

## Foreign workers' composition at construction site

Open  
Access

Kevin Chester Wong How Yee <sup>1</sup>, Abdul Rahim Abdul Hamid <sup>1,\*</sup>, Haziq Zul Asyraf Zahari <sup>1</sup>

<sup>1</sup> Department of Structures and Materials, Faculty of Civil Engineering, University Teknologi Malaysia, 81310 Johor Bahru, Johor, Malaysia

### ARTICLE INFO

### ABSTRACT

#### Article history:

Received 23 December 2016

Received in revised form 7 March 2017

Accepted 8 March 2017

Available online 13 March 2017

The fragmented and unstable nature of the construction industry associated with unpleasant working environment caused the diminishing preference of potential manpower to participate in the construction industry. An increasing number of construction firms are experiencing severe outflow of the workforce, not limited to loss of manpower, but contemporaneously, expertise and valuable experiences too. The construction industry is conservative and particularly resistant to synchronise with hectic and rapid changes to content and accommodate current demands. Accumulation of a few causes such as the refusal of locals to involve, unsatisfied working conditions, labour-intensive trades, etc had caused workforce scarcity as the supplies unable to overcome and cope in-parallel with the demands. The objective of this study was to identify labour composition (profiles) at construction sites. The method used to fulfil the objective was face to face questionnaire survey to the targeted respondents. The questionnaire consisted two (2) sections; details of the construction project and details of construction labours such as background, education and training level, working experiences, general welfare and working hours and wages. The collected data were analysed using percentage distribution methods and presented in the tables and charts for easy understanding. From the result gathered, the respondents' education level is low and most of them are from the Philippines and Indonesia. Most of them acquire the construction skills through site experience and no formal training. The majority of them stayed off-site comfortably with their family and being paid according to their skills.

#### Keywords:

Profiles, Foreign labour, Construction, Skill level, Composition

Copyright © 2017 PENERBIT AKADEMIA BARU - All rights reserved

## 1. Introduction

### 1.1. Research background

There is an increasing number of projects had been recorded in Malaysia over the years. Data from the Department of Statistic of Malaysia shows that about 10,000 projects in the fourth quarter of 2015 were registered compared to 9.883 projects in the third quarter of 2014 [1]. From another

\* Corresponding author.

E-mail address: [rahimhamid@utm.my](mailto:rahimhamid@utm.my) (Abdul Rahim Abdul Hamid)

report released by the Department of Statistics on 2015, construction industry in Malaysia had employed a workforce of 745,131 workers solely, which comparatively, the ratio of workers consumed to national income is of surprisingly high [1]. Seeing the high demand of manpower and in parallel to satisfy the performance, around 70% - 80% of development works involved foreigners.

The influx and ability to work under harsh conditions had caused many employers reluctant to employ locals since the wages paid to foreign workers are much less compared to the locals [2]. With the positive incremental in construction industry proportional to the scarcity of the labour supply, it is becoming a worrisome dilemma that cannot be ignored any more. From the initial recruitment of foreign workers until now, we have been alarmed the associated consequences. Over-dependence on foreign workforce will inevitably stimulate an outflow of currency, cause decline in productivity, performance, and existence of hurly burly that distorted the economy and social balance of equilibrium [3]. Foreseen these, we were closing an eye and allowed for its occurrence, and currently, we are the one begging for their stay.

The over reliance on foreign workers put us through hard times, especially with unstoppable and rapid development, the scarcity of them will halt the development progress. As revealed above, abundance projects available, but whether the supply of workers can cope in sync, is yet another query. Per the President of Master Builder Association Malaysia (MBAM – contractor association engaged by the clients to construct projects), the shortage of skilled construction workers was an exceptionally essential issue in construction industry [4]. The Malaysian construction industry has been experiencing a critical shortage of workforce [5]. Years passed, but still, this very issue still existing, and emerging to even critical stage.

To accomplish Vision 2020, any delay or disturbance should be mitigated and avoided. MBAM stated that, the acute shortage of skilled workers in the construction industry will bring negative impact towards the projects under the Tenth Malaysia Plan (10MP) and Economic Transformation Plan (ETP) [5]. The distortion of normal performance expected will lead us to wrong path and ineluctably, render and inhibit our national growth. In comparison, Singapore labour force has 52.8% of skilled workers, meanwhile Malaysia has only 28% of skilled workers. The facts of 25% SPM-leavers enter the workforce without proper skills training / tertiary education, thus limiting their career advancement. The Ministry of Human Resource (MOHR) targeting to increase their workforce to 33% - 40% skilled by 2020 [6].

According to the Construction Industry Transformation Plan (CITP) released by the Construction Industry Development Board Malaysia (CIDB), the latest statistics on local construction workforce is 8% Construction Manager and Architects, 9% Site Supervisor, 8% Skilled Construction workers, 22% Administration Personnel and 53% General Workers or Unskilled workers [7]. We chose to recruit foreign workers, with the intention of not to compromise nation's outgrowth. An outstanding number of low-skilled foreign workers were imported to induce development. Malaysia now had become the Asian country with the most significant reliance on foreign workers [8].

There is abundant evidence mention about the unskilled construction workers have overloaded the construction industry. Moreover, time passed and reliance upon foreign workers are thickening, and when the supply of them is diminishing, it puts us on an urging condition, as it will inescapable, disturb and ruin our routine performance. Thus, on this critical stage, if really left untreated, we never will be freed from this extrication, and what's up-comings will be encumbrances and serious impacts that will cost us more.

Thus, the study was carried out to identify labour composition (profiles) in a selected local construction project located in Kota Kinabalu, Sabah, Malaysia. The composition of foreign workers is quite unique and different from other state in Malaysia. This study is an extension of the previous

labour profiles survey conducted for projects in the Johor Bahru district and part of the overall study to gain an overview of the labour profiles at construction sites in Malaysia.

## 2. Literature review

### 2.1. Labour flow

In general, the foreigner laborers' supply is the outright contrast in wages between the destination and origin nations. While for demand, it is the proportion of outsiders to locals' wage rates. At the macroeconomic level, extensive contrasts in per capita total wage will decide the heading of net migration flows [9].

During the early-1970s, Malaysia relied on low-to-medium skilled workers to sustain growth and facilitate structural adjustment. Since the mid-1980s, the unprecedented influx of the second-generation migrant workers, in contemporaneous to unstoppable high growth formed several social, political and economic concerns [10, 11]. The popular perception was that local unskilled workers were being dislodged and wages and living standards were being subdued [10]. Initially, foreign workers complemented natives when a sudden labour shortage existed in the sector, at prevailing wage levels. In the second phase, in parallel with increasing wage levels, and in slower pace, immigrant labour dominated local workers in reducing non-wage costs. Evidence revealed that the influx of immigrant labour sabotaged growth of real wages of all workers, particularly the wages of unskilled workers [12].

Early 1990s, Malaysia's growth strategies, formal rules relating to foreign laborers business were introduced. The Government supported the movement as a feature of its high development procedure while it sought after a more extended term technique to help the economy and grow the supply of skilled labour [13]. Ministry of Finance said migrant workers was officially ratified as an interim solution to satisfy demand for low-skilled labour to cultivate its high growth strategy [10]. Shortage of human resources in a country will inevitably lead to the seeking for foreign resources in order to cater employment demands [14]. As a result, the labour market welcomed low-skilled labour, especially in plantations, construction sector and domestic employment [13].

The main determinants of the continuing inflow of foreigners are a combination of economic, socio-cultural, and external political factors. Rapid industrialization, urbanization, strong economic growth, and a relatively small population base contributed to relatively high employment and tight labor markets [13]. It was illustrated that Malaysia's impressive economic growth over recent was attributed to immigration [15]. The main statistics of labour force Malaysia in 2013, about 20,335,400 were under the working age population, with 13,634,600 labour force and 6,700,800 outside labour force. Construction industry recorded 1,244,100 employed persons in 2013 [1]. The construction industry needs a continuous supply of workers – an estimated of one million every year, the majority of them foreign workers – for infrastructure and building projects in order for it to sustain growth of 8% to 10% in the year 2017. It is estimated that about 1.3 million foreign workers were needed at construction sites throughout the country at this moment [16].

#### 2.1.2. Labour flow out of Malaysia

Malaysia is a labour exporter as well as a labour importer, but its in-migration far prevailed its out-migration [10, 15]. Unfortunately, it exports highly-skilled labour and imports low-to medium skilled contract labour [10]. Out-migration is predominantly technical and professional labour, while in-migration almost entirely consists of low-skilled labour [11]. Significant emigration was indicated with an estimated outflow of 1.5 million people [15]. The dynamics of the Malaysian labour market

has been fluctuating to cater changing policies and market factors [10]. This outflow, partly been driven by familiar 'brain drain' forces, which, in globalizing and internationalizing labour markets, involved are not just barely greater mobility of the highly skilled, but also net losses of them in low- and middle-income countries. To evolve as a high-income country, a range of interventions and initiatives to enhance the human capital of Malaysia's current workforce and future entrants are salient and necessary [15].

## 2.2. Recruitment of foreign workers

There are three permit types: Visit pass for provisional employment targeting unskilled and semi-skilled labours; Visit pass for provisional employment targeting professionals with short term contracts and who failed to meet some income threshold; and Employment pass for skilled labours with long term contracts (at least two years) and who surpassed an income threshold [17]. Migrant workers are permitted one-year work permits, and can opt for renewal annually (maximum three years). Skilled workers can further extend for two more years. Employers can extend their foreign workers' services beyond the five-year period, provided the workers are of approved skilled [10, 18, 19].

However, some hardships pointed during the employment of foreign workers were: Head-to-toe inefficient recruitment entry of foreign workers through normal paths; Cumbersome and lengthy administrative procedures; Strict control of documentations; Endorsements on migrant workers without authorization; Management relations in various workplaces; and Preparation of proper training and workplace protection [14, 20, 21]. Comprehensive policy framework and administrative machinery are used to precipitate the recruitment of migrants to fulfill labour imbalances and skill gaps [10, 22]. As the result, duration of legal recruitment has been shortened from approximately two years to six months, and the recruitment process and procedures had been simplified and made transparent [10, 22].

## 3. Methodology

The objective of the study achieved using two methods. The first method was through literature review to gather some sound knowledge of the study topic where a clearer framework of the study was established. The sources of the literature were obtained from books, previous thesis, journal, articles, websites and previous researches. The second method was achieved through distribution of questionnaire survey for the selected construction project in Kota Kinabalu, Sabah. The question will be divided into a few parts, to make sure the objectives are clear, better analysis process and respondents are clear on the question. The questionnaire was structured into two (2) parts:

- i. Questionnaire cover and general information and instructions to the participants.
- ii. Section A: General information of construction project (Project Title, Type of Project and Project Cost)
- iii. Section B: A quantitative research method was chosen a questionnaire survey was used to collect information on construction labour for each construction project to fulfil the objective of this study. The questions will ask about the total number of foreign labour, their background, education and training Level, working experiences, general welfare and working hours and wages. The questionnaire in this section is to understand the workers profile in the construction industry. Distribution of questionnaire survey to selected construction project in Kota Kinabalu. This questionnaire forms were answered by 60 respondents. Respondents from each construction project

were consisted of skilled, semi-skilled and general foreign workers. To describe the profile of respondents, the percentage will be computed by using the formula below:

$$P = \frac{F}{\sum N} \times 100 \tag{1}$$

where,

P = Percentage(%)

F = Frequency

$\sum N$  = Total Number of Respondents

#### 4. Results and discussion

##### 4.1. Construction labour profile

Table 1 show Six (6) construction sites being surveyed that involved 60 foreign workers as targeted respondents.

**Table 1**  
 Project profile

Code	Type of Project Involved	Cost	Category	Project Progress (%)	Number of Respondents
P1	2 Storey Residential	RM15,568,000	Residential	20	5
P2	3 Storey Shop Office	RM77,350,000	Commercial	65	15
P3	2 Storey Residential	RM20,260,000	Residential	50	5
P4	3 Storey Residential	RM30,444,500	Residential	50	10
P5	2 Storey Shop Office	RM55,000,000	Commercial	30	10
P6	3 Storey Shop Office	RM70,000,000	Commercial	70	15

##### 4.2. Labour background

Figure 1 shows the categories of labour background from 60 sets of questionnaire. Its show that both 40% of labours are at the age of 21-30 years old and 31-40 years old. The remaining 20% are being divided into 15% and 5%, 15% of labours are at age 41-50years old, meanwhile the remaining 5% are 51 years old or more. These 60 respondents consist of skills, semi-skills, and general workers. 42% of respondents are skilled workers, following by 35% of semi-skills workers, and the remaining 23% is general workers.

Among the 60 foreign workers, 63% of respondents are from the Philippines and 37% of them have come from Indonesia. About 62% of these respondents are married, and the remaining 38% of respondents are single.

##### 4.2. Labour education and training

Figure 2 shows the labour education. The highest percentages are vocational training (35%), with the second and third highest percentages are secondary education and no formal education. The lowest percentages are primary education (10%), and there are no respondents are in the further education categories. Others than education level, Figure 3.2 has also shown the training experiences. It appears that 43% of respondents are training while working, and is followed by 38% of respondents do not have any training. Meanwhile, 15% of respondents have joint construction

skills courses to help them improve their skills. The lowest percentage of respondents are taking a short course (4%).

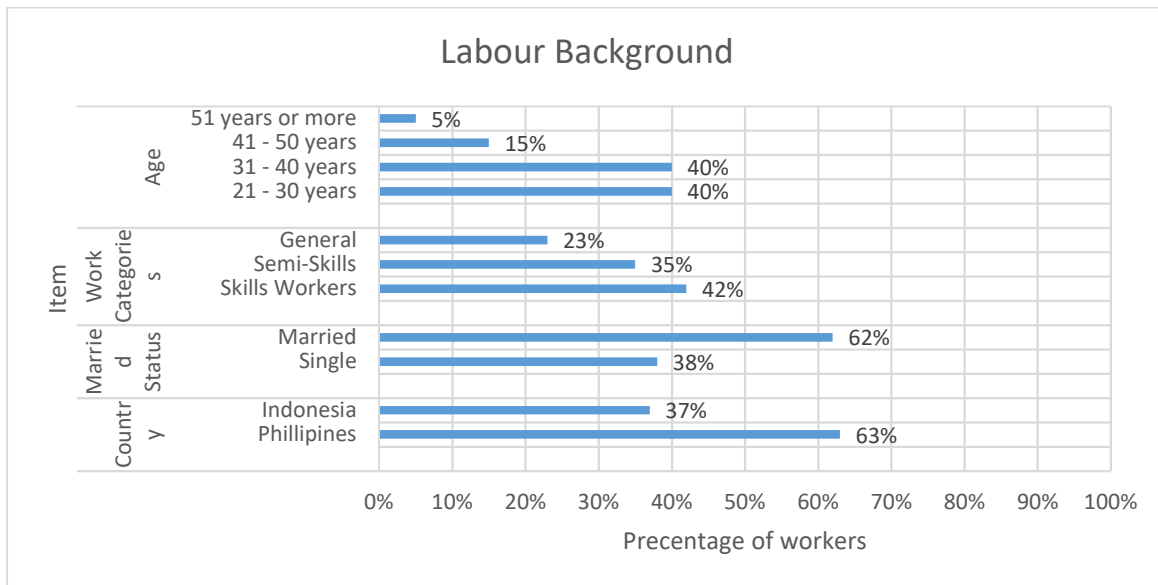


Fig. 1. Labour background

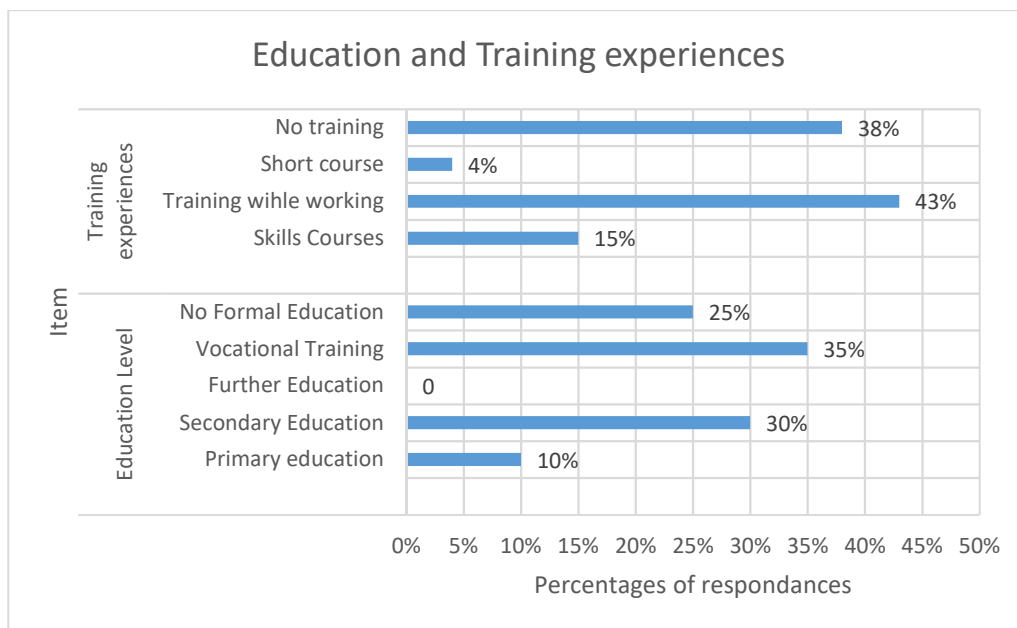
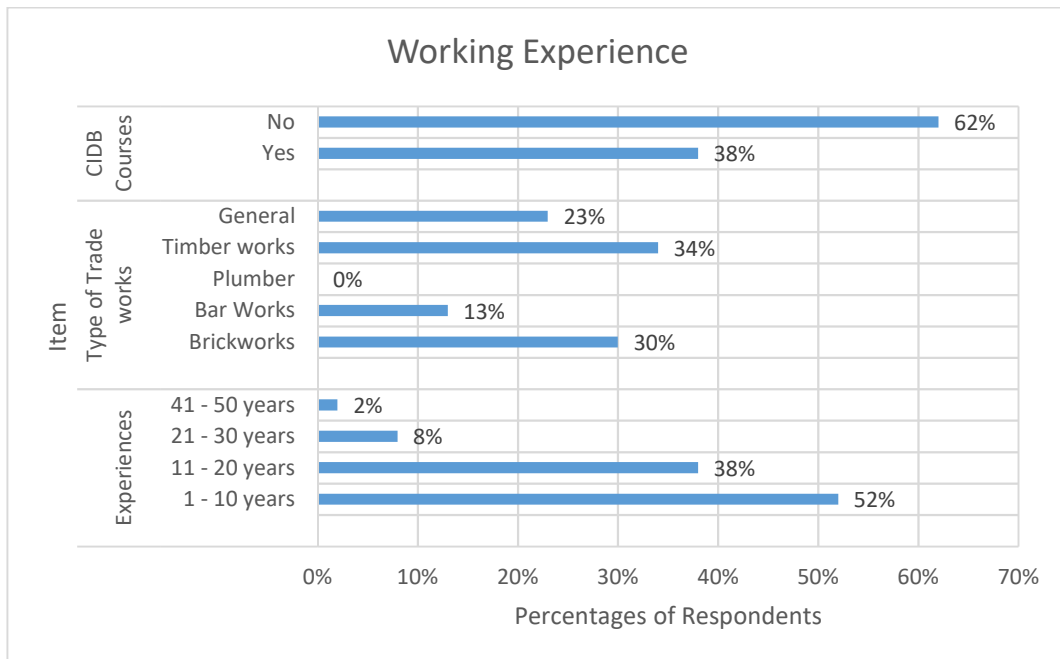


Fig. 2. Education and training experiences

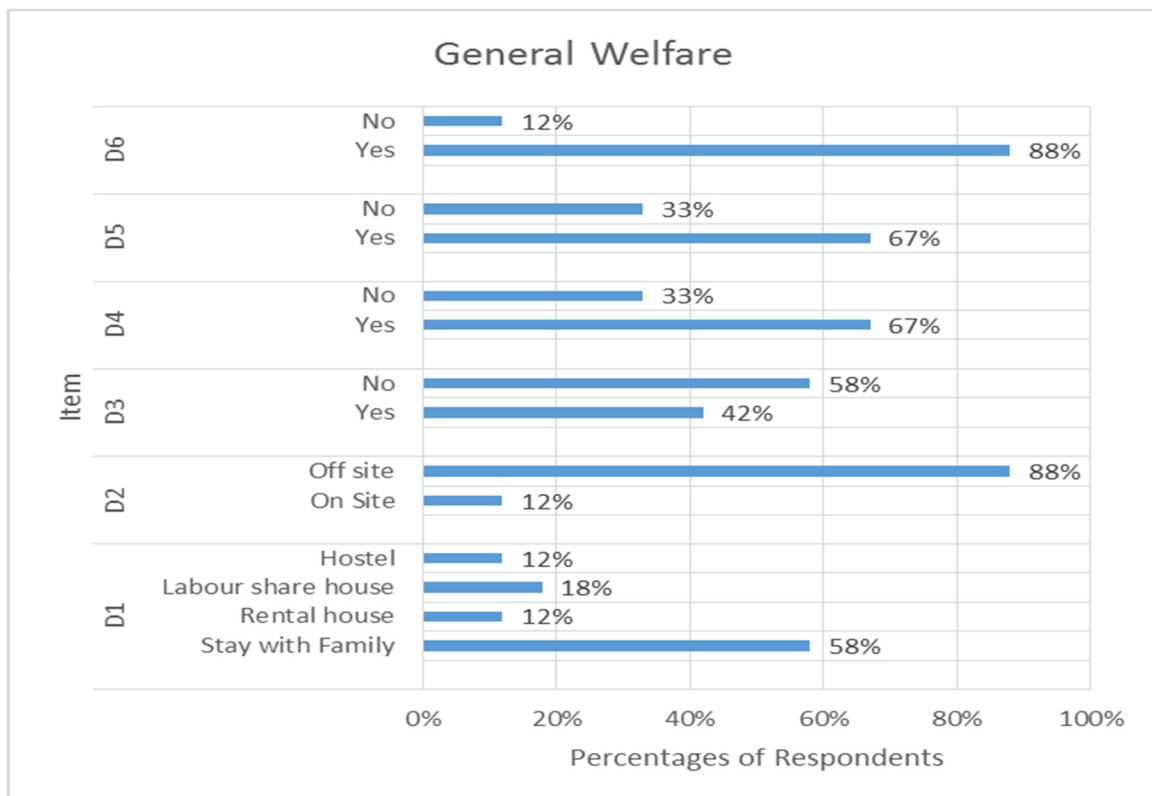
#### 4.3. Experience of works

From Figure 3, we can see the majority of respondents are having 1 – 10 years of working experiences (52%), and 38% of respondents have 11-20 years of experiences, follow by 21-30 years (8%) and lastly 41-50 years (2%). Figure 3.3 shows that the most respondents are doing timber works (34%) and second and thirds most respondents are brickworks (30%) and general works (23%). The lowest percentage is bar bending works (8%). There are no respondents are experts in plumbing works, since those works were mostly subcontracted to another company. In term, of course

attendance, 62% of respondents did not join any CIDB courses while the remaining 38% of respondents had joined CIDB courses.

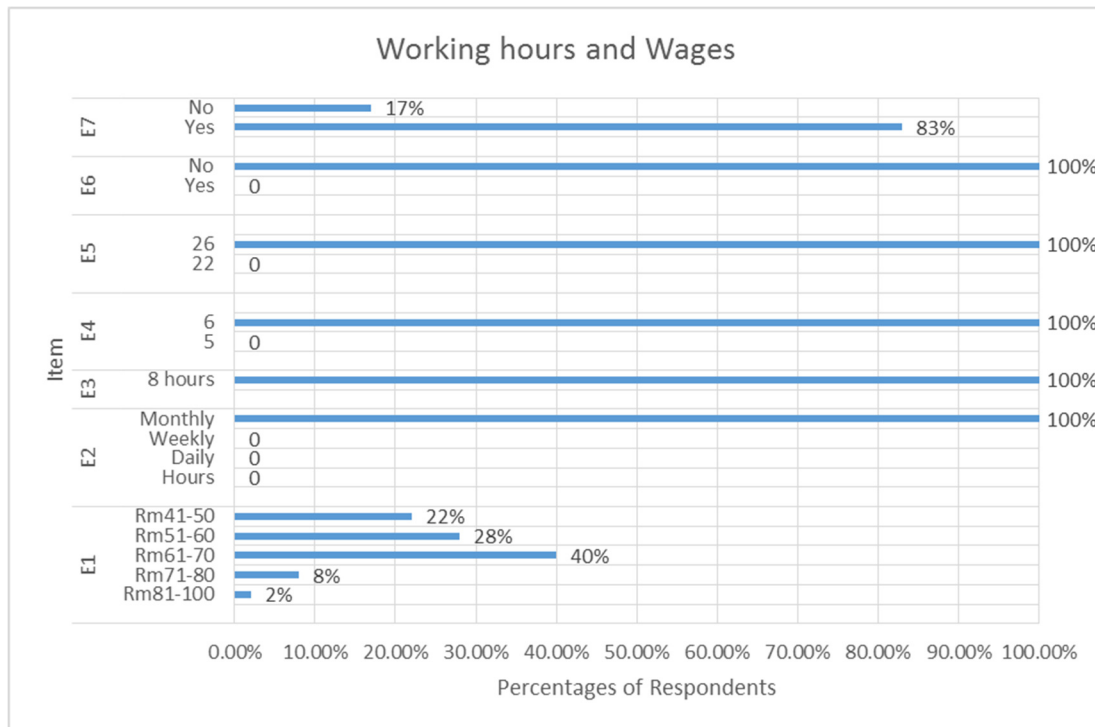


**Fig. 3.** Labour working experience



**Fig. 4.** General welfare

(Note: D1 = Accommodation; D2 = Place; D3 = Transportation to work; D4 = Medical Check-up; D5 = Insurance; D6 = Home Comfortness)



**Fig. 5.** Working Hours and Wages  
 (Note: E1 = Daily Wages Rate; E2 = Payment Method; E3 = Working Hours; E4 = Days of working per week; E5 = Days of working per month; E6 = Overtime; E7 = Total wages equitable works)

#### 4.4. General welfare

Figure 4 shows the results for the general welfare of the respondents. For item D1, 58% of respondents are staying with family, 18% are staying in a labour shared house, and the remaining 24% are staying in the rental house (12%) and labour hostel (12%). For item D2, 88% of respondents are not staying on site, and the remaining workers (12%) are staying on site. For item D3, there are 58% of respondents who do not have transportation provided to work and the remaining 42% of respondents has transportation. For item D4, 67% of respondents have a medical check-up provided by the company and the remaining 33% of respondents does not have any medical check-up. For item D5, 67% of respondents stated that, their company has provided insurance to them, and the remaining 33% of respondents does not have any insurances provided by their company. Lastly, for item D6, 88% of respondents are comfortable with their home condition and the remaining 12% of respondents do not satisfy with their accommodation standard.

#### 4.5. Income and working hours

Figure 5 shows workers' wages and working hours. The highest percentages of daily wage rate are in between RM61 - RM70 (40%), and the second and third percentages is in between RM51 - RM60 (28%) and RM41 - RM50 (22%) follow by RM71 - RM80 (9%). The least percentages of daily wage rate are RM81-RM100 (1%). Their wages normally correspond to the skill level. Respondents are being paid on a monthly basis. Their normal daily working hours is eight. 100% of respondents are working 6 days per week and 26 days per month. 100% of respondents do not have overtime work. 83% of respondents think their wages are equitable with their work, and 17% do not agree with this.



## 5. Conclusion

This study concluded that the composition of labour at the selected construction site in Kota Kinabalu was mostly occupied by foreign labour from the Philippines and Indonesia. Most of the foreign workers are between 21- 40 years old and over half of the respondents are not under skilled worker categories. None of the respondents have a higher education level. Most of them acquire training while working. Only a small portion of the respondents did acquire skills by attending training courses. However, the majority of them has never joined any CIDB courses before. The majority of them have less than 10 years of working experiences. Most of the respondents do not stay on site due to marital status and happily stay with their family. Most respondents are happy with their accommodation and use their own transportation to the working area. Most respondents agree that their company has provided them with medical check-up and insurance. Half of the respondents' wages fall into low income categories between RM41- RM60. However, most of them are agree that their wages are equitable with their works.

## References

- [1] Department of Statistics Malaysia, "Quarterly Construction Statistics" (Fourth Quarter 2015). Putra Jaya, Jabatan Perangkaan Malaysia, Malaysia, 2016.
- [2] Ofori, George. *Foreign construction workers in Singapore*. No. 321168. International Labour Organization, 1996.
- [3] Kanapathy, V. "Malaysia" *Asia and Pacific Migration Journal* 17, no. 3-4 (2008a): 335-347.
- [4] Latiff, Siti Sakinah Abdul. "Skilled Manpower Shortage Need Urgent Attention." *MBAM Online News* 4 (2010).
- [5] Wong, P.M. "Workers Shortage Could Hit ETP Plan." 2011. Retrieved on 30 April 2016 from: [www.thestar.com.my](http://www.thestar.com.my)
- [6] MIGHT "The Role of The Department of Skills Development - Towards Developing Highly Skilled Workforce". Retrieved on 30 April 2016 from: [industry.might.org.my/en/](http://industry.might.org.my/en/)
- [7] "Construction Industry Transformation Programme 2016 – 2020." *CIDB*, p. 35, 2016.
- [8] Pillai, Patrick. "The Malaysian state's response to migration." *SOJOURN: Journal of Social Issues in Southeast Asia* (1999): 178-197.
- [9] Tan, Chuie Hong, and A. Solucis Santhapparaj. "Macroeconomic determinants of skilled labour migration: The case of Malaysia." *Journal of Applied Sciences* 7, no. 20 (2007): 3015-3022.
- [10] Kanapathy, Vijayakumari. "Towards and east asian cooperation framework for migrant labour." In *Workshop on an East Asian Cooperation Framework for Migrant Labour*. Kuala Lumpur, Malaysia. 2006.
- [11] Kanapathy V. "Case Study by Economy Southeast Asia- Malaysia". Revised Paper after PECC-ABAC Conference on "Demographic Change and International Labor Mobility in the Asia Pacific Region: Implications for Business and Cooperation". Seoul, Korea on March 25-26, 2008b. Kuala Lumpur: Institute of Strategic and International Studies.
- [12] Narayanan, S., and Y. W. Lai. "Migration and Development in Malaysia: The Impact of Immigrant Labour on the Manufacturing Sector, 1986-2010." In *Ministry of Women, Family and Communication, National Population Conference on the Inter-Relationship Between Population Dynamics and Development*. Palm Garden IOI Resort Hotel, Putrajaya, Malaysia, vol. 26. 2014.
- [13] Del Carpio, X., R. Karupiah, M. Marouani, C. Ozden, M. Testaverde, and M. Wagner. "Immigration in Malaysia: Assessment of its Economic Effects, and a Review of the Policy and System." *World Bank, Washington DC* (2013).
- [14] Othman, Siti Awanis, and Rohani Abdul Rahim. "Migrant Workers in Malaysia: Protection of Employers." *Pertanika Journal of Social Sciences & Humanities* 22 (2014): 271-282.
- [15] Hugo, G. "Migration and Development in Malaysia." *Asian Population Studies* 7, no. 3 (2011): 219-241.
- [16] Foo Chek Lee (MBAM). "Malaysia's construction industry faces manpower shortage." Retrieved on 20 September 2016 from: [www.humanresourcesonline.net/malaysias-construction-industry-faces-manpower-shortage/](http://www.humanresourcesonline.net/malaysias-construction-industry-faces-manpower-shortage/)
- [17] Ducanes, Geoffrey, and M. Abella. *Labour Shortages, Foreign Migrant Recruitment and the Portability of Qualifications in East and South-East Asia*. ILO, 2013.
- [18] Kaur, Amarjit. "Managing labour migration in Malaysia: Guest worker programs and the regularisation of irregular labour migrants as a policy instrument." *Asian Studies Review* 38, no. 3 (2014): 345-366.
- [19] A. R. A. Hamid, B. Singh, A. M. Yusof, A. M. Ismail and O. S. Wei. "Issues Related to Foreign Workers in the Construction Industry: Literature Review." Paper Proceeding of (SEPKA 2011) Faculty of Civil Engineering Research Seminar.

- 
- [20] Hamid, Abdul Rahim Abdul, Bachan Singh, Aminah Md Yusof, and Nur Ashikin M. Abdullah. "The employment of foreign workers at construction sites." In *2 nd International Conference on Construction and Project Management*, vol. 15, p. 126. 2011.
- [21] A. R. A. Hamid, B. Singh, A. M. Yusof and A. M. Ismail. "The employment of foreign labors in the construction industry." *Brunei International Conference on Engineering & Technology 2012 Proceedings*, Brunei Darussalam (2012): 92–99.
- [22] Hamid, Abdul Rahim Abdul, Bachan Singh, and Muhammad Ammar Jamadi. "Foreign Labour Employment in Construction Project." *International Journal of Scientific and Research Publications* 3, no. 11 (2007): 1-7.