

# LOCAL CONSTRUCTION COMPANIES AND MEGA PROJECTS: FOREIGN PRESENCE IN THE SRILANKAN CONSTRUCTION INDUSTRY

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**Abstract:** The Sri Lankan Construction Industry has been booming for the past few years, with the emergence of several mega projects. Mega Projects are currently led by foreign consultancy and construction companies with the foreign aid, and this has caused several concerns in the local construction industry.

This research identifies the issues and constraints relating to the local construction companies, when entering into Mega Projects. Further appropriate solutions for the identified issues have also been provided in the research, with the required justification.

The research methodology comprises literature review, incorporated with a one to one discussion with the professionals in the industry, including Engineers, Architects, Managers, CEOs, Government Officials, Banking Sector representatives, Foreign Construction Company representatives, and a questionnaire survey carried out with 32 professionals related to the construction Industry.

As a conclusion, the research provides the best course of action, for the two major issues identified, with justifications and the research would be a base for the future research to further conduct thorough research on the solutions identified in this research.

**Keywords:** Mega Projects, Funding, Local Companies, Foreign Companies

## 1. Introduction

During the conflict period spanning 30 years, no significant mega scale project was introduced, due to severe hardships prevailing in Sri Lanka. But now the situation has changed, and a number of Mega Projects have emerged, since 2009, most of which were funded by foreign aid.



**Figure 14:** Share of Construction Sector in the GDP  
(Source: Central Bank Annual Report)

As indicated in the Figure 1, the share of the construction sector in the country's Gross Domestic Product has increased from 18% to 23% from 2011 to 2012 (at current prices).

With such a background, most of the local mega projects are led by foreign construction and consultancy companies and the local construction companies are only operating as subcontractors to them, which has caused several concerns in the industry.

Due to lack of research about this newly developed topic, in the context of Sri Lanka, this research was conducted.

The objective of the research was to identify the issues which prevent local construction

companies from leading Mega Projects which are currently implemented in Sri Lanka and provide appropriate solutions to them.

## 2. Literature Review

The extensive literature review carried out can be mainly grouped in to 5 categories as below.

### 2.1 Joint ventures with foreign companies

According to Gale and Luo (2004), the foreign companies have been entering into Chinese Construction Industry, since early 1990s and were able to form various types of joint ventures to sustain their businesses. What is most important in that is even during the recent past as well, foreign companies are struggling to establish their base in the Chinese Market.

According to Ozorhon, Ardit, Dikmen, and Birgonul (2007), it is mentioned that Joint Ventures have become more popular because it can be considered as a strategic alternative to global competition.

As for Norwood and Mansfield (1999), they have identified that forming a joint venture is really advantageous for both the foreign company as well as the companies in the developing country, with the improved technology transfer and the potential risk reduction.

### 2.2 Global Construction Industry

Ngowi, Pienaar, Talukhaba and Mbachu (2005) have provided an extensive research on the globalization of the construction industry and have concluded that developing countries should be very careful to harness the benefits of globalization.

Ngowi et al. (2005) have also mentioned the lack of research carried out in the developing countries in order to enable firms from developing countries to cope with the challenges from the Globalized Construction companies.

### 2.3 Public Private Partnership (PPP)

According to the researches done by Spackman (2002), it has been revealed that currently the British Government is moving activities from public to the private sector.

Ke, Wang, Chan and Lam (2010) recognize Public Private Partnership as an effective way of delivering value for money in public infrastructure or services specially considering the case of China.

Li et al (2005) indicate that, PPPs help to allocate risks on an agreed basis between the public sector and the private sector.

According to Tang, Shen, Cheng (2010), the private sector financial sources and the way to achieve best value for money are important. They further mention that changes would be evolving with the future in this dynamic topic of PPP, with new research.

### 2.4 Knowledge Transfer

According to Leafner, Bromer and Zeng (2012), it has been expressed that technologically less advanced people can upgrade their knowledge considerably through active knowledge absorption.

Bakuli (2008) mentions that, though tremendous growth in technology adoption by developing countries is visible in all the disciplines in Engineering and Construction, very little is done for adopting such technology in developing countries

### 2.5 Collaboration between foreign companies and local companies

Xu, Bower and Smith (2005), have identified that the foreign contractors are venturing into the Chinese construction industry with China's accession to the World Trade Organization.

Further, Xu et al. (2005) comment that though the foreign companies prefer strategic alliance, whereas the local Chinese companies prefer International Joint ventures.

## 3. Methodology

The methodology comprises an extensive literature survey, followed up by interviews with the engineers, architects, university lecturers, senior management of local construction companies and foreign companies, representatives from banks, BOI, UDA and government officials.

The information collected from literature and interviews are analyzed using Johnson, Scholes and Whittington's Suitability, Acceptability and

Feasibility - SAF model, which is a model currently used widely in the world for assessing solutions and opportunities in decision making.

Further, as a verification of the above analysis, a separate questionnaire survey was developed and opinions of 32 professionals connected to the construction industry were recorded.

Whenever possible the industry examples of other countries were used for analysis where relevant, and the results and the conclusions were arrived at with proper justifications.

#### 4. Data Collection

The data was collected reviewing research papers and also from newspapers and internet since the topic is currently relevant to the present day context.

##### 4.1. Local Construction industry

In order to have a good understanding of the Local Construction Industry, a SWOT analysis has been produced based on the data.

##### Strengths

- Government Support for the industry
- Share of the construction sector in GDP is significant and improving
- Updating and upgrading of knowledge from the foreign companies

##### Weaknesses

- Cost of Construction Materials has been increasing
- Site Safety has not been maintained to the specific level
- Less retention of skilled workers
- Lack of funds available

##### Opportunities

- Post Conflict boom in the industry providing a lot of opportunities
- Number of projects are in the pipeline to come
- Competition among construction companies is increasing

##### Threats

- Foreigners leading the Mega Projects
- Competition from foreign companies outweighing the locals
- Uncertainty in the industry, where it is highly political

#### 4.2. Issues and Constraints which prevent Local Construction companies leading Mega Projects

With the interviews conducted several key issues were identified which prevent local construction companies leading Mega Projects. Further, the questionnaire survey conducted, provided with the following, as the main issues (See Table 1).

Table 1: Data from Questionnaire Survey

Issue identified	Percentage of interviewees who have identified this as the	
	1 <sup>st</sup> Priority	2 <sup>nd</sup> Priority
Funding Issue	56%	25%
Technology and Capacity Problems	25%	50%
Lack of Qualified people	6%	6%
Inadequacy of laws	13%	19%

With the questionnaire survey observations two major issues were identified as below.

##### • Funding Issue

Most of the Mega Projects have gone into the hands of the foreign companies since they come with the money.

Quoting an industry expert "The problem that the local construction industry is facing is the accessibility to Finance at reasonable Interest Rates", produces the true picture.

##### • Capacity and Technological issues

Capacity and the lack of technology has been an issue for the local construction companies to directly lead mega projects according to some industry professionals specially in the design and construction of harbors, port city, monorails.

#### 4.3. Solutions for the issues identified

With the interviews and literature following has been identified as alternative solutions for the two issues identified above.

- Setting up an infrastructure development fund
- Public Private Partnership Model
- Strengthening of local banks
- Joint Venturing with foreign companies
- Bid as Joint ventures with local companies
- Getting Listed in the stock exchange

The analysis of the above solutions identified are done in the analysis section using SAF model and also a verification is done through questionnaire survey.

## 5. Analysis and Results

For the two issues identified above, the alternative solutions were analyzed in this section using SAF model and the questionnaire survey.

### 5.1. Setting up an infrastructure development fund

#### Suitability

Since the projects have been awarded to foreigners due to lack of finance available, providing a fund would be a suitable option to some extent. With the previous experiences of Sri Lanka, suitability of a fund would be governed by the lessons learnt from the failures. Countries such as India, Japan, Korea, and Malaysia have developed with the help of such fund.

#### Acceptability

Acceptability is whether the project is accepted by the stakeholders in particular the shareholders of the fund, such as government, EPF, ETF, Asian Development Bank, World Bank, etc. The acceptability criteria is highly governed by the return they obtain and if the return is high they would highly accept the initiative.

#### Feasibility

Financial feasibility of having an infrastructure development fund is somewhat questionable. With the previous experiences, it is really important that the development of the fund is welcomed equally by the government and the private sector.

### 5.2. Public Private Partnership Model

#### Suitability

Public Private Partnership - PPP Model can be a suitable way forward for a developing country

such as Sri Lanka. In a background where the government does not have adequate finance to provide for mega projects mechanisms like build-operate-transfer (BOT), build-operate-own-transfer (BOOT), and build-operate-own (BOO) would be quite useful.

#### Acceptability

Acceptability in terms of the government would be high since they would not have to repay the loan and for funding agency side, the incurred cost can be recovered by operating/owning the development.

#### Feasibility

In terms of financial feasibility of PPPs, it would depend on the agreements and contracts put forward, where mechanisms like BOT, BOOT and BOO mechanisms would be operated.

In terms of social feasibility, it has to be carefully identified because society may be reluctant to permit the foreign party own the facility for 15-20 years.

### 5.3. Strengthening of local banks

#### Suitability

If local banks are strengthened and encouraged to provide capital to kick start some mega projects it would be a good initiative, specially as it would prevent dependence on foreign money, thus can be suitable.

#### Acceptability

In order to be acceptable the local banks should feel like their investments are secured, and there should be sufficient return with respect to the loans provided. This would be the main concern since the capital recovery payments not received on time would make the local banks hesitant to fund such infrastructure projects.

#### Feasibility

It is important to consider whether local banks have the required financial capacity. At present, some large scale projects have been funded entirely by local banks, indicating that the capacity is adequate to some extent.

### 5.4. Joint Venturing with foreign companies

#### Suitability

Joint venturing would provide more autonomy for Sri Lankan companies. Further it would be vital for the expected knowledge transfer to

occur, and also it would be a good solution for the capacity issue and the technological issue.

### Acceptability

Since the share of the profits and the autonomy of the local companies are increasing the shareholders of such would like this strategy. For the other stakeholders as well, joint venturing would provide more value to the local resources, including human resources, making this an acceptable opportunity.

### Feasibility

In terms of financial feasibility, the local construction companies should have the required financial and other capabilities which would allow them to work on par with the foreign companies for smooth progress of a joint venture.

## 5.5. Bid as Joint ventures with local companies

### Suitability

When operating as joint ventures the two firms are considered as one firm, where the capacity of the venture would be increased, making it a suitable option. But it should be noted that the projects are different as well as the Companies are different which would sometimes affect the suitability of this initiative.

### Acceptability

As indicated earlier as well, the companies are different so are the projects. The stakeholders involved in one company would be thinking in a different way from the others. Further, the company should be profitable in a joint venture than just operating as an individual unit.

### Feasibility

One company possessing competitive advantage over the other firm in one discipline and the need for that discipline in the considered project and vice versa would urge companies to have a joint venture between those companies. Thus the feasibility would depend.

## 5.6. Getting Listed in the stock exchange

### Suitability

The nature of construction sector is very uncertain than in any other sector. Further it can be very political. Most of the Mega projects are government oriented, and thus involves so many politics. Therefore it is quite susceptible to the changes of governments, changes of

government policies and to many more, thus for today's context it is questionable.

Further, since the construction companies are project specific, suitability of getting listed should be concerned in that context as well.

### Acceptability

In terms of acceptability it is important to consider whether the directors of the respective companies would consider this as a feasible option. Will they accept this opportunity so that the company would benefit more by going public?

At the same time it is important to understand whether the general public would accept this offer. Will they invest in the shares of the construction companies? Thus this also depend.

### Feasibility

It is important to mention how many companies have the required capacity and the experience or the successful history that is needed for the success in listing in the stock exchange.

Summary of the analysis on SAF model is indicated in the table below

Table 2: Summary of the SAF model

Alternative Developed	S	A	F	Ranking
1) Infrastructure development fund	M	H	M	3
2) Public Private Partnership Model	H	H	M	1
3) Strengthening of local banks	H	H	M	1
4) Joint Venturing with foreign companies	H	M	M	4
5) Bid as Joint ventures with local companies	M	M	M	5
6) Getting Listed in the stock exchange	M	M	M	5

H: High      M: Medium      L: Low

### • Questionnaire Survey

From the Questionnaire Survey conducted with 32 professionals, following opinions were received (See Table 3).

**Table 3: Results from the Questionnaire Survey**

Alternative Developed	Percentage of interviewees who have identified this as the		Ranking
	1 <sup>st</sup> Priority	2 <sup>nd</sup> Priority	
1)Infrastructure development fund	28%	31%	1
2)Public Private Partnership Model	25%	25%	2
3)Strengthening of local banks	16%	9%	4
4)Joint Venturing with foreign companies	19%	19%	3
5)Bid as Joint ventures with local companies	9%	13%	5
6)Getting Listed in the stock exchange	3%	3%	6

Results of both the SAF model and the Questionnaire survey are somewhat identical as indicated from the rankings.

Solutions 2, 3, 1 and 4 have been obtained as appropriate from SAF model and the solutions 1, 2, 4 and 3 have been welcomed by the interviewees.

With the rankings obtained, from the Questionnaire Survey and SAF model the recommendations have been provided in the next section.

## 6. Recommendations

For the two main issues considered, the recommendations were arrived at as below.

### 6.1. Funding Issue

It is recommended to go for Public Private Partnership Schemes as much as possible. In

the meantime it is also advised to go for an infrastructure development fund.

Further it is also advisable to strengthen the local banks in order to provide finance for the Mega projects.

### Justification

Sri Lanka is a developing country and the government of Sri Lanka does not have adequate finance to provide funds for Mega Projects of this nature, and thus it is important to move into Public Private Partnership Schemes.

In order to kick start the Mega Projects, there should be some sort of fund so that money is readily available, when mega projects are due. An Infrastructure development fund would be a great idea to establish, because it would surely keep sufficient money in hand to be used when it is needed, but it should be well kept in mind not to repeat the same mistakes done in the recent past with the previous funds.

Involvement of local banks would be highly welcomed by the Sri Lankan Construction Industry. It would strengthen the finance base of the country in carrying out mega projects.

The questionnaire survey results have also validated the points, where the 3 solutions provided above were the main prioritized solutions by the interviewees as well.

### 6.2. Capacity and Technological issues

It is recommended to go for joint ventures with foreign companies.

Further it is also recommended to have joint ventures between local companies as well when bidding for Mega Projects.

### Justification

A joint venture with a foreign company would resolve the issue for some extent, because of 2 main reasons. First of all, the foreign company would get sufficient local knowledge that is useful for the success of the project. Secondly for the local company, it would be beneficial as a joint venture would provide a better autonomy than just sub-contracting.

Further it is also important that when bidding for Mega Projects, the local construction companies should establish joint ventures between themselves when it comes to capacity

issues. When applying as a joint venture, the two companies are considered as one and thus creating synergy as one group. It would increase the group capacity and can be successful in successful bidding procedures.

The results from the questionnaire survey also indicates that the solution of going for stock market was not much expected by the interviewees and thus the solutions of joint venturing with foreign and local companies were accepted.

## 7. Conclusions

The conclusions arrived at are indicated in Table 4, where the objectives indicated at the beginning are successfully achieved.

**Table 4: Conclusions**

Issue	Available Solutions
Funding Issue	Public Private Partnership Models
	Strengthening of local banks
	Infrastructure development fund
Lack of technology and capacity	Joint Venturing with foreign companies
	Bid as Joint ventures with local companies

It is important to mention that further research needs to be conducted on these options individually to arrive at a sound conclusion, based on the findings of this research.

### Limitation of the research and areas of future research needed

The research is highly time sensitive that the findings of the research is not universally accepted or true at all times.

Acquiring data and information from some of the interviewees were really difficult due to the high political involvement and the hiding of so much useful information, specially when it relates to bidding procedures and award of contracts.

Further, in order to arrive at a concrete solution, further research is needed with respect to each of the solutions considered above and this research can be considered as a base for such future researches.

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