b]Geringer (1988); [c]Luo (1998); [d]Barden et al (2005); [e]Naguyen & Larmio (2011); [f]Das & Teng (1998); [g]Ross (2009) ; [h]Fey & Bemish (1999);[i]Borrior & Victor (1998); [j] Ab-Karim et al (2019); [k] Rahim (2002); [l.] Gale (2004); [m] Beamish (2009)													

As summarized in above table, literature suggested various approaches for management of conflicts. Among those strategies' selection of suitable partner, align partners objectives, measuring partners performance and agreement on profit and loss are some common pro-active strategies identified in those researches. Problem solving, compromising, forcing, legalistic, avoiding, accommodating, competing collaborating, integrating, obliging, and dominating are some reactive strategies proposed in different studies based on the conflict management styles identified by Thomas-Kilmann (1976) and, Rahim and Bonoma (1979).

2.13 JV Practice in Sri Lankan Construction Industry

Economic changes of the country closely affect to the demand and supply of the construction industry (Weddikara & Devapriya, 2000). Hence, according to

Weddikara and Devapriya (2000) there are many deficiencies in the supply side of construction firms in Sri Lanka, in terms of financial, technology and management.

After the end of war, there was a considerable development on infrastructure development projects and post war reconstruction and rehabilitation projects (Kumarasawamy, 2006). However, there are some occasions where local contractors do not have required expertise to carry out some complex projects (Fisher and Ranasinghe, 2001).

Therefore, multilateral agencies and governments in developing countries like Sri Lanka began to encourage foreign construction firms to form JVs with local construction firms. Technology transfer is one of the key benefits expected from the involvement of foreign firms (Ganesan, 2006). Moreover, forming a JV enables to minimize the deficiencies of local construction firms and improve the technological and managerial capacities (Weddikara & Devapriya, 2001). Hence, use of JV leads the local construction industry towards the international market, by enhancing the capacity, knowledge of local contractors (Raffery ,1998; Ganesan & Kelsey,2006).

Besides, that the government also under the process of drafting the construction bill to regulate the activities of construction industry (Weddikara & Devapriya, 2000). Accordingly, under the proposed construction bill, even for the donor funded projects, emigrant contractors necessary to form a CJV with local establishment (Weddikara & Devapriya, 2000). Accordingly, it seems that there is an increasing demand to form CJVs in Sri Lankan construction industry. However, conflicts are inevitable feature of CJV entity. Therefore, deep understanding about the nature and sources of conflicts is necessary for the successful operation of CJV (Ding, 1997).

2.14 Conceptual Framework

Prior studies carried out in different contexts highlighted some strategies for the management of conflicts in JV projects. Additionally, Naguyen (2011) classified those approaches into two categories as; proactive approaches and re-active approaches. However, Naguyen (2011) has not clearly categorize those approaches for each stage CJV life cycle. Moreover, in the above studies, those approaches were not proposed after identification of root causes behind conflicts in CJV projects.

In addition, as highlighted in the above literature, selection of suitable strategy for management of conflicts highly depend on the culture. Thus, there are no researches carried out in the Sri Lankan context to identify the causes behind the conflicts and strategies for management of conflicts in Sri Lankan context. Therefore, focus of this study is to address the above gap and develop a framework for management of conflicts in JV contracts in Sri Lankan construction industry. In order to achieve above aim, a conceptual model was developed. Key issues identified above were taken as the basis for develop on conceptual framework.

- i. Identify the causes behind the conflicts in each stage of CJV life cycle
- ii. Identify the root causes for conflicts in each stage of CJV life cycle
- iii. Identify the effect of those conflicts on CJV performance
- iv. Investigate approaches to be followed in each stage of CJV life cycle to manage conflicts.

Figure 2.3 shows the conceptual framework developed to facilitate the empirical investigation in order to address the aforementioned key focus areas.

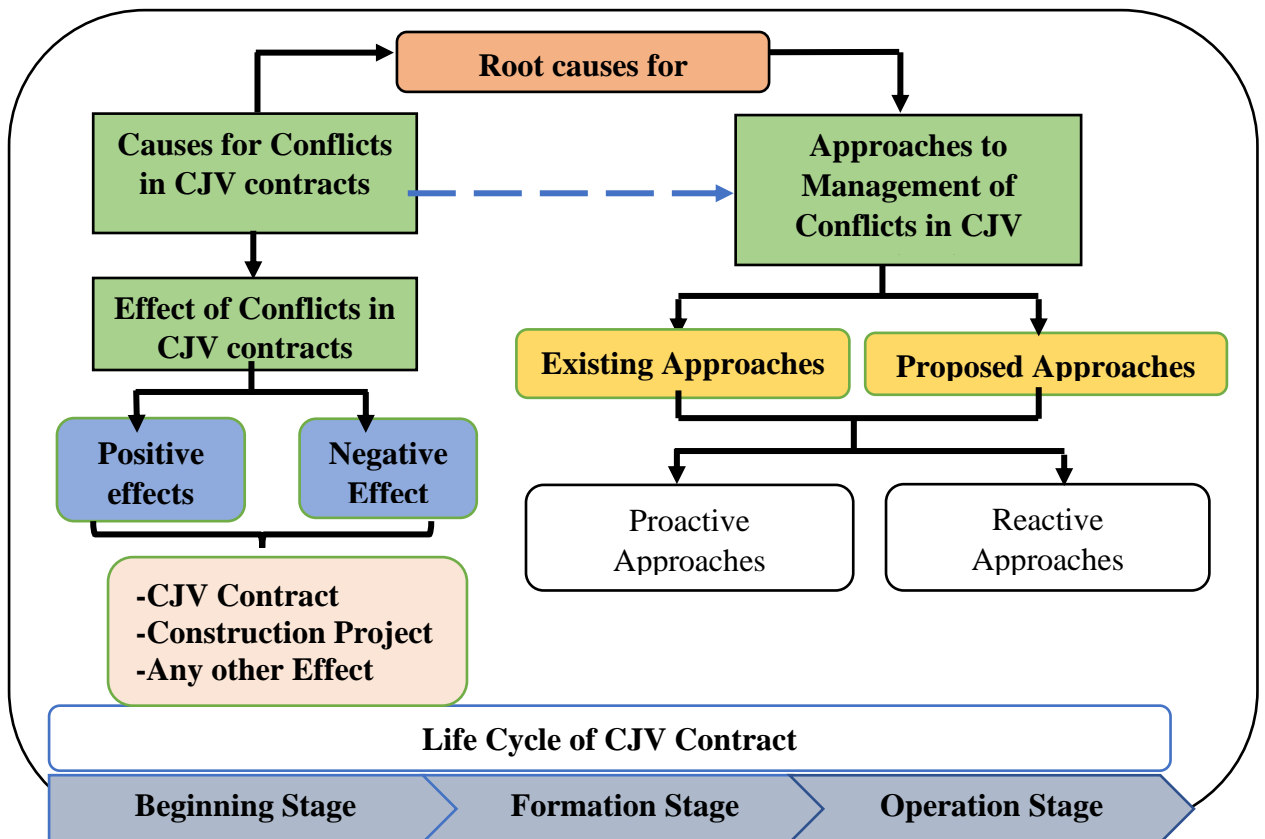


Figure 2.3: Conceptual framework

As shown in Figure 2.3 all data were collected considering the beginning stage, formation stage and operation stage of JV life cycle. Termination stage was not considered, as the data were collected from on-going projects. In this approach, first the causes for conflicts occurred in each stage of the CJV life cycle were identified. Then the research goes into two directions.

In one end the effect of those conflicts was identified. based on two categories named: positive and negative effects. These effects were identified considering the: CJV contract, Construction project performance, and any other effect. In the other side the root causes for those conflicts were identified. Thereafter, by way of studying existing conflict management approaches, and other suitable approaches proposed by the interviewees, suitable proactive and reactive conflict management approaches for manage of conflicts in each stage were identified.

2.15 Summary

This chapter provides the prevailing knowledge on the subject area. According to literature findings, conflicts are natural phenomena encountered in construction projects. In a construction project which carried out by a JV entity, there may be a wide range of conflicts within the CJV entity. Conflicts between the parties of CJV entity have the considerable effect on the performance of the CJV. Therefore, prerequisite identification of causes for conflicts in CJV contracts and identification of conflict management approaches to minimize effect of those conflicts is important for the successful operation of CJV entity.

During past few years, there is a considerable development in the construction industry of Sri Lanka. Therefore, there is increasing demand to form CJVs in Sri Lanka. Accordingly, identification of conflicts in JV entity and management of those conflicts will be much beneficial for successful completion of a construction project. However, there are lack of researches conducted in the perspective of conflicts between JV partners, and management of conflicts between JV partners in Sri Lankan Construction industry. Hence, this chapter finally developed a conceptual framework to facilitate empirical investigation in order to achieve the research aim.

CHAPTER 03

RESEARCH METHODOLOGY

3.0 RESEARCH METHODOLOGY

3.1 Introduction

Chapter presents the research methodology adopted in the study to achieve the aim and objectives. Chapter explains the research process, research philosophy, research approach, research technique adopted for data collection and data analysis, to fulfil the objectives successfully.

3.2 Research Process

Research process is a series of link stages that has to be undertaken to complete the research project (Saunders, Lewis and Thornhill,2019). Research process adopted in this study is shown in Figure 3.1.

3.2.1 Background study

Initially, a background study was carried out to familiar with the conflict and conflict management in JV contracts and to identify the research gap. It is carried through journal articles, books, conference articles, reports and previous dissertations. The initial study evident that, there is an increasing demand to perform the complex projects through a JV entity, specially in developing countries like Sri Lanka. Further it is evident that conflicts occurred in JV contracts have considerable effect on the performance of JV contract and ultimately on CJV projects.

3.2.2 Identification of research problem

Identification of research problem is vital for the success of any research, as the research carried out seeking to provide solutions for problems (Kothari, 2004). The background study helps to identify the research gap and establish the research problem related to this study. The identified problem in this study was; although there are various researches carried out in foreign countries related to conflicts and conflict management in CJV contracts, there is lack of a research study carried out in Sri Lankan context. Therefore, this research gap is led to development of aim and, objectives of the research. Further, the scope and limitations of the research was established. The literature review descriptively addresses the research problem formulated at this step.

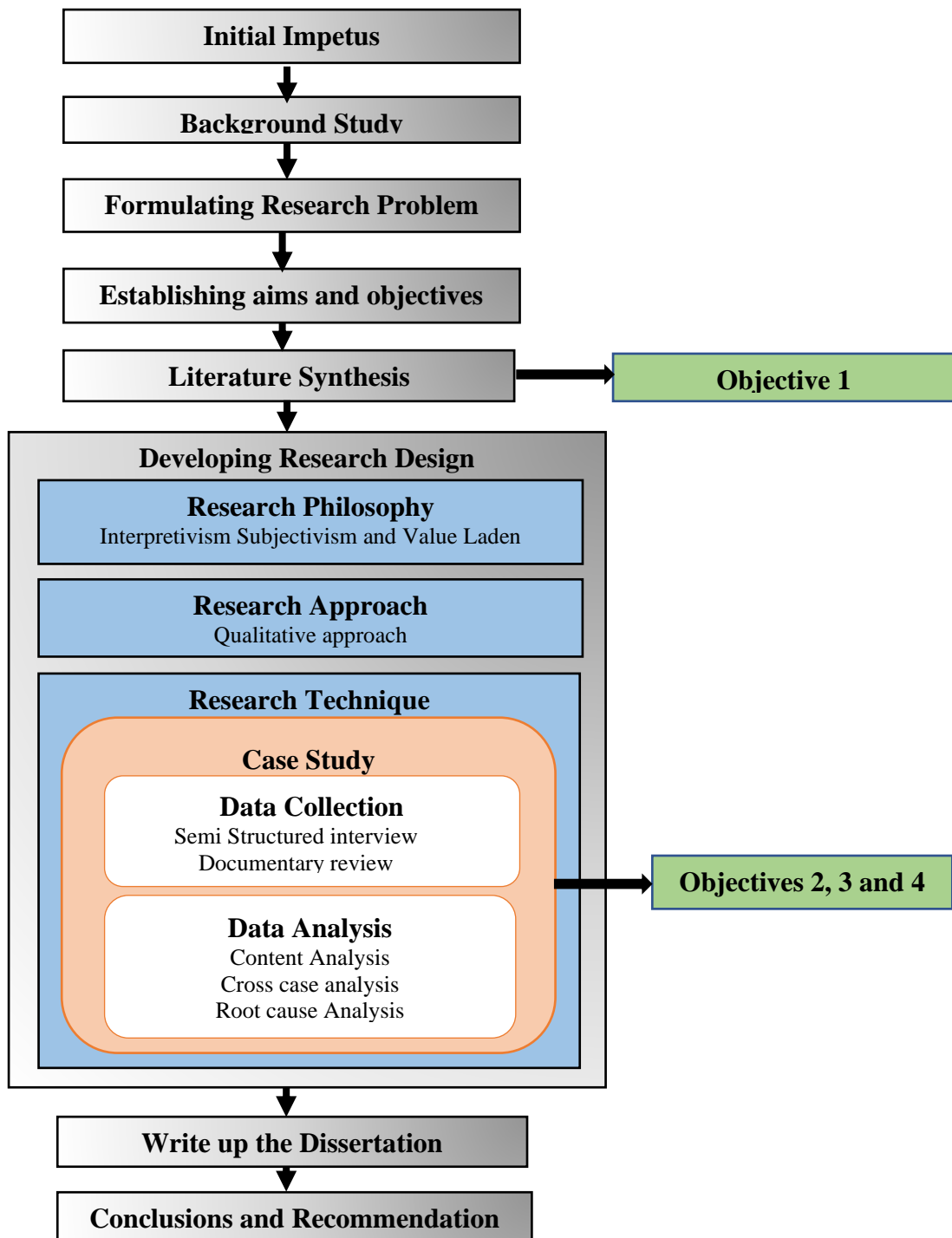


Figure 3.1: Research process

3.2.3 Literature synthesis

Literature review provides the foundation for the research area and it develops good understanding and insight related to previous researches carried out in reach area (Saunder et al,2019). A comprehensive literature survey was carried out to have an in-

depth knowledge on; practice of JV contracts in construction industry, causes for conflicts in JV entity, effect of those conflicts and strategies to minimize the effect of conflicts in JV entity.

3.2.4 Developing a research design

Research design is the plan and procedure to be followed by the researcher to study the research area (Kothari, 2004). Research design or research methodology of any research consists of three key factors named: research philosophy, research approach and research technique. This study used hierarchical model proposed by Kagioglu et al's (2000), which is also known as nested research methodology including; philosophy, approach and technique as shown in Figure 3.2.

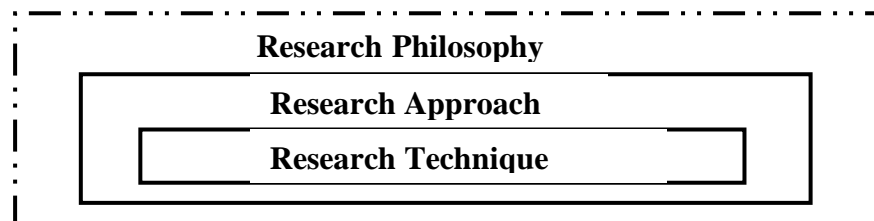


Figure 3.2: Nested research methodology
Source: Kagioglou et al., (2000)

3.2.5 Research philosophy

Research Philosophy contains the important assumptions about the knowledge going to be developed (Saunders, Lewis and Thornhill, 2019). According to Saunder (2019), the assumptions of the research can be categorized under three types namely epistemology, ontology and axiology.

Epistemology is the assumptions about knowledge, which contains acceptable, valid and legitimate knowledge (Burrell and Morgan, 2005). There are two extreme ends in epistemology named positivism and interpretivism. Positivism use the knowledge of scientist and interpretivism builds up knowledge through opinions (Saunder et al, 2019). The ontology is on assumptions about nature of reality (Saunder et al, 2019). Subjectivism and objectivism are the two extreme ends of ontology. In objectivism, knowledge is pre-determined and in subjectivism, knowledge is not exit and created from observations and consequent actions. The axiology contains the values and ethics used on the research study (Saunder et al, 2019). Value free and value laden are the

two extreme ends of this assumption type. Value free means researches' knowledge is not taken for the research and value laden means researches knowledge and experience are taken for the research (Saunders et al, 2019).

The aim of the research is to investigate the approaches for managing conflicts in JV projects in Sri Lankan construction industry. The causes for conflicts and conflict management approaches in JV contracts have to be investigated through the opinions of the stakeholders. Therefore, in terms of epistemology assumption, research use interpretivism. Moreover, the framework for management of conflicts in CJV contract was developed from observation. Therefore, in terms of ontology assumption, research uses subjectivism. In addition to that researcher's knowledge and experience have to be incorporated to the study as the data collected are in subjective nature. Therefore, in terms of axiology assumptions, research use value laden assumption type.

3.2.6 Research approach

Research approach contains plan on how to get the research question to its conclusion (Tan, 2002). This classified in three ways as: qualitative approach, quantitative approach and mixed approach. According to Kothari (2004), if the research problem wants to identify factors that affecting the outcome, effectiveness of a certain factor or to best forecaster, quantitative approaches is suitable. On the other hand, if there are little researches carried out in the phenomena and the researcher does not know the important variables to examine, qualitative researches is suitable (Kothari, 2004). Further, qualitative approach is a subjective valuation of attitudes, opinions and behaviour, which includes non-numerical data.

There are very few researches conducted in Sri Lanka related to conflicts in CJV projects. On the other hand, since this research aims to investigate the suitable approaches for management of conflicts in CJV contracts, in depth insight is requires related to research area. According to Yin (2009), qualitative research can provide a detailed and in-depth information about the factors under concern. Therefore, qualitative research approach was selected for this research study.

3.2.7 Case study design

Basically, there are mainly four approaches to carry out qualitative research as phenomenology, grounded theory, case study and narrative. In ethnography research, researcher himself involved in the target participants' environment to understand goals, culture, challenges, motivation and themes (Sauro, 2015). Narrative approaches explain the sequence of events, using one or two individuals. Grounded theory develops theories about the phenomena, which is being studied and case study researches provide the detail analysis about the particular scenario (Berg, 2001). Hence, Ellis and Levy (2009) stated that to conduct in-depth analysis of a person, a group of persons, an organisation or a particular project, case studies are the most suitable method. This research does not study the pre-established phenomenon. Therefore, phenomenology and grounded theory are not suitable. Researcher is not involved in the scenario and therefore ethnography approach is not used. Since, this research requires an in-depth investigation of the particular scenario, case study approach was selected.

- Procedure of case study design

Yin (2009) identified two basic types of case study designs called single case study design and multiple case study design. This study identifies the conflicts and conflict management of parties involved JV contracts in Sri Lankan construction industry. As limited number of parties involved in single entity, single case study is not enough to get the clear picture. Therefore, multiple case study design was selected for this study and numbers of cases are four.

➤ Unit of analysis

Unit of analysis is major entity that is analysed in the study and it is the 'what' or 'who' that is being studied (Trochim, 2001). Through identifying unit of analysis, researcher seeks to identify the scope of study including the limits of data collection (Yin, 2003).

Figure 3.3 shows the unit of analysis of this research

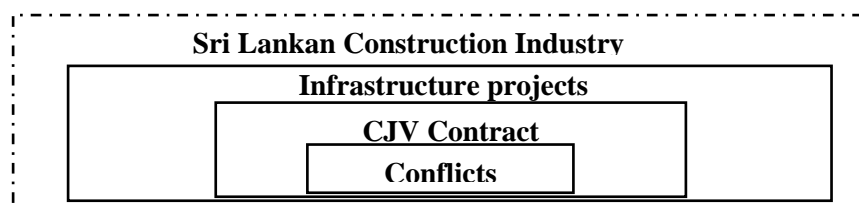


Figure 3.3: Unit of analysis

➤ Criteria for selection of cases

The criterion for selection of cases is a matter of discretion and judgement, convenience, access and to be which are subjective for the purpose of research (Yin, 2009). Following criteria was considered in selecting cases for this study. In Sri Lanka, JV contracts are most commonly used for infrastructure projects due to lack of experience of local contractors to perform those projects. In few infrastructure projects, with the intention of share risk and increase competitiveness. CJVs are formed between local contractors. Therefore, the data collection was focused on infrastructure projects in Sri Lanka. Moreover, due to difficulty in finding representatives from completed projects, data were collected from ongoing projects, and beginning, formation and operation stages of projects were studied.

➤ Defining the number of cases

After setting the criteria for selection of cases, the number of cases was defined. According to Yin (2019), the number of cases in case study research varies from one to eight depends on the nature of research. This study was conducted to identify and manage of conflicts within the CJV entity. As limited number of parties involved in single entity, single case study is not enough to get the clear picture. Therefore, multiple case study design was selected for this study and numbers of cases are four.

3.2.8 Research technique

Research techniques comprise of data collection methods and data analysis methods. According to Saunder et al (2009), variety of data collection methods can be adopted in a case study researches such as; interviews, document surveys, observations, participation and simulation. According to Kahkonen (2011), case study combine with interviews allows to have in-depth discussion on why and how questions and it allows having deep understanding of the phenomenon in question.

In this research, in depth discussion is required to identify causes for conflicts, root causes for conflicts, effect of those conflicts and conflict management between JV partners of Sri Lankan construction industry. Therefore, it was decided that the most

suitable techniques for data collection of this study are; face to face interviews among parties who involved in JV entities and documentary review of construction projects.

- Data collection techniques

Two methods were used for the data collection as: interviews and documentary review.

➤ Interviews using semi structured interview guideline

In interviews one person ask series of questions from another person (Keats, 2000). These interviews can be conducted on unstructured, semi structured and structured manner (Kothari, 2004). When conducting semi-structured interviews, it is able to asked necessary questions, clarify the doubts on questions asked and the answers given (Sekaran, 2003). Therefore, interviews using semi structured interview guideline were selected as the data collection technique.

The study requires the expertise knowledge related to respective case. According to Koerber and McMichael (2008), purposive sampling involves selection of partner from available resources, who will be able to assist relevant research with rich account of information. Accordingly, purposive sampling method was selected for this study and, the persons who have expertise knowledge related to the performance of each CJV partner and the performance of CJV entity were selected for the interview. Eight interviews were conducted and profile of the interviewees are given in Table 4.2 of Chapter 04.

➤ Documentary review

Documentary review is the method of data collection which enables to incorporate historical data to support arguments in the research (Kothari, 2004). In this research, CJV agreements were reviewed to study the management and operation procedures agreed by the partner. Areas covered under each CJV agreement are summarized in Appendix 13.

- Data analysis technique

After developing the interview guideline, data were collected related to key areas identified in conceptual framework, from each case. Root causes analysis, content analysis and cross case analysis were used to analyse the data.

➤ Root cause analysis

Root cause analysis is a structured methodology which identifies the underline root causes responsible for the target problem and develops corrective actions aimed at eliminating root causes (Abramov, 2015). This can be performed through cause and effect charts, Five Whys analysis or fault tree analysis tool. In this study five-why analysis was used to identify the root cause of conflicts.

➤ Content Analysis

Content analysis enables to properly identify and categorize collected data, and highlight important opinions or findings (“University of Surry”, 2008). Among the available data analysis software’s, NVIVO (version 12) manufactured by Qualitative Solutions and Research (QSR) International (Pvt) Ltd. used for this study.

➤ Cross case analysis

Cross case analysis enables to compare commonalities and differences in the event of activities and processes in the case study (Khan & Wynsberghe, 2008). Accordingly, in this study, cross case analysis was used to compare commonalities and differences of the research findings of the four cases.

3.2.9 Write-up

Write up of the first three chapters were developed gradually and data collected from interviews were entered, rather than wait for the end of the data collection process. After completion of data collection and data entering, descriptive write up of the other chapters was completed.

3.3 Summary

This chapter discussed about the methodological adopted to achieve objectives of the research. Qualitative research approach with multiple case study approach was selected to collect data related to conflicts and conflict management approaches in life cycle of JV contracts in Sri Lankan construction industry. Semi structured interviews were selected as the data collection technique of this study while root cause analysis, content analysis and cross case analysis were used to analyse data and draw conclusion.

CHAPTER 04

**DATA ANALYSIS AND RESEARCH
FINDINGS**

4.0 DATA ANALYSIS AND RESEARCH FINDINGS

4.1 Introduction

Chapter four presents the analysis of data collected from Sri Lankan construction industry relating to the research problem. The purpose of this chapter is to analyse the data to find the causes behind the conflicts and approaches for managing conflicts in, CJV contracts in Sri Lankan construction industry using views of experts in case studies.

4.2 Profile of the Cases

Four infrastructure projects were selected for the study, as CJVs are frequently in those projects. Table 4.1 indicates the profile of the selected cases.

Table 4.1: Profile of cases

Description	Case A	Case B	Case C	Case D
Type/Scope	Design and construction of rock fall protection system	Laying synthetic track and other related athletic field facilities	Slope protection and road laying	Replacing pipe lines in Colombo area
Partners involved in JV	One local partner- two foreign partners	One local partner- One foreign partner	Two local partners	Two foreign partners established in Sri Lanka
Condition	On-going	On-going	On-going	On-going
Duration	12 months	6 months	12 months	36 months
Contract Price	300 Million	300 Million	285 Million	3.4 Billion
Formation of JV entity	Division of scope- Combination type joint venture	Division of scope- Combination type joint venture	Division of scope- Combination type joint venture	Division of scope- Combination type joint venture
Label of interviewees	R-A1 R-A2	R-B1 R-B2	R-C1 R-C2	R-D1 R-D2

Out of 4 cases, Cases A and B contain multinational cultural entities, whilst Cases C and D contain similar cultural entities.

4.3 Profile of Respondents

Partners of selected CJV contracts were interviewed to collect data. Semi structured interviews were held with each selected representative to collect data. The representatives were selected from the management level of each JV entity, who has the sound knowledge about the overall performance of the CJV entity. Prior to collecting views from expertise, background of each respondent was collected. Table 4.2 summarizes the profile of respondents and the reference number used in carrying out the analysis.

Table 4.2: Profile of respondents

Case	Respondents Reference	Designation	Years of Experience in Construction industry	Prior experience in JV Contracts	Number of projects
A	R-A1	General Manager	40 Years	Yes	5
	R-A2	Co-ordination Manager	15 years	Yes	2
B	R-B1	General Manager	40 years	Yes	4
	R-B2	Co-ordination Manager	20 years	No	–
C	R-C1	Contract Manager	10 years	Yes	2
	R-C2	Managing Director	35 years	Yes	2
D	R-D1	Consultant	50 years	Yes	10
	R-D2	Commercial Manager	5 years	No	–

4.4 Analysis of Collected Data

This section presents the research findings. At outset, the reasons for performing the project through a CJV entity and methods used to select JV partners were investigated. Findings are summarized in Table 4.3.

Table 4.3: Reasons for forming the CJV contract and selection method of CJV partner

Case	Reason for performing the contract through JV	Method used to select JV partner
A	Lack of technical expertise	Previous relationship
B	Expand in to the new markets and lack of technical expertise	Market analysis

C	Difficulties with related to technical and financial resources Improve partner's competencies Increase market strength	Previous relationship
D	Improve competency Share risk	Previous relationship and parent company is established in same country

According to Table 4.3, lack of technical expertise, expand into new markets, improving competency and sharing risk can be identified as the reason to form CJV. Moreover, CJV partners were selected through their previous relationships or market analysis.

Cross case analysis was conducted to compare differences and similarities of the findings related to 4 case studies. Figure 4.1 contains the Parent NVivo coding developed for the analysis.

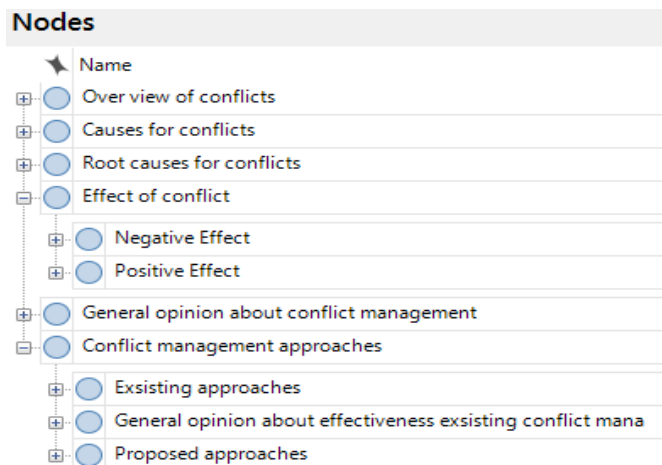


Figure 4.1: Parent coding

4.5 Overview of Conflicts

One of the major questions raised from the respondents is whether they are satisfied with the CJV arrangement and their general opinion on conflicts in CJV contracts. Most of the respondents answered that they are satisfied with the CJV arrangement. Only R-C1 commented that they are not satisfied with the CJV arrangement and further mentioned that; *“scope division of CJV arrangement had lot of interdependencies, which caused delay on our scope of work due to the delays*

triggered by the other JV partner". Accordingly, interdependency of CJV partners may create a lot of conflicts between partners which eventually result in dissatisfaction over the CJV arrangement. R-D2 commented that although he is satisfied about this CJV arrangement, he is preferred to work as a single entity. Moreover, respondents answered that they face some conflicts within the CJV entity. (Refer Appendix 1: NVivo coding for general opinions about conflicts in CJV contracts).

Majority of the respondents mentioned conflicts as an inevitable phenomenon. Respondent R-D1 stated that *"At the beginning parties entered into CJV agreement with the intention of performing the contract. Since all things can't be agreed, and due to differences in viewpoints each party bares, conflicts are occurred between parties"*. Hence, respondents R-A1 and R-D2 stated that conflict is a natural phenomenon, and have to be properly managed without having any effect to the CJV relationship and project performance. Accordingly, it can be identified that conflict is a natural phenomenon in CJV contracts and should be managed without having effect over CJV relationship and project performance.

Besides, R-C2 opined that *"through mutual understanding in between two companies we resolve them"*. Therefore, CJV partners always practice various mechanisms to resolve the conflicts between them without damaging the mutual understanding.

4.6 Causes for Occurring Conflicts

As the next step, causes for occurring conflicts were identified throughout the beginning, formation and operation levels of CJV life cycle discussed below.

4.6.1 Beginning stage

Respondents did not highlight any conflicts at beginning stage, as most of the parties have used previous relationships in selecting a partner.

4.6.2 Formation stage

Table 4.4 summarizes the causes behind conflicts at formation stage (Refer Appendix 2 for NVivo coding on causes for conflicts).

Table 4.4: Causes for conflicts at formation stage

Causes for Conflicts	Case			
	A	B	C	D
Disagreement over bid price	x		x	x
Disagreement over finalizing terms of CJV contract	x	x		x
Disagreement over legal capacity of foreign partner to enter into contract	x			

Respondents of cases A, C and D opined that the **disagreement over bid price** is one of the common reasons for conflicts during bidding. However, respondent R-B1 stated that, *“they accept the rate given by other party, put their mark-up and submitted as they did not experience in technology”*.

According to respondents R-A1 and R-A2, at the formation stage, **disagreements were occurred in finalizing terms of the CJV agreement**. According to respondent R-B1, some conflicts occurred between them, related to the scope division mentioned on the CJV agreement. However, as stated by respondent R-C1, not giving priority to the terms of CJV contract, caused lot of conflicts at latter stage. Accordingly, in finalizing the terms of CJV agreement, lot of conflicts can be occurred and lack of attention in finalizing the CJV agreement can even create problems in latter stages.

According to respondents R-A1 and R-A2, a conflict was occurred between them on **legal capacity of the foreign partner to enter into contract** without having Construction Industry Development Authority (CIDA) registration. Although this type of conflict is not common, it can be occurred where there is an involvement of foreign partner, with lack of experience on legal system of Sri Lanka.

According to above discussion, disagreements over bid price and disagreements on finalizing terms of CJV contract, can be identified as common causes for occurring conflicts at formation stage.

4.6.3 Operational stage

Table 4.5 presents the causes behind conflicts at operational stage (Refer Appendix 2 for NVivo coding on causes for conflicts).

Table 4.5: Causes for conflicts at operational stage

Causes for Conflicts	Case			
	A	B	C	D
Disagreement on working patterns of labour and staff	x	x	x	
Disagreement over non-performance as per the project plan	x	x	x	
Disagreement over payments related to varied scope of work		x	x	
Disagreement over non transparency of cash flow		x	x	
Disagreement over finish of the work performed by the other partner		x		
Disagreement over bearing of cost during (Extension of Time) EOT period		x	x	
Disagreement over exchange rate applicable for EOT period		x		
Different ways in interpreting messages	x			
Disagreement over dominant control carried out by the lead partner				x
Disagreement over utilization of common resources				x
Disagreement over responsibility on material procurement and way of using them				x
Disagreement over low response of local partner when employer's refuse to accept the modifications proposed at the bid stage on Employer's requirement during the operational stage	x			
Disagreement on division of loss related to extra ordered material	x	x		
Disagreement over wrong procedure of material storage		x		

All respondents highlighted that most of the conflicts between parties were occurred at the operational stage. According to respondents R-A1 and R-D2, when the interaction between parties are high, amount of conflicts between parties also become high.

On the other hand, as highlighted by respondent R-A1 “when *local and foreign labours or staff members work together, conflicts occur due to the differences in working patterns.*”. R-B1 also highlighted similar kind of conflict. In case C, respondent R-C1 highlighted that “*conflicts between the staff of two partners, were occurred due to the different attitudes and behaviours in managing the project*”. Therefore, **disagreements over working patterns of staff and labour** can be occurred not only between partners from different nations, but also between similar nations, due to difference organizational culture.

On the other hand, foreign parties of cases A and B highlighted that non-performance of local partners as per the project plan caused delays on the project. However, respondent R-A1 highlighted that there was an effect from the consultant on these delays. Hence, respondent R-B1 stated that non-performance of local partner led to selection of another partner and enabled performing as per project plan. Moreover, respondent R-C1 stated that non-performance of the other partner caused delays on their plan. Further respondent R-C1 stated that “*there are no provisions in CJV agreement to recover such delays caused by the lead partner [Other partner]*”. When go through with the CJV agreement, it is evident that there are no any provisions in the CJV agreement to cover the delay damages cost for the 2nd partner (Refer Appendix 13 for summary of areas covered under CJV agreements). Therefore, conflicts can be occurred due to **disagreements on non-performance as per project plan**. However, in some occasions (e.g. case A), for such non adherence with the project plan, there can be an effect from the 3rd partner.

Moreover, according to R-B1, “*they [local partner] provided additional labourers, tools, to foreign partner, but foreign partner has not yet paid for them or agreed to pay for them*”. Similarly, respondent R-C1 highlighted that they have not received payments for additional works completed by them related to the other partner’s scope. Further, CJV agreements of these cases do not contain a provision on way of agreeing for varied scope of work. Accordingly, conflicts can be occurred within the CJV entity, due to **disagreements on payments related to varied scope of work**.

On the other hand, respondents R-C1 and R-B2 stated that “*lead partner did not provide details of cash flow*”. Hence, CJV agreements of these two cases do not contain a clause related to the way of maintaining transparency of cash flow. However, agreements of cases A and D contain a provision on way of maintaining the transparency of cash flow. Therefore, **disagreement over non transparency of cash flow** can be occurred, when there is no agreement between the parties on maintaining the transparency.

According to respondent R-B1 “*initially foreign partner has not given the details of required finish. Only after finishing the work they have mentioned some deficiencies*”.

Therefore, we have to redo those things which doubled the cost for us". This conflict occurred in case B due to technology gap. However, this conflict is not found in case A. That may be due to adequate technical advices provided by the foreign partner while lowering knowledge gap between parties. Accordingly, **disagreements over finish of work performed by other partner** can be occurred between partners, due to knowledge gap on higher technologies and lack of guidance from the technical expert.

According to respondent R-B1, in Sri Lanka, normally employers granted no cost EOTs. As a result, **disagreements have occurred between partners over bearing cost during extended period**. This situation has not highlighted in Case A and no related provision in their agreement (Refer Appendix 13 for summary of areas covered under CJV agreements). In the case of project extension, similar conflict can be occurred in Case A. On the other hand, respondents of case C highlighted a conflict related to bearing of preliminary items cost during EOT period. In this note, respondent R-C1 stated that *"in bidding stage, we were asked to price only for specific preliminary items related to our scope. But at the EOT period, he [other partner] is asking more resources from us than what we have budgeted"*.

In addition, respondent R-B1 stated that, there is no provision in CJV agreement related to applicable exchange rate during EOT period. This situation results in **disagreement over applicable exchange rate for EOT period**. Foreign partner has quoted the price based on USD prices at formation stage. When paying him during the EOT period at the dollar rate, local partner has to bear the cost relating to dollar fluctuations. This situation has not been highlighted in case A. Therefore, this type of conflict can be occurred, when there is a combination of both local and foreign partners, and employer does not bear the currency fluctuation risk.

Further, as per respondent R-A1, conflict occurred between parties on **different ways of interpreting messages**. According to respondent R-A1 *"when we [R-A1] said something about a small issue, they [foreign partner] understand it in a different way and dreams a big issue"*. However, the difficulties created due to gaps in communications have not highlighted in case B.

Moreover, respondent R-D1 highlighted that conflicts occurred between parties due to **dominant control carried out by the lead partner** in some occasions. Respondent R-D1 stated that “*in getting some important decisions, other partner does not listen to their opinion*”. In cases A and B, there is a special committee, consist of all members to get key decisions.

According respondent R-D2, there was a conflict between parties regarding **utilizing common resources**. As highlighted by respondent R-D2, both partners have to perform a similar kind of work as per the designs provided by one design team and both parties wanted to get their design completed first. In addition, respondents R-D1 and R-D2 stated that as the both parties used similar kind of materials, conflicts occurred between parties in terms of **responsibility on material procurement and way of using those materials**. These conflicts are unique to case D. Unlike in other cases in case D both parties have to perform similar kind of work. Accordingly, utilizing common resources often creates conflicts between partners in case D.

Particularly in case A, there was a conflict between partners when the local partner got the Engineer’s view regarding the modification proposed by the design partner upon Employer’s requirement as per the bidding document. Accordingly, in case A **disagreement occurred between partners over low responses of a local partner when Employer’s refuse to accept modifications proposed at the bid stage on Employer’s requirement during the operational stage**.

Moreover, respondents of cases A and B highlighted, the conflict related to **division of loss on excess ordered materials**. In both cases local parties stated that they pre-ordered materials at the request of foreign partner. However, the foreign partner did not agree on division of loss related to over ordered materials.

Besides, respondent R-B2 highlighted that, there was a disagreement between partners due to wrong procedure carried out by the local partner in storing material. Respondent R-B1 stated that, foreign partner has not provided instructions to store those materials.

Accordingly, conflicts are a common phenomenon between the JV partners in any kind of CJV contract. Considering the above discussion: disagreement over working patterns of staff and labour, disagreement over non-performance as per project plan,

disagreement over payments related to varied scope of work, disagreement over bearing cost during EOT period, disagreement over non transparency of cashflow can be identified as the common causes for occurring conflicts.

Despite common causes for occurring conflicts, nature of CJV contract and different partners involved in the CJV may result in specific types of conflicts. Therefore, identification of root causes for these conflicts is paramount important to identify the suitable strategies to manage these conflicts.

4.7 Identification of Root Causes for Conflicts

With the participation of respondents five-why analysis was conducted and root causes for conflicts have been identified as given in following subsection.

4.7.1 Beginning stage

Respondents has not highlighted any conflicts occurred at beginning stage. Therefore, there are no root causes to conflicts identified through five-why analysis.

4.7.2 Formation stage

Table 4.6 listed the identified root causes behind the conflicts in formation stage (Refer Appendix 3 for five-why analysis and Refer Appendix 4 NVivo coding on root causes for conflicts).

Table 4.6: Root causes for conflicts at formation stage

Causes for Conflicts	Identified root causes	Case			
		A	B	C	D
Disagreement over bid price	Imbalance of level of expertise in different markets	x			
	Difference in opinions and priorities	x			x
	Difference in company policies	x		x	x
Disagreement over terms of contract	Non identification and allocation of risk in a fare manner	x	x		x
	Lack of expertise related to technology and market condition		x		
	Disagreement over attempt to get the dominant control of the project				x
Disagreement over legal capacity of foreign partner to enter into contract	Lack of knowledge of foreign partner regarding legal background of the country	x			

Majority highlighted that **differences in company policies** relating to pricing, is a common root cause for disagreement over the bid price. Besides in case A, the partners are from different cultures or backgrounds. Therefore, **imbalance on level of expertise in different markets**, become the root cause for disagreement over bid price. Moreover, in bidding for the project parties may have different objectives and those objectives may result in bearing **different opinions and priorities**.

Majority of respondents highlighted that, **non-identification and allocation of all relevant risks** to the suitable parties is the most common root cause for occurring conflicts in drafting CJV agreement. Besides, case B highlighted that **lack of expertise related to technology and market conditions** become a root cause for conflicts. Moreover, as highlighted on case D, **disagreements on one partner’s attempt to get the dominant control of the project also become** a root cause for conflicts.

On the other hand, in case A, when the partners are from different backgrounds, **lack of knowledge of foreign partner regarding the legal background of the country** also becomes a root cause for several other conflicts.

4.7.3 Operational stage

Table 4.7 listed the identified root causes behind conflicts in operational stage (Refer Appendix 3 for Root causes analysis and Refer Appendix 4 NVivo coding on root causes for conflicts).

Table 4.7: Root causes for conflicts at operational stage

Causes for Conflicts	Identified root causes	Case			
		A	B	C	D
Disagreement over working pattern of staff and labour	Difference in working culture	x	x		
	Difference in organizational culture			x	
	Non availability of prior agreed policies and procedures to minimize conflicts			x	
Disagreement over non-performance as per the project plan	Difference in working culture	x			
	Non- alignment of objectives of JV partners			x	
-Non-performance of local partner and have to find another partner	Un observed background of the JV partner prior to enter into agreement		x		

Causes for Conflicts	Identified root causes	Case			
		A	B	C	D
Disagreement over payments related to varied scope of work	Deficiency in terms of CJV contract		x	x	
	Difference in priorities		x		
Disagreement over non transparency of cash flow	Deficiency in terms of CJV contract		x	x	
Disagreement over finish of the work performed by the other partner	Lack of expertise related to technology		x		
	Lack of coordination between parties		x		
Disagreement over bearing of cost during EOT period	Difference in working culture		x		
	Deficiency in terms of CJV agreement			x	
Disagreement over exchange rate applicable for EOT period	Deficiency in terms of CJV agreement		x		
Different ways in interpreting messages	Usage of different languages	x			
Disagreement over dominant control carried out by the lead partner	Lack of willingness to listen or accept other partners view				x
Disagreement over utilization of common resources	Deficiency in planning and scheduling				x
	Insufficiency of available resources				x
- Disagreement over responsibility of material procurement and material distribution	Lack of flexibility to face unforeseeable situations				x
	Deficiency in project management and controlling				x
Disagreement over low response of local partner when employer refuses to accept the modifications proposed at the bid stage on Employer's requirement	Deficiencies in planning and scheduling works related to bid submission	x			
	Difference in working culture	x			
	Difference in level of expertise	x			
Disagreement on division of loss related to over ordered material	Unwillingness of one partner to bare losses	x	x		
	Deficiency in terms of CJV contract		x		
Disagreement over wrong procedure followed in material storage	Lack of expertise related to technology		x		
	Lack of coordination between parties		x		

The most frequent root cause for occurring conflicts at operation stage is **deficiency in terms of CJV agreement**. CJV agreement is the most important document which contains the agreed terms for: management and operation of CJV entity throughout its life cycle, distribution of responsibilities, division of loss, etc. When the agreement does not consist of important aspects, it creates lot of conflicts over way of handling particular situation.

Difference in working culture is another root cause highlighted by respondents in cases A and B. Case C further stresses that **difference in organizational culture**, result in conflicts between partners even though they have CJV partners from same country.

As highlighted by respondents of both cases A and B, **difference in level of expertise** between partners related to associate technology, market condition is another root cause for conflicts.

Deficiencies in planning and scheduling are another root cause for conflicts. According to respondent R-A1, **deficiency of planning and scheduling work at the bidding stage** become a root cause for occurring conflicts at operational stage. R-D1 stated that **deficiency of project management and controlling work** conducted during operational stage also becomes a root cause for some conflicts.

Moreover, respondent R-B1 highlighted that **lack of coordination between the parties** become a root cause for some conflicts. **Difference in priorities** each partner bares in a project also creates some conflicts between parties. According to respondent R-A1 parties with non-compatible priorities, become a root cause for occurring conflicts.

Moreover, respondents of cases A, and B highlighted some conflicts occurred between partners, due to **unwillingness of one partner to bare the losses**. Respondent R-C1 stressed that **non-alignment of objectives of the JV partners** become a root cause for some conflicts.

On the other hand, respondent R-C1 highlighted that **non availability of prior agreed policies and procedures to minimize conflicts** between staff of the CJV partners, also become a root cause for some conflicts. Besides, respondent R-B1 stated that **unobserved backgrounds of the JV partners prior to enter into agreements** become a root cause for occurring conflicts at latter stages in the project. This root cause for conflict was only found in case B, as in other case CJV partners has an experience in worked together or any other relationship.

In addition, according to case A, **different languages used** by the partners, become a root cause for occurring conflicts. This conflict is not highlighted in cases C and D, as the partners to the CJV entity are from same nationality. However, there is a high possibility to occur this conflict in case B, due to the difference in language.

In the case D, both partners require similar kind of resources. Therefore, as highlighted by respondent R-D2, **insufficiency of the available resources** becomes a root cause for some conflicts.

Further, respondent R-D2 highlighted that **lack of flexibility in facing unforeseeable changes** to the contract is another root cause for conflicts. Moreover, as highlighted by respondent R-D2, **lack of willingness to listen or accept other partner's views** become a root cause for some conflicts.

According to the above discussion: deficiency in terms of CJV agreement and difference in working culture can be identified as most common root causes for occurring conflicts. In addition, in a multinational culture, difference in expertise and priorities can be identified as some other leading cause for occurring conflicts.

4.8 Effect of Conflicts

Respondents were provided their opinion on two major questions to identify the effect of conflicts. They are: effect of conflicts occurred at one stage to other stage of CJV life cycle and positive and negative effects of conflicts.

More than 50% of the respondents commented that there are no effects from conflicts occurred at one stage to the other stage of CJV life cycle. However, respondent R-A1 and R-C1 stated that though they have minimized the effect of conflicts occurred at one stage of the life cycle to the other stage, non-identification of conflicts, non-identification of the requirement of project and its scope at the early stages, result in conflicts at succeeding stage in CJV life cycle.

Majority of respondent's stress that, conflict is a natural phenomenon and it has both positive and negative contribution to the performance. Positive and negative effects of conflicts in CJVs to the: CJV relationship, construction project performance and any other effects are discussed in subsection 4.9.1 and 4.9.2.

4.8.1 Negative effect

Negative effects of conflicts highlighted by the Respondents were discussed under this sub section. Refer Appendix 5 for NVivo coding for respondents' statements on negative effects of conflicts. Respondent R-A2 states that "*conflicts sometimes make us feel like abandon the relationship*". Further, respondent R-B2 stated non-performance of their initially selected partner, result in lack of willingness to perform projects with him in future and, time and cost overruns. Similarly, R-C1 stated that lack of performance of other partner result in loss for them, in terms of non-claimable preliminary cost.

Respondents R-C1 and R-B2 highlighted that these conflict situations exceed expected budget limit. R-C2 also stress that conflicts between parties disrupt project performance until resolving those conflicts, and ultimately the low productivity. Moreover, R-C2 stated that conflicts result in building up emotional stress in partners to balance in between, conflict resolution and maintaining relationships.

Respondents in cases A, C and D commented that though they have faced above negative effects within the CJV entity, they have taken maximum effort to minimize the effect of conflicts on construction project performance. Moreover, respondent R-C1 and R-D1 stated that they are taking few preventive measures to minimize effect of internal conflicts to project performance and avoid, exceeding budget limits.

Therefore, conflicts in cases A, C and D, are resolved within the CJV entity, with no negative effect on overall project progress. However, in the case B, conflicts within the CJV entity have some negative effect not only on the JV entity, but also on overall construction project performance.

4.8.2 Positive effect

Positive effects of conflicts highlighted by the Respondents were discussed under this sub section. Refer Appendix 6 for NVivo coding on positive effect of conflicts. Respondent R-A1, R-B1 and R-C2 stated that conflicts improve the understanding between parties on various technical aspects. Further, R-C1 stated that conflicts improve the understanding between parties on factors to be considered when initiating

a contract with JV partner. Moreover, R-C1 stated that conflicts improve the understanding between parties on suitable behavioural patterns, in different situations.

On the other hand, foreign partners of case A and case B stated that conflicts enhance their knowledge regarding the working patterns of local entities. They explained that this experience helps them to identify their own mistakes and, preventive measures for conflicts. Accordingly, conflicts create a platform to identify potential grounds that the conflicts can be occurred.

4.9 General Opinion about Conflict Management

As the next step of the research respondents were asked to give their opinion regarding the conflict management on CJVs. Refer Appendix 7 for NVivo coding on general opinion on conflict management of CJV. Majority stated that conflict management is necessary for CJV entity to manage the conflicts between parties. According to respondent R-D1, CJV entities are operated mainly with the mutual understanding within the parties. However, there are some situations when conflicts occurred between party's management of those conflicts are important in order to reduce the effect. Similarly, R-C1 stated that conflicts cannot be eradicated and have to be managed properly to minimize the effect on CJV relationship.

Moreover, respondent R-A1 stated that “*ignoring conflicts may result in getting into a worse condition. Therefore, have to manage them prior to development of the conflict*”. Similarly, respondents R-B1 and R-B2 stated that managing conflicts within the CJV entity is necessary to minimize its effect on the construction project. Further, respondent R-D2 stated that “*conflicts have to be managed from the day one itself using the right strategy*”.

Accordingly, conflicts have to be managed within the CJV entity using the appropriate strategies to minimize the impact and for timely completion of the project.

4.10 General View on Existing Conflict Management Measures

Respondents of cases A, B and D stated that they have agreed on some measures to manage conflicts within the CJV entity, as per their previous experience. However, for non-identified situations, parties act depends on the situation. However, respondent R-

C1 stated that “*managing conflicts highly depends on the person and his expectations. When there are some people who lack experience on contract management and contract administration, we can’t manage conflicts effectively*”.

Accordingly, procedures agreed within CJV entity provide mechanisms to manage CJV and un-identified situations should be handled in an ad-hoc basis. However, the effectiveness of reactive measures highly depending on the knowledge and expectation of the partners.

4.11 Proactive and Reactive Conflict Management Approaches

The respondents explained proactive and reactive approaches used in each stage of CJV life cycle under following sections.

- Conflict management approaches already practiced within the CJV
- Drawbacks identified on existing approaches
- Actions taken to make those existing approaches successful
- Proposed other suitable approaches to practice within the CJV entity

(Refer Appendices 8, 9, 10, 11 for NVivo coding for respondents’ comments on above questions).

4.12 Proactive Approaches

Proactive conflict management approaches practiced in each stage of CJV life cycle are summarized in subsections 4.13.1 to 4.13.3.

4.12.1 Beginning stage

List of existing and proposed proactive approaches at the beginning stage of the life cycle in four cases are summarized in Table 4.8.

Table 4.8: Proactive conflict management approaches at beginning stage

Proactive conflict management approaches	Existing approaches				Proposed approaches			
	A	B	C	D	A	B	C	D
Selection of suitable partner								
- Based on previous experience of working together in relevant field	x		x					

- Conducting a Market analysis		x					
- Who is culturally fit				x			
Studying background information about the partner prior to start negotiations						x	
Identify and align objectives of each partner on performance of the project as a CJV entity.						x	
Carry out grounded study prior to enter into new territory						x	

According to respondent's, **selection of suitable partner** is one of the major factors that has to be prioritized at the beginning stage. Respondents of cases A and D, have selected the partner, based on **previous experience and expertise on working together in relevant field**. Further, in case D, **cultural fitness** also considered in selection of partner. On the other hand, in case B, since the partners did not have previous experience, partner was selected **by conducting a market analysis**, based on: expertise of relevant field and the successfulness of the technology they are practicing.

However, respondent R-B2 stated that not **studying the background information about the partner** at the beginning stage may result in, face lot of conflicts at latter stage. Respondent R-B2 further stated that "*prior to enter into negotiations with the partner, need to study the background information about the partner in terms of company size, previous experience, reputation, financial capability, business capacity etc.*". Accordingly, it can be identified that, from case to case partner selection criteria may vary. However, initially selection of suitable partner through proper background study is paramount important for success of CJV.

Besides, respondent R-C1 mentioned that incompatibility of objectives of each partner, in performing the project as a CJV entity, creates lot of conflicts. Therefore, it is important to **identify and align objectives of each partner on the performance of the project as the CJV entity**.

In case B, responded R-B2 highlighted the importance of **carrying out grounded study, prior to enter into new territory**, to minimize conflicts occurred due to cultural differences, though they did not conduct it in this project.

Therefore, as per the above discussion it can be identified, at the beginning stage partners to the CJV entity have to develop proper base to obtain sufficient understanding about the project and the partner.

4.12.2 Formation stage

List of existing and proposed proactive approaches at the formation stage of the life cycle in four cases were summarized in Table 4.9.

Table 4.9: Proactive conflict management approaches at formation stage

Proactive conflict management approaches	Existing approaches				Proposed approaches			
	A	B	C	D	A	B	C	D
Prepare bid submission with a proper plan and submit the bid covering all requirements mentioned in the bidding document					x			
- Prepare the list of aspects to be covered on bid submission, divide them between JV partners and combine and compile each partner's submission					x			
- Give the bid price covering all associated risk					x	x		
- Brainstorming sessions to identify factors to be covered through bid pricing and bid submission							x	
- Understand the documents submitted by other party					x			
Divide the scope with minimum interaction							x	x
Entering into a proper agreement on covering all aspects	x					x	x	x
- Clearly state terms of CJV agreement	x	x				x		x
- In drafting CJV agreement use previous experience to identify the conflicting situations <ul style="list-style-type: none"> o Working with same partner o Working as a JV entity 	x						x	
- Received the consultancy of legal expert	x	x						
- Identify all risk and allocate them to a partner who is much suitable to manage those risk factors - Delay, currency fluctuation etc					x			
- Procedure to maintain transparency of communication, and cash flow					x	x		
- Precautionary aspects to state if the project falls behind the schedule (delay, currency fluctuation etc)					x			
- Procedures to agreeing for varied scope of work			x					
Share the knowledge and experience					x	x		
Prepare CJV administration structure having a representative from each partner	x	x						x
Preparation of project master plan with the participation of all partners					x	x		x

Respondent R-A1 stated that in bidding for a project through a CJV entity it is important to **prepare bid submission with a proper plan and submit the bid covering the all requirements mentioned in the document.**

Respondent R-A1 highlighted that in bidding, **it's important to prepare a proper plan listing out all aspects that has to be covered through bid submission, and divide them between partner.** Further, respondent R-A1 stated that, **all required documents have to be collected from each partner, combine and compile them properly** to win the bid and to reduce the conflicts between parties on unfulfilled aspects.

Respondent R- D1 mentioned that, when there is a knowledge gap between parties, prior to negotiate bid price, it is important to have **brainstorming sessions to identify the factors to be covered in pricing and bid submission.** According to respondent R-A1, **the bid price should cover all associated risk.** This is an important aspect to be considered. Therefore, prior to quoting the bid price, a background study on the project and JV partners has to be conducted, while providing consideration for previous experiences on pricing.

Moreover, as highlighted by respondent R-A1 **understanding the documents submitted by other partner** is even beneficial to minimize the mistakes of other party and to get the overall idea about the bid submission which is even beneficial on latter stages to divide the scope properly and to plan the management and operational activities of the project with minimum conflicts.

On the hand, respondents R-C1 and R-D1 highlighted the **division of scope with the minimum interaction with one partner's scope over the other partner's scope** will be beneficial to minimize the conflicts during operational stage.

According to respondents R-A2 and R-D2, with the consent of all partners, scope of respective partner and associated activities should be clearly included in the agreement. Majority highlighted that, **entering into an agreement covering all the aspects** is important and, proactive conflict management approach to be practiced in the formation stage. Accordingly, respondents proposed various opinions on preparation of CJV agreement.

Respondent R-B2 stated that, “**clearly state terms of CJV agreement**, which is necessary to avoid contradictions on interpretation of terms of contract”. Similarly, respondent R-A1 mentioned that drafting the agreement with clear statements, helps to minimize conflicts due to interpretation of terms on the contract.

Besides, R-A1 mentioned that in preparation of CJV agreement, they **used their previous experience on conflicting situation**, on working with same partner and other CJV partners. Accordingly, R-A1 highlighted that “*we enable to enter into the agreement, which covers the areas that have possibility to occur conflicts and, on the operational stage of this project we [JV entity], face minimum number of conflicts than other projects*”. Moreover, when reviewing the JV agreements in Cases, A, B and C, Case A’s agreement covers the lot of aspects than other two cases.

According to the respondents R-A1 and R-B1, in drafting the agreement they **received the consultancy of legal expert**, due to lack of knowledge their foreign partner had on the legal context of the country. Although this was only highlighted in case A and case B, this is an important proactive conflict management strategy that can be practiced in any cases to minimize the errors due to misinterpretation of law in CJV agreement.

On the other hand, respondent R-A2 commented that prior to preparation of CJV agreement **all associated risk factors has to be identified and management of those risk factors have to be divided properly among the parties**. Hence, areas covered on CJV agreements are summarized in Appendix 12. Refer Appendix 12, for summary of main areas cover up through the CJV agreement of cases A, B, C and D.

According to summary agreement, case A has covered up substantially higher number of aspects compared to agreements in other cases. Further the agreement in case C contains specific clauses such as: responsibility on providing preliminaries, way of dividing advance payment, retention money, tax etc. Case A contains a clause related to maintain transparency of cash flow and communication, however not in other two cases. Respondents R-B2 and R-C1 stated that in CJV agreement parties have to **agree for a suitable procedure to maintain transparency of, communications and cash flows**.

Besides, none of the above agreements contains a clause related to division of cost during EOT period. According to respondent R-A1, in the agreement, necessary **precautionary aspects have to be agreed to share the cost of delays, currency fluctuations etc if the project falls behind schedule**. Further, as highlighted by respondents R-C1, in the agreement stating the **procedure to agree on varied scope of work** benefice to reduce conflicts occur in latter stage.

Meanwhile, respondents of cases A and B mentioned that when there is a knowledge gap between parties related to technology, market condition etc, it is better to **share the relevant knowledge and experience among partners**. As highlighted by respondent R-B2, this may be beneficial to reduce errors, which eventually cause conflicts, due to knowledge gap between parties.

On the other hand, respondents R-D1 mentioned that it is better to **prepare JV administration structure having a representative from each partner**. Further, as highlighted by respondent R-D1 such administrative structure should be included with all management and operational activities and to take important decisions. Respondent R-A1 stressed that it will be beneficial to update all partners regarding the all managerial and operational activities related to project.

Moreover, respondents R-B1, R-A1, R-D2 stated that the **project master plan has to be prepared at this stage with the participation of all partners**. Respondent R-A1 stressed that participation of all partners for preparation of project plan is importantly beneficial in many ways, specially to minimize the mismatch of one partner's plan over the other partner plan, and to identify other partner's plan in-advance and arrange ours accordingly etc.

As discussed above, entering into CJV agreement covering all aspects, preparing bid submission with a proper plan, preparation of CJV administration structure having a representative from each partner, and preparation of project master plan with the participation of all partners can be identified as the important proactive management measures to follow in formation stage.

4.12.3 Operational stage

List of existing and proposed proactive approaches at the operation stage of the life cycle in four cases were summarized in table 4.10.

Table 4.10: Proactive conflict management approaches at operation stage

Proactive conflict management approaches	Existing approaches				Proposed approaches			
	A	B	C	D	A	B	C	D
Conducting progress meetings and sending progress reports to update all partners of the project progress	x	x		x				
Get the in-advance project plan of other partner and arrange the plan accordingly.	x							
Frequent update and revision of project plan	x			x				x
Getting key decisions related to management and operation of JV through joint operation committee	x	x						
Appoint local representative on behalf of foreign partner	x	x						
Act according to the procedures stated in JV agreement				x				
Receiving instructions from the technical expert	x					x		
Giving frequent update to parent company on project progress and any associated issues of the project							x	
Having brainstorming sessions in timely manner for early identification of conflicting situations								x
Providing frequent update to all partners on cash flow	x							
Agreed suitable procedure for update, maintain and distribute common and scare resources in a fair manner								x

Respondent of cases A, B, and D highlighted that **conducting progress meetings, sending progress reports to update all partners on the progress of the project** is a proactive strategy they are practiced in the operational stage. As highlighted by respondent R-D4 “*continuous progress meeting enables them to early identification of situations, where there is a possibility to create conflicts. This will enable them to discuss the issues openly and decide the necessary proactive actions to minimize the effect of matters*”. Respondent R-A1 and R-A2 stated that frequent update on progress of the project through meetings and progress reports is beneficial for each party to

arrange or update their planning and scheduling works and minimize the occurrence of conflicts.

In addition, respondent R-A1 and R-A2 highlighted that, he **[local partner] gets in-advance the plan of other partner [foreign partner] and prepare [his] plans accordingly**. Moreover, as highlighted by respondent R-A1, **frequent update and revision of project plan** as per the current condition will enables them to forecast necessary delay mitigation actions for each partner and minimize delay. Similarly, respondent R-D1 admitted the current practice of this strategy.

Moreover, respondents R-A1 and R-A2 highlighted that **getting the key decisions related to management and operations of the JV though the joint venture operation committee** will enable to minimize the conflicts due to unawareness of such key decisions. However, in case B as highlighted by respondent R-B1 steering committee is not actively involved in the project operation activities, due to change of initial local partners. Therefore, appointing CJV committee not only works as a proper proactive strategy, however, collectively and regular participation is very important for its efficiency.

According to the respondents, case A has **appointed local representative on behalf of foreign partner**, to minimize the effect of communication gap. Similarly, in case B, local representative provides guidance for their operational activities. Therefore, the authority given for the local representative can vary depending on the situation.

As highlighted by R-D1, **working as per the procedures stated and agreed in the CJV agreement** enables effective work environment without conflicts. However, for disagreed situations, decision has to be taken based on a suitable conflict management approach depending on the situation.

According to respondent R-B1, when the CJV is formed with the knowledge gap where one party is a technical expert on the scope of the project, then **receiving instruction/advices from technically expert party** is beneficial to minimize occurrence of conflicts during operational stage. In case A, they often consult technical expert, which enables minimizing errors. However, in case B, non-consultation results

in conflicts between partners. Therefore, advices from technical experts are essential to minimize the knowledge gap between parties.

On the other hand, though the CJV operated as the separate entity from the parent company, respondent R-C1 stated that, **giving frequent update to the parent company on project progress and any other related issues** will be beneficial to make an early involvement of the respective persons from the parent company whenever required.

Moreover, respondent R-D1 suggested, having **brain storming sessions in a timely manner** for early identification of conflicting situations and arrangement of necessary actions is important to minimize the effect.

According to respondent R-B1, providing **frequent updates for all partners regarding the cash flow** of the project will be beneficial to have an idea on cash in and cash out of the project. It enables to make necessary early arrangements to provide necessary cash on time when one party is not in a position to provide cash as agreed earlier.

Further, R-D1 mentioned that when common resources are used by many partners, it is important to continuous update of the existing stock and, maintain the stock at the acceptable level by fulfilling both partners' requirements, while distributing the resources in the fair manner. Therefore, **agreed suitable procedure to update, maintain and distribute common and scare resources in a fair manner** can be identified as an important proactive strategy to follow, when using common resources.

Accordingly, there are some proactive conflict management measures which has already been taken by the parties of some cases. Some approaches are proposed to practice. Further, there are some measures that has to be taken depend on the nature of the case.

4.13 Reactive Approaches

Respondents discussed existing approaches, drawbacks of existing approaches, actions taken to make those approaches successful and proposed suitable approaches, reactive

conflict management approaches practiced in each stage of CJV life cycle as summarized in Subsections from 4.14.1 to 4.14.3.

4.13.1 Beginning stage

The respondents have not highlighted any conflicts or reactive conflict management approach in this stage. This may be due to less interaction between partners on this stage, in selection of JV partner and taking investment decision.

4.13.2 Formation stage

List of existing and proposed reactive approaches at the formation stage of the life cycle in four cases were summarized in Table 4.11.

Table 4.11: Reactive conflict management approaches at formation stage

Reactive conflict management approaches	Existing approaches				Proposed approaches			
	A	B	C	D	A	B	C	D
Negotiation	x		x	x				
- Negotiate Bid price	x		x	x				
- Negotiate the terms of the contract	x	x		x				
o Exchange statement clarification	x							x
Get the support of other stakeholders of the main contract	x			x				

Negotiation is the commonly used in reactive management measure. According to respondent R-A1, they have used negotiation to agree for the bid price to a position that enables to win the bid. During this negotiation they used previous records to elaborate the local market condition to the foreign partner. Similarly, respondents in cases C and D highlight that they used negotiation to agree for bid price.

Majority of the respondents used negotiation to agree for terms of CJV contract. According to respondent R-A1, after several discussions, clauses are agreed to a favourable and acceptable position for both parties. Respondent R-A1 stated that they had to exchange statement of clarifications to minimize the conflicts over misinterpretation of terms.

In addition, R-A1 highlighted that when a conflict has arisen between parties regarding the legal capacity of foreign partner to enter into the contract, local partner gets the

support of the employer and other legal experts to control the problem. Accordingly, when a conflict arises between partners, it is vital to **get the support of other stakeholders involved in the main contract** to resolve the conflict.

Therefore, as per the above discussion, negotiation can be identified as the most common conflict management approach used in the formation stage

4.13.3 Operational stage

List of existing and proposed reactive approaches at the operation stage of the life cycle in four case were summarized in Table 4.12.

Table 4.12: Reactive conflict management approaches at operation stage

Reactive conflict management approaches	Existing approaches				Proposed approaches			
	A	B	C	D	A	B	C	D
Negotiation	x	x	x	x				
Compromising	x	x		x			x	
Open discussions	x		x					x
Looking at the views other partner's ideas in a broader perspective	x	x				x		
Acknowledge own mistakes						x		
Forcing	x							
Avoiding	x		x					
Phrase problem or message correctly in an understandable language	x							
Increase involvement of top management			x					
Prepare monthly financial inspection assessment to maintain transparency of cash flow	x			x				
Self-patience, listening and understanding other partner's view						x		x
Continuous update of the project progress and having necessary precautions to catch up delays	x				x			
Revised the plan in a way that minimize effect of one partner's delays to other partner and project progress							x	

Respondents of 4 cases highlighted that, they are frequently using **negotiation** to resolve the conflicts between them. Respondents of the cases A, B and D highlighted that in a conflicting situation; they often discuss with each other and come into favourable position for both parties. They stated that their practice is much similar to **compromising** strategy.

In addition, respondents R-A1, R-C1, R-C2 and R-D1 stated that with the participation of various parties who are directly involved with the situation, they conduct **open discussions**. Respondent R-C2 further highlighted that, *“this open communication enables them to get the idea on other partners mind”*. Respondent R-A1 declared to finalize the conflict management strategy they get the help of JV operation committee. Therefore, in any case parties are practicing open discussion strategy to manage conflicts. However, final interpretation of the agreed approach is depending on the prior agreed procedures within the CJV entity.

Moreover, respondent R-A2 highlighted that in conflicting situation, **looking at the other partners ideas in a broader perspective** enables to identify own mistakes and find a suitable solution. Similarly, respondent R-B2 stated that *“when the conflict occurs as we have less experience regarding local market we just get into the shoes of other party and look on the problem. Then we can understand the position or difficulties he is facing”*. Further, respondent R-B1 stressed that *“if we feel that we are wrong, it is better to **acknowledge our own mistakes**, without fighting to prove the wrong”*.

Respondent R-A2 mentioned that when local partner was not giving priority for taking necessary approvals, they use **forcing** strategy to get the work done. On the other hand, respondent R-A1 and R-A2 highlighted that **‘avoidance’** sometime convert the small conflict into a big conflict or with some additional conflicts. Moreover, as stated by respondent R-A1 sometimes using avoidance strategy helps us to forget our aggressive discussions and protect the relationship. Therefore, the strategy suitable for one situation may not be suitable for another situation. Accordingly, as highlighted in literature have to select the suitable strategy depend on the situation.

Respondent R-A1 stated that sometimes foreign partner understands a small issue, as a big issue. Therefore, respondent R-A1 highlighted that *“now when we are giving or sending him messages or emails, we are giving much attention to **phrase the problem or message correctly in simple understandable language**. Further, we get the help of local representative to communicate those messages to them correctly”*.

In case C, respondent R-C1 highlighted that as they have not expected this amount of conflicts within the JV entity there are no prior agreed ways to manage those conflicts. Therefore, rather than other projects now they have to get the help of top management to manage those conflicting situations. Accordingly, in case C where parties not agreed ways of managing conflicts, they have to **increase the involvement of top management** to manage those conflicts.

In case D respondent R-D2 and R-A1 stated that **monthly financial inspection assessment is prepared to maintain the transparency of cash flow**. However, cases B and C, faced lot of conflicts due to lack of transparency on their accounts.

According to respondents R-B1 and R-D1 in a conflict situation, **self-patience, listening and understand other party's views** are highly essential. On the other hand, respondent R-C2 stated that; *“listening to the other party makes feel him that we are in position to talk and eventually it results in he expressed his feelings openly and ability to select the best solution for the particular situation”*.

On the other view, respondents R-A1 and R-A2 highlighted that **continuous update of the project progress and discussion on necessary precautionary methods to catch up delays** is another reactive measure in operational stage to minimize conflicts related planning and scheduling activities. As further highlighted by respondent R-C1, *“if there are any effects from one partner's delay to the other partners work, revising the plan in a way that minimizes effect of one partner's delays to the other partner and project progress is important”*.

Therefore, in a conflict situation, at the operational stage, parties have to agree on suitable reactive measures, which enable each party to identify other partner's views and to arrive in a favourable position for both partners.

4.14 Recommendations for Authorities and the Government

As the final question of the interview respondents were asked to give their recommendations for the governments and authorities for the better practice CJV. Respondents R-A1, R-C1 and R-D1 highlighted the importance of developing a standard document or related clauses in conditions of contract to provide guidance for

the preparation of JV agreement. Respondent R-A1 stated that having a standard document will help to prevent omission of important items that have to be agreed in JV agreement.

Respondent R-B1 stated that *“there are no any related laws available in Sri Lanka to sue against parent company, for the wrong actions of JV partner. Therefore, it is better to introduce such laws which enable to sue against parent company. Otherwise Employers have to face various difficulties in such situations”*. Accordingly, introduction of such laws will be beneficial for employers to ensure work security.

Respondents R-A1 and, R-C1 highlighted that importance of initiating specific laws related to JV entities. Accordingly, it will be beneficial for all partners to avoid misinterpretations, when using other related laws.

Respondent R-A1 further stated that *“authorities need to provide special attention for giving approvals and any other necessary support when there is a JV entity form with the foreign partners. Otherwise there are lot of conflicts occurred between JV partners”*. Therefore, JV with the foreign partner requires special attention to minimize conflicts due to faults of the employer or engineer.

Accordingly,

- development of standards to prepare JV agreement
- improve legal system in Sri Lanka to sue against parent companies for the faults of JV
- introducing specific laws applicable to JV in Sri Lanka

can be identified as the recommendations for the proper practice of CJV in Sri Lanka.

4.15 Summary

The research findings indicate that multinational cultural JV entities face more conflicts than the similar cultural entities. Even in the similar cultural entities' conflicts can be occurred due to under performance of one partner compared to the other. When the partners are using common resources there is high possibility to occur conflicts. The possibility of occurring conflicts is magnified, when one partner's scope of work has effect over the other partners work.

There are both positive and negative effects from the conflicts. However, JV partners often handle those conflicts with minimum effect on construction project performance. Each JV entity has some agreed procedures to manage and operate, which also provide basis for proactive conflict management. Non identified situations should be handled in an ad-hoc basis. In any JV entity, there is a possibility to occur conflicts and necessary precautions should be implemented to manage those conflicts and minimize the effect on JV relationship and the overall construction project performance.

CHAPTER 05

DISCUSSION

5.0 DISCUSSION

5.1 Introduction

Chapter five provides the discussion of research findings, along with the findings of literature review. The aim of this chapter is to develop a framework for management of conflicts in CJV contracts in Sri Lankan construction industry, incorporating research findings.

5.2 Overview of Conflicts in CJV Contracts.

According to research findings, conflicts within CJV entity are a natural phenomenon which cannot be totally eradicated. Similarly, literature findings indicate unique set of objectives that JV parties can bare and shall inevitably result conflicts in CJVs (Sillars and Kanagari,2004). According to Hennart and Zeng (2002), when there are parties from different cultural backgrounds, occurrence of conflicts will be magnified. Similarly, research findings stated that when there is a multinational culture, magnitude of conflicts are higher. Literature findings stated that there are both positive and negative effect from the conflicts depend on the way they are handled (Verma, 1998). Similarly, research findings indicate that there are both positive and negative effects from conflicts.

5.3 Causes for Conflicts

Different studies identified causes for conflicts in CJV contracts. According to Demirbag (2003) these causes can be categorized in terms of;

- Issues related to terms of contract,
- Issues related to objective of JV and partners,
- Issues related to strategic control and division of benefits,
- Conflict related to tactical control and joint venture link with parent company,
- Issues related to sourcing and performance evaluation of Joint venture.

Correspondingly, the causes for conflicts identified through research findings can be classified under these categorizations. Research findings identified causes for conflicts and root causes for conflicts and categorized considering the beginning, formation and

operation stages of the CJV life cycle. Termination stage was not considered in this research, as the data were collected from on-going projects.

5.3.1 Beginning stage

The research findings could not be able to identify any conflicts during beginning stage. This may be due to less interaction between parties in selection of partners and making investment decision.

5.3.2 Formation stage

A comparison of similar causes and root causes for conflicts, identified through literature and research findings at beginning stage of CJV is summarized in Table 5.1.

Table 5.1: Comparison for similar kind of causes for conflicts identified during formation stage

Literature findings	Research findings
Issues related to terms of CJV contract	
<ul style="list-style-type: none"> Contractual provisions are not drafted in a proper way that shift project risk to the party who is ready to bare it 	<ul style="list-style-type: none"> Disagreement over finalizing terms of JV contract, Non identification and allocation of risk in a fare manner
<ul style="list-style-type: none"> Disagreement over terms in Contract 	<ul style="list-style-type: none"> Disagreement over terms of contract
Issues related to management and control and division of profit and loss	
<ul style="list-style-type: none"> Disagreement over profit retention and division of benefits 	<ul style="list-style-type: none"> Disagreement over bid price
<ul style="list-style-type: none"> Attempt by one party to obtain dominant control 	<ul style="list-style-type: none"> Disagreement over attempt to get the dominant control of the project
<ul style="list-style-type: none"> Incompatibility or Disagreement over management and operational strategies 	<ul style="list-style-type: none"> Deficiency in planning and scheduling works
Conflict related to control within the JV entity and joint venture link with parent company	
<ul style="list-style-type: none"> Imbalance in level of expertise and investments or assets provide by each party in the venture 	<ul style="list-style-type: none"> Lack of expertise related to technology and market condition Lack of knowledge of foreign partner on legal background of the country Imbalance of level expertise in different markets
<ul style="list-style-type: none"> Disagreement over hiring policies 	<ul style="list-style-type: none"> Disagreement over legal capacity of foreign partner to enter into contract
<ul style="list-style-type: none"> Disagreements related to role and functions to be performed by each partner in JV 	<ul style="list-style-type: none"> Disagreement over providing preliminaries

Literature findings	Research findings
<ul style="list-style-type: none"> Each partner has different objectives on participating for the joint venture and they are not aligning with each other 	<ul style="list-style-type: none"> Difference in priorities

In addition to above, research findings identified difference in company policies, as a root cause for conflicts.

5.3.3 Operation stage

A comparison of similar causes and root causes for conflicts identified through literature and the research findings at operational stage is summarized in Table 5.2.

Table 5.2: Comparison for similar kind of causes for conflicts identified during operational stage

Literature findings	Research findings
Issues related to terms of contract	
<ul style="list-style-type: none"> Disagreement over terms in Contract 	<ul style="list-style-type: none"> Disagreement over terms of CJV agreement
<ul style="list-style-type: none"> Each partner has different objective on participating for the joint venture and they are not tally with each other 	<ul style="list-style-type: none"> Non- alignment of objectives of JV partners Difference in priorities
Issues related to management and control and division of profit and loss	
<ul style="list-style-type: none"> Attempt by one party to obtain dominant control 	<ul style="list-style-type: none"> Disagreement over dominant control carried out by the lead partner
<ul style="list-style-type: none"> Disagreement over profit retention and division of benefits 	<ul style="list-style-type: none"> Disagreement on division of loss related to over ordered material Unwillingness of one partner to bare loss
<ul style="list-style-type: none"> Incompatibility or Disagreement over management and operational strategies 	<ul style="list-style-type: none"> Deficiency in project management and control Deficiency in planning and scheduling
<ul style="list-style-type: none"> Failure of parties to deal with changes and unexpected conditions occurred 	<ul style="list-style-type: none"> Disagreement over payments related to varied scope of work Disagreement over bearing of cost during EOT period Disagreement over exchange rate applicable for EOT period Lack of flexibility in facing unforeseeable changes
<ul style="list-style-type: none"> Poor communication between project participants 	<ul style="list-style-type: none"> Lack of coordination between parties

Literature findings	Research findings
Conflict related to control within the CJV entity and joint venture link with parent company	
<ul style="list-style-type: none"> • Imbalance in level of expertise and investments or assets provide by each party in the venture 	<ul style="list-style-type: none"> • Lack of expertise related to technology • Difference in level of expertise • Difference in priorities
<ul style="list-style-type: none"> • Disagreements related to role and functions to be performed by each partner in JV 	<ul style="list-style-type: none"> • Disagreement over low response of local partner when employer's refuse to accept the modifications proposed at the bid stage on employer's requirement during the operational stage
<ul style="list-style-type: none"> • Difference in opinion, stress, complains and frustration, blaming, sarcasm and uncooperativeness 	<ul style="list-style-type: none"> • Lack of willingness to listen or accept other partners view
<ul style="list-style-type: none"> • Social and cultural difference between home and host country 	<ul style="list-style-type: none"> • Difference in working culture • Difference in organizational culture
Issues related to providing resources and performance of CJV	
<ul style="list-style-type: none"> • Disagreement on performance and performance evaluation 	<ul style="list-style-type: none"> • Disagreement on working pattern of staff and labour • Disagreement over non-performance as per the project plan • Non-performance of local partner and have to find another partner • Disagreement over finish of the work performed by the other partner • Disagreement over wrong procedure carried out on storing materials

Research findings highlighted that the deficiencies in terms of CJV agreement, is the frequent root causes for conflicts. Research findings identified that interdependency of works, disagreement over non-transparency of cash flow, unobserved backgrounds of partners prior to enter into agreements and non-availability of prior agreed policies and procedures to minimize conflicts, are causes for conflicts. Further, due to the use of common resources, conflicts can be occurred in terms of; disagreement over material procurement and material distribution, insufficiency of available resources and disagreement over utilization of common resources. In multi-cultural CJV, conflicts can be occurred due to difference in working culture, usage of different languages and difference ways in interpreting given messages.

5.4 Overview of Conflict Management

Literature findings indicate that the failure to handle conflicts result in failure of JV (Naguyen, 2011). Further, the literature highlighted that if conflicts are well managed, it brings the organization and JV to a much more innovative and productive position (Karim et al, 2014). Similarly, research findings indicate that conflicts need to be managed to minimize the effect to the JV relationship and to achieve the successful completion of the project.

Literature findings identified three major steps on conflict management as: identification of conflicting situations and take necessary actions to avoid them or minimize the effect of them, face the conflicts by understanding its real nature and come into the win-win solution. Naguyen (2011) categorized conflict management approaches in to two sections as; proactive approaches and reactive approaches. Similarly, research findings identified causes and root causes for conflicts, proactive conflict management approaches to avoid or minimize conflicts and reactive approaches to obtain win- win solutions, considering beginning, formation and operation stages of CJV life cycle.

5.5 Proactive Conflict Management Approaches

Proactive conflict management approaches identified through research findings and literature findings, in the beginning, formation and operation stages of CJV life cycle, are summarized in sub sections 5.5.1 to 5.5.3.

5.5.1 Beginning stage

A comparison of similar type of proactive management approaches identified through literature findings and research findings at beginning stage is summarized in Table 5.3.

Table 5.3: Comparison for similar kind of proactive conflict management approaches identified during beginning stage

Research findings	Literature findings
<ul style="list-style-type: none"> • Selection of suitable partner- <ul style="list-style-type: none"> ○ Based on previous experience of working together in relevant fields ○ Conducting market analysis ○ who is culturally fit 	<ul style="list-style-type: none"> • Selection of suitable partner who fit & compatible in terms of; Strategic fit, Organizational fit, Cultural fit, Task related features, Partner related features

Literature findings	Research findings
<ul style="list-style-type: none"> • Study background information about the partner prior to start negotiations 	<ul style="list-style-type: none"> • Obtain enough information about partner before negotiation
<ul style="list-style-type: none"> • Identify and align objectives of each partner on performance of the project as a CJV entity 	<ul style="list-style-type: none"> • Clear identification and Align partner's objectives

Both literature and research findings highlighted the importance of, selecting a suitable partner as a proactive approach. Research findings further identified mechanisms to be used on selection of CJV partner. Hence, literature findings stated requirements to be fit and compatible in selection of a JV partner. In addition, research findings stressed to, carry out grounded study prior to enter into new country.

5.5.2 Formation stage

A comparison of similar type of proactive management approaches identified through literature findings and research findings at formation stage is summarized in Table 5.4.

Table 5.4 :Comparison for similar kind of proactive conflict management approaches identified during the formation stage

Research findings	Literature findings
Enter into agreement covering all aspects	Clearly state terms of JV agreement
Divide the scope with minimum interaction with each other	IJV Contract design- Share/split control, measuring each partners performance, Agreement on profit/loss sharing considering the gain of all partners

Research findings identified that entering into proper agreement is the most important proactive approach in formation stage. Further, research findings identified important aspects that have to be concerned in preparation of agreement. Research findings stated to divide the scope with minimum interaction. Literature findings stated the requirements to consider on CJV Contract design.

In addition, research findings identified: the importance of preparing bid submission with a proper plan and submit the bid covering all requirements mentioned in bidding document as a proactive conflict management measure. Further, research findings identified: giving the bid price covering all associated risk, brainstorming sessions to identify factors to be covered through bid pricing and submission, prepare the list of aspects to be covered on bid submission and divide them between JV partners,

combine and compile each partner's submission properly and understand documents submitted by other party, as proactive management approaches to be practiced in preparation on bid submission.

Moreover, research findings identified: sharing knowledge and experience, appointing administration committee with the participation of representative from all partners, preparation of project master plan with the participation of all partners, as proactive approaches to practice during the formation stage.

5.5.3 Operational stage

Literature findings indicated relational quality has to be built between parties through: trust, commitment, communication and establishing procedures. Similarly, research findings identified that, having frequent progress meetings, sending progress reports and update all partners on project progress as the most productive proactive conflict management measure.

In addition, research findings identified that: updating and revising the project plan, getting the key decisions through CJV administration committee, acting according to the procedures stated in CJV agreement, receiving instructions/advices from the technical expert, frequently updating all partners on cash flow, increasing awareness to the parent company on project progress and any associated issues, discussing ways to avoid conflicts and brainstorming sessions to identify the conflicts, as proactive conflict management measures. Further in using common resources research findings proposed to agree on suitable procedure for update, maintain and distribute common and scarce resources in a fair manner.

5.6 Reactive Conflict Management Approaches

Both literature and research findings stated though they have taken proactive approaches to manage conflicts, there can be unforeseeable situations, where corrective actions to be taken. In such situations, it is wise to take necessary reactive measures in, managing those situations. Accordingly, reactive conflict management approach to be practiced in formation and operation stage of CJV life cycle were identified and summarized in subsections 5.6.1 to 5.6. 2.

5.6.1 Beginning stage

According to research findings, respondents have not highlighted any conflicts or reactive conflict management approach in this stage.

5.6.2 Formation stage

According to research findings ‘negotiation’ is a reactive conflict management approach practiced during formation stage by the partners. In addition, parties can exchange statement clarifications to manage disagreements on interpretation of contract terms. Hence, research findings identified, get the support of other stakeholders of main contract to manage conflicts.

5.6.3 Operational stage

A comparison of similar kind of reactive management approaches highlighted by both literature findings and research findings is summarized in Table 5.5.

Table 5.5: Comparison for similar kind of proactive conflict management approaches identified during operational stage

Research findings	Literature findings
Conflict handling styles- Avoiding Compromising Forcing	Selecting right handling strategy: Problem solving, Compromising, Forcing, Legalistic, Avoiding, Accommodating, Competing, Collaborating, Integrating, Obliging, Dominating
Phrase message correctly in understandable language	Phrase problem correctly
Open discussions	Discuss problem as open talk, self-patience and endurance
Looking at the views of other partners ideas in a border perspective	Expand the ways of view the problem
Listening and Understanding other partner’s view	Express understanding of other parties’ view

Literature identified more conflict handling styles compared to research findings. Research findings identified that; increase involvement of top management, prepare monthly financial assessment to maintain transparency of cash flow, acknowledge own mistakes, continuous update of project progress and having necessary precautions to catch up delays and, identify ways of minimizing effect of one partner’s delays to other partner, as reactive approaches.

On the other hand, as per literature findings, assessment, acknowledgement, action and analysis as conflict handling steps. Further, as per literature, developing a high tolerance, understanding for different cultures, post-conflict follows up with real firm commitment and rebuilding trust can be highlighted as other reactive conflict management approaches.

5.7 Development of Framework

Conflicts can be occurred in any type of CJV entities. Therefore, attention has to be paid on managing conflicts in a way that having minimum effect for the project performance and CJV relationship. Literature findings stated three major steps of conflict management such as: identification of conflicting situations, take precautionary actions to avoid or minimize the effect of conflicts, face the conflicts by understanding its real nature and coming into the win-win solution. Accordingly, framework was developed using research findings, providing guidance for practitioners to practice when enter into CJV.

Identified causes and root causes for conflicts, proactive and reactive conflict management approaches were used to develop the framework on conflict management. Identified causes and root causes were generalized with the research findings and mentioned as cause for conflict in framework. Hence, the framework was developed considering beginning, formation and operation stage of CJV life cycle. The research findings were further categorized as: common for any CJV, specific for multinational culture and specific in utilization of common resources. Framework illustrated in Figure 5.1 provides guideline for industry practitioners on factors to be consider in entering into CJV and performing as a CJV entity

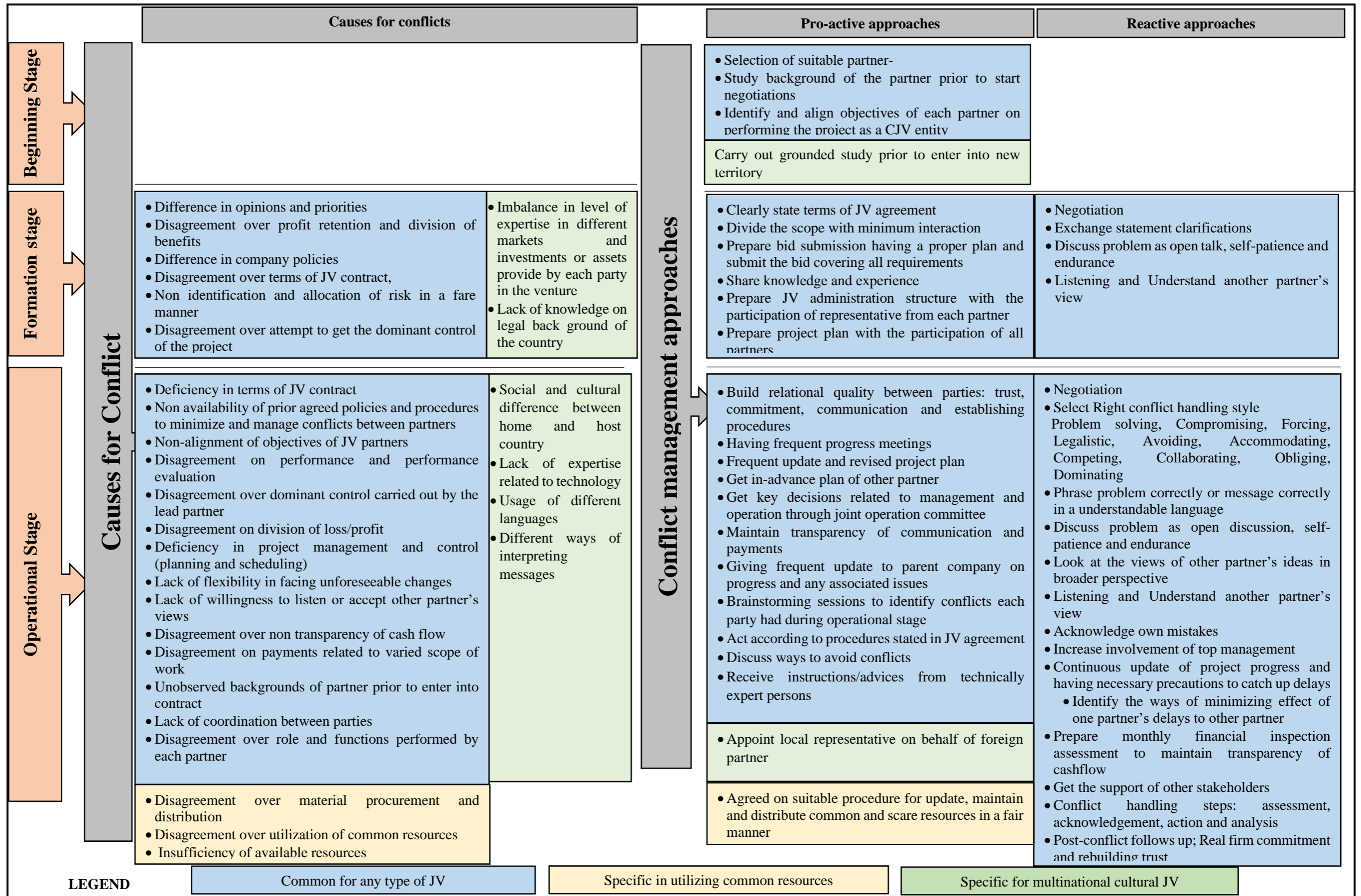


Figure 5.1 Framework for conflict management in CJV contracts

The framework provides basis for identification of potential causes for conflicts, precautionary measures to be taken to minimize the effect of conflicts or to avoid conflicts, and suitable approaches to be followed to achieve the win-win situations, considering the beginning, formation and operation stage of CJV life cycle. Notably, these are not the only cause for conflicts and suitable approaches to be followed. Hence, all the approaches are not suitable for every situation. The partners to the CJV have to identify the suitable approaches depend on the situation and they can practice any other suitable approach, based on their previous experience and their knowledge. Further, in the beginning stage, there is less possibility to occur conflicts. However, development of proper basis during beginning and formation stage is important to minimize conflicts in latter stage.

5.8 Summary

This chapter synthesised the outcome of research findings comparing it with the existing knowledge find through the literature survey. Accordingly, it reveals that findings identified through research study were in line with the existing knowledge. Further, the research findings enable to identify the causes for conflicts and conflict management approaches in a broader view considering the beginning, formation and operation stage of CJV life cycle. Based on the research findings framework was developed to manage conflicts in CJV contracts in Sri Lankan construction industry.

CHAPTER 06

**CONCLUSIONS AND
RECOMMENDATIONS**

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

Chapter 6 provides the summary of findings and conclusion while addressing the initially established objectives. The chapter provides recommendations based on the research findings. Finally, further research directions were opened up by this research which is spotlighted.

6.2 Summary of Key Findings and Conclusion

The present study designated to investigate the approaches for managing conflicts in Joint venture contracts in Sri Lankan construction industry.

Objective 1: Review JV contracts, conflicts in JV contracts and conflict management approaches

Joint venture is a temporary assemble organization with the intention to; enhance competitiveness, share risk and, gain access to new market, to name a few. In the construction industry, JVs are form for duration of single project. The entire life cycle of the CJV consists of four main phases; beginning, formation, operation and termination stage. CJVs are formed with the participation of people with different goals and objectives.

Unique set of objectives each party bears inevitably result in conflicts within the CJV entity. These conflicts have both positive and negative effects. If conflicts are not properly managed, that may affect the effectiveness and productivity of CJV entity. Therefore, adequate conflict management is necessary within the CJV entity. Conflict management is the process of dealing with conflicts in a way that minimizing destructive functions and enhancing the constructive functions. These approaches can be divided into two segments as proactive approaches and reactive approaches.

Objective 2: Conflicts and their root causes of JV contracts in Sri Lankan construction industry

Causes and root causes for conflicts were identified in, considering beginning, formation and operation stage of CJV life cycle. Probability of occurring conflicts at the beginning stage is fewer. In the formation stage conflicts occurred due to non-aligned objectives of JV partners, disagreement on terms in CJV agreement, disagreements on CJV management and control structure and disagreements on division of loss and profit. Conflicts are frequently occurred in operation stage of CJV life cycle. When the interactions between parties are high, probability for occurring conflicts also magnified. In operation stage conflicts occurred due to: non-aligned objectives of JV partners, deficiency in terms of CJV agreement, disagreements for management and control of JV entity, disagreement on division of loss and profit, disagreements for performance and providing resources, and cultural differences between organizations or countries.

Objective 3: Investigate the existing approaches for managing conflicts in JV contracts in Sri Lankan construction industry

Research findings identify proactive and reactive conflict management approaches considering the beginning, formation and operational stage of CJV life cycle. Selection of suitable partner and understand and align objectives of all partners, at the beginning stage is important for proper execution of CJV entity. In the formation stage, enter into proper agreement, proper design of CJV administration structure and development of project master plan with the participation of all partners, are important proactive approaches. In the operation stage, having progress meetings and having open discussions can be identified as the most productive, proactive conflict management measure. Updated and revised master programme and revising each partner's program in a way that minimizing effect to the other party is an important proactive conflict management measure. Further, agreed suitable procedure to update, maintain and distribute common resources is a proactive approach to be practiced in utilizing common resources.

Though the partners practice some proactive measures, there can be a possibility to occur conflicts. Therefore, suitable strategies have to be used to minimize the effect and obtain a win- win solution. Negotiation is the most common approach practiced by the partners. Moreover, discuss the problem as an open discussion, listen and understand other partner's views and acknowledge own mistakes are some other reactive approaches that can be practiced during formation and operation stage.

Objective 4: Propose suitable approaches for managing conflicts in CJV in Sri Lankan construction industry

Conflicts can be occurred in any type of CJV entity. Therefore, attention has to be paid on identification of causes for conflicts and precautionary measures. Therefore, identified conflicts and conflict management approaches were used to develop a framework for conflict management in CJV entity, considering beginning, formation and operation stage of CJV life cycle. In the framework, the research findings were further categorized as, common for any JV, specific for multinational culture and specific in utilization of common resources.

6.3 Recommendations

Based on the findings of the research following recommendations can be made;

- The developed framework can be used by the industry practitioners for conflict management in CJV contracts, when they enter into CJV contract. It will provide an idea on possible causes for occurrence of conflicts, proactive and reactive conflict management measures to follow in beginning, formation and operation stage of JV life cycle to minimize conflicts.
- Statutory bodies can introduce statutory act in-relation with CJVs. Such act needs to contain a provision to take actions against CJV partners for the malpractices.
- Authorities can have more elaborative clauses in conditions of contract providing guidance for aspects to be covered in CJV agreements.

6.4 Further Research Area

It was identified that there are many scenarios yet to be studied related to this research area. Therefore, following research areas are recommended to study with suitable adjustments related to CJV contracts.

- Investigation of critical factors for conflicts occurred in CJV contracts in Sri Lankan construction industry.
- Investigation of causes for conflicts and conflict management strategies for CJV contracts used in building projects.
- Develop a guideline highlighting the important aspects that have to be covered through CJV agreement.
- Investigation of critical factors affecting for the failure of JVs and proposed suitable approaches to minimize those failures.

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APPENDIXES

Appendix 1: General opinion about conflicts

Nodes			
Name	Files	References	
Over view of conflicts		0	0
General opinion about conflicts		1	8
Conflict is a natural phenomina		1	3
Conflict should be managed		1	2
Priority should be given to minimize conflicts as much as possible		1	2
Conflicts between JV partners resolved through mutual understanding		1	1

Appendix 2: Causes for conflicts

Nodes	
Name	
Causes for conflicts	
Beginning stage	
Formation stage	
Disagreement over bid price	
Disagreement over finalizing terms of CJV contract	
Disagreement over legal capacity of foreign partner to enter into contract	
Operation stage	
Diagreement on working pattern of labour and staff	
Different ways in interpreting messages	
Disagreement on division of loss related to over ordered material	
Disagreement on law response of local partner when employer refuse to accept modifications on bid	
Disagreement over bearing cost during Extention of Time (EOT) period	
Disagreement over dominant control carried out by lead partner	
Disagreement over exchange rate applicable for EOT period	
Disagreement over finish of the work performed by other partner	
Disagreement over non transparency of cashflow	
Disagreement over non-performance as per project plan	
Disagreement over payments related to varied scope of work	
Disagreement over responsibility on material procurement and ways of using them	
Disagreement over utilizing common resources	
Disagreement over wrong procedure of material storage	

Appendix 3: Five why analysis

Conflict/ Problem	Respo	Why	Why	Why	Why	Why
Case A						
Formation Stage						
Disagreement over bid price	R-A1	In pricing put high risk margin by the foreign partner and local partner asked to reduce it	Not familiar with Sri Lankan market	Imbalance of level of expertise in different markets		
				Difference in opinions and priorities		
	R-A2	Based on the assumptions about the Sri Lankan market price the BOQ	Not familiar with risk associated in Sri Lankan market related to the scope of work	Lack of knowledge about the Sri Lankan market	Imbalance on level of expertise in different markets	
		Different OH & P percentage used by the companies in pricing	Difference in company policies			
Disagreement over legal capacity of foreign partner to enter into contract without having CIDA registration.	R-A1	Disagreement on legal entitlement to sign the contract	Unwillingness -Not like - to accept the other partner's view without having the valid document proving it.	Lack of knowledge on legal background of the country		
	R-A2	Without having valid document unable to believe the words	Lack of knowledge on legal background of the country			

Conflict/ Problem	Respo	Why	Why	Why	Why	Why
Disagreement on terms of JV agreement	R-A1	Foreign partner has put terms much favourable for him	Shift some risk to the local partner which can be easily bare up by him	Non division of associated risk in a fare manner		
	R-A2	Local partner has put terms much favourable for him	Not draft the contract properly	Not allocate the risk properly		
Operation stage						
Disagreement over working patterns of local labour and staff	R-A2	Less efficiency of local labour (not working for the lengthy hours and not attend to the Site as agreed after the Site shut downs)	Difference in working culture			
Local authorities take lot of time to give approvals and lead partner not force to the Engineer to give it quickly	R-A1	Lengthy procedures taken in Sri Lanka to give approvals	Non familiarity with the procedures followed in Sri Lanka			
	R-A2	Not like to commence the work at the verbal approvals	Difference in ethics followed	Difference in working culture		
Disagreement over low response from the local partner for delay caused by the local authorities in approval process	R-A1	Inability explain the procedures practice in Sri Lanka to foreign partner	difference in approval process	Difference in working culture		

Conflict/ Problem	Respo	Why	Why	Why	Why	Why
Disagreement over low response of local partner when employer's refuse to accept the modifications proposed at the bid stage on Employer's requirement during the operational stage	R-A1	Lack of experience on local partner regarding the documents submitted by the foreign partner	At the Bidding stage submit the technical proposal given by the foreign partner without studying it	Insufficient time to study the document prior to submission	Not properly allocate the bidding period	Deficiencies in planning and scheduling works related to bid submission
	R-A1	Difference in priorities; Local partner focus on relationship between the Employer and Contractor, Foreign partner focus on loss incurred for them	Lack of experience about the local construction industry, lack of knowledge about the technology	Difference in priorities and expertise (in terms of nature of local construction industry and interpretation of technology)		
	R-A2	Disagreement over interpretation of terms stated in the Bidding document	Different attitudes over interpretation of terms	Difference in culture		
Disagreement over non-performance as per project plan	R-A2	Disagreement over non compliances of planning and scheduling works of the local partner	Difference in working culture			
	R-A1	Due to delays caused by authorities unable to comply with the planning and scheduling works of the foreign partner	Lack of knowledge about the lengthy procedures taken to give approvals	Difference in working culture		
Different ways in interpreting messages	R-A1	Different interpretations	Different language usage			

Conflict/ Problem	Respo	Why	Why	Why	Why	Why
Case B						
Formation stage						
Disagreement over finalizing terms of JV contract	R-B1	Non identification and division of scope properly	Lack of expertise related to technology and the market conditions			
	R-B2	Non allocation of risk properly to the party who is much suitable to bare those	Non identification of all associated risk in a fare manner			
Operation stage						
Disagreements on payments related to varied scope of work (In the agreement it is agreed to provide 6 local labours during the material laying stage and now foreign partner is asking for 10 local labours)	R-B1	Not paid or agreed to paid for additional labour	difference in attitudes and working patterns	Difference in working culture		
Disagreement over less efficiency of labor provided	R-B2	Provided labours are not up to the expected level	Working patterns are not tally with foreign partner	Difference in working culture		

Conflict/ Problem	Respo	Why	Why	Why	Why	Why
Disagreements on payments related to varied scope of work (Local partner has to supply some tools which are on foreign partner's scope)	R-B1	not making additional payments for those tools	Not have prior agreement on way of measuring and paying varied works	Deficiency in contract terms		
Disagreements on payments related to varied scope of work (Not providing the tools whenever request by the foreign partner)	R-B2	Disagreement on delay of supply of required tools	At this stage priority has to be keep on progress of project rather than dividing money	Difference in priorities		
Disagreements on payments related to varied scope of work Additional labours have provided to remove the incorrectly laid areas of track	R-B1	Disagreement on payments for additional labour provided	Not have prior agreement on way of measuring and paying varied works	Deficiency in contract terms		
Disagreement on division of loss related to over ordered material	R-B1	Not having prior agreements related to division of loss	Deficiency in terms of JV agreement			
		Unwillingness to accept the loss				

Conflict/ Problem	Respo	Why	Why	Why	Why	Why
Disagreement on finish of work performed by the other partner (After prepare the ground request for the changes finish surface)	R-B1	Incurs double work to prepare the surface as requested by the foreign partner	Lack of details provided on required surface finish	Lack of expertise related to the work		
Deficiency in ground preparation	R-B2	Not got the instructions on required finish	Poor coordination between partners			
Disagreement over non-performance as per project plan (Non-performance of local partner and have to find another partner)	R-B2	Due to poor financial situation of local partner he has not perform properly	Not properly study the financial situation of the partner prior to enter into the agreement	Not giving attention for the partner's capacity	Not observe the back ground of the partner prior to enter into contract	
Disagreement over bearing cost during EOT period	R-B2	Disagreement over non-clamming cost related to extended period from the Employer	Different attitudes over the claiming cost from the Employer	Difference in working culture		
Disagreement over not clamming preliminary items cost from the Employer	R-B1	EOT was granted on sympathy basis	Not like to affect to relationship with Employer	Difference in working culture		
Disagreement over exchange rate applicable in EOT period	R-B1	In the contract only agreed for the lump sum amount in \$ and not considered about the changes in dollar rate	Deficiency in contract terms of the JV contract			

Conflict/ Problem	Respo	Why	Why	Why	Why	Why
Disagreement over non transparency of cashflow	R-B2	[Foreign partner] not aware about the IPCs and claims submitted by the lead partner	Not agreed for the exchange of information related to the payments	Deficiency in terms of contract agreement		
Disagreement over wrong procedure of material storage	R-B2	Lack of expertise has on storing material	Lack of expertise on technology			
		Haven't got instructions on how to store materials.	Poor co-ordination between the parties			
Case C						
Formation Stage						
Disagreement over bid price	R-C1	Different level of expected profit from the project	Difference in company policies			
Operation Stage						
Disagreement over non-transparency of cashflow	R-C1	Lead partner not provide the copy of Boq or IPCs submitting to the Employer	Not agreeing proper procedure on transparency of payments and communications held between the Employer and the lead partner	Deficiency in terms of JV Contract		
Disagreement over non-performance as per project plan	R-C1	Lack of willingness to complete the project as early as possible	Non alignment of objectives of the JV partners			
Disagreement over behaviour of staff	R-C1	Not having the dedicated and experience staff	Difference in organizational culture			
	R-C2	Not have prior agreed actions to reduce the conflicts between staff				

Conflict/ Problem	Respo	Why	Why	Why	Why	Why
Disagreement over bearing cost during EOT period	R-C1	Project was extended due to other partner's fault, therefore not agreed to bear portion of preliminary cost during EOT period	Not having prior agreed procedure on how to divide such cost	Deficiency in terms of JV Contract		
Disagreement over division of cost related to EOT period	R-C2	Preliminary items cost related to EOT period has to be divided between parties- Loss has to be divided	No provision in the agreement related way of dividing preliminary cost during EOT period	Deficiency in JV Contract		
Case D						
Formation stage						
Disagreement over bid price	R-D1	Not in a position to give further discounts	Given the lowest possible rate as per the company policies	Difference in expected profit level from the project	Difference in company policies	
		Difference objectives in bidding for the project	Difference in opinions and priorities			
		Different Oh & Profit level expected from the project	Difference in company policies			
Disagreement over terms of JV contract	R-D1	Disagreement over unfair terms put in the contract	Disagreement over attempt to get the dominant control over the project through those terms			

Conflict/ Problem	Respo	Why	Why	Why	Why	Why
Operation						
Disagreement over dominant control carried out by the Lead partner- in getting some important decisions, they are not listening to our opinions	R-D1	Difference in organizational sizes	Due to difference in organizational sizes not like to get the opinion from smaller parties	Reluctance to get the opinions of others		
Disagreement over responsibility of material procurement and material distribution	R-D1	Not having prior agreements over responsibility of material ordering	Deficiency in planning & scheduling			
Disagreement over utilization of common resources	R-D1	Non- agreement of proper procedure for allocation of material for each partner	Deficiency in maintain & updating status of common resources	Deficiency in project management and controlling		
	R-D2	Materials are stored in single place	There are no prior agreed ways of issuing material for partner	Deficiency in project management and project controlling		
	R-D2	Revision of design result in requirement of additional materials than initially plan	Unforeseeable complexities occurred in placing pipes in Colombo city	Lack of flexibility to face unforeseeable changes		
Disagreement over utilization of common resources	R-D2	Disagreement over finishing sequence of design work	Each partner wants to finish design of their scope of work	Not having prior agreement on procedures followed in designing	Deficiency in planning and scheduling considering both partners	

Conflict/ Problem	Respo	Why	Why	Why	Why	Why
			There is a single design team	Resources they have not sufficient to fulfil the requirement in both partners	Insufficiency of available resources	

Appendix 4: Root causes for conflicts

Nodes	
Name	
<input type="checkbox"/>	Root cause for conflicts
<input type="checkbox"/>	Beginning Stage
<input type="checkbox"/>	Formation stage
<input type="checkbox"/>	Imbalance of level of expertise in different markets
<input type="checkbox"/>	Difference in opinions and priorities
<input type="checkbox"/>	Difference in company policies
<input type="checkbox"/>	Non identification and allocation of risk in a fare manner
<input type="checkbox"/>	Lack of expertise related to technology and market condition
<input type="checkbox"/>	Disagreement over attempt to get the dominant control of the project
<input type="checkbox"/>	Lack of knowledge of foreign partner regarding legal background of the country
<input type="checkbox"/>	Operation stage
<input type="checkbox"/>	Difference in working culture
<input type="checkbox"/>	Difference in organizational culture
<input type="checkbox"/>	Non availability of prior agreed policies and procedures to minimize conflicts
<input type="checkbox"/>	Non- alignment of objectives of JV partners
<input type="checkbox"/>	Un observed background of the JV partner prior to enter into agreement
<input type="checkbox"/>	Deficiency in terms of CJV contract
<input type="checkbox"/>	Difference in priorities
<input type="checkbox"/>	Lack of coordination between parties
<input type="checkbox"/>	Usage of different languages
<input type="checkbox"/>	Lack of willingness to listen or accept other partners view
<input type="checkbox"/>	Deficiency in planning and scheduling
<input type="checkbox"/>	Insufficiency of available resources
<input type="checkbox"/>	Lack of flexibility in facing unforeseeable changes
<input type="checkbox"/>	Deficiency in project management and controlling
<input type="checkbox"/>	Deficiencies in planning and scheduling works related to bid submission
<input type="checkbox"/>	Difference in level of expertise
<input type="checkbox"/>	Unwillingness of one partner to bare losses
<input type="checkbox"/>	Lack of expertise related to technology

Appendix 5: Negative effect of conflicts

Nodes			
Name	Files	References	
Effect of conflict		0	0
Negative Effect		0	0
Any other effect		0	0
Spending lot of time and money to resolve conflicts		1	1
Exceeding budget limit		1	3
Distruption to work progress and decrease productivity		1	1
Non-adhering to the project plan result in cost and time overuns		1	3
Construction project performance		0	0
Non performance or lack of performance result in delay on const		1	1
Effect to JV relationship		0	0
Reduce motivation to have future relationships		1	1
Not provide discounts in future projects		1	1
Feel like abandon the project		1	1

Appendix 6: Positive effect of conflicts

Nodes			
Name	Files	References	
Effect of conflict		0	0
Positive Effect		0	0
Other effect		0	0
Enhance understanding on various technical aspects		1	1
Identify the factors that has to be concern on enter into JV contra		1	1
Effect to JV relationship		0	0
Improve knowledge about working culture		1	2
Improve understanding on behaviour of other partner		1	1

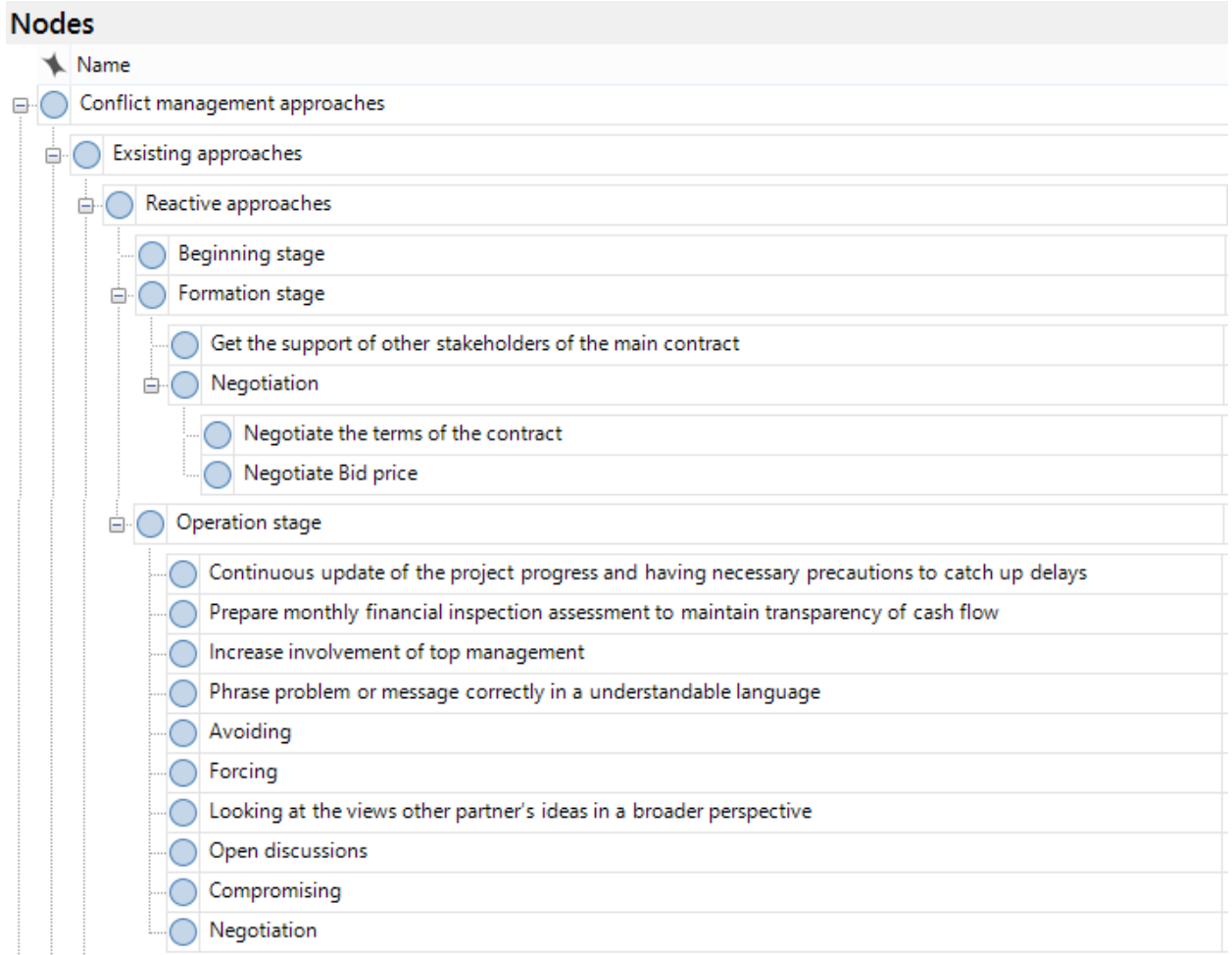
Appendix 7: General opinion on conflict management

Nodes	
Name	
General opinion about conflict management	
Avoiding conflicts get it to the worst condition and have to manage them	
Have to use right strategy to manage conflicts	
To achieve successful completion of project, managing conflicts between	
Need to manage conflicts to reduce effect to the JV relationship	
Conflicts can't be totally eradicated, have to manage them to minimiz	

Appendix 8: Existing proactive conflict management approaches

Nodes	
Name	
Conflict management approaches	
Existing approaches	
Proactive approaches	
Beginning stage	
Selection of suitable partner	
Based on previous experience of working together in relevant field	
Conducting a Market analysis	
Who is culturally fit	
Studying background information about the partner prior to start negotiations	
Formation stage	
Entering into a proper agreement on covering all aspects	
Clearly state terms of CJV agreement	
In drafting CJV agreement use previous experience to identify the conflicting situations	
Received the consultancy of legal expert	
Procedures to agreeing for varied scope of work	
Prepare CJV administration structure having a representative from each partner	
Operation stage	
Conducting progress meetings and sending progress reports to update all partners of the project progress	
Get the in-advance project plan of other partner and arrange the plan accordingly	
Frequent update and revision of project plan	
Getting key decisions related to management and operation of JV through joint operation committee	
Appoint local representative on behalf of foreign partner	
Act according to the procedures stated in JV agreement	
Receiving instructions from the technical expert	

Appendix 9: Existing reactive conflict management approaches



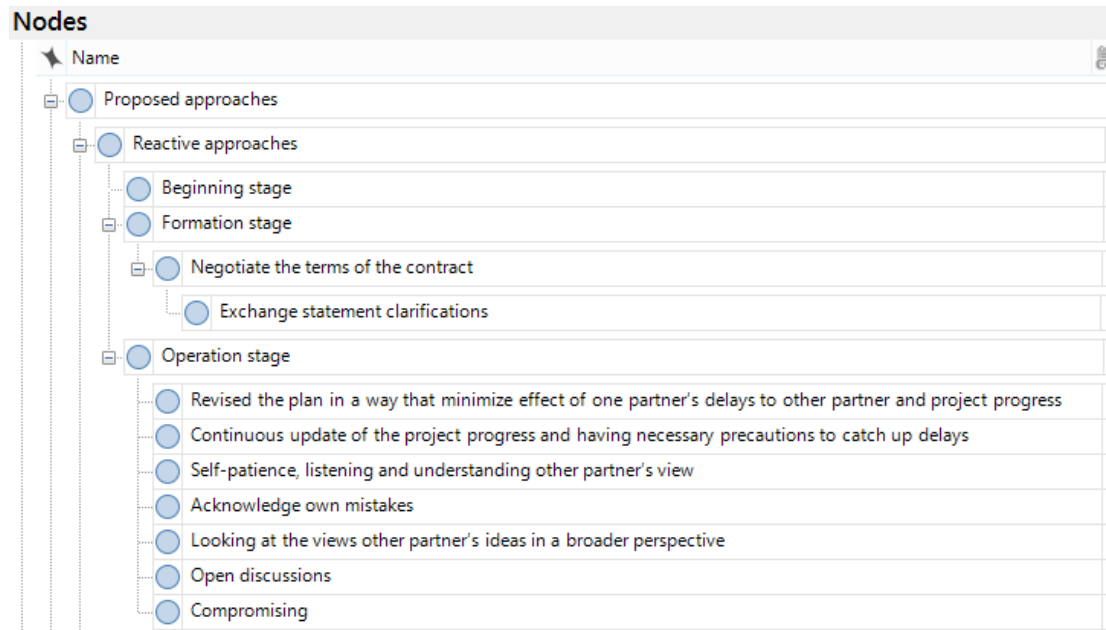
Appendix 10: General opinion about conflict management approaches

Nodes			
Name	Files	References	
General opinion about effectiveness existing conflict management approaches		0	0
Satisfied		0	0
Actions taken to make them successful		0	0
Having frequent update on project progress		1	2
Foreseen the situations which have potential to occur conflicts		1	2
Get into shoes of other party and look at the problem		1	1
Open talks		1	2
Listening to other party		1	1
Not fully satisfied and satisfied upto some extent		0	0
Not satisfied		0	0
Reason for dissatisfaction		0	0
Avoidance creates some additional conflicts		1	2
Lack of study about the partner at earlier stage		1	1
Knowledge gap between parties on conflict management		1	1

Appendix 11: Proposed proactive conflict management approaches

Nodes	
Name	
Conflict management approaches	
Proposed approaches	
Proactive approaches	
Beginning stage	
	<ul style="list-style-type: none"> Carry out grounded study prior to enter into new territory Identify and align objectives of each partner on performance of the project as a CJV entity Studying background information about the partner prior to start negotiations
Formation stage	
	<ul style="list-style-type: none"> Preparation of project master plan with the participation of all partners Prepare CJV administration structure having a representative from each partner Share the knowledge and experience
	<ul style="list-style-type: none"> Entering into a proper agreement on covering all aspects <ul style="list-style-type: none"> Precautionary aspects to state if the project falls behind the schedule Procedure to maintain transparency of communication, and cash flow Identify all risk and allocate them to a partner who is much suitable to managed those risk factors - Del In drafting CJV agreement use previous experience to identify the conflicting situations Clearly state terms of CJV agreement
	<ul style="list-style-type: none"> Divide the scope with minimum interaction with each other
	<ul style="list-style-type: none"> Prepare bid submission with a proper plan and submit the bid covering all requirements mentioned in the <ul style="list-style-type: none"> Understand the documents submitted by other party Brainstorming sessions to identify factors to be covered through bid pricing and bid submission Give the bid price covering all associated risk Prepare the list of aspects to be covered on bid submission, divide them between JV partners and comb
Operation stage	
	<ul style="list-style-type: none"> Agreed suitable procedure for update, maintain and distribute common and scare resources in a fair mann Having brainstorming sessions in timely manner for early identification of conflicting situations Giving frequent update to parent company Receiving instructions from the technical expert Frequent update and revision of project plan

Appendix 12: Proposed reactive conflict management approaches



Appendix 13: Summary of areas covered under CJV agreements

Clauses	Case			
	A	B	C	D
Introduction to				
– partner	X	X	X	X
– Project	X	X	X	X
– Employer	X	X	X	X
– Contract	X	X		
– Works	X	X		X
– Project Cost	X	X	X	
Identify partners (Lead partner and other)	X	X	X	X
Responsibility/ Scope of each partner	X	X		X
Parties Jointly and severally liability to the Employer		X	X	X
Profit and loss distribution				
– Division of profit/loss	X		X	X
– How to indemnify the cost incurred due to negligence of other party	X			X
Management of JV				
– Partners involvement to Joint Operation Committee (JOC)	X	X		X
– Authority and responsibilities of JOC	X	X		X
Accounts				
– Responsibility of preparing account	X		X	X
– Way of maintaining transparency	X			X
– Responsibility over opening and maintain bank account	X		X	
Way of maintaining working capital	X			X
In the event of liquidation or bankruptcy	X			
– Rights and obligations of solvent and insolvent party	X	X		
Assignment and withdrawals rights, obligation, benefits				
– Rights and obligations of each party	X		X	X
– Procedure	X	X		X
Limitations of powers of each partner	X	X		
Rights and obligations in providing resources by each partner	X			
Insurance				
– Responsibility of taking insurance	X			
– Types insurance taken under JV and their coverage	X			
Responsibility on taking and maintaining securities required under the contract	X		X	
Confidentiality of information	X	X	X	X
Severability of clauses in the agreement	X	X		X
Way of settling disputes	X	X	X	X

Way and addresses for exchanging and serving notices, claims, demands or any other documentations	X	X		X
Way of maintaining Exclusivity		X	X	
Ownership of documents		X		
Way of making amendments to the agreement		X	X	
Governing law of the contract	X	X	X	X
Validity of this JV agreement				
– Validity period	X	X	X	X
– Ways of the agreement comes to end	X	X	X	X
– Representing previous communications, agreements	X	X		X
Withdrawal procedure		X		
Way of extending validity of agreement		X		
Language	X		X	
Copies of agreement	X	X	X	
Warranty on non-availability of any disagreement from parent company and any other person or entity to perform in the JV	X			
Responsibility on preparing programm			X	
Delayed works				
– Way of recovering delay occurred to lead partner			X	
Responsibility on providing preliminaries			X	
Way of dividing advance payment			X	
Responsibility on correcting defects during DLP			X	
Deduction and repayment of retention money			X	
TAX paying procedure			X	
Use of LOGO under JV			X	

Appendix 14: Interview guideline

INTERVIEW GUIDELINE

A Framework for Managing Conflicts in Joint Venture Contracts in Infrastructure Projects in Sri Lanka

Dear Sir / Madam,

I am a Post Graduate Student following MSc in Construction Law and Dispute Resolution in Department of Building Economics, University of Moratuwa. It is a requirement of this Master's program, to carry out a research and produces a dissertation on a topic related to Construction Law and Dispute Resolution in construction industry.

In this regards my research focus on "A Framework for Managing Conflicts in Joint Venture Contracts in Infrastructure Projects in Sri Lanka".

In order to achieve above aim, I have identified you as one of the potential participants. Therefore, I would like to interview you at the time convenient to you for thirty to forty-five minutes. Your views will be tape recorded with your permission and will be used solely for the purpose of this dissertation. And your personal information will not be disclosed any part of this dissertation.

Your time and views to my research are highly appreciated. If you are interested to know the outcome of this research, it would be my pleasure to share it with you.

Yours faithfully,

J.A. Harshi Madhuka Jayssinghe
Post Graduate Candidate,
MSc in Construction Law and Dispute Resolution
Department of Building Economics
University of Moratuwa

1.0 INFORMATION OF INTERVIEWEE

1. Name of the Interviewee (Optional)
2. Date of interview
3. Designation of Interviewee
4. Years of Experience in Construction industry?
5. Do you have prior experience in JV projects in Sri Lankan Construction Industry?
Yes/No
If yes state the number of projects?

2.0 INFORMATION ABOUT THE PROJECT

6. Project Name: (Optional)
7. Scope of Project:
8. Contract Price:
9. Duration of Construction project:
10. Reasons for performing this contract through a JV entity;
11. Formation/type of JV entity;
12. Method used to select JV partner;

3.0 CONCEPT OF CONFLICTS

13. Are you satisfied about the JV arrangement in the project?
14. Have you experience any conflicts within this JV entity?
15. Can you briefly explain the types of conflicts you have faced within this JV entity in beginning, formation, operation and termination stage of JV life cycle?
16. What are the root causes behind those conflicts?

Stages	Why	Why	Why	Why	Why
Beginning Stage					
Formation Stage					
Operation Stage					
Termination Stage					

17. Did the conflicts occurred in one stage of life cycle, affect to the other stage of life cycle of JV?
18. Some literature states that; “non existence of conflicts indicates deficiency of meaningful interaction and existence of conflicts required to improve the performance of JV partners” Do you agree with this statement?
19. Have you faced any negative effect from those conflicts?
- What are they?
 - How did they affect the JV relationship?
 - How did they affect to the construction project performance?
20. Have you faced any positive effect from those conflicts?
- What are they?
 - How did they affect the JV relationship?
 - How did they affect to the construction project performance?

4.0 CONFLICT MANAGEMENT

21. What is your opinion about managing conflicts?
22. Is your project administration considered about conflict management within JV entity?
23. Is there any predefined way/s you have agreed within JV entity to manage conflicts or are you considering about conflict management when a conflict situation occurred?
24. Have you use any approach to minimize the effect of conflicts?
- 24.1 If yes state the proactive and reactive approaches you are following in stages of JV life cycle

Stages of JV life cycle	Proactive approaches	Reactive approaches
Beginning Stage		
Formation Stage		
Operation Stage		
Termination Stage		

25. Have those conflict management approaches successfully managed the conflict situation by giving full satisfaction to all parties?

25.1 If no, do you think it is due to the usage of wrong conflict management approach or any other?

25.2 If yes, what are the actions you have taken to make them successful?

26. Have you now recognized any other approach which you think would be more suitable for managing that conflict situation? Please explain.

27. In your experience please explain, what are the proactive and reactive conflict management strategies you are proposed to use in each stage of JV life cycle to minimize the effect of conflicts?

Stages of JV life cycle	Proactive approaches	Reactive approaches
Beginning Stage		
Formation Stage		
Operation Stage		
Termination Stage		

28. Do you think that these conflict management approaches can be practiced in any sort of industry who practice JV in Sri Lankan context?

29. What are your recommendations government/ authorities/ institutions etc to practice JV effectively in Sri Lankan context?

Appendix 15: Sample interview transcript

INTERVIEW GUIDELINE

A Framework for Managing Conflicts in Joint Venture Contracts in Infrastructure Projects in Sri Lanka

Dear Sir / Madam,

I am a Post Graduate Student following MSc in Construction Law and Dispute Resolution in Department of Building Economics, University of Moratuwa. It is a requirement of this Master's program, to carry out a research and produces a dissertation on a topic related to Construction Law and Dispute Resolution in construction industry.

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Your time and views to my research are highly appreciated. If you are interested to know the outcome of this research, it would be my pleasure to share it with you.

Yours faithfully,

J.A. Harshi Madhuka Jayssinghe
Post Graduate Candidate,
MSc in Construction Law and Dispute Resolution
Department of Building Economics
University of Moratuwa

1.1 INFORMATION OF INTERVIEWEE

30. Name of the Interviewee (Optional):
31. Date of interview: 25.02.2020
32. Designation of Interviewee: General Manager
33. Years of Experience in Construction industry? 40 years
34. Do you have prior experience in JV projects in Sri Lankan Construction Industry?
Yes/No yes
If yes state the number of projects? 5 nrs

2.0 INFORMATION ABOUT THE PROJECT

35. Project Name: (Optional) Design and construction of rock fall protection works on Knady Mahiyanganya Road
36. Scope of Project: Design and build of rock fall protection system
37. Contract Price: 298 Mn
38. Duration of Construction project: 01 year
39. Reasons for performing this contract through a JV entity; Some local partners don't have required design experience and material experience
40. Formation/type of JV entity; separated define scope (design, construction, supervision)
41. Method used to select JV partner; previous working experience

3.0 CONCEPT OF CONFLICTS

42. Are you satisfied about the JV arrangement in the project? Satisfied but there are conflicts
43. Have you experience any conflicts within this JV entity?
Yes, there are some conflicts occurred within the JV entity. It is a natural phenomenon in any kind of project which can't be totally prevented.

44. Can you briefly explain the types of conflicts you have faced within this JV entity in beginning, formation, operation and termination stage of JV life cycle?

Beginning Stage

We have selected our partner through our previous relationships, therefore there are no conflicts occurred in this stage.

Formation Stage

At the beginning stage of the project, normally parties have faced conflicts over difficulty on finalizing bid price. In our case they prize high and we think that we are more expertise than them regarding competition of local market, therefore we insist on reducing rates, and they insist on keeping the same rate, as they are the expert on the technology, therefore some conflicts occurred between us. But at the last moment they gave the discount and agreed for our price.

CIDA registration- Japanese were afraid that as they are not registered in Sri Lanka, they are not legally entitled to sign the contract. They don't like to accept our view therefore we have to get the letter from the Employer saying that doesn't having registration for them is not a problem.

Initially we have some disagreements on terms of JV agreement. We send our recommendations, they send their recommendations for terms of JV agreement and after having several arguments, counter arguments and negotiations, we have finalized the terms of the contract

Operational Stage

Communication gap, since Japanese very randomly speak English

Cultural gap- Local party is much familiar with the procedures in Sri Lanka. But Japanese parties are very adman regarding the long procedures and time taken to give approvals. But in Japan they have quick approvals and they are not working based on the pending approvals. Foreign partner always complains about the delay caused by the Engineer in giving approvals. Due to this delay we are unable to do the work as per the initial plan. Therefore, they always force us to get the approvals as early as possible

Getting approval for design- Since Japanese have submit their design at the tender stage they think that Employer has to study those designs at the tender stage and need to give approvals quickly. But in Sri Lanka after awarding the contract Employer asked further details and take lot of time to give approvals. But in Japan authorities won't take such long period to give approvals. Therefore, Japanese always act in a aggressive manner and force us to get the approvals quickly.

In the dispute between the Employer and the Contractor regarding the changes that proposed to change the length in their proposal first we also take the Engineer's side saying that we can't blame the Engineer saying that it is their fault. We were just dulling the leg of Japanese party. But at that situation Japanese partner said that don't take the Engineer's side blindly and take our side since you are also from our side. Thereafter we understood that this is a fault of the Engineer and we two parties jointly able to convince the Engineer that it is the fault of their side.

Communication gap- when we are sending some emails they understood in completely different way and dreams a big issue. Therefore, there are some conflicts occurred between us due to this matter.

Japanese are concerning about working on time. If they asked us to come on 7 and if we got delay they get angry, if say that we are working on Sundays and we are not showing on that day they got angry. That sort of cultural matter is there. They work punctually. For the material also if they say they need this material on this day exactly on that day they need those material. If we unable to provide those material on time they are shouting, blaming and behave very aggressively. They expect on time supply of labour, material. But in Sri Lanka it is not possible to act in that manner.

Japanese always do prior planning and scheduling and they try to do work stick to that plan. But in here though we know we have to do work as per that plan we concern those matters slightly and then it will result in conflicts between us. Further this even result in happening more errors from our side.

They have given us the required material quantities. At their sudden request we have pre-ordered those quantities. However later they have identified they don't require such amount rock material and now they don't agree to bare the loss. Therefore, some conflicts are occurred between us regarding the division of this loss.

In the contract agreement we haven't mention that who is responsible for the bank charges, when we are transferring money. However later we agreed to bare the bank cost occurred for each side by each party.

There are no agreements related to applicable exchange rates for the EOT periods. Because Japanese think that they can claim it from the Employer. They are not aware of the think called no claim EOT practiced in Sri Lanka.

45. What are the root causes behind those conflicts?

Conflict/ Problem	Respo	Why	Why	Why	Why
Formation Stage					
Disagreement over bid price	In pricing put high risk margin by the foreign partner and local partner asked to reduce it	Not familiar with Sri Lankan market	Imbalance on level of expertise in different markets		
			Difference in opinions and priorities		
Foreign partner questions his legal capacity to sign the contract without having CIDA registration. Local partner said that it is not a problem since he has the CIDA registration.	Disagreement on legal entitlement to sign the contract	Unwillingness -Not like - to accept the other partner's view without having the valid document proving it.	Lack of knowledge on legal background of the country		
Disagreement on terms of JV agreement	Foreign partner has put terms much favourable for him	Shift some risk to the local partner which can be easily bare up by him	Non division of associated risk in a fare manner		
Operation Stage					
Foreign partner always complains that local labours are not working for the lengthy hours and not attend to the Site as	Disagreement over working patterns of local labour	Difference in working culture			

agreed after the Site shut downs					
Local authorities take lot of time to give approvals and lead partner not force to the Engineer to give it quickly	Lengthy procedures taken in Sri Lanka to give approvals	Non familiarity with the procedures followed in Sri Lanka			
Disagreement over low response from the local partner for delay caused by the local authorities in approval process	Inability explain the procedures practice in Sri Lanka to foreign partner	difference in approval process	Difference in working culture		
In the design proposal as mentioned in the Employer's requirement Bidder has gave some modification and given his proposal for the lesser length considering the site condition. The Employer didn't ask clarifications for it during the bidding stage and at the design review stage only questioning on it. In this situation lead partner without	Difference in priorities; Local partner focus on relationship between the Employer and Contractor, Foreign partner focus on loss incurred for them	Lack of experience about the local construction industry, lack of knowledge about the technology	Difference in priorities and expertise in terms of nature of local construction industry and interpretation of technology		

considering the error caused by the Engineer accept whatever he says.					
Communications we made with them, they understood in a different way	Different interpretations	Different language usage			

46. Did the conflicts occurred in one stage of life cycle, affect to the other stage of life cycle of JV?

If we identified the conflict, we have managed them without having its effect for another stage. However, there are some situations which we have not identified at the earlier stage and having its effect on latter stages.

47. Some literature states that; “non existence of conflicts indicates deficiency of meaningful interaction and existence of conflicts required to improve the performance of JV partners” Do you agree with this statement?

Yes, conflicts help us to identify the errors caused by each partner and minimize happening them in future

48. Have you faced any negative effect from those conflicts?

(g) What are they?

(h) How did they affect the JV relationship?

Sometimes foreign party said that they will abandon the project. But considering the long-term relationship we had we able manage those conflict situations.

(i) How did they affect to the construction project performance?

Conflicts within JV entity we have managed in a way that not having any effect for the Construction project performance.

49. Have you faced any positive effect from those conflicts?

(j) What are they? Rather than in other projects we are much concern on our content of the email before we send it to them.

Conflicts helps us to improve our knowledge on important technical aspects that has to be concern on performing a project. If we perform the project alone sometimes, we may not give our priority on those matters and that may create issues on latter stages.

(k) How did they affect the JV relationship?

Conflicts improve our understanding on factors that has to be concern on performing the project with this JV partner and other JV partners in future projects.

(l) How did they affect to the construction project performance?

The conflicts occurred between us result in performing the project on time. If we are performing the project alone, we may act according to the Engineer and that may even result in delay on project. We may not force the Employer in taking approvals, since they are forcing us, we also force to the Employer to give early approvals.

5.0 CONFLICT MANAGEMENT

50. What is your opinion about managing conflicts?

Conflict management is a very important for a JV entity to maintain the relationship., otherwise they may think on abounded the project

51. Is your project administration considered about conflict management within JV entity?

Yes, we have agreed some steps in our JV agreement based on our previous experience in performing with other parties as a JV entity

52. Is there any predefined way/s you have agreed within JV entity to manage conflicts or are you considering about conflict management when a conflict situation occurred?

We have agreed some measures to mange conflicts within the JV entity for pre identified conflicts as per their previous experience by performing together in the Sri Lankan construction industry, however for non-identified situations, get the suitable decision through project management committee

53. Have you use any approach to minimize the effect of conflicts?

Yes, there are some measures agreed between us

24.2 If yes state the proactive and reactive approaches you are following in stages of JV lifecycle

Proactive approaches	Reactive approaches
Beginning Stage	
Selection of suitable partner who has prior experience in working with us	
Formation Stage	

<p>Enter into an agreement based on our previous experience, and covering lot of areas which we had issues earlier. Therefore, we enable to enter into the agreement which covers the areas that have possibility to occur conflicts and, on the operational stage of this project they face minimum number of conflicts than other projects</p> <p>Get the legal advice from the experience person when enter into the agreement</p>	<p>In order to negotiate the bid price to a position that enables to win the bid, we have elaborated the local market condition to the foreign partner using the records we have maintain previously. Thereafter only our partner has understood the situation and agreed to reduce the bid price</p> <p>We have to get the letter from the Employer to prove that unavailability of CIDA registration for them is not a problem.</p> <p>We have exchanged several statement clarifications through mails to minimize the conflicts over interpretation of terms of contract.</p>
Operation Stage	
<p>Having progress meetings, web conference When performing activities always take the advices from the technically expert person Get the planning and scheduling details of the foreign partner and plan the local partners arrangement accordingly. In the past project they complain that we are always causing delays, by way of this mechanism we able to mitigate the delays caused by us</p> <p>Empower local based foreign manger to handle the communications between parties Frequently updating project plan and revised each partner's project plan in a way that minimizing each partner's delay for other partner.</p> <p>Agreed procedures to maintain transparency of accounts, communications</p>	<p>Though they forced us to follow-up the approvals, in some situations we can't do any thing rather than avoiding. In some situations, though they blamed us, though we have some aggressive discussions later we avoid/disregard all those discussions and work together.</p> <p>Most of the time we a selecting the strategy favourable for Both parties. Therefore, that is just like compromising strategy.</p> <p>When we are giving or sending him messages or emails, give much attention to phrase it correctly, in a way that understandable to them. Further, we are getting the help of local based foreign manager to communicate those messages to them correctly.</p> <p>Having open talks with the participation of conflicting parties to find a solution for conflicts and, to finalize the solution get the help of operational committee</p> <p>Copy monthly progress reports to each partner, continuously update project progress and have meetings with the</p>

	participation of JV operation committee to discuss the necessary precautionary methods to catch up delays.
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54. Have those conflict management approaches successfully managed the conflict situation by giving full satisfaction to all parties?

Some of them given full satisfaction for us, but in some situations, we have bare some loss.

25.3 If no, do you think it is due to the usage of wrong conflict management approach or any other?

Yes, sometimes though we followed avoidance as a reactive strategy, later it creates some additional conflicts

25.2 If yes, what are the actions you have taken to make them successful?

Having frequent update regarding the project to the all partners make beneficial to have their planning and scheduling activities accordingly and reduce conflicts between the partners.

Foreseen the situations which have potential to occur conflicts. Agreeing predefine ways to minimize the conflicts.

55. Have you now recognized any other approach which you think would be more suitable for managing that conflict situation? Please explain.

Yes- We identified our weak points in this project and planned to minimize them in future.

56. In your experience please explain, what are the proactive and reactive conflict management strategies you are proposed to use in each stage of JV life cycle to minimize the effect of conflicts?

Proactive approaches	Reactive approaches
Formation Stage	
Prepare bid submission by having a proper plan. In here prepare the list of aspects that has to be covered by each partner, collect all information related to those aspects and compile them properly is important to minimize the conflicts related to bid submission	

Based on the previous experience keep the data base on aspects that has to be covered on giving bid price for JV projects. Study and have the knowledge about the documents submitted by the other partner	
Share the expertise each party bares Having standard committee will be beneficial to update all partners regarding the all managerial and operational activities related to project	
Operation Stage	
Make early arrangements like pre planning to minimize the effect of difference in working patterns Update and revised the project plan continuously	Understand the other partner's view Continuous update of the project plan in a way of catching up delays and update the plans of each partners accordingly

57. Do you think that these conflict management approaches can be practiced in any sort of industry who practice JV in Sri Lankan context?

Yes, most of the time all industries who has JVs with foreign partners has to face similar types of situations due to cultural differences.

58. What are your recommendations government/ authorities/ institutions etc to practice JV effectively in Sri Lankan context?

Developing standard to prepare JV agreements will beneficial to prepare JV agreements and reduce risk of missing some important aspects which has to be included in the Contract.

There are no laws related to JVs. Better to introduce such law.

Authorities need to provide special attention for giving approvals and any other necessary support when there is a JV entity form with the foreign partners.

Otherwise there are lot of conflicts occurred between JV partners