

## POOR INVOLVEMENT OF LOCAL SKILLED WORKERS IN MALAYSIAN CONSTRUCTION INDUSTRY

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***Abstract - Construction industry is labour intensive industry which requires continuous supply of manpower to generate growth and development of the industry. However, poor local involvement is the biggest problem that exists in the Malaysian construction industry for long time ago while lacked of local skilled worker is the most challenge part for it. This study intends to identify the factors and effect of poor involvement of local skilled workers in construction industry and also effective strategies for this issue. The opinion and views of related individuals were obtained from the questionnaire surveys which give a clear picture of the current situation of poor participation of local skilled workers in Malaysian construction industry. It was found that change in education level, availability of foreign workers and working environment of construction industry contribute to the poor involvement of local skilled workers. Thus, the industry was heavy reliance on foreign workers and produce quality of output. It is important to implement the incentives and rewards and develop multi-skilled workers to attract and retain more local skilled workers to work in Malaysian construction industry.***

**Keywords:** Local Skill Workers, Construction Industry

### I. Introduction

In 2015, the Construction Industry Transformation Programme (CITP) was developed by the Construction Industry Development Board (CIDB) in order to strengthen the construction industry as adopted in the Eleventh Malaysia Plan (RMK11) (Construction Industry Transformation Programme 2016-2020, 2017). Besides that, Building Information Modelling (BIM) was introduced into construction

industry to promote modern technology and growth in construction industry. Many parties work together to develop the construction industry as it plays a vital role in aggregating the economy such as the generation of revenue, creation of employment and improvement of living standard (Khan, Liew and Ghazali, 2014).

Besides modern technology and capital, another important criterion for developing the construction industry is resources, particularly human resource. However, shortage of local labourers is a critical problem that is faced by the Malaysian construction industry. Most Malaysians nowadays are not interested to work in construction industry as they think its 3D works, dirty, dangerous and difficult. Most Malaysians are more willing to work in air-conditioned offices rather than the harsh and risky workplace as the construction sites.

A shortage of workers in the construction projects poses a threat to any construction progress and might cause it to be delayed or halted entirely. This resulted the contractor hire cheap and unskilled foreign workers to solve the shortage problem in industry. According to the Dewan Rakyat, a total of 1.85 million of foreign workers with valid Temporary Employment Passes (PLKS) are found in Malaysia by the end of September 2016 (The Rakyat Post, 2016). The increase of foreign workers in labour market has cause many problems as evidenced by a surge of crime rates and transmitted diseases.

According to the President of Master Builders Association Malaysia, Foo Chek Lee, our country is facing a serious labours shortage and we

need more foreign workers for the development of our country. According to New Straits Time, an estimated of 1.3 million of foreign workers were needed in the construction industry (Ooi Tee Ching, 2016). Import of foreign labours is not a long-term solution for the shortage problem. Instead, local labours are encouraged to participate in the construction industry in order to solve the shortage problem in construction industry.

## II. Significant of Research

Construction industry is an assorted industry and which plays an important role in the development of a country. However, when people talk about the construction industry, most of them will think about foreign workers. This is because the labour market of Malaysian construction industry is full of foreign workers as they are hired to overcome the shortage of labours. Local labours are not willing to participate in the construction industry due to a few reasons such as tough working environment, low wages, high risk and so on.

According to The World Bank (2018), Malaysia has the seventh highest ration of migrant to total population in East Asia. Furthermore, as the numbers of foreign workers in the construction industry are increasing, the social and security problem increases too. For instances, foreign workers are more likely to commit crimes like robberies and thefts to account for their low wages. Moreover, the influx of immigrants also contribute to the spreading of transmitted diseases like malaria and cholera (Marhani et al., 2012). Therefore, this paper will present the issue of poor involvement of local labours in the construction industry.

## III. Labour Crisis in Construction Industry Malaysia

Malaysian construction industry is labour intensive industry which require continuous supply of manpower to generate growth and development of the industry. In other words, human resource is the capital for the development of the country. However, poor local participation is the biggest problem that exists in the Malaysian

construction industry for long time ago while lacked of local skilled worker is the most critical part for it. This can be prove by Grant Thornton, globally there is an average of 39 per cent shortfall in skill workers and the figures are higher in Singapore and Malaysia at more than 60 per cent (Thornton and Business, 2012).

In recent decade, local labours are no longer willing to participate in the construction industry and resulted foreign labours are influx to fulfil the labour demand. According to President of Master Builder Association of Malaysia (MBAM), Foo Chek Lee, the skilled workforce shortage problem will affect the construction industry and will cause some negative impacts to the development of the industry (Mat Salleh et al., 2014).

In the early of 1990s, there is a high demand for skilled and semi-skilled workers over the work due to many Malaysian workers are emigrated to high wages country such as Japan, United State, Singapore and etc. This phenomenon remains unchanged until today, Malaysian citizen think that work at other country is better than local. The shortage problem in construction industry was compounded when local youth are not willing to work in construction sector and this resulted to no new manpower supply to the industry.

Many construction projects will roll out due to high demand for housing and development of economic such as Mass Rapid Transit in Klang Valley, Electrified Double Track in Johor, East Coast Rail Link from Selangor to Kelantan and so on. 1.3 million of foreign workers are estimated to be imported but our country still struggling the labour shortage problem in construction industry (Ooi, 2014). The industry will keep expand and the skilled and semi-skilled workers will be more demand in the market.

IV. Research Method and Results

Mixed method approach is the combination of both fieldwork and desk study approach which means several survey methods was used to enhance the response rate. This method was adopted in this study as it can provide a more comprehensive data. The questionnaire was in the format of closed-end questionnaire which is respondents is restrict to answer the questionnaire among any given answer. The questionnaire is conveyed to respondents through face-to-face and internet survey. The questionnaire will be sent to the engineer, quantity surveyor and project manager and contractor by getting their email and sent the questionnaire to them. Descriptive statistic were adopted in this study to described and summarised the basic feature of the data (Trochim, 2006). The descriptive analysis analyses the characteristic of respondents, like gender, designation, working experience and etc. The descriptive test also used to conduct mean ranking to determine the core factors, effects and strategies on the poor involvement of local skilled workers.

**Factors that cause the poor involvement of local Skilled workers**

Table 1: Factors that cause poor involvement of local The questionnaires were given to the respondents to indicate their level of agreement on the factors of poor involvement of local skilled workers on a five-point scale, where 5= strongly agree, 4= agree, 3= neutral, 2= disagree and 1= strongly disagree. All the means were more than 3 00 were tending to agree

while the means less than 3.00 were tending to disagree. Table 1 shows the analysis on the respondents’ opinion in the factors that cause the poor involvement of local skilled workers in

Factors	Mean	Std. Deviation	Rank
<b>Change in education level (F8)</b>	3.72	1.494	1
<b>Availability of foreign workers (F10)</b>	3.67	1.536	2
<b>Working environment (F5)</b>	3.48	1.437	3
<b>Poor image of industry (F4)</b>	3.45	1.536	4
<b>Wages structure (F3)</b>	3.28	1.547	5
<b>Poor career path (F7)</b>	3.00	1.498	6
<b>Low wages (F2)</b>	2.95	1.442	7
<b>Lack of training, skill formation and apprenticeships (F9)</b>	2.85	1.458	8
<b>Poor site accommodation and service provided (F6)</b>	2.84	1.462	9
<b>Economic factor (F1)</b>	2.63	1.323	10

Malaysian construction industry. The ranking is determined according to the mean value. Most of the factors were agreed by the respondents except the factors like *low wages, lock of training skill formation and apprenticeships, poor site accommodation and service provided and economic factor* were lower than the average mean shall be eliminate in the future research.

Most of the respondents feel that the *change in education level* is the core factor as it had highest mean value ( $\mu=3.73$ ) among all factors. The increase in number of young people enter to higher education is the key factor that cause the poor involvement of local people in the construction industry (Dainty, Ison and Briscoe, 2005). The new graduate having high education level will feel like they are more competent than others so they can be choosy in their job (Jayasingam, Fujiwara and

Thurasamy, 2016). They are reluctant to work under such dirty and hot environment in the construction site while they prefer to work in air-conditional office room.

The *availability of foreign workers* was ranked the second highest among the factors with a mean of 3.67. Huge number of foreign workers were influx into Malaysia was indirectly encourage the contractor employ them to work. This is because the foreign workers were no choosy in carrying out the work in construction industry and they willing to work for low wages and bad working environment as compare to locals (Mazlan, Yusof and Saud, 2013). In addition, most of the local youth will hesitate to work in construction industry because of they are not willing to work with foreign workers. The availability of foreign workers in construction industry caused the locals to shunning away from construction sectors (Abdul-Rahman et al., 2012).

The *economic factor* has the lowest raking with mean value 2.63. The economic change did not have much effect on the poor involvement of local skilled workers unless it is adverse economic condition. The Figure 1 shows that the construction industry contributes a part of economic growth in the gross development product (GDP) and Figure 2 shows the GDP in construction industry in Malaysia increased from RM 10,945 million in the fourth quarter of 2015 to RM 14,094 million. As abovementioned, the economic in Malaysian construction industry showing a constant growth therefore the economic factor is not the core factor in the poor involvement of local skilled workers.

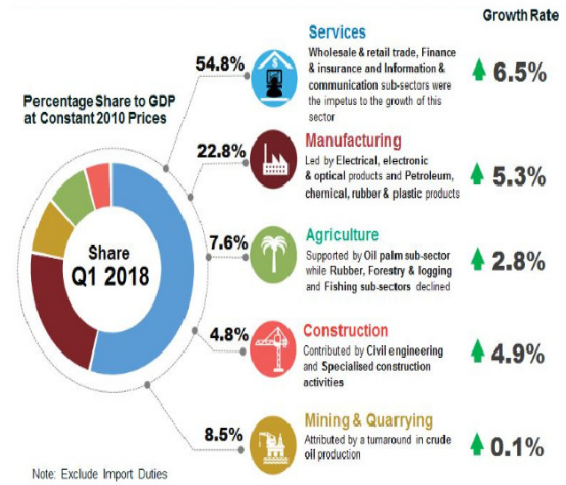


Figure 1: Percentage share to GDP 2018  
Source: (Department of Statistics Malaysia Official Portal, 2018)

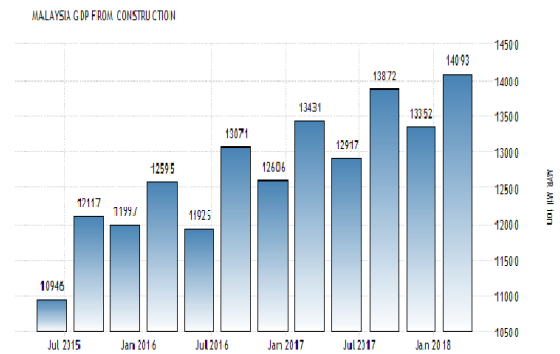


Figure 2 : GDP from Malaysian construction industry  
Source: (Trading Economics, 2018)

**Effects due poor involvement of local skilled workers**

Table 1: Effects due poor involvement of local skilled workers

Effects	Mean	Std. Deviation	Rank
Reliance of foreign workers (E4)	3.92	1.323	1
Produce low quality output (E1)	3.80	1.284	2
Affect image of Malaysian construction	3.09	1.481	3

industry (E5)			
High construction cost (E2)	2.93	1.455	4
Schedule Delay (E3)	2.88	1.414	5

The questionnaires were given to the respondents to indicate their level of agreement on the factors that arise due to poor involvement of local skilled workers on a five-point scale, where 5= strongly agree, 4= agree, 3= neutral, 2= disagree and 1= strongly disagree. All the means were more than 3.00 were tending to agree while the means less than 3.00 were tending to disagree. Table 2 illustrate the analysis on the respondents' opinion in the effects that cause due poor involvement of local skilled workers in Malaysian construction industry. The effects like *reliance of foreign workers, produce low quality output, affect image of Malaysian construction industry* were agreed by the respondents while *high construction cost and schedule delay* were disagreed by the respondents and should eliminate in the future study.

As shown on the table 2, it was found that there is high concern from respondents toward the *reliance of foreign workers* as which has highest mean value 3.92. The poor involvement of local skilled workers causes the contractor tend to employ the foreign workers as they are highly available compare to locals. This can be prove by the Malaysia become the most significant reliance on foreign labours within Asian country (Abdul-Rahman et al., 2012). According to New Straits Time, more than 1.78 million of foreign workers are working in Malaysia and they are around 6% of Malaysia's population ( New Straits Times, 2017). In addition, there are lots of illegal foreign workers exist and work in Malaysia.

The second highest ranking effects is *produced low quality output* with mean value of 3.80. The poor involvement of local skilled workers leads to influx of little or no skilled and knowledge workers in construction industry. Furthermore, the

foreign workers imported to the Malaysia were unskilled and lack of construction knowledge, which has reduced the productivity and quality in the construction industry (Abdul-Rahman et al., 2012). The unskilled, untrained and inexperienced workforce is the major factors of influenced the quality of construction project (Oke and Dlamini, 2017).

*Schedule delay* scored quite low in the rankings, it achieved the lowest rank with mean value of 2.88. Delay in project can be cause by many factors such as late payment by owners, design changes, weather, site conditions, economic conditions and so on (Sambasivan and Soon, 2007). Therefore, the poor involvement of local skilled workers is not core factor that cause the schedule delay in project.

Other effects like *affect the image of Malaysian construction industry* and *high construction cost* are ranked in the middle place as third ( $\mu=3.09$ ) and forth ( $\mu=2.93$ ) respectively.

### Strategies to increase the involvement of local skilled workers

Table 2: Strategies to increase the involvement of local skilled workers

Strategies	Mean	Std. Deviation	Rank
Incentives and rewards (S3)	3.80	1.294	1
Develop multi-skilled labours (S2)	3.71	1.383	2
Vocational training system (S4)	3.44	1.482	3
Improve apprenticeships (S6)	3.32	1.526	4
Improve safety and health (S5)	3.32	1.629	5
Implementation of IBS (S1)	3.24	1.505	6

The questionnaires were given to the respondents to indicate their level of agreement on the strategies

on how to increase the involvement of local skilled workers. The Table 3 shows the result of the survey and all the strategies stated were agreed by the respondents.

As shown in Table 3, the most effective strategies use to increase the involvement of local skilled workers in construction industry that respondents choose is *incentives and rewards*. Incentives and rewards system can attract and retain more local skilled workers because it can provide motivation for people to work in construction industry (Eriksson, 2011). Most of the incentives or reward will in the form of money which can induce individual actions as everybody like money. In the other hand, some companies feel that money is not an effective motivator, they may reward with extra day-off with day or travel voucher (Makhene, D. and Thwala, 2015).

It's surprising that the *implementation of Industrialised Building System (IBS)* scored lowest in the ranking which only has 3.24 of mean value. This may due to the construction industry in Malaysia tend to use labour intensive conventional building system (Thanoon et al., 2003) hence most of the respondents were not prefer this strategies. CIDB was conducted a survey in 2003, the usage level of IBS in Malaysian construction industry only has 15% (Manchester et al., 2010). This is because the economic benefit of IBS are not well documented and most of the contractors reluctant to adopt IBS as they claimed that IBS is more expensive compare to conventional building system (Nasrun and Nawi, 2015). Therefore, most of the local construction still sticking to traditional building method because most of the contractor are familiar with it.

Apart from that, *improve apprenticeships* show and *improve safety and health* equal mean value ( $\mu=3.32$ ) but different standard deviation which is 1.526 and 1.629 respectively. The equal mean value can indicate that the respondents rank these two strategies in same place. Additionally, the *develop multi-skilled labour* and *vocational training system* were ranked as second and third place respectively.

## V. Conclusion

The poor involvement of local skilled workers is the critical issue around the world. Therefore a serious attention on the poor involvement of local workforce issue need to placed. The change of education level to higher level among the citizen is the critical factor that causes locals shunning away from high skilled works in construction industry. Thus, the poor involvement creates some negative influence to the development of country such as heavy reliance on foreign workers. The change education to higher level contribute choosy and picky attitude within Malaysian, locals seek for better job which can match for their education qualification. Furthermore the availability of cheap and willing to work overtime, or dirty and dangerous environment will be the preference for employer to recruit foreigners for construction works. This is further made worse when construction industry is unattractive and hazardous working environment in construction site caused locals stay away from Malaysian construction industry. Besides the effect that arise due to the poor involvement of local skilled workers is more on social issues which can be a big problem towards the nations populations. Therefore effective strategies need to be taken to increase the involvement of local skilled workers in construction industry. The strategies like better incentives and rewards system are an effective motivator tool. It can attract and retain local skilled workers and also lift up the image of the industry. Furthermore multi skilling allow the workers to perform more than one work process in construction project. Thus, it can benefit the workers with higher wages and provide security for their career path. It is important to implement the incentives and rewards system and develop multi-skilled workers in order to improve the participation of local workforce in construction industry.

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