SUSTAINABLE STRATEGIES FOR HIGH LOCAL YOUTH EMPLOYMENT IN THE CONSTRUCTION WORKFORCE IN MALAYSIA

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Abstract

The construction industry in Malaysia is heavily dependent on foreign workers. Unfortunately, it seems that the local youth would prefer to be unemployed rather than be employed in construction sites. Archival data from the Labor Force Survey Report was compiled to determine the trend of youth participation in the construction workforce. The findings indicate that local youth participation has never exceeded 25% of the total construction workforce. An extensive survey was also carried out on youth at vocational training centers to determine their current perception of a career in the construction industry especially in construction sites. Surprisingly, the findings of the survey found that 3'D (difficult, dangerous and dirty) image is no longer a main factor in distracting local youth from pursuing career in the construction workforce. Hence, the strategies have been adopted based on extensive feedback from self-administered questionnaire survey to acquire perception 288 local youth who are taking the non-construction courses at GIATMARA Malaysia. Construction industry experts representing Government Authority, Researcher and contractor were also interviewed to obtain an insight on what went wrong with the previous and current initiatives to attract youth into the construction industry and how things can be done better. This study has attempted to produce more effective and sustainable strategies that can transform the construction industry into a preferred sector of employment for local youth.

 ${\bf Keywords:}\ Local\ youth, for eign\ works, labor, construction$

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Introduction

Studies indicate that Malaysia is still heavily dependent on foreign and unskilled workers especially in the construction industry. Unfortunately, the Malaysian construction industry has traditionally suffered from a poor image and being not attractive to young people as a career option. This is so even with the government having invested substantially in a proper planning; and initiating various programmes and courses in order to attract and to train the new potential workforce through local youths for various trades of the construction industry. The government has appointed the Construction Industry Development Board (CIDB) to train more workers in the construction industry by establishing the Malaysian Building Academy (Abdul-Aziz et al. 2008). This academy provides construction skills training namely the Youth Skill Training Programme (Abdul-Aziz et al. 2008). Then, CIDB introduced another new approach by the establishment of the Construction Club at the secondary school level (CIDB, 2010b). Furthermore, Program Belia Tempatan Mahir (BERTAM) was held as a training skill programme under the Malaysian Building Academy (MBA) in collaboration with the Iskandar Regional Development Authority (CIDB, 2010b).

Even so, the development of various programmes and training courses related to the construction industry has not received the expected response from local youths, where overall the involvement of young workers has still not achieved the government's target as to change the employment pattern of youths working in this sector. Records from the Department of Statistics Malaysia shows that the number of local young workers working in the construction sector is still very low (Figure 1). This has been the case for the past 20 years since 1990 with the percentage of local youth in the

construction workforce hardly exceeding 25%, as shown in Figure 2. Statistics show that for those working at the construction sites in Malaysia, only 15.9%, 18.8%, 19.3%, 23.2% and 16.6% of the total number of workers are local young workers for the year 1990, 1995, 2000, 2005 and 2010 respectively (Department of Statistic Malaysia, 2011). Hence, the Malaysian construction industry needs to review the strategies that have been implemented as to increase the participation of local youths in the construction sector in Malaysia and ensure strategies made are well structured and centralized as parallel to the establishment of the Construction Industry Master Plan Malaysia 2006-2015 (CIDB, 2007).



Source. Labour Force Survey Report 2004-2010, Department of Statistic Malaysia





Source. Labour Force Survey Report 1990-2010, Department of Statistic Malaysia

Figure 2. Percentage of local young workforce involve in the construction industry in Malaysia in year 1990 until 2010

In achieving the crucial target to know what has gone wrong with the past and current initiatives by many parties to increase local youth participation in the construction workforce, the evolution that has occurred in the Malaysian construction industry has to be first studied. The method of interview is applied throughout this stage. Interview results function to complement the facts from previous literatures. It also gives significance as to show whether the evolution that has occurred has changed the pattern of involvement of young workers in the construction industry. Hence, their current involvement in this sector is being studied. Current involvement of young workers in specific trades and skilled level in this industry has been analyzed. The results were scrutinized to portray the status-quo of local youths involved in the construction workforce.

The Archival data method has been used in this phase. Then, a survey of our local youth's perception of a career in the construction industry has been conducted.

Lastly, the current strategies adopted to increase youth participation in the construction workforce have been studied by using the method of interview. The final outcome will be to put forward effective and sustainable strategies that can transform the construction industry into a preferred sector of employment for our local youth. This in return hopefully will also help to resolve the industry high dependency on foreign workers.

Problem Statement

Many efforts have been initiated by the government of Malaysia in the past to promote the construction industry to the local youth as an alternative industry sector for career development especially in the skilled workers category. The involvement of local youth in the construction workforce will hopefully reduce the dependency on foreign workers in the construction industry. Construction Industry Development Board (CIDB) noted that government's decision to progressively reduce the current dependency on foreign workers which currently reach 450,000. The recruitment of foreign worker in Malaysia was a temporary measure which started in 1993 to fill up employment gaps due to labour shortage. This is resulted in money outflow from this country of about 2.5 million Ringgit Malaysia every year. Construction industry experts reported that the industry is experiencing a significant shortage of workers. Industry experts noted that the construction industry has difficulty in recruiting local youth and there needs to improve the skills of youth. Industry experts cited the lack basic academic and employability skills among some youth, as well as insufficient capacity and capability among some of education and training providers that serve for this demographic group.

In many countries including Malaysia, people work in construction industry is out of necessity and out of choice (International Labour Organization, 2001). Based on previous study, the unattractiveness of manual construction work to local youth as contributing factors toward Malaysian construction industry faced with problem regarding labour shortages that particularly acute in many indispensable trades such as in carpentry, bricklaying, concreting, tiling, bar bending, painting and plumbing (Abdul-Aziz, 2001). According to the Malaysia's seventh and eighth 5-year plan, the data indicates that numbers of unskilled or semi-skilled youth workers in Malaysia are much higher in numbers compared to the professional and skilled workers (Rajeswari, 2004). Certain factors contributed, including an expanding manufacturing sector that offered better employment conditions, increasing opportunities for higher level of education and migration of Malaysia workers that preferred working to the high wage countries such as Japan and Singapore (Abdul-Aziz, 2001).

The emergence of foreign site operatives as the indispensable component of the labour force in Malaysian construction industry has taken place over the last two decades. The research shows that foreign site operatives have been subjected to the some degree of discrimination at the hands of local employers. There are same situation for local workers which partly contributes for the reduction of interest among local youths to choose construction manual work as the career option.

The construction industry is famous for depriving manual construction workers of their legal social protection as written contracts and work relationship is invariably ad hoc in nature do not normally provide by employers (Abdul-Aziz, 2001). Many 'kepala' or leader in with own right to control the work process and pay workers out of the proceeding in construction industry in Malaysia (International Labour Organization, 2001). Thus, the needs to impose a statutory minimum wage as youth have often been subject to wage discrimination as Malaysia is moving quickly towards a goal of becoming a fully developed country (Economic and Social Commission for Asia and the Pacific, 2002).

Literature Review

Sustainable Strategies for High Local Youth Employment in the Construction Workforce in Malaysia

The Malaysian construction industry faced with serious problems such as heavy reliance on a large pool of foreign and unskilled construction workforces (Kamarani, 2011). The emergence of foreign workforces in the Malaysian construction sector occurred in year 1970 (Ibrahim et al., 2010). The construction industry employed 316,559 workers or about 14.9% of total legal foreign workforces in Malaysia in early 2008 (Master Builder Malaysia, 2008). In addition, the demand for skilled workforces began increasing supply from the late 1980s onwards but the local workforce is less attracted working in the construction industry (Aman, 2008). In relation, shortages of the construction workforces were mainly critical occurred in many important construction trades such as bar bending, bricklaying, concreting, tiling, painting, carpentry and plumbing (Abdul-Aziz, 2001).

Towards those problems, large financial commitment has invested in order not only to train the existing workforce but to also attract the new potential workforce into the construction market (Kamarani, 2011). Therefore, the Malaysian construction industry has no other alternative but to invest in new technology (Kamarani, 2011). Through technology development, the developed nations were able to generate a sustainable highly skilled, well-trained and educated construction workforce to deal with accelerated industrialisation to the extent that the economic performance of a country is frequently intertwined with its performance in science and technology (Kamarani, 2011).

Based on previous study, government's efforts toward a appropriate planning and implementation of various programs and courses to provide necessary skills to youth was conducted for more than a decade (Rajeswari, 2004). The government tried to motivate the private sector to help produce semi-skilled and skilled workforce by offering incentives such as the Human Resource Development Fund and a grant which called matching grant that introduced in year 1992, but the response was modest (Rajeswari, 2004).

Additionally, Youth Development Plan was established in the Seventh Malaysian Plan that adopted in year 1996 (Economic and Social Commission for Asia and the Pacific, 2002). Based on the Youth Development Plan, the thrust of youth development would be to provide youth with the necessary skills to increase involvement and contribution of youth to nation of building, as well as to develop leadership qualities and positive values among. The aim outlined in the Plan was to nurture youth who are skilled, educated and disciplined youth (Economic and Social Commission for Asia and the Pacific, 2002).

Sustainable Strategies for High Local Youth Employment in the Construction Workforce in Malaysia in terms of Training

Since 1970, there was lack of training; inappropriate training and skill formation contributes to the unattractive of local youth as a career pathway in the Malaysian construction industry (Construction Sector Council, 2003). Thus, construction industry in Malaysia is having difficulty recruiting new workers, especially better qualified young people (Construction Sector Council, 2003). Government appoints Construction Industry Development Board (CIDB) to train at least 100,000 skilled construction workers in 2009 (Master Builder Malaysia, 2008). As to achieve that target, CIDB take measures to train more workers in the construction industry (Master Builder Malaysia, 2008). For this purpose, CIDB need to provide at least 100,000 industrial training opportunities in technical fields such as welding, management and safety in 2009 (Master Builder Malaysia, 2008).

Government developed Malaysian Building Academy (MBA) under the CIDB in year 1996 as provide construction skills training namely Youth Skill Training Programme to help youth to participation enters the labour market due to construction industry (Abdul-Aziz et al. 2008). MBA guiding trainees with the right skills, productivity, quality, standard and competency of construction works to produce more locally semi-skilled and skilled construction personnel that capable of management the advanced construction technology to support the construction industry as well as will reducing the country's dependency on foreign workers (CIDB, 2010).

Gamuda Plant Operator School (GPOS) was established in year 1997 which provide construction skill training (Gamuda, 2011). Courses offered by GPOS under Youth Apprenticeship Program include Mobile, Crawler and Tower Crane Operation, Hydraulic Excavator, Backhoe Loader and Bulldozer Operation as these courses cooperate under CIDB and Gamuda Berhad (Gamuda, 2011).

CIDB introduced another new approach by establishment of Construction Club at the secondary school level in 2009 (CIDB, 2010b). Through Construction Club, student was exposed with construction's opportunities and challenges towards working in the construction industry and at the same time, students will also be equipped with several of knowledge and skills in the construction trades such as piping, painting, landscape, carpentry, bar bending, plastering, tiling and etc (CIDB, 2010b). Furthermore, Program Belia Tempatan Mahir (BERTAM) was held in year 2009 as a training skill programme under Malaysian Building Academy (MBA) in collaboration with the Iskandar Regional Development Authority (CIDB, 2010b). This program focused in practical training to trained youths at Iskandar areas to be skilled workers in the construction industry (CIDB, 2010 b). In relation, MBA and CIDB authority also provides Safety and Awareness Courses at the sites before starting the project (CIDB, 2010b).

Sustainable Strategies for High Local Youth Employment in the Construction Workforce in Malaysia in terms of Construction Technologies

Malaysian construction industry is still in conventional level, causing local youth less interested to participate in this sector (Yatim, 2008). The construction industry in Malaysia is undergoing a transitional change from an industry employing conventional method to new transfer technology which a more systematic and mechanised system (Haron et al., 2005). This new system is now known as the industrialised building system (IBS) and has been introduced in Malaysia since the 60's (Haron et al., 2005). Since the demand of infrastructure construction has increased rapidly, it is necessary to change the construction method, which speeds up the building construction process (Haron et al., 2005). IBS can increase productivity and quality of work, time and cost saving through the use of better construction equipment, materials, machinery (Haron et al., 2005), with less labour on site, minimized effects of risk and minimal on site activities (Hassim et al., 2009). Trough IBS, if properly designed and executed, this method can lead to much better quality of work (Haron et al., 2005).

In some instances, new technologies, in the form of new materials, techniques or equipment have resulted in de-skilling (Construction Sector Council, 2003).. For example, in the past, a construction labour may have fabricated a part on-site but now the part is fabricated off-site and simply installed on the job-site (Construction Sector Council, 2003). IBS is expected to change society's perception of the construction sector, which is often seen as a poor image (dirty, difficult and dangerous) (Yusof, 2008). The application of IBS if comprehensive used; it is believed to overcome the country's dependence on foreign labour (Yusof, 2008). Also, toward the situation where the rising costs of labour and less assurance of dependable skilled manpower, the trend of the application of precast construction will become increasingly competitive as compared to cast-in-situ construction (Haron et al., 2005). Through these advantages of application of IBS, a lot of countries have chosen to use this new method in their construction industries including the Malaysia government (Hassim et al., 2009).

The introduction of new technologies has brought the need for upgrading training to the forefront, and expanding the urgency of increasing the industry's training capacity to ensure that the skills of the

construction labour remain current (Construction Sector Council, 2003). Hence, the Government is trying to apply the concept of IBS in curriculum syllabus at training institutions in Malaysia (Yusof, 2008). Importantly, by applying IBS, it is not only reduce labour, but shall ensure that the workforce arise from local youth who are trained at local training institutions (Yusof, 2008). However, barriers to training include the high cost of equipments that are required for training in some trades of construction, such as crane operators, and the small numbers of trainees (Construction Sector Council, 2003). Government spent a lot of money to develop training institutions such as Malaysian Building Academy (MBA) with a target to produce creative and skilled workers (Yatim, 2008). However, this opportunity is not fully exploited to trigger in expertise to the younger generation (Yatim, 2008). Even at secondary school and tertiary levels, students who take up skills courses remain only five to eight percent of the overall student intake at the training institutions (Othman, 2013). This is a stark contrast when compared to developing countries, where one could find between 20 to 25 percent of students enrolling in skills courses (Othman, 2013).

Methods

All needed data and information was obtained through a well-organized methodology which outlines various stages in collecting data and information. Three methods were used for the study such as archival data as from statistic record, survey method through self-administered questionnaire survey and interview. With the completion of data collection by using the stated methods, data analysis has taken place. Analysis and discussion were done to respond the objectives. Eventually, conclusion has been made provided with relevant recommendation.

This study intends to challenge the perception that the local youth is purely to be blamed for not exploiting the massive employment opportunities created by a vibrant construction industry. The findings was also tell us what has gone wrong with the past and current initiatives by many parties to increase local youth participation in the construction workforce, and the final outcome was to put forward effective and sustainable strategies that can transform the construction industry into a preferred sector of employment for our local youth.

Qualitative assessment

A qualitative assessment of the evolution of the construction industry in Malaysia and the current strategies adopted to increase youth participation in the construction workforce. Interviews were also conducted in this study. Three experts in the construction industry have been selected to represent government, researchers and contractors. On behalf of government, interview has been conducted with a General Manager of the industrial training, Department of Development Sector at Construction Industry Development Board (CIDB); the man who heads the body which controls and manages the manpower development; and also chairing the Malaysia construction industry manpower. Then, on behalf of researcher, a researcher from Research and Development Division of Construction Research Institute of Malaysia (CREAM) which also plays the role of a "panel" for CIDB has been opted for interview. Respondent is actively involved in research fields related to labour, training of local youth and construction workforce development in Malaysia. Meanwhile, a contractor who has a construction company has been selected for interview due to the respondent is highly knowledgeable and has extensive experience (more than 16 years) in the construction industry.

Quantitative assessment

Self-administered questionnaire survey was conducted among trainees in GIATMARA Malaysia and Malaysian Building Academy to investigate the perception of local youth to the construction industry as to achieve objective 3 of this study (to determine the major factors contributing to youth lack of interest in pursuing a career in the construction workforce in Malaysia). Respondents were requested to rate the level of agreement of given statement in the questionnaire according to Likert scales. Likert scales, which can measure broader attitudes and values (Johns, 2010), providing a range of responses to a given question or statement (Jamieson, 2004). Likert scales are the four, five, six, seven, eight or

nine point scales much used in various fields of research (Sclove, 2001). Likert scales can be a 1 to 5 scale, 0 to 10, etc. (Jamieson, 2004).

Archival data

Archival data of the current involvement of youth in the construction workforce in Malaysia were collected from the Department of Statistics Malaysia that was extracted from the Labor Force Survey Report. However, the data used in this study is based on data from 1990 to 2010 only. While the data for the year 2011 has not been updated yet and the report will be published in 2013.

Analysis and findings of interview of Construction Industry Expert

In this section, data have been organized which were obtained through the interview. Several interview sessions was conducted among three respondents at different places and periods from multiple roles in the construction industry which represents on behalf of the government authorities, a researcher and contractor. The interview sessions has been properly recorded, analysed and discussed. In this study, all the data have been analysed by using triangulation method using multiple perspectives by a combination of three difference data sources which are interview, self-administered questionnaire survey and archival data. Data have been interpreted based on the principle of using two known points to locate the position of an unknown third point, by forming a triangle.

The challenges faced by the construction industry with regards to the involvement of local youth in the construction workforce in Malaysia

From the result obtained through triangulation analysis, the similarity towards respondents' perception on the most challenges faced by the construction industry with regards to local youth participation in the construction workforce in Malaysia which are lack of involvement of local youths in working as manual construction workforces in the construction industry and challenges to gain local youths' interest working in the wet trade works at the construction sites. Youths consider that the tasks associated with the construction works as dirty, dangerous and also difficult; hence they are more interested to work in the supervisory and management area as stated by the International Labour Organization (2001). These findings were supported by Aman, (2008) which highlights that local youths prefer to be unemployed than to work in the Malaysian construction industry. However, based on the triangulation results, the most contributed factors toward the problem which were our local youths less opportunity or lack to be exposed about the construction industry career, poor image of the industry and also an unattractiveness salary which offer low wages for skilled construction workers.

The Reason of Why haven't the Current Strategies Implemented Succeeded in Increasing Significantly the Number of Youth in the Construction Workforce in Malaysia

From the analysis, the similarities of the results show that all respondents agreed that even though many strategies had been provided, but it still cannot achieve the government's target to attract youths to involve in the construction industry as well as unable to achieve the target to increase number of young workforces working at wet trades in the construction industry similar to the study of Abdul-Aziz (2001) and CIDB, (2010b). From the result of triangulation analysis, similar perception towards the response of the respondents as a main reason of why the current strategies haven't implemented succeeded in increasing significantly the number of youth in the construction workforce in Malaysia due to the lack of cooperation by many authorities to attract local youths to get involved in the construction workforce.

Analysis and findings of self-administered questionnaire survey

For the purpose of data analysis, data related to the question of the demographic profile and working experience were analysed using descriptive analysis, where frequency was used. The remaining data were analysed quantitatively in dependable of the Likert scale. Data were analysed using descriptive

analysis using the mean score. From the mean score, the results have been compiled in accordance with the highest rank to the lowest and then labelled the range as shown in Table 1 (Likert, 1967).

	Mean	Score Level
t	0.00-2.49	Very low
	2.50-3.49	Low
	3.50-4.49	Moderate
Γ	4.50-5.00	High
		Very High

Table 1.	Mean	score	level
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Working Experience in the Construction Industry

In this section, respondents were asked to indicate their level of interest to continue working in the construction industry if they had experience working in the industry. This part is important to investigate whether the respondents who did not want to be involved in the construction industry has a history of working experience in the industry and whether that experience has contributed to the factors they do not wish to remain involved in the industry. The result of the analysis is shown in Figure 3.



Figure 3. Effect of working experience in the construction industry towards local youth's interest to working in the construction industry

Through the study, based on the responses given by the respondents who have experience working in the construction industry as shown in Figure 3, most of them (83%) do not intend to remain involved in the industry. This has been supported by the construction industry experts said that local youth are more interested to work at the construction sites in other country such as Singapore because of high wage offered compared with rates of wage given in Malaysia. However, the results obtained were very surprised in which there is a small percentage of respondents (17%) who have experience working in this industry which had interest to continue working in this industry.

6.2 Youth's Perception on the Barrier Factors of the Construction Industry

Esa et.al., (2009) stated that construction industry was not filled up by the local youth. It was supported by the Labour Organisation (2001) where local youth generally preferred to be unemployed than working in the construction sector. According to Ibrahim et. al. (2010) that construction industry in Malaysia was labeled as low quality, low productivity and poor image. Hence, respondents were questioned on their perception of the nature of construction industry that influences their attraction for involvement. Table 2 show the results using the descriptive analysis on the perception of the nature of

the construction industry in terms of safety, employment condition, construction work, job opportunity, foreign workers, labour's image, security of job and wage.

Factor	Statement	Ranking	Mean Statistic	Score level
Foreign workers	I am not keen to work at construction sites due to the large members of foreign workers employs there	1	4.65	Very High
Wage	The construction industry offer very low wage.	2	4.54	Vey High
Labour's image	I will be looked upon as an uneducated, low class and a low quality person if I work in the construction industry.	3	4.22	High
Job opportunity	It is not easy to get jobs in the construction industry.	4	4.15	High
Security of job	Jobs in the construction sector are unsecured.	5	4.13	High
Construction work	Construction work involves very difficult tasks.	6	3.26	Moderate
Employment condition	Working conditions at the construction sites are not very satisfactory.	7	2.66	Moderate
Safety	Construction sites are not very safe place to work.	8	2.51	Moderate

Table 2. Youth's perception on the barrier factor of the construction industry

As shown in Table 2, the overall score ranged between a mean value of 4.65 to a mean value of 2.51. Furthermore, result showed local youth not keen to pursue a career in the construction workforce were arose from several factors including large members of foreign workers, low salary, an uneducated; low class and a low quality of job and unsecured job. Surprisingly, the findings of the survey found that 3'D (difficult, dangerous and dirty) image is no longer a main factor in distracting local youth from pursuing career in the construction workforce. The main reason however was found to be the abundant presence of foreign workers at construction sites and unattractive wages.

Pattern of Local Youth Involvement in the Construction Workforce in Malaysia from 1990 until 2010

Data on the number of involvement of local young workers in the construction industry in Malaysia in 1990 until 2010 was calculated. Data have been converted in percentage values and interpreted in graphical formatting. These data are important as to shows the pattern of the current involvement of young workforces in the construction industry for 20 years. From the data tabulated from Labour Force Survey Report, graph of the current involvement of youth in the construction workforce in Malaysia has been derived as shown in Figure 4.



Source. Labour Force Survey Report (1990-2010), Department of Statistic Malaysia Figure 4. Percentage of local youth in the construction workforce in Malaysia

The Malaysian economy grew rapidly since the 60s, and mostly jobs were created in the construction industry (Aman, 2008). However, the construction sector was not filled up by the local youth (Esa et al. 2009). The accessible statistic in Figure 4 shows the increase in percentage toward the involvement of young workforces between the age group 15-24 in the construction industry which is still low in numbers as not more than 25 percent for almost 20 years.

Pattern of Number of Local Youth Compared to the Total Number of Construction Workers in the Construction Workforce in Malaysia Annually from 2004 until 2010

Data on the total number of involvement of local young workforces compared to the total number of construction workforces in the construction industry in Malaysia from 2004 until 2010 was analysed quantitatively. Data have been converted in terms of percentage and interpreted in graphical formating as illustrated in Figure 5. These data are important as to show the comparison between the involvement toward local young workforces and total construction workforce in the construction industry in Malaysia.



Source. Labour Force Survey Report 2004-2010, Department of Statistic Malaysia

Figure 5. The Total Number of Local Youth compared to the Total Number of Construction Workers in the Construction Workforce in Malaysia from 2004 until 2010

Figure 5 shows the distribution of local youth in the construction workforces in Malaysia, which the total number of local youth relatively remain low for 7 years compared to the total construction workers in the construction industry in Malaysia extracted from the Department of Statistics Malaysia.

Pattern of Percentage of Local Youth in the Construction Workforce in Malaysia Anually from 2004 until 2010

In this section, percentage of local youth in the construction workforce in Malaysia in 2004 until 2010 has been derived based on data obtained from achival data record. Data was tabulated in graphichal format as shown in Figure 6. This data is important as to show the pattern in percentage value of involvement of local young workforces in the construction industry in Malaysia for 7 years.



Source. Labour Force Survey Report 2004-2010, Department of Statistic Malaysia Figure 6. Percentage of local youth in the construction workforce in Malaysia from 2004 until 2010

Figure 6 shows the percentage of local youth in the construction workforce in Malaysia where proximately 20 percent which can be considered low and declines decending gradually for almost seven years, extracted from the Department of Statistics Malaysia.

Pattern of Percentage of Local Youth Working in Difference Industries in Malaysia from 2004 until 2010

Data of percentage of involvement of local youth working for difference industries in Malaysia since 2004 until 2010 was analysed quantitatively and has been interpreted in graphical formatting as shown in Figure 7. These data are important as to show a comparison of current involvement of local youth in the construction workforce compared to other sectors including in industries including manufacturing; agriculture, hunting and forestry Malaysia for almost 7 years.



Source. Labour Force Survey Report 2004-2010, Department of Statistic Malaysia Figure 7. Percentage of involvement of local youth working in difference industries in Malaysia

Malaysia faced a situation where local youth prefer to be unemployed than work in the construction industry (Aman, 2008). Figure 7 compares the percentage of involvement of local youth working in

difference industries in Malaysia. Findings obtained indicate that the lowest percentage of local youth in the construction workforces compared to other sectors such as manufacturing; agriculture, hunting and forestry.

Recommendations and Suggestions for Improving the Construction Industry's Ability to Produce Local Young Workers to Overcome the Lack of Strategies have been Implemented

Based on the overall discussion which takes into consideration of the weakness of the strategies that have been implemented, the following are among the proposals and measures to be implemented to enhance the construction industry to produce local young workers.

The following are some suggestions that have been identified that could attract more youth to choose careers in the construction industry as their career choice by overcoming the cause of weakness of the Construction Club that have been implemented:

Since the establishment of the Construction Club is still not comprehensive and only established in some selected schools in Malaysia, hence CIDB need to collaborate with the Ministry of Education to expand the establishment of the Construction Club in every school in our country as one of the extracurricular activities.

Moreover, to broaden the exposure of the construction industry to the local youths, CIDB needs to collaborate with the schools and kindergartens to provide activities related to the construction industry. The following are some suggestions on activities that have been identified that can be implemented in schools and kindergartens;

- i. CIDB must obtain approval from the school and also organise site visits to bring students to the construction site and give them the opportunity to perform construction works such as bricklaying, plastering and others.
- ii. CIDB is also required to disclose to students about new technologies that have been designed to simplify the construction work.
- iii. Conduct collaborative activities of repairing damaged school buildings.
- iv. Provide building design competitions.
- v. Awareness seminars in schools that involve students, teachers and parents that aims to change the negative perception of society about careers in the construction industry.
- vi. For children in the kinder garden, they may be exposed to the concept of construction with game plays like Lego, build building using clay and others.

Next, some suggestions that have been identified that can be used to overcome the weakness of the problems related to the weakness of the vocational division at school level.

- i. The construction industry must collaborate with the Ministry of Education to revitalize interest in the construction-related courses by revise the curriculum to make learning materials and skills in school more relevant to industry needs.
- ii. A coordinate effort could be undertaken by construction industry associations (e.g. Malaysian Building Academy) to establish a formal dialogue with the Ministry of Education to revise the curriculum subject in which the syllabus or teaching methods used at the academy can be used as a reference to be applied to produce an effective curriculum to attract students to the construction industry beginning at the early stages of schooling.

Conclusions

It can be concluded that construction industry experts were aware on the growth of evolution occurred in the construction industry in Malaysia in many ways to further develop this industry to be on par with other developed countries. However, the findings obtained from interview meetings showed that the evolution is less leveraged and applied in an effort to increase the number of local construction workers through local youth participation in order to replace the dependence on foreign workers to perform construction work. An extensive survey was also carried out on youth at vocational training centers to determine their current perception of a career in the construction industry especially in construction sites. Surprisingly, the findings of the survey found that 3'D (difficult, dangerous and dirty) image is no longer a main factor in distracting local youth from pursuing career in the construction workforce. The main reasons however was found to be lack of encouragement from parents, the abundant presence of foreign workers at construction sites and unattractive wages as supported by mean score of 0.9234 ,4.6492 and 4.5363 (meaning very agreed with a statement) respectively. The survey also showed that youth are more attracted to the training centers providing non-construction related training programs which provide better facilities with a high mean score of 4.4839. Industry experts claimed there was a serious lacking in promotion of career prospects and developments in the construction industry. This shortcoming has perpetuated the negative perception among local youth of the industry being dirty, dangerous and difficult as well as paying low salary.

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