An Investigation of the Conflict Management Strategies in International Construction Joint Ventures of Sri Lanka

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Purpose: Most developing countries, like Sri Lanka (SL), are now looking for the support of foreign construction companies for large-scale infrastructure projects in return for expertise and resources. Thus, foreign companies may enter into agreements with local contractors through joint ventures (JVs). However, the priorities of construction project stakeholders may differ, which may ultimately end up in conflicts. Therefore, this research aims to investigate the most suitable conflict management strategies for international construction JVs (ICJVs) considering the SL context.

Methodology: The mixed method was used for the research choice by selecting a questionnaire survey and expert interviews. Completed questionnaires (n = 78) were analysed using statistical techniques. The expert interviews with six industry practitioners were piloted to increase the validity and credibility of survey findings through a triangulation process where the collected data was analysed through content analysis.

Findings: The findings confirm that JV parties should first seek collaborative solutions in a conflict and seek legal redress only when those efforts are unsuccessful. Collaborating and compromising were recommended as the most appropriate tactics if an informal approach to conflict management was chosen. Alternative Dispute Resolution (ADR) and litigation were identified as formal conflict management strategies.

Originality: This study will be the first of its kind in SL, which will lead to a better understanding of conflict management in IJCVs and will encourage other researchers to extend this study through further work.

Keywords: International Construction Joint Ventures (ICJVs); Conflict Management; Alternative Dispute Resolution (ADR); Collaboration; Sri Lanka (SL).

Introduction

Around the world, construction organisations are focused on growing their profits and expanding their market through entering into joint ventures (JV) with other entities (Nippa & Reuer, 2019). A JV is an arrangement for business purposes between two or
more parties that agree to share resources to achieve a particular task (Hargrave, 2019).
A JV contract in the construction industry refers to the cooperation of two or more
construction firms to achieve a mutually agreed-upon project, sharing project risk,
technical knowledge, and resources (Ma & Voo, 2014). According to Mantecon et al.
(2015), JVs can be considered international construction joint ventures (ICJVs) if at least
a single party’s headquarters is not within the venture's country of activity or has a
sufficient level of activity in another country. Eventually, JVs provide the capacity for
construction firms to achieve their goals as they allow companies to work with varying
levels of experience, more resources, specialists, and good financial arrangements
(Daniels, 2018; Gaughan, 2017). However, ICJV can also become complicated to manage
due to the merging of organisations from various countries with differing political
situations, legal structures, and cultural, technical, and economic status (Ahiaga-Dagbui
et al., 2011). Therefore, conflicts are inevitable in ICJVs, resulting from poor
consideration of the above conditions (Rauzana & Anitab, 2016). According to Karim et
al. (2014), conflicts are one of the main causes of the failure of ICJVs. Conflicts in the
ICJV could result in delays in project completion, reputational damage to the project
stakeholders, and losses (Atkinson, 2014; Cakmak & Cakmak, 2014). Hence, an effective
conflict management mechanism is essential for ICJVs if such damage is to be prevented.

The construction firms in developing countries may have the ability to meet the
project’s requirements for most of the activities. However, there are situations where
firms do not have enough finance and expertise to carry out more complex projects single-
ha ndedly. Samaratunge and Pillay (2011) stated that ICJVs between firms in developing
countries like Sri Lanka and foreign firms had become a preferred means for management
to achieve their objectives. Many ICJV projects were carried out in Sri Lanka during the
last few years, and more are yet to be started (Moramudali, 2017; Oxford Business Group,
2016). The research in the Sri Lankan context indicates many benefits derived from
ICJVs. They include sharing technology, risks, and resources (Chen & Sheng, 2013),
encouraging innovations (Mohamed et al., 2019), enhanced commitment (Chuang &
Thomson, 2016), and a door for entering new markets (Klijn et al., 2010). However,
Jayathilaka (2012) has identified a dearth of knowledge in investigating the root causes
of conflicts and conflict management strategies that can be applied to ICJVs in Sri Lanka.
Therefore, it is a worthy context to investigate how the conflicts in international
construction joint ventures can be appropriately managed considering the Sri Lankan
context.
Literature Review

The beginning of this section explains the types of ICJVs, benefits of ICJVs, drawbacks of ICJVs, the JV trend in the world construction industry, and its application in the Sri Lankan context. Next, the identification of conflicts and their management in the ICJVs are discussed.

International Construction Joint Ventures (ICJV)

In recent years, construction organisations around the world have been focusing on expanding internationally through JV agreements (Nippa & Reuer, 2019; Khamaksorn et al., 2020). According to Hong and Chan (2014), as cited in Chan et al. (2020), these ICJV agreements are typically formed between independent construction firms to carry out Architectural, Engineering, and Construction (AEC) projects. As elaborated in the Introduction section, ICJV is a formal identification if at least one headquarters of the party is situated outside of the JV operation country. While foreign firms provide technology and managerial expertise to the local firms, ICJV also provides a portal for them to enter into local markets. However, as in any agreement or contract, both parties to the ICJV share risks (Chen & Messner, 2009). Thus, ICJV can be defined as a collaborative arrangement or temporary agreement between two or more parties that are from different countries to carry out AEC projects (Rostami et al., 2015). Hong & Chan (2014) argued that ICJV is a subcategory of CJV between multinational firms. Moreover, it is known as an ICJV if the IJV is project-related, as it is essential to understand the difference between IJVs and ICJVs (Ozorhon, 2007).

Types of ICJV

As identified by Cartwright (2011), Chen (2005), and Bashir et al. (2019), the main two types of ICJV are "integrated" and "non-integrated." Guofeng et al. (2020) and Kale et al. (2013) have illustrated three more categories: combination, equity, and contractual based on the structure of ICJV.

- Integrated joint venture
  This is the most suitable type for civil engineering work (Cartwright, 2011). Furthermore, the parties can carry out their work as a single corporation (Bashir et al., 2019). Thus, they are jointly responsible for whether the project is a profit or loss (Chen, 2005).

- Non-integrated joint venture
In this type of formation, parties can share their resources more than in the Integrated JV, and the main difference is that the JV board has the power to decide the responsible party in the contract (Cartwright, 2011; Guofeng et al., 2020). Hence, experts who have good experience in this field are required because it is complicated (Chen, 2005).

- **Combination joint venture**
  This type of JV is used for more complex projects. Combination joint ventures are formed by the combination of integrated and non-integrated JVs. The JV agreements are stated as the parties’ responsibilities, obligations, and methods of profits or losses sharing (Guofeng et al., 2020; Shelar & Konnur, 2017).

- **Equity joint venture**
  There is a different legal concept from other JVs in this type of JV. The project is carried out under a separate legal company which is created by two or more parties in the JV agreement. The parties provide equity capital and agree to their responsibilities and obligations such as furnishing bonds, profit sharing, staffing, and providing other resources (Guofeng et al., 2020; Shelar & Konnur, 2017).

- **Contractual joint venture**
  This type of JV is used for achieving the objectives of short-term construction projects by two or more parties under the JV agreement (Kale et al., 2013; Shelar & Konnur, 2017). The lifetime of the JV depends on the construction contract (Gale & Luo, 2004).

**ICJV in the construction industry**

Organisations use the ICJV as a solution to the demand for bulk market requirements (Gale & Luo, 2004; Zhang & Zou, 2007). The ICJV strategy has extensively been used for large-scale and more complex construction projects such as crude oil exploration and manufacturing, real estate development, rail construction, industrial projects, and urban projects (Harrigan, 2003; Hwang et al., 2016). Furthermore, Hwang et al. (2016) explored how the ICJV can be applied to construction management, procurement work, consulting, and engineering services for short-term objectives. For example, Hong Kong, Taiwan, and China are carrying out their complex and large capital projects, including underground, sea bridges, and skyscrapers, through the ICJV concept (Zhao et al., 2013; Liang et al., 2019). In recent times, the Hong Kong-Zhuhai-Macau Bridge was developed by three parties through joint venturing successfully (Liang et al., 2019). Singapore also
invited foreign firms to engage with local contractors by introducing preferential margin schemes (PMS) (Zhao et al., 2013; Hwang et al., 2014).

**Benefits of ICJVs**

Many developing countries tend to form ICJVs because JV is inherently advantageous. The advantages of ICJVs can be illustrated in Table 1.

**Table 1: Benefits of ICJVs**

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risks sharing</td>
<td>[1], [2]</td>
</tr>
<tr>
<td>Encourage innovations</td>
<td>[3]</td>
</tr>
<tr>
<td>Sharing technology</td>
<td>[1], [4]</td>
</tr>
<tr>
<td>Ability to share resources</td>
<td>[5]</td>
</tr>
<tr>
<td>Enhanced commitment</td>
<td>[6], [7]</td>
</tr>
<tr>
<td>A door for entering the new market</td>
<td>[8], [9]</td>
</tr>
</tbody>
</table>

**Drawbacks of ICJVs**

Although organizations look for the ICJV because of its benefits, its drawbacks of them are interrupting its good performance. Following Table 2 has elaborated the drawbacks of ICJVs.

**Table 2: Drawbacks of ICJVs**

<table>
<thead>
<tr>
<th>Drawbacks</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>The difficulty for the senior management in creating the right working philosophy throughout the ICJVs</td>
<td>[1], [2], [3], [4]</td>
</tr>
<tr>
<td>Difficult to control</td>
<td>[4], [5]</td>
</tr>
<tr>
<td>Lack of Trust</td>
<td>[6], [7]</td>
</tr>
<tr>
<td>Lack of clear objectives</td>
<td>[8]</td>
</tr>
<tr>
<td>Differences in operating procedures</td>
<td>[9]</td>
</tr>
</tbody>
</table>

Application of ICJVs to Sri Lankan Context

The ICJV can also be used for procurement in the Sri Lankan construction industry (Wijewardana et al., 2013). However, as revealed by Joseph and Jayasena (2008), ICJVs were a rare procurement method in the Sri Lankan construction industry, with only a few ICJV projects completed in the country. Nevertheless, 1992–96 can be identified as the turning point of the ICJV in Sri Lanka, where the government first introduced this mechanism by carrying out a lot of megaprojects through the ICJV. The most common recent example is the Hambantota port, which was constructed by the ICJV between China Merchants Port Holdings Company Limited (CMPort) and the Sri Lankan government (Moramudali, 2017). For carrying out power plant projects, the National Thermal Power Corporation (NTPC) of India entered into the ICJV with the Ceylon Electricity Board (CEB). The Moragahakanda power plant, expressways, Colombo port city, and most of the large-scale infrastructure are carried out by the ICJVs (Oxford Business Group, 2016). However, ICJV was not limited only to expressways, and its application was further expanded to iRoad projects around the island. Many roads in Sri Lanka that are funded by the Asian Development Bank (ADB) during 2017–2021 are carried out through the ICJVs (Integrated Road Investment Program (iRoad)-II, 2020). Hence, those details establish a significant growth of the ICJV application as a procurement strategy in Sri Lanka.

Conflicts in ICJV

Makino et al. (2017) have accepted that ICJVs are difficult to survive for a long period of time and can be terminated due to inefficiencies, differences in strategic objectives, and cultural differences among partners. Mainly, two types of conflicts in ICJVs can be identified as task-related and relationship (or emotional)-related (Tsang et al., 2004). Task conflict can be defined as differences in opinions about and viewpoints on the task, while interpersonal tension or personality disorders such as frustration, anger, and other negative feelings lead to relationship conflict (Dirks & Parks, 2003). Hence, the general belief is that both task and relationship conflicts harm the ICJVs due to this dual impact (Li & Hambrick, 2005). Therefore, it is vital to identify the causes of conflicts in ICJVs to reduce their potential negative impacts (Ren, 2009). The following Table 3 illustrates the different causes of conflicts in ICJVs.
Table 3: Causes of conflict in ICJVs

<table>
<thead>
<tr>
<th>Causes of Conflict</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unequal equity</td>
<td>[1]</td>
</tr>
<tr>
<td>Dissimilarities of goals</td>
<td>[2]</td>
</tr>
<tr>
<td>Relationship problems</td>
<td>[3]</td>
</tr>
<tr>
<td>Failure to manage the risks</td>
<td>[4], [5]</td>
</tr>
<tr>
<td>Distrust</td>
<td>[5], [6]</td>
</tr>
<tr>
<td>Culture barriers</td>
<td>[5], [7], [8], [9]</td>
</tr>
<tr>
<td>Uneven commitment</td>
<td>[3]</td>
</tr>
<tr>
<td>Communication problems</td>
<td>[3], [10], [11]</td>
</tr>
<tr>
<td>Lack of continuous improvement</td>
<td>[3]</td>
</tr>
<tr>
<td>Inefficient problem solving</td>
<td>[3]</td>
</tr>
<tr>
<td>Inadequate training</td>
<td>[3], [12]</td>
</tr>
<tr>
<td>Dishonourable relationship</td>
<td>[3]</td>
</tr>
</tbody>
</table>


Conflict management in ICJVs

Conflicts in ICJVs can cause unproductivity in organisations as managers must spend additional time and money to resolve such conflicts (Julian, 2008). Conflicts in any project inevitably damage the project goals and performance significantly unless there is effective management (Altuncan & Tanyer, 2018). Li and Hambrick (2005) defined conflict management as a method of developing beliefs in procedural justice among the ICJV partners. Therefore, there should be a management system for each conflict because of its unique nature and context (Rahim, 2002). Even so, management levels in organisations can propose innovative methods to solve conflicts using their professional knowledge, conflict management practice, and experience (Liu et al., 2008). Hence, there
is a necessity for having effective and innovative strategies for conflict management in ICJVs (Altuncan & Tanyer, 2018).

Conflicts Management Strategies

Based on the opinions of higher management, the conflict management strategies can be changed on every project at any time (Lin & Wang, 2002). However, Lin and Wang (2002) also revealed that conflict management can cause critical concerns in the project environment. Thus, it is important to identify the most appropriate conflict management strategies depending on the context (Wong et al., 2017). In Parry et al. (2008), five conflict management strategies have been identified, which are mentioned below in Table 4.

Table 4: Conflicts management strategies

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Explanation</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaborating</td>
<td>Looking for a way to simultaneously satisfy the desires of both parties</td>
<td>[1], [2], [3]</td>
</tr>
<tr>
<td>Compromising</td>
<td>Offering partial acceptance of the other party's desires in return for partial acceptance of one's desires</td>
<td>[1], [2], [3], [4]</td>
</tr>
<tr>
<td>Accommodating</td>
<td>Yielding to the desires of the other party</td>
<td>[1], [2], [3]</td>
</tr>
<tr>
<td>Competing</td>
<td>Attempting to impose one's desires on the other party</td>
<td>[1], [2], [3]</td>
</tr>
<tr>
<td>Avoiding</td>
<td>Ignoring the conflict between one's desires and those of the other party</td>
<td>[1], [2], [3], [4]</td>
</tr>
</tbody>
</table>

Sources: [1] - (De Church et al., 2007); [2] - (Parry et al., 2008); [3] - (Koc, 2010); [4] - (Saeed et al., 2014);
Methodology

This section describes the methodology that was followed to achieve the goal of this research, including the research approach, strategy, data collection techniques, and the analysis method.

Research approach

The research approach can be defined as embodying data collection and organising research tasks (Thurairajah et al., 2006). Saunders et al. (2019) have categorised the research approaches as deduction, induction, and abduction. In the logic of deduction, the conclusion must also be true when the premises are true, while in the inductive approach, conclusions are drawn from premises that have not been tested using known premises (Flick, 2018; Saunders et al., 2019; Folger & Stein, 2016). The abduction approach is a mixture of deduction and induction approaches (Elshamly, 2013; Folger & Stein, 2016).

Though this study is based on the conflict management of ICJVs, it is necessary to test the presumptions based on the interrelationships of the conflicts. Therefore, the abductive approach was selected for this study as it builds a concept, a theory, or an idea that can understand the act of representing data while explaining.

A methodological choice is made based on the research problem (Yoshikawa et al., 2008). Methodological choices include quantitative, qualitative, and mixed methods (Gray, 2019). The quantitative method is the process of using the reports and evidence gathered to find the data, while the qualitative research method is best suited for the evaluation of social, attitudinal, and behavioural conditions (Naoum, 2007). The mixed method is a mixture of both qualitative and quantitative methods (Johnson & Onwuegbuzie, 2004). Through this study, we considered the social, attitudinal, beliefs, and behaviours by qualifying the conflicts in the ICJVs. Thus, according to Naoum (2007) and Ritchie et al. (2013), the qualitative method can be justified for this research to discuss the research problem. Furthermore, it has been accessed to quantify the uses and practicalities of conflict management strategies in the industry. Hence, as revealed by Naoum (2007), the qualitative method is also applicable. Based on the above justification, this study followed a mixed methodology to achieve its aim.

Research strategy

A research strategy is used to systematically resolve the identified research problem by stating the methodology (Creswell, 2013; Saunders et al., 2009). The appropriate research
strategy is always determined by the research approach chosen, the type of research problem, the degree of influence of the investigator over actual behaviour and actions, and the extent to which current situations are affected (Saunders et al., 2009; Yin, 2014). The survey strategy, which is used for social and physiological research (Singleton & Straits, 2017), was selected for this study from strategies like archival research, experiments, and case studies, as this study is also based on the social matter of conflict management in ICJVs.

**Data collection**

Initially, the study required collecting data based on the ICJVs. Hence, there was a necessity for having a large sample to collect data. Therefore, as the first stage of data collection, a questionnaire survey was conducted. Purposive sampling was used for the questionnaire survey as it was responded to through an online platform only by professionals with knowledge of ICJV. However, the questionnaire was distributed to 146 professionals in the industry, considering the knowledge of ICJV projects as the benchmark, and received valid responses from 78 of them. Interviews are most suitable for data collection when the research question pertains to technical and process knowledge (Litting & Pochhacker, 2014). Thus, expert interviews are ideal for examining the impact of conflict in the ICJV project environment and its management principles. Therefore, interviews were conducted as the second stage of data collection with the experts in projects carried out through JV from 2015 to 2020, and it was limited to six interviews due to the data saturation. Moreover, the snowball sampling method was used to select interviewers as it is a non-random sampling method (Johnson, 2014). The profiles of the questionnaire respondents and the interviewers are represented in the following Table 5.

**Table 5: Profile of questionnaire respondents and the interviewees**

<table>
<thead>
<tr>
<th>Questionnaire respondents</th>
<th>Variable</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Project Manager</td>
<td>2</td>
<td>2.56%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Engineer</td>
<td>24</td>
<td>30.77%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Current Designation</td>
<td>Quantity Surveyor</td>
<td>35</td>
<td>44.87%</td>
</tr>
<tr>
<td></td>
<td>Architect</td>
<td>14</td>
<td>17.95%</td>
<td></td>
</tr>
</tbody>
</table>
### Interviewees

<table>
<thead>
<tr>
<th>Details</th>
<th>Designation</th>
<th>Industry Experience</th>
<th>Type of Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>IA</td>
<td>Senior QS and Claim Specialist</td>
<td>28 years</td>
<td>Consultant</td>
</tr>
<tr>
<td>IB</td>
<td>Senior QS and Claim Specialist</td>
<td>23 years</td>
<td>Consultant</td>
</tr>
<tr>
<td>IC</td>
<td>Senior QS</td>
<td>15 years</td>
<td>Consultant</td>
</tr>
<tr>
<td>ID</td>
<td>Senior Architect</td>
<td>20 years</td>
<td>Contractor</td>
</tr>
<tr>
<td>IF</td>
<td>Senior QS</td>
<td>11 years</td>
<td>Client</td>
</tr>
</tbody>
</table>

#### Data analysis: Quantitative data analysis

According to Newton and Rudestam (2007), the detailed analysis was performed using Excel functions, taking advantage of the convenience and success of quantitative research. Therefore, the data from the questionnaire survey was analysed under this method. Mainly, the Weighted Mean rating (WMR) value was used to analyse the quantitative data.

\[
WMR = \frac{\sum_{i=1}^{5}(x_i \times f_i)}{n}
\]

- \(WMR\) = Weighted Mean Rating
- \(x_i\) = Response for the attributes
- \(n\) = Total number of respondents
- \(f_i\) = Frequency of responses to the attribute considered (from 1 to 5)

#### Data analysis: Qualitative data analysis

Expert interview data was analysed through qualitative data analysis methods. Under the qualitative approach, the collected data content is firstly analysed and then encoded into word groups (Perry, 2001). Content analysis is used to accurately process quality data so
that the data obtained for test purposes is well organised (Langos, 2014). The content analysis was done manually by the researcher because of the ease of organising and managing the data found through qualitative approaches and the need for a thorough data analysis.

### Research Findings and Discussion

#### Suitability of ICJVs in Sri Lanka

As per the findings of the expert interviews, it is evident that the unanimous opinion of all participants was that ICJV projects were suitable for Sri Lanka. The questionnaire survey confirmed this idea with 93.5% of responses. Moreover, in literature findings, Wijewardana et al. (2013) revealed that the ICJV could be used as a procurement method in the Sri Lankan construction industry. As revealed by the empirical evidence, the disadvantages of ICJV projects that start with gaining foreign knowledge, technology, and many other can be prevented by a proper agreement. Though there are shortcomings in the ICJV agreement, the foreign party is keen to take advantage of those gaps, and it is the responsibility of the local party to ensure that they do not. In addition, the content of the parties' agreement is critical as it is the key to finding a legal remedy for a problem. Thus, projects that are carried out on a proper contract basis are suitable for Sri Lanka.

#### Most favourable project type for ICJVs in Sri Lanka

When summarising the findings of the interviews related to this matter, ICJV projects were found to be best suited for large-scale building construction that requires a high level of knowledge and technology with returns. Further verifying this, 66.67% of the questionnaire survey respondents found that the ICJV concept was suitable for large-scale complex projects. Visible examples of this have been found in previous studies, such as the Hambantota Port project, which was constructed through the JV between CMPort and the Sri Lankan Government (Moramudali, 2017). NTPC of India entered into a JV with CEB to carry out power plant projects. In addition to those, expressways, Colombo port city, and most of the large-scale infrastructure are carried out by the IJVs (Oxford Business Group, 2016). Today, the ICJV concept is used not only for large-scale complex projects but also for rural projects. Hence, through literature, the Integrated Road Investment Program (iRoad)-II (2020) has explored that the majority of iRoad in Sri Lanka, which is funded by the ADB during 2017–2021, is carried out through the IJVs.
Benefits and the drawbacks of ICJVs

Six benefits and five drawbacks of ICJVs have been identified in the literature (refer to Table 1 and Table 2). Additionally, by analysing the questionnaire and interview findings, four main benefits and two main drawbacks of ICJVs emerged. The ranking of the benefits and the drawbacks is illustrated in Table 6 with the literature references. As per the analysis, when choosing a foreign company for a JV, local companies can gain more benefits by selecting a company with a high reputation.

Table 6: Ranking of benefits and the drawbacks of the ICJVs

<table>
<thead>
<tr>
<th>Benefit</th>
<th>WMR Value</th>
<th>Rank</th>
<th>Literature Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sharing technology</td>
<td>4.78</td>
<td>1</td>
<td>[1], [4]</td>
</tr>
<tr>
<td>Risks sharing</td>
<td>4.69</td>
<td>2</td>
<td>[1], [2]</td>
</tr>
<tr>
<td>Ability to share resources</td>
<td>4.63</td>
<td>3</td>
<td>[5]</td>
</tr>
<tr>
<td>A door for entering the new market</td>
<td>4.60</td>
<td>4</td>
<td>[8], [9]</td>
</tr>
<tr>
<td>Encourage innovations</td>
<td>3.29</td>
<td>5</td>
<td>[3]</td>
</tr>
<tr>
<td>Enhanced commitment</td>
<td>3.09</td>
<td>6</td>
<td>[6], [7]</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Drawbacks</th>
<th>WMR Value</th>
<th>Rank</th>
<th>Literature Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>The difficulty for the senior management in creating the right working philosophy throughout the ICJVs</td>
<td>4.26</td>
<td>1</td>
<td>[1], [2], [3], [4]</td>
</tr>
<tr>
<td>Difficult to control</td>
<td>4.10</td>
<td>2</td>
<td>[4], [5]</td>
</tr>
<tr>
<td>Lack of Trust</td>
<td>3.35</td>
<td>3</td>
<td>[6], [7]</td>
</tr>
<tr>
<td>Differences in operating procedures</td>
<td>3.24</td>
<td>4</td>
<td>[9]</td>
</tr>
<tr>
<td>Lack of clear objectives</td>
<td>3.10</td>
<td>5</td>
<td>[8]</td>
</tr>
</tbody>
</table>


Factors affecting conflicts in ICJVs

The literature review identified twelve causes of conflict in ICJVs (refer to Table 3). In the questionnaire survey, seven of them emerged as the leading causes, as ranked in Table 7 and further explained in the interviews. In addition, two other causes were found in the questionnaire survey, which were "different approaches in the application used by specific professionals" and "financial and economic difficulties in the local venture". The common occurrence is that there is a big cultural difference between Sri
Lanka and foreign countries, which was confirmed in interviews. In the literature findings, Adnan et al. (2012) state that although the higher management tries to reduce this cultural gap, the majority of members are reluctant to change, and they may protest strongly. According to Ozorhon and Hasan (2017), ultimately, the high cultural gap may increase conflicts and misunderstandings between the partners. The interviewees suggested that to deal with this situation, all parties should make an extra effort and show flexibility.

According to Alazemi and Mohiuddin (2019), communication is the life rope in projects, as all projects begin and end with communication. Furthermore, Alazemi and Mohiuddin (2019) identified poor communication as a cause of conflict. Like that, several other unfortunate aspects of poor communication were highlighted in the interviews as well. The adverse effects of claims and EIs commonly used in the construction industry were further explained by the interviewees. As per the further discussion, communication problems could be avoided by using a common language and common law that all parties could handle well and by having the agreement in that form.

During the interviews, several factors were identified to consider when selecting a foreign party for a JV. Interviewees emphasised that it is more important to choose the right party first than to choose the wrong party and then get into conflicts. Interviewees revealed that many problems that may arise in future projects could be prevented by a proper agreement. Therefore, all parties should pay attention to the contents of the agreement and how it should be implemented. The other issue discussed in the interviews was the contribution of top management. The common suggestion was that when a dispute arises, immediate solutions should be sought, and it should be prevented from exuberating into a conflict. Interviewers further elaborated that the use of a dispute resolution mechanism is very much appropriate for this. Besides, there must be a mutual agreement on that mechanism because, according to Karim and Danuri (2014), a lack of mutual understanding of conflict management mechanisms is also a major challenge for JV.

Table 7: Ranking of the factors affecting conflicts in ICJVs

<table>
<thead>
<tr>
<th>Causes of Conflict</th>
<th>WMR Value</th>
<th>Rank</th>
<th>Literature Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unequal equity- unequally resources sharing</td>
<td>4.56</td>
<td>1</td>
<td>[1]</td>
</tr>
<tr>
<td>Culture barriers</td>
<td>4.50</td>
<td>2</td>
<td>[5], [7], [8], [9]</td>
</tr>
<tr>
<td>Uneven commitment</td>
<td>4.46</td>
<td>3</td>
<td>[3]</td>
</tr>
<tr>
<td>Failure to manage the risks</td>
<td>4.21</td>
<td>4</td>
<td>[4], [5]</td>
</tr>
<tr>
<td>Relationship problems - Lack of good relationships</td>
<td>4.14</td>
<td>5</td>
<td>[3]</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>------</td>
<td>---</td>
<td>-----</td>
</tr>
<tr>
<td>Communication problems</td>
<td>4.14</td>
<td>5</td>
<td>[3], [10], [11]</td>
</tr>
<tr>
<td>Inefficient problem solving</td>
<td>3.72</td>
<td>7</td>
<td>[3]</td>
</tr>
<tr>
<td>Dissimilarities of goals</td>
<td>3.69</td>
<td>8</td>
<td>[2]</td>
</tr>
<tr>
<td>Lack of continuous improvement</td>
<td>3.64</td>
<td>9</td>
<td>[3]</td>
</tr>
<tr>
<td>Distrust</td>
<td>3.42</td>
<td>10</td>
<td>[5], [6]</td>
</tr>
<tr>
<td>Dishonourable relationship</td>
<td>3.26</td>
<td>11</td>
<td>[3]</td>
</tr>
<tr>
<td>Inadequate training</td>
<td>3.18</td>
<td>12</td>
<td>[3], [12]</td>
</tr>
</tbody>
</table>


Favourable conflicts management strategies in ICJVs

In this study, five conflict management strategies were identified (refer to Table 4) and investigated for their suitability for the SL context through the questionnaire survey. Here, it was concluded that collaborating and compromising were more appropriate and accommodating while competing and avoiding were unfavourable to use for conflict management in ICJVs. Accordingly, identified conflict management strategies are described as follows:

- **Collaborating - Looking for a way to satisfy the desires of both parties simultaneously**

According to IC, "this is the most effective method. When there is a problem between the two parties, decisions should be made flexibly. Arbitrary decisions can cause additional issues, or they can complicate matters." Furthermore, the IB emphasised that "since the parties enter into agreements for a common purpose, it should be given priority. Therefore, it is crucial to solve problems collaboratively. Otherwise, the main goal of ICJV may be damaged." Explaining the responsibility of the local party, ID emphasised, "when selecting a company for a project, it is the responsibility of the local party to choose the appropriate company. However, it is not brilliant to expect a collaborative response from a foreign company that does not fit into the project. Thus, if a party hopes to solve problems collaboratively, it is crucial to choose a suitable company." Further, respondents also highlighted that reputation is essential to managing conflicts collaboratively.
Compromising- Offering partial acceptance of the other party's desires in return for partial endorsement of one's desires

All the interviewees agreed that compromising was the best strategy if strategy collaboration could not be implemented. According to IC, "collaborating tactics are the best, but it is not always practical. Solutions that meet 100% of the needs of both parties are rare. Often, even when agreements are for a common purpose, the personal aspirations of the parties vary." Pointing out the value of this strategy instead of competing, IE emphasized, "it is unbelievable that a project flows smoothly that meets everyone's needs. Then it's best to shift from collaborating to strategy compromising."

ID explained this strategy further as "if the foreign party cannot stay in Sri Lanka, they can go to another country. Thus, local companies are increasingly using this tactic as they must survive in Sri Lanka. Foreign companies also use these tactics when they intend to continue to be involved in projects in Sri Lanka. Then, they strategically use these strategies to protect the reputation of the company". Therefore, companies strategically use these strategies for conflict management with prospects in mind.

Appoint a team to provide immediate solutions

According to IC, "highly trained, competent, and experienced staff from a local JV partner should be involved in the day-to-day conflicts’ management at the site. They should be individuals with good communication skills and authorized/empowered individuals who can bring a sense of ownership of the project from the local JV partner’s side". IC further stated that "if the local party does not participate in this, the foreign company team may try to act selfishly."

Dispute Adjudication Board (DAB)/ Alternative Dispute Resolution (ADR)

IA and IB identified DAB and ADR as conflict management strategies. According to them, following the contractual procedure is the best way to resolve conflicts. Furthermore, IA stated, "often when entering into commercial agreements, the parties include conflict management mechanisms. DAB and ADR occupy a prominent place among them. The agreement clearly and explicitly states each other's rights. Then, there will be no injustice to either party. The charges against the answer may be minimised as a result." IB also stated that "professionals with specialised knowledge are involved in resolving conflicts based on DAB and ADR. These professionals work independently and, therefore, can manage conflicts fairly."
• Litigation

IA stated, "conflicts are often caused by a breach of contract. In such a case, the innocent party can seek a legal remedy. In addition, this action can be used to challenge a solution provided by another route. Due to the judicial process, the answer is fair and independent, and the parties must agree to it". "The parties should try to resolve a conflict amicably," IB said, while highlighting the unsuitability of legal remedies as the first step. If that is not possible, "they can only find legal solutions because this takes a lot of time and money. Also, good relationships between partners can be damaged. Therefore, the parties should be cautious about the consequences before going to court."

Unfavourable conflicts management strategies in ICJVs

The questionnaire findings have analysed three of the identified strategies that are unfavourable to the ICJVs' conflict management. Hence, those were further discussed as below in the interviews.

• Accommodating (Yielding to the desires of the other party)

All the interviewees highlighted that the accommodating approach has many disadvantages. According to IF, "often volatile local companies engage with a foreign company to stabilize. Then the local company has to bow down to all the decisions of the foreign company". Explaining a similar sad situation, IC stated, "Because they are not in a position to make suggestions, the views of the local side can be better. Thus, they are overwhelmed by the authority of the foreign party. Perhaps, this will make the local company worse off than it is now". Completing the gap here, IA stated, "a reputable company often does not use this approach. They always listen to the other side. Therefore, caution should be exercised in selecting a foreign party. The local party needs to look at the conflict management strategies they have previously used." According to IB, "frequent use of this approach by the foreign party can cause a loss of the local party's confidence. As a result, the productivity of that staff can be very low."

• Competing (Attempting to impose one's desires on the other party)

IC and IF identified competing as the worst conflict management strategy. The other interviewees also did not agree that this method was suitable for the ICJVs. IC mentioned that "it is never good to use this approach as this method is used for personal purposes." Competing is not good for the common goal. As a result, in the end, the common purpose is destroyed." IF also stated that "this can happen when agreements are made without a
basic understanding. In a way, this is like an act in the animal world. That is, the strongest person wins, and the weakest person becomes helpless. Therefore, this approach is not suitable for a civilised society.

- Avoiding (Ignoring the conflict between one's desires and those of the other party)

All interviewees agreed that avoiding tactics is inappropriate for resolving ICJV conflicts. According to IA, "these types of strategies are used by inexperienced companies." Further to IA, "Experienced companies know the consequences of avoiding problems. This often happens the first time a foreign company is doing a project in Sri Lanka through a JV". As a supplement, IF stated, "Conflict in an ICJV project is like cancer. Healing is easy at first but becomes very complicated later. Eventually, these could end up in lawsuits. Therefore, the solution should be without hesitation." Citing one appropriate occasion, IB stated, "This method may work in some conflicts. For example, conflicts are solved by time. It is practically impossible to find answers to every question. So, this is not 100% inappropriate. The important thing here is to identify the conflict. This requires a lot of JV-related experience."

The guideline to select suitable conflict management strategies for ICJVs

The guideline in Figure 1 demonstrates the path for selecting the most appropriate conflict management strategy in ICJVs, which was achieved through the literature review and analysis. Thus, before applying strategies, conflict identification, conflict classification, and conflict causes must be identified. The types of conflicts and causes of conflicts identified in literary findings are used for this guideline. Here, the strategy travels along two main paths, with the informal route being the one that saves time and money. Collaboration and compromising have been identified as strategies to be trained along that path. These solutions are difficult to enforce under the law. Conflicts that cannot be resolved through the informal route can be resolved through the formal route. In the formal route, the ADR should be chosen first and then the litigation. However, those solutions are legally enforceable, even if they cost a lot of money and time. Thus, the nature of the conflict should determine the path to take.
Conclusions and Way forward

The current literature has recognised that recognising disputes early on and executing appropriate conflict management methods are critical for both domestic and foreign enterprises to thrive in a JV collaboration. Therefore, this study is intended to fill a knowledge vacuum in the Sri Lankan context by examining acceptable conflict management tactics for ICJVs in Sri Lanka. Other than that, this study contributed to knowledge by identifying the concepts of ICJVs, conflicts in ICJVs, and conflict management strategies. Additionally, the study intends to investigate the importance of ICJVs in general and with reference to Sri Lanka, while exploring the causes of conflicts and their impact on the ICJVs. As a result, this study suggested formal and informal conflict management solutions for ICJV projects, which will aid in the selection of appropriate conflict management strategies for ICJVs. Collaboration and compromise
were recognised as the best options for informal remedial action. However, if adequate resources are available and the conflict is complicated, the ADR path and, finally, litigation were recognised as suitable. This study also indicated that when engaging in ICJVs, parties must have a formal written agreement and a shared dispute management process in place since it is vital to pursue legal remedies when any condition is violated. As the final output, a guideline for selecting appropriate conflict management strategies for ICJVs in Sri Lanka (Figure 1) was developed, to provide basic guidance for construction professionals to manage possible conflicts in IJCVs. This study recommends prioritise collaborative conflict management as it will give solutions that are suited for all parties during the shortest period of time with the use of the minimum amount of resources. This study, like any empirical research, has limitations. As a result, this analysis was restricted to joint venture projects in the Sri Lankan construction industry. However, the conclusions of this study can be extrapolated to other emerging economies with similar socioeconomic, demographic, or cultural characteristics.

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