

## ESCALATING NUMBER OF FOREIGN LABOUR IN THE MALAYSIAN CONSTRUCTION INDUSTRY

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### ABSTRACT

*In the recent year, vast development in Malaysia resulted the direct growth of the nation's Construction Industry. Due to the overwhelming construction activities in Malaysia, the demand for construction labour is unsurprisingly high. However, contractors are highly depending on hiring foreign labours than local labours. As a matter of facts, the construction industry is being labelled with 3D term, translated to dirty, dangerous and difficult. As a result, many youths among Malaysian have shunned the industry. Hence, employment of foreign labour increased drastically and slowly becoming a threat as not just towards the construction industry but to the nation as well. Therefore, this research will explore the issue on the escalating number of foreign labours in Malaysia construction industry. The views and opinions acquired are strictly confined to Grade 7 contractor in Petaling Jaya only. Questionnaire are distributed to relevant contractors to collect their feedback on the foreign labour issue. In total, 30 respondents have participated in this survey. This study had utilised questionnaires form as the research instrument which is quantitative technique, the data will then be analysed using frequency method, Relative Importance index method, and Ranking method. The results obtained are presented in the form of tables, figures and charts. Factor resulting the escalating number of foreign labour in Malaysian construction industry, problems arising from the escalating number of foreign labour in Malaysian construction industry and the solutions to minimise it will be further explained.*

**Key words:** Foreign labour, Construction industry, Malaysia, Employment

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### 1.0 INTRODUCTION

The Malaysian Construction industry is well known to have a huge influence on the nation's economy over the past decade. This can be proved by referencing Table 1 where the construction sector was among the top contributors in Malaysia's GDP in 2010 and 2011 respectively (Peros, 2013). By 2012, it became the largest contributor in Malaysia's GDP with a jump of 2.1% from 2011.

**Table 1: Major GDP Contributors in Malaysia (2010-2012)**

Sector	2010(%)	2011(%)	2012(%)
Manufacturing	11.9	4.7	4.0
Construction	6.0	4.6	6.7
Plantation	2.5	5.9	3.9
Services	-0.4	-5.7	0.7
Agriculture	7.2	7.0	5.2

Fast forwarding to 2015 the construction sector still sits firmly at the top of the list among Malaysia's GDP contributors, outperforming all the other economic sector in terms of growth clocking in at 8.2% GDP growth from the previous year (Ram Ratings, 2016). The increasing number of projects can be observed day in day out from its product diversification such as, office building, housing, shop lots and most recently, infrastructures like the MRT project.

The beginning of foreign labours recruitment in the construction industry started all the way back to the booming years of the industry itself in the 1970s where these labours, majority of them who were Indonesian, have already worked in the Malaysian agricultural sector and moved into urban areas as construction site workers (Kassim, 2006). The reason being at that time is due to a scarcity of local labour force in the construction sector and this tragedy has been carried on to the 1980s all the way till today which makes the call to liberalise the use of immigrant labour necessary (Abdul-Aziz, 1995).

As of 2011, Malaysia has an estimated amount of 1.9 million foreign workers spread across sectors (Peros, 2013). According to CIDB, 93% of the registered foreign workers in the construction industry are unskilled workers (Hisyam, 2015). Majority of the foreign labours have been recruited from neighbouring countries such as Indonesia, Bangladesh, Myanmar and Philippines (Zaki, Mohamad, and Yusof, 2012). This matter has directly resulted in shortage of construction skilled labour in Malaysia as labours from this few nations have very limited exposure to proper education. Recruiting cheap foreign labours might ease the contractor's expenditure but will it guarantee the quality or even benefit the Malaysian Society remains a question in the mind.

## 1.1 PROBLEM STATEMENT

According to the research conducted by Peros (2013), as of June 2011, around 70 to 80 percent of the construction labours are occupied by foreigners and nearly half a million of them are brought in illegally without a working permit or visa. A strategy paper, which is part of the 11th Malaysia Plan, indicated that their numbers have increased by 152% from year 2000 to 2013 tabled by (Hisyam 2015). Besides, Mohamed (2015) also added that ever since the construction industry has a bad image towards local workers, the employers of the industry will have no choice but to bring in foreign workers to satisfy the labour demand as these foreign workers will willingly accept the low wages offered and the poor working conditions of construction sites. Hence, the research question which arises here is what are the factors resulting in the escalating number of foreign labours in Malaysian construction industry?

Nevertheless, Zaki, Mohamad, and Yusof (2012) mentioned that the increase of inflow of foreign labour will eventually lead to skilled labour shortage due to the fact that majority of them are from places with poor education background. When cheap foreign labours are up for grab, contractors are reluctant to hire better skilled labours that will cost more. Therefore, another research question arises from this situation is "What are the Problems arising from the escalating number of foreign labours in Malaysia construction industry? Moreover, what are the solutions to minimise the escalating number of foreign labours in Malaysian construction industry?" Thus, this research highlights the factors of escalating number of foreign workers, the effects of escalating number of foreign workers and solutions to minimise escalating number of foreign workers in Malaysian construction industry.

## 1.2 RESEARCH OBJECTIVES

This study aims to achieve the following objectives:-

1. To determine the factors resulting in the escalating number of foreign labours in the Malaysian Construction industry
2. To examine the problems arising from the escalating number of foreign labours in the Malaysian Construction industry
3. To establish solutions to minimise the escalating number of foreign labours in the Malaysian Construction industry

## 2.0 Literature Review

### 2.1 Factors Resulting in the Escalating Number of Foreign Labours in the Malaysian Construction Industry

#### 2.1.1 Low Wages Offered

Jobs with low wages associated with high risk in construction field are the reasons why Malaysians will not get themselves involve in construction industry. For the amount of wages being paid to construction workers, it is really not worth putting one's life at risk. Tanner (2017) stated that according to Maslow's Hierarchy of Needs Theory, physiological needs which includes the basic issue of survival such as adequate salary and stable employment is the most basic needs of any employee at any workplace. If the amount of wages offered does not fulfil the requirement of an individual, it will lead to dissatisfaction and he or she will very likely take on other jobs that offers a better a pay (Tanner, 2017).

#### 2.1.2 Poor Image and Poor Working Conditions

Jobs at construction sites are frequently related to the 3D which are dirty, dangerous, and difficult (Mohamed R. B., Manpower needs in construction, 2015). In 2016 alone, the Department of Occupational Safety and Health (DOSH) (2016), indicated that there are 50 reported accidents occurred at construction site. Additionally, other logic explanations on why young graduates are unwilling to be involve is because many construction labours in Malaysia are not well equipped with safety equipment and this

situation has made working conditions at the site more dangerous which provokes more accidents to happen and will only further deteriorate industry's image (Mohamed, Yusof, & Zaki, 2012).

### **2.1.3 Poor Career Path**

CIDB mentioned in its Construction Industry Transformation Programme 2016-2020 (CITP) master plan that the construction industry is also perceived to be difficult because it has limited career progression and lack of job development. (Hisyam, 2015). In the modern days, people are looking jobs that allow them to get promoted and perhaps earn a recognisable status within the company in the future which is something that working as a construction labour could not offer (Tanner, 2017). Construction jobs are regarded as less prestigious compared to other jobs as it does not require much skills or even intelligence (Hamid, Jamadi, & Singh, 2013). Besides that, esteem need is the fourth level out of five levels in Maslow's Hierarchy of Needs Theory which includes recognition issues such as job titles and prestigious job assignments (Tanner, 2017). Although not many will consider this as one of their needs at the early stages of their career but as time passes, more and more will look for career progression instead of just focusing on their respective pay.

### **2.1.4 Economic Factor**

The rapid development in the Malaysian economy over the past two decades has led to an increase in construction projects being awarded which has directly resulted in more job opportunities available (Mohamed, Yusof, & Zaki, 2012). The Malaysian unemployment rate has decreased from 4.5 percent in 1999 to 3.28 percent in 2017 which currently ranked 27th lowest in the world (Malaysia Unemployment Rate, 2017). There has also been massive rural-urban migration drift due to industrialisation and urbanisation in the economy (Hamdan, Kamar, Lop, Mamter, & Salleh, 2014). Navamukundan (2002) also stated that the fast growing rates of the Malaysian economy has directly caused many employers to hire foreign workers to satisfy the demand of the labour market in Malaysia.

### **2.1.5 Higher Education Level Among Malaysians**

In the modern society, more young Malaysians are getting higher educational achievement such as Bachelor's degree or even Master's degree (Mohamed R. B., Manpower needs in construction, 2015). This is due to many people are in the hunt for a higher education recognition in an effort to secure a much more profession field to have a better quality life (Saleh, 2008). Malaysia is considered to have one of the most tertiary education institutions in Asia with 492 institutions as of 2016 (Higher Education in Malaysia, 2016). With the Malaysian economic performing well, it encourages parents to send their children to universities. Besides, a survey carried out by Anderson Market Analytics among 1,100 local undergraduates found that 72 percent would want to prefer to study overseas and apply for permanent residence status upon completion of their studies abroad (Song, 2015).

### **2.1.6 Lack of Survival Chance in Own Country**

Indonesians and Bangladeshis are among the dominant nationality in terms of foreign labour in Malaysia which consist of 39% and 13% respectively of the overall foreign labour force (Population and Labour Force, 2017). Majority of these foreign labours in Malaysia decided to migrate due to lack of survival opportunity in their own nation. Due to poor economic performance, the unemployment rate in Indonesia was relatively higher than Malaysia as well (Malaysia Unemployment Rate, 2017). In Bangladesh, the population suffers the same fate as Indonesia and according to the respondents in Datta (2004) research, the main economic push factor that made people to leave Bangladesh for Malaysia have been lack of industrialisation and economic instability.

## **2.2 Problems Arising From Escalating Number of Foreign Labours in the Malaysian Construction Industry**

### **2.2.1 Social Problem**

Disregard the fact whether the foreign labours are legal or not, they may cause social problems and the locals are the one who suffers. As mentioned previously, many of these foreign labours are from rural places with poor educational background that will cause some of them to create havoc without hesitations (Mohamed, Yusof, & Zaki, 2012). Home Minister Datuk Seri Dr Ahmad Zahid Hamidi said that there were 85,029 reported crime cases and 9,496 (11.2 %) of them were committed by illegal immigrants and foreign workers (Bakar, 2014). There were 2,306 crime cases convicted by foreigners were categorized as serious crimes while the remaining 7,190 cases were associated with property crimes (Bakar, 2014). In a separate report earlier this year, Deputy Inspector-General of Police (DIGP) Datuk Seri Noor Ibrahim however said that Bangladeshis are the top contributors among other foreigners to criminal (Palansamy, 2017). Besides criminal activities, the inflow of foreign labours will also be a threat to the health of Malaysians. Many of the foreigners are prone to spreading deadly diseases as the condition of the accommodation provided to them is filthy (Jamadi, 2012).

### **2.2.2 Political Stability**

The high number of foreign labours had struck fear in the country's harmony, security, and political stability. The number of foreign labour had increased drastically that the locals are fearful of being the minority group and unable to express their views or influence the country politically (Pook, 2016). The Royal Commission of Inquiry (RCI) concluded that there was a

controversial case, “Project IC” where corrupt officials assisted by syndicates had taken advantage of a weakly institutionalised citizenship system to issue illegal identification documents to all these illegal foreign labours for monetary purposes (Hew, 2015). With the Malaysian citizenships in their hands means that they are eligible to cast their vote during the General Elections. If this proceeds for the coming years, it will only mean that the choice of the Malaysian government will no longer be in the locals’ hands but instead be decided by those foreign labours with permanent residence.

### **2.2.3 Economic Issues**

The foreign labours have had a major impact on the nation’s economic. The remittances earned by the foreign workers will be sent back to their home countries which resulting an outflow of currency causing our Malaysian ringgit to deteriorate. Moreover, foreign workers living in Malaysia are causing a higher rate of inflation. This is because they enjoy goods without paying income taxes and enjoy the benefits for free. Not just that, foreign labours health are ensured by their employers and other facilities without any corresponding expenditures (Jamadi, 2012). Consequently, they become a burden to the Malaysian economy. The recruitment of foreign labour will eventually affect the wage structure of the industry as well. As time passes, employers will be satisfied with the low wages paid to the foreign labour and will be reluctant to increase it by a high margin (Abdul-Rahman, Chen, Shu, & Woods, 2012).

### **2.2.4 Low Quality and Productivity On Site**

The decrease of duration of temporary work permits for foreign workers from six years to only three years had caused poor quality of workmanship and low productivity at site (Jamadi, 2012). When the foreign labours’ working permit expired, they are replaced by those who have no construction experience thus, resulting in poor performance at the construction site. With the foreign workers being recruited being unskilled, it will be hard for local contractors to implement Industrialized Building System (IBS) Construction as IBS construction are executed with proper skill, technique, and in compliance with standard procedures (Abas, Buyung, Mydin, & Sani, 2014). This will leave contractors with no other options but to go with conventional construction method. According to a case study conducted by Gan et al. (2017), conventional construction method is a major disadvantage as compared to IBS construction in terms of building quality, reducing construction waste, and as well as reducing numbers labours on site.

### **2.2.5 Prolong the Construction Time**

The construction industry is considered a labour concentrated industry; it relies heavily on a huge numbers of foreign labour. According to Economic Report, The New Immigration Act that was amended in 2002 and came into effect on 1st August 2002, an estimated amount of 318,300 illegal immigrants were deported back to their home countries in 2002 (Minter, 2016). Such act had caused many construction projects to undergone costly delays. Besides that, the government scheme that shortened the validity period of foreign labour work permit to three years had sever effects on human resource planning in construction industry (Jamadi, 2012). Upon commencement, the foreign labour would require another estimated 3 months learning curve period before they become prolific (Abdul-Rahman, Chen, Shu, & Woods, 2012). Besides that, the inability to use IBS construction due to lack of skilled labour is another reason why construction period is prolonged (Chen, et al., 2017).

## **2.3 Solutions to Minimise the Escalating Number of Foreign Labours in the Malaysian Constructiton Industry**

### **2.3.1 Adopt More Advanced Construction Method**

One of the most advanced construction method that is commonly used in construction internationally is Industrialised Building System (IBS). Construction Industry Development Board (2003) defined IBS as a construction system that uses a mixture of construction components which are either manufactured on or off site and then placed and assembled into building structures. The adaptation of IBS in Malaysia can solve the foreign labour issues in Malaysia by actually reducing the number of workers on site by a large scale. Abas, Buyung, Mydin, and Sani (2014) concluded that since IBS construction relies more on modern construction technology hence, it can reduce the reliance on manual labour and subsequently reducing the inflow of foreign labours into Malaysia. Besides that, being able to reduce number of labours on site, IBS construction also has many other benefits such as better building quality, shorter construction period and most of all providing environmental sustainability (Mohamed, Shamsuddin, & Zakaria, 2013). As such, IBS can be considered as a useful approach in making the construction industry a lesser dependant on foreign labour-oriented and at the same time fulfilling quality concerns (Ismail & Shaan, 2003).

### **2.3.2 Improving Working Conditions**

According to National Farmers’ Federation (NFF) (2008) Labour Shortage Action Plan, the major reason why many people turn down construction labour jobs is due to the poor impression of the industry. Therefore, it is necessary to improve the working condition of the construction industry. As mentioned by Sundaraj (2007), if the construction industry has a reputable image, it will fascinate more locals to take up construction jobs and consequently reducing the reliance on foreign labour. Indeed, there are a several ways to provide a decent working condition and environment by reducing the negative environment effects such as dust, noise, debris and unhealthy emission (Sundaraj, 2007). One of the few ways to improve working conditions is to provide standard safety equipment such as safety helmet and protective clothing to minimize casualties and injuries on site (Johnson, 2013).

### 2.3.3 Attract the Young Generations

As mentioned by Johnson (2013), there are an estimated amount of 80 million youths who will be in the labour force and be the next skilled workforce in construction industry. In order to be able capture the attention of the younger generations to participate in the construction industry, cultivating their interest in construction can be done so while they are still acquiring education in school (Johnson, 2013). The Malaysian education system can introduce construction technology and innovative construction methods as one of the elective subjects in the local education syllabus. If the employers can change the perception of working as a construction labour is all about manual labouring into using various kinds of automation and cool, new tools that could be used as a trump card in gaining interest among the youngsters (Johnson, 2013).

### 2.3.4 Implementing Strict Laws Regarding Foreign Labour Employment

The government should implement laws and regulation regarding the employment of foreign labour to reduce the inflow of foreign workers into Malaysia. As mentioned by Cheong (2017), among the most effective ways to reduce inflow of foreign labour is that the government have to be strict and firm with their policies. Regulations such as all foreign labours hired for construction jobs must go through a basic skill training before their respective Visas can be granted (Cheong, 2017). Local authorities must always check on the employers' human resource department and those who fail to comply will have severe consequences. By doing so, skilled labour shortage issue and also the recruitment of illegal immigrant labour could be possibly reduced.

### 2.3.5 Hunt Down and Deport Illegal Foreign Workers

Deporting undocumented foreigners has been an on-going routine the past two decades at the very least. In 2005, over 300,000 illegal foreign workers were deployed as Malaysia's largest search against illegal migrant workers went down (Karim, 2016). The main priority for this search is to curb the nation's crime rate and social problems. (Karim, 2016). Today, the illegal immigrant tally has not decreased hence, the Immigration Department have decided to put in more effort in their crackdown on illegal immigrants (Goh, 2017). A large-scale operation was carried by them to deport illegal immigrants soon after the deadline for the temporary Enforcement Card (E-Card) expired on the 1st of July 2017 (Goh, 2017). Ever since E-Card expired on the 1st of July, raids on construction site were done frequently and more than 3,300 illegal workers have been arrested along with 60 employers (Goh, 2017). As a result employers will have to comply with local regulations in order to prevent their work progress to be hindered by lack of labour.

## 3.0 RESEARCH METHODOLOGY

### 3.1 Quantitative Approach

Quantitative approach is commonly adopted in scientific research problems by acquiring data in respects to behavioural and social parameters where the relationship between these parameters will be identified (Creswell, 2002). In short, quantitative approach collects numerical data from a large representative sample size and inferences that are deduced will be used as a generalisable conclusion. Additionally, questionnaires survey is being adopted in this research. The questionnaires were delivered to the targeted respondents via email and were returned by the respondents once they have completed it. The combination of quantitative and questionnaire survey allows for a very quick and efficient means of collecting data with regards to respondents' perception. The questionnaire comprises of 4 sections with 20 questions in total. Section A is the demographic profile of the respondent. Section B being the factors resulting in the escalating number of foreign labour in Malaysian construction industry. Section C which are in relation to the problems arising from the escalating number foreign labour and lastly Section D will be on the solutions to minimise the current issue.

### 3.2 Sampling

#### 3.2.1 Population Size

The population size is deliberately selected on registered Grade 7 contractor in Petaling Jaya. Based on the information provided by CIDB, there are 220 Grade 7 Contractors in Petaling Jaya.

#### 3.2.2 Sample Size

According to Krejcie and Morgan (1970), there is specific formula to calculate the required samples size. The formula is as shown below:

$$S = \text{required sample size} = \frac{x^2 NP(1-P)}{d^2(N-1) + x^2 P(1-P)}$$

$x^2 = 3.841$ , obtained from the table value of chi-square for 1 degree of freedom at the desired confidence level

$N$  = population size

$P$  = population proportion, always fixed at 0.50 as this would provide the maximum sample size

$D$  = degree of accuracy expressed as a proportion at 0.05

Therefore,

$$S = \frac{3.841 \times 220 \times 0.5(1-0.5)}{0.05^2(220-1)+3.841 \times 0.5(1-0.5)}$$

$$= 140$$

Based on the information provided by CIDB, the total population of registered Grade 7 contractor in Petaling Jaya is 220. Based on the result on the above formula, the needed sample size for this research is 140 respondents

### 3.3 Data Analysis Method

#### 3.3.1 Relative Importance Index Method

Relative Importance Index (RII) method is a very frequent used for data collected through ranking scale. In this research, a scale rating of 5 will be used to measure the respondent's point of view in regard to the factors and effects of the escalating number foreign labours in the Malaysian construction industry and as well as the solutions to overcome it. Level of Occurrence will be used for Section B of the questionnaire while level of agreement will be used for Section C and D. The relationship between the RII and Likert Scale will be presented in Table 2. The RII is calculated by using the formula below (Kunst, 1997).

$$RII = \frac{\sum (1x_1 + 2x_2 + 3x_3 + 4x_4 + 5x_5)}{A \times N}$$

Where,

- $x_1$  = number of respondent for almost never occurs/ strongly disagree
- $x_2$  = number of respondent for seldom occurs/ disagree
- $x_3$  = number of respondent for occurs moderately/neutral
- $x_4$  =number of respondent for often occurs/ agree
- $x_5$  = number of respondent for most common occurrence/strongly agree
- A = the highest weight (i.e. 5 in this case)
- N = total respondents

Table 2: Relationship Between RII and Likert Scale (Source: Kunst, 1990)

Likert Scale	Relative Importance Index	Level of Occurrence/ Agreement
1	0<RII<0.20	Almost never occurs/ Strongly disagree
2	0.20<RII<0.40	Seldom occurs/ Disagree
3	0.40<RII<0.60	Occurs moderately/ Neutral
4	0.60<RII<0.80	Often occurs/ Agree
5	0.80<RII<1.00	Most common occurrence/ Strongly agree

#### 3.5 Ranking Method

Ranking method is considerably the simplest evaluation method where the items will be arranged in a number sequence from the most relevant to the least (Graeber, Taschereau, & Wong, 2010). Besides that, each response provided will poses a specific value hence, allow the results to rank numerically. Standard competition ranking will be specifically used where items that are equal will each receive the same ranking respectively leaving a gap in the ranking numbers (Graeber, Taschereau, & Wong, 2010).

## 4.0 KEY RESULTS

### 4.1 Respondent Rate

140 questionnaires were sent to grade 7 contractors in Petaling Jaya. Out of the 140, only 30 sets were returned which was reflecting a respondent rate of 21.43%.

### 4.2 Factors Resulting in the Escalating Number of Foreign Labours in the Malaysian Construction Industry

**Table 3: Factors Resulting in the Escalating Number of Foreign Labours in the Malaysian Construction Industry**

Factors resulting in the escalating number of foreign labours in the Malaysian construction industry	Weighting Scale					RII	Remark	Rank
	ANO	SO	OM	OO	MCO			
	1	2	3	4	5			
Low wages offered	1	2	4	11	12	0.807	Most Common Occurance	1
Lack of survival chance in own country (i.e. foreigners have no stable job in own country)	0	4	3	15	8	0.780	Often Occurs	2
Poor career path	1	4	9	13	3	0.687	Often Occurs	3
Poor image of industry and poor working conditions	1	6	8	12	3	0.667	Often Occurs	4
Higher education among Malaysians	2	5	7	14	2	0.660	Often Occurs	5
Economic Factor (i.e. industrialisation and urbanisation causes locals to choose better jobs)	1	7	8	11	3	0.653	Often Occurs	6

By referring Table 3, it can be deduced that the main factor that contributed to the escalating number of foreign labours in the Malaysian construction industry is low wages offered which obtained the highest RII of 0.807 and rating scale of "most common occurrence". As emphasised by Tanner (2017), the basic criteria that influence a person in terms of employment is money. Jobs at construction site not only offer relatively low wages but are also associated with high risk which is discouraging (Ruban, 2016). The second-ranked factor is the lack of survival chance in own country.

The following factor scored an RII of 0.780 which has a rating scale of "often occurs" to the escalating number of foreign labour in the Malaysian construction industry. Most of the foreign labours in Malaysia left their home country to work here mainly due to the lack of survival opportunity back home (Lin, 2016). Neighbouring countries such as Indonesia and Bangladesh have very poor living conditions and poor economic development which leads to high unemployment rate and poverty (Lin, 2016).

Lastly, the lowest ranked factor goes to economic factor. Based on table 4.1, economic factor scoring an RII of 0.653 and managed a rating scale of "often occurs" to the escalating number of foreign labour in the Malaysian construction industry. As a developing nation, there is significant increase in construction projects being awarded in the past two years which has resulted in more job opportunities available (Mohamed, Yusof, & Zaki, 2012).

### 4.3 Problems Arising from the Escalating Number of Foreign Labours in the Malaysian Construction Industry

**Table 4: Problems Arising from the Escalating Number of Foreign Labours in the Malaysian Construction Industry**

Problems Arising from the escalating number of foreign labour in the Malaysian construction industry	Weighting Scale					RII	Remark	Rank
	SD	D	N	A	SA			
	1	2	3	4	5			
Social Problems (i.e. crimes such as theft and rape)	0	1	3	14	12	0.847	Strongly Agree	1
Economic issues (i.e. outflow of currency)	1	1	8	12	8	0.767	Agree	2
Political Stability (i.e. immigrants getting citizenship illegally)	0	6	5	12	7	0.733	Agree	3
Prolong the Construction Time	1	6	10	10	3	0.653	Agree	4
Low Quality and productivity on site	4	8	7	8	3	0.587	Neutral	5

By referring Table 4, the problem that ranked the highest among all is social problem which achieved a solid RII score of 0.847 and has a rating scale of “strongly agree” towards the problems arising from the escalating number of foreign labour in the Malaysian construction industry. The result achieved can be closely related to what Bakar (2014) had previously said, where foreign labours are among the contributors of serious crimes such as rape, murder, and robbery. Besides contributing to criminal activities, foreign labours also are prone to spreading diseases as the condition of their accommodation is filthy (Jamadi, 2012).

The second-ranked problem is economic issues which score an RII of 0.767 and a rating scale of “agree”. The main economic impact of escalating number of foreign labour in Malaysia is the outflow of currency (Jamadi, 2012). With the number of foreign labours increasing yearly, there will be more outflow of currency from the country as the wages earned by the foreign labours will be sent back to their respective home country which eventually resulting in deterioration of the Malaysian Ringgit.

The lowest ranked problem is low quality and productivity on site. Based on figure 4.2, low quality and productivity scored relatively low RII of 0.587 and rating scale of “neutral” towards the problems arising from the escalating number of foreign labour in the Malaysian construction industry. Foreign labours only have a valid work permit for 3 years hence, when their working permit had expired, they are most probably to be replaced by inexperience labours who had not gone through proper training (Jamadi, 2012). As a result, the quality and workmanship of the final product will most likely not be up to standards.

#### 4.4 Solutions to Minimise the Escalating Number of Foreign Labours in the Malaysian Construction Industry

Table 5: Solutions to Minimise the Escalating Number of Foreign Labours in the Malaysian Construction Industry

Solutions to minimise the escalating number of foreign labour in the Malaysian construction industry	Weighting Scale					RII	Remark	Rank
	SD	D	N	A	SA			
	1	2	3	4	5			
Improve working conditions	0	1	6	12	11	0.820	Strongly Agree	1
Adopt more advance construction method (i.e. use IBS)	0	0	9	10	11	0.813	Strongly Agree	2
Attract the young generations (i.e. through education system)	1	2	6	15	6	0.753	Agree	3
Implement Strict laws regarding foreign labour employment	2	6	4	9	9	0.713	Agree	4
Hunt down and deport illegal foreign labours	3	4	4	11	8	0.713	Agree	4

By referring to Table 5, improve working conditions cemented top spot among all the other solutions by scoring an RII of 0.820 and a rating scale of “strongly agree” towards the solutions to minimise the escalating number of foreign labour in the Malaysian construction industry. According to Maslow’s Hierarchy of needs, having a safe and comfortable working environment is considered as among the basic needs that an employee will seek (Tanner, 2017). However, Malaysian construction sites are mostly filthy and has safety issues. Thus, working conditions of the construction sites must be improved to attract locals to be involved in construction jobs (Sundaraj, 2007). The second ranked solution is Adopt more advance construction scoring an RII of 0.813 and has a rating scale of “strongly agree” towards the solutions to minimise the escalating number of foreign labour in the Malaysian construction industry. Adopting more advance construction method such IBS actually reduces the onsite labours by a huge margin as it relies more on modern construction technology (Abas, Buyung, Mydin, & Sani, 2014). Hence, if the labours can reduced by adopting IBS, the demand for foreign labour will be subsequently reduced as well.

The solutions that were ranked equally last were implement strict law regarding foreign labour employment and hunt down and deport illegal foreign labours respectively. Both of these solutions scored an equal lowest RII which was 0.713. However, both of these solutions still managed a rating scale of “agree” to the solutions to minimise the escalating number of foreign labour in the Malaysian construction industry. Karim (2016) stated that raiding construction sites is among the best way to hunt down illegal foreign labours. Besides, Cheong (2017) also mentioned that all foreign labours hired for construction jobs must go through a basic skill training before their respective Visas can be granted. By implementing this regulation, not only the inflow of foreign labour can be reduced but skilled labour shortage can be prevented as well. However, quite a number of contractors do not agree with these two solutions. One of the few logic explanations is that hunting down and deporting illegal foreign labours will cause contractors to suffer from labour shortage on site which will subsequently lead to low productivity and delay of works progress (Minter, 2016). Additionally, employers will have to go through lengthy process to acquire new labours and train them (Abdul-Rahman, Chen, Shu, & Woods, 2012).

## 5.0 CONCLUSION

For many years to come, the Malaysian construction industry will still rely heavily on foreign labours as there are many existing factors that causes locals to turn their attention away from the industry. Hence, contractors will need opt for foreign labours to satisfy the labour demand. The leading factor that causes locals to shun construction jobs is low wages offered. Besides, construction jobs have a relatively poor career path as due to limited career progression and lack of job development. Additionally, poor image of the industry and poor working conditions is also among the factors. Dirty, dangerous and difficult are the three common words used by the young generation to describe the construction industry. Besides the locals turning down construction jobs, another factor is also due to lack of survival chance of foreigners in their own country. Many foreigners that chose to work as a construction labour in Malaysia as their country struggles economically which leads to high unemployment rate.

The biggest problem that was identified is Social problems. Crimes such as robbery, theft, and rape cases were further increased by foreign workers especially the illegal ones as a handful of them have been reportedly involved. In addition, the escalating number of foreign labour has also effected the political stability of Malaysia. The Malaysian politics has been negatively affected due to involvement of foreign labours that have been granted permanent residence status illegally. Moreover, many economic issues related to wages and the outflow of currency had also arisen. Thus, the escalating number of foreign labours does not just affect the construction industry but also has a large impact on the nation socially, politically and economically.

The most effective solution to curb the foreign labour issue would be improving the working conditions and the next best solution is to adopt more advanced construction method. Hence, the government must consider getting to the bottom of the factors leading to the escalating number of foreign labour as to minimising the issue before it becomes way beyond control and unsolvable.

## REFERENCES

- Abas, N., Buyung, N., Mydin, M., & Sani, N. (2014). Trends and reliance of foreign labourers in Malaysia: conventional construction versus industrialized building system construction. *EDP Sciences*. doi:10.1051/shsconf/20141101004
- Abdul-Aziz, A.-R. (2001). Foreign workers and labour segmentation in Malaysia construction industry. *Construction Management and Economics*, 19(8), 798-872. doi:10.1080/01446190110072022.
- Abdul-Rahman, H., Chen, W., Shu, F., & Woods, L. (2012). Negative impact induced by foreign workers: Evidence in Malaysian construction. *Habitat International*, 36(1), 433-443. doi:10.1016/j.habitatint.2012.03.002
- Chan, D., & Kumuraswamy, M. (1998). Contributors to Construction Delays. *Construction Management and Economics*, 16, 17-29.
- Chen, J., Chethana, I., Gan, Y., Shen, L., Tam, V., & Tan, Y. (2017). Critical factors affecting the quality of industrialized building system projects in China. *Sustainability*, 9(216). doi:10.3390/su9020216
- Cheong, L. M. (2017, January 21). Long-term solution to foreign labour issues. *The Star Online*. Retrieved from <http://www.thestar.com.my/business/business-news/2017/01/21/longterm-solution-to-foreign-labour-issues/>
- Construction Industry Development Board. (2003). *Industrialised Building System (IBS) Roadmap 2003-2010*, Kuala Lumpur: CIDB Malaysia.
- Datta, P. (2004). Push-pull factors of undocumented migration from Bangladesh to West Bengal. *Indian Statistical Institute, Kolkata*. Retrieved from <http://www.ipcs.org/article/bangladesh/undocumented-migration-from-bangladesh-to-west-bengal-1402.html>
- Department of Occupational Safety and Health (DOSH). (2016). Retrieved from Ministry of Human Resource of Malaysia: <http://www.dosh.gov.my>
- Goh, M. (2017, July 15). Malaysia continues crackdown on illegal migrant workers even as businesses cry foul. *Channel News Asia*. Retrieved from <http://www.channelnewsasia.com/news/asiapacific/malaysia-continues-crackdown-on-illegal-migrant-workers-even-as-9033668>
- Graeber, T., Taschereau, R., & Wong, J. (2010). Rank-rank hypergeometric overlap: identification of statistically significant overlap between gene-expression signatures. *Nucleic Acids Research*, 169. doi:10.1093/nar/gkq636
- Hamdan, N., Kamar, I., Lop, N., Mamter, S., & Salleh, N. (2014). The escalating of numbers of foreign workers in construction site. *MATEC Web of Conferences*, 15, doi: 10.1051/mateconf/20141501026.
- Hamid, A., Jamadi, M., & Singh, B. (2013). Foreign Labour Employment in construction Project. *International Journal of Scientific Research Publications*, 3(11). Retrieved from <http://civil.utm.my/rahimhamid/files/2012/10/ijsrp-p2377.pdf>.
- Hew, L. Y. (2015, March 6). Illegal workers in Malaysia: How much do you know about the dilemma? *Says*. Retrieved from <http://says.com/my/news/illegalworkersinmalaysiahowmuchdoyouknowaboutthedilemma>
- Higer Education in Malaysia. (2016, September 4). Retrieved from Study in Malaysia: <http://www.etawau.com/edu/IndexEducation.htm>
- Hisyam, K. (2015, November 4). *A nation built by foreigners, brick by brick*. Retrieved from Malaysian Trades Union Congress: <http://www.mtuc.org.my/anationbuiltbyforeignersbrickbybrick/>
- Ismail, E., & Shaan, S. (2003). Promoting the usage of industrialised building system (IBS) an modular coordination (MC). *In The Malaysian Construction Industry*, 7-9.
- Jamadi, M. A. (2012). Foreign labour employment in construction. (Master's Thesis, Universiti Teknologi Malaysia, Kuala Lumpur, Malaysia), Retrieved from: <http://eprints.utm.my/29838/1/MuhammadAmmarJamadiMFKA2012.pdf>.

- Johnson, M. L. (2013). *Attracting Young People into Construction Field Positions*. Retrieved from The Foundation of Wall and Ceiling Industry: [https://www.coaa.org/Documents/About-COAA/Workforce-Shortage/Attracting-Young-People-to-Construction-\(AWCI\).aspx](https://www.coaa.org/Documents/About-COAA/Workforce-Shortage/Attracting-Young-People-to-Construction-(AWCI).aspx)
- Karim, F. (2016, February 25). Counting the costs of undocumented labour. *New Straits Times*. Retrieved from <https://www.nst.com.my/news/2016/02/129442/counting-costs-undocumented-labour>
- Kassim, A. (2006). Indonesian immigrants and Urban squatting in Kuala Lumpur, Malaysia. *Indonesia Circle. School of Oriental & African Studies. Newsletter*, 14(41), 29-38. doi:10.1080/03062848608729649.
- Krejcie, R., & Morgan, D. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, 30(1).
- Kunst, A. (1997). An overview of available measures illustrated with two examples from Europe. *Social Science & Medicine*, 757-771. doi:10.1016/S0277-9536(96)00073-1
- Labour Rates. (2016). Retrieved from Quantity Surveyor Online: <http://www.quantitysurveyoronline.com.my/labour-rates.html>
- Lin, M. (2016). Indonesian Labor Migrants in Malaysia. (*Master's Thesis, University of Malaya, Kuala Lumpur, Malaysia*), Retrieved from: <http://cmsad.um.edu.my/images/ics/workingpaper/2006-11.pdf>.
- Malaysia Unemployment Rate. (2017). Retrieved from Trading Economics: <https://tradingeconomics.com/malaysia/unemployment-rate>
- Minter, A. (2016, April 22). Malaysia's immigration mess. *Bloomberg*. Retrieved from <https://www.bloomberg.com/view/articles/20160421/>
- Mohamed, R. B. (2015). Manpower needs In construction. (*Master's Thesis, University of Malaysia Pahang, Pahang Malaysia*), Retrieved from <http://umpir.ump.edu.my/13055/1/FKASA%20-%20RAZLINA%20BINTI%20MOHAMED%20-%20CD%209742.pdf>.
- Mohamed, S., Shamsuddin, S., & Zakaria, R. (2013). Economic attributes in Industrialised Building System in Malaysia. *Social and Behavioral Sciences*, 75-84. doi:10.1016/j.sbspro.2013.11.009
- Mohamed, S., Yusof, Z., & Zaki, S. (2012). Construction skilled labour shortage - The challenges in Malaysia construction sector. *OIDA International Journal of Sustainable Development*, 4(5), 99-108. Retrieved from: <https://ssrn.com/abstract=2115083>.
- National Farmers' Federation. (2008). Retrieved from Labour Shortage Action Plan, Canberra, ACT, Australia: [www.nff.org.au/get/3022.pdf](http://www.nff.org.au/get/3022.pdf)
- Palansamy, Y. (2017, June 6). Most Criminals are Malaysians, police amid Bangladeshi intake concerns. *Malay Mail Online*. Retrieved from <http://www.themalaymailonline.com/malaysia/article/most-criminals-are-malaysians-police-say-amid-bangladeshi-intake-concerns>
- Peros, A. A. (2013). Factors Attracting the inflow of Foreign Workers to Malaysia Construction Industry. *Master's thesis, University of Malaysia Sarawak*. Retrieved from <http://ir.unimas.my/9079/1/Factors%20Attracting%20The%20Inflow%20of%20Foreign%20Workers%20to%20Malaysia%20Construction%20Industry%20%2824pgs%29.pdf>,
- Pook, A. I. (2016, September 17). The dilemma of having foreign workers in Malaysia. *The Straits Times*. Retrieved from <http://www.straitstimes.com/opinion/the-dilemma-of-having-foreign-workers-in-malaysia>
- Population and Labour Force. (2017). Retrieved from Economic Planning Unit: <http://www.epu.gov.my/en/economic-statistics/population-and-labourforce>
- Ratings, R. (2016, June 13). Malaysia's construction sector to keep growing. *The Star*, Retrieved from <http://www.thestar.com.my/business/businessnews/>.
- Ruban, A. (2016, August 29). Monthly household income up to RM6,000, Khazanah Report says. *Malay Mail online*. Retrieved from <http://www.themalaymailonline.com/malaysia/article/monthly-household-income-up-to-rm6000-khazanah-report-says>
- Saleh, S. B. (2008). Cases of poor participation of local workers in Malaysian construction industry. *Master's Thesis, University Technology Malaysia*, Retrieved from.
- Song, B. M. (2015, October 23). 70% of Malaysian students want to study overseas. *The Sun Daily*. Retrieved from Grok Global Service: <http://www.thesundaily.my/news/1590541>
- Sundaraj, G. (2007). The way forward: construction industry master plan 2006-2015. *Master Builders*, 48-51.
- Tanner, R. (2017). *Motivation - Applying Maslow's Hierarchy of Needs Theory*. Retrieved from Management is a Journey: <https://managementisajourney.com/motivation-applying-maslows-hierarchy-of-needs-theory/>
- Zaki S.A., Mohamed S.F., Yusof Z.M. . (2012). Construction skilled labour shortage - The challenges in Malaysia construction sector. *OIDA International Journal of Sustainable Development*, 4(5), 99-108. Retrieved from: <https://ssrn.com/abstract=2115083>.