# INVESTIGATING OF INDONESIAN CONSTRUCTION LABOUR SKILL STANDARD TO FULFILL MALAYSIAN CONSTRUCTION SECTOR REQUIREMENT

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#### **ABSTRACT**

Construction is a labour-intensive industry. Malaysian construction sector is highly depend on foreign labours. The number of them nearly 70% of its workforce. 71.3% of total foreign labour is Indonesian labour. Those foreign labours, largely unskilled, did not contribute to skill formation. Many of the current problems in Malaysian construction labour market are the level of labours skills.

The paper is on-going research. The research purposed to elaborate skills level measurement of construction labours in each of the trades. This method is going to be used observation and structured interview. The data obtained will be used to compare Malaysian construction skill standard and Indonesian construction skill standard. Then a model of skills standard is going to describe skills in each of trade in a way that is widely recognized and consistent with practices for training and certification. National Occupational Analysis (NOA) that compiled by The Construction Sector Council of Canada will be applied.

According to previous research, Indonesia is the biggest country sending construction labours in Malaysia. The Indonesian construction labours in Malaysia are largely unskilled and semi skilled labours. The most trades of Indonesian construction labours in Malaysia are carpenters, bricklayers, plumbers, plasterers and painters. Measuring skills in construction is very important to find a way to meet that need by tracking the requirements for the specific skills in each of trade, specially for Indonesia as the biggest labours suppliers and Malaysia as labours user.

Keywords: construction labour, skills standard

# 1 INTRODUCTION

Construction sector has a strategic role in development of a country. Recently, construction sector is having fast development and growth. This development influences toward elements related requirement to construction service sector, one of them is labour. Labour is one of important element influencing continuity and execution fluency of construction project (Agapiou, 1995).

Construction labour requirement in a country, sometimes is fulfilled insufficiently by local labour. It causes the labour requirement from other country (foreign labours). Malaysian's construction sector is highly dependant to foreign labour. The number of foreign labour is nearly 70% of its workforce. Although they have aided the sector's rapid expansion, it has not been

without costs. They were not used to cut costs, but were used because domestic workers were not available in sufficient numbers (Narayanan & Lai, 2005).

The number of foreign labours in Malaysian construction sectors is 130,130 people. 71.3% of total foreign labour is Indonesian labour. Regarding skill aspect, 50% of Indonesian labours are unskilled labours. This percentage is bigger than unskilled labour from Bangladesh (47.4%), Myanmar (47.2%) and Philippine (41.7%) (Abdul-Azis, 2001a).

Many of the current problems in the Malaysian construction labour market especially for foreign labours, are the level of skills. Each worker in one trade will have a distinct set of skills acquired through experience and training. This distinguishing feature is a crucial indicator of employability. Labours become certified for a particular trade, follow the work out of province, and then discover their certification is not recognized in that jurisdiction (Saleh et al, 2008). Indonesia as the biggest labours supplier's country to Malaysian construction sector perhaps has not same skills level standard with Malaysia. The impact is Indonesian construction labour always considered to be unskilled labour by Malaysian construction sector and got law wages (Yoshimura, 2001).

Concordance of construction labour skills standard between Indonesia and Malaysia hardly required, that Indonesian construction worker can fulfill skilled labour requirement of Malaysian construction sector. Measuring skills standard in construction is very important to find a way to meet that need by tracking the availability and requirements for the specific skills in each of trade.

# **2 OBJECTIVES**

The whole objective of this research is to elaborate construction labours skills standard in each of the trades by comparing skill standard in Malaysia and Indonesia.

# 3 METHODOLOGY

This paper is on going research. The method that will be applied in this research is to compare construction labour skills standard between Malaysia and Indonesia. A model or structured representation of skills in the trades will be design to describe skills in each trade in a way that widely recognized and consistent with practices for training and certification. A model of skill will use National Occupational Analysis (NOA) that compiled by The Construction Sector Council of Canada as a model of skill will be used as a bench mark.

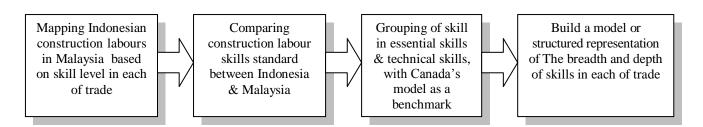


Figure 1: Steps of Research

Finally, the stakeholders will be asked if the information on skills is accurate and useful for their understanding of construction labour markets. This evaluation led to recommendations about the feasibility of tracking skills, and the best way to proceed.

# 4 CONSTRUCTION FOREIGN LABOURS IN MALAYSIA

The impressive growth of the Malaysian economy in the 1980s and 1990s has been matched and often exceeded by the growth in the construction sector. Much of this growth has been achieved by relying on immigrant labour (Narayanan & Lai, 2005).

# 4.1 Foreign Labours

Malaysian construction industry is highly depend on foreign labour. It is almost 70 % of its workforce. Malaysian workers of Chinese descent were the primary source of labour in the construction sector until the early 1980s. The construction boom of the late 1970s and early 1980s resulted in a labour shortage at the prevailing wage rate (Gill, 1988). The fact that construction work was less permanent in nature and was carried out in trying conditions did not help induct new entrants. Matters worsened when employers were reluctant to make upward corrections in wages and terms of employment (Narayanan, 1992). Rather than raising wages in response to the shortage, employers resorted to using illegal immigrant workers from neighbouring Indonesia around 1982. They were not only easily available, but were also less likely to be detected on account of their similarities to the predominant Malay community in Malaysia.

# 4.2 Characteristics of Foreign Labours

The Economic Report of 2003 and 2004 estimated that 794,600 workers were in the construction sector, of which 70% (or 556,200) were believed to be foreign labours. Most of foreign labours (nearly 90%) came from Indonesia. The distribution of labours by countries of origin has not changed from the early 1980. Immigration statistics confirm that the number of Indonesian labour still account for the bulk of immigrant workers in the sector (Narayanan & Lai, 2005). The distribution of foreign labours in Malaysian construction sectors is shown in Table 1.

Country	1997	1998	1999	2000	2001	2002
Indonesia	69.2	59.7	57.9	63.4	65.4	69.2
Bangladesh	23.9	32.3	33.9	29.7	27.4	9.0
India	1.5	3.3	4.1	3.9	3.3	2.0
Myanmar	1.5	1.3	1.1	0.8	1.1	2.0
Thailand	0.2	0.4	0.7	0.5	0.5	10.9
Pakistan	3.7	3.0	2.3	1.5	1.2	0.4
Nepal	0	0	0	0	0.9	1.3
China	0	0	0	0.2	0.2	0
Viet Nam	0	0	0	0	0	5.0
Others	0	0	0	0	0	0.2
Total in number	165,500	63,013	49,080	65,455	59,838	149,659

Table 1 : Distribution of Foreign Labours in Construction Sectors (%)

Source: Narayanan & Lai (2005)

Labours in the construction sector are either employed directly by the main employer or hired on contract through a labour intermediary (contractor) who takes on the responsibility of recruiting the labours, paying them, and providing for their needs. The employment of contract labours through an intermediary is more widespread and, not surprisingly, the bulk of immigrant labours are employed by this

way. Many immigrants initially entered the country illegally. However, it is difficult to employ the labours through the legal cannels. The contractors, who tend to move from site to site, were more logical employers since their mobility reduced the chances of the illegal labours being discovered. (Narayanan & Lai, 2005).

# 4.3 Skills of Foreign Labours

Regarding skill level, most of foreign labours at construction project in Malaysia are dominated by unskilled and semi skilled labours. Indonesia and Bangladesh are most countries sending unskilled and semi skilled labour at construction sector in Malaysia. Profile of foreign construction labour based on skills level is shown in Table 2.

Country of origin	Number	Unskilled (%)	Semi- skilled (%)	Skilled (%)	Supervisor (%)	Total (%)
Philippines	1,160	8.3	41.7	41.7	8.3	100
Thailand	6,342	18.2	54.5	18.2	9.1	100
Myanmar	1,290	19.4	47.2	30.6	2.8	100
Indonesia	92,805	23.2	50.1	25.1	1.5	100
Bangladesh	26,484	33.6	47.4	17.5	1.5	100

Table 2 : Skills Level of Foreign Labours in Construction Sectors

(Source: Abdul-Aziz, 2001)

Unskilled labours do not remain so indefinitely, site operatives can be expected eventually to master their respective trades in time, provided they have sufficient attachment to work and a desire for self-improvement.

# 5 INDONESIAN CONSTRUCTION LABOUR IN MALAYSIA

The Indonesian construction labours in Malaysia were largely uneducated, poor, and inexperienced in construction. However, they could work for low wages and under harsh conditions (Gill, 1988; Azizah, 1988; Navamukundan, 1992). Once immigrant labours gained a foothold, the booming construction sector proved to be a strong magnet, drawing labours in huge numbers, both legally and otherwise.

Generally, Indonesian construction labour in Malaysia beginning their work as worker assistant or servant, then they get work specialization after working during 3 months. As for work area done by Indonesian construction labour are worker assistant, carpenters, bricklayers, plumbers, plasterers and painter (Furqan, 2007). Percentage of this work area is shown in Figure 2.

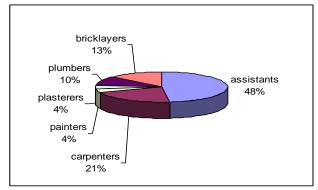


Figure 2: The Trades of Indonesian Construction Labours in Malaysia (Source: Furqan, 2007)

Bases on above figure, seen that 48% Indonesian construction labours is unskilled labour, so they placed as worker assistant. Generally, they don't have job experience in construction project and never followed skill training of job.

# 6 SKILLS PROBLEM OF INDONESIAN CONSTRUCTION LABOURS

The number of construction labours in Indonesia is 4,470,000 peoples (Nursyirwan (2006), from that amounts which has followed training of construction work is only 100,000 labours. Generally, Indonesian construction labour that working in Malaysia, included in labours which have never got training of work in construction area.

In the sending process of construction labours, the vast majority of migrant construction labours are recruited for work through the mediation of recruiting agents. Such agents exist in both labours sending and labour receiving countries. There is a long chain of agents linking the prospective migrants in their home village to the ultimate employer in the receiving country. Classification of labours skills in unskilled, semi-skilled and unskilled is implicated to wage rate. The wage rate of foreign labour in Malaysia based on the level of skills is shown in Table 3.

_		_	_
	1996	2003	2007 *
	(RM/Day)	(RM/Day)	(RM/Day)
Skilled	35 - 60	80	70 - 80
Semi-skilled	30 - 35	40 - 70	40 - 70
Unskilled	20 - 28	28 - 30	30 - 35

Table 3: Wage Rate of Construction Foreign Labour in Malaysia

Source: Narayanan & Lai, 2005 and interview (\*)

Many new technologies developed by component and materials producers aim to improve the quality and to reduce the cost of building elements. At the same time, their objective are to reduce the content and time required for on-site work. In consequence, technological changes aimed at improving construction processes and reducing the need for on-site skills often are made away from construction sites. In the future, construction project in Malaysia will lead to practice method to reduce dependency to unskilled labours. It will cause degradation of requirement to labour and replaced by equipments or machine, so availability job for foreign labours later is skilled labours (Majid, 2007).

Labours and employers in have strong and potentially different views about skills, and feel a sense of ownership around the scope of the trade. It is common to find that employers are frustrated when recruiting new employees. At the same time, unemployed workers may seek jobs without success in the same trade or occupation (Mackenzie et al, 2001).

According to the above facts, equation of opinion from all participant in construction labour market about requirement of labours trade and skills level measurement of construction labours is hardly needed to balances between availability and requirement of labours.

# 7 TRACKING LABOUR SKILLS STANDARD

Improvement of Indonesian construction labour skill level can be done by comparing construction labour skills standard between Malaysia and Indonesia. Then build a model or structured representation of skills in the trades to describe skills in each trade in a way. It is widely recognized and consistent with practices for training and certification. Model of skill will use National Occupational Analysis (NOA) that compiled by The Construction Sector Council of Canada as a benchmark.

The proposed of the model is tracking skills defined the depth and breadth of skills. The model distinguish the breadth and depth of skills in each area. One key conclusion is that there are many dimensions (e.g. depth and breadth) and types of skills (e.g. essential and technical). Breadth of skills refers to the extent of training and work experience across specialties in a trade or occupation, while depth of skills refers to the extent of training and work experience within any one specialty. The construction industry agreed that added depth and breadth of skills increases income and employability.

Table 4 : Depth and breadth of skills

Hierarchy of Skills	Breadth	Depth
Essential	Reading	Reading safety manual
	• Math	
Technical	Site preparation	Scaffolding
	Maintenance & Repair	Trouble Shooting

Table 4 identifies three dimensions for skills. First, a hierarchy distributes skills from basic or Essential Skills required for entry, through technical skills. Second, skills are grouped into blocks that show the breadth of skills as well as sub-tasks that reflect the potential depth of skill in single areas. Examples of depth and breadth skills are shown in Table 4. The number of skill areas deemed important in the profiles represents the breadth of Essential Skills. Depth of skills is represented by the assigned level of complexity associated with each area and the number of specialized tasks identified. Third, the model divides skills into those acquired by labours, and those required by employers.

#### 7.1 Essential Skills Breadth

The Essential Skill profiles adopted from Human Resources and Skills Development Canada (2005) identifies nine blocks and sub-groups of skills regarded as essential for entry into the occupations, it's shown in Table 5.

Table 5: Breadth of Essential Skills

Essential Skills Breadth		
1. Reading Text	6. Working with others	
2. Document Use	7. Continuous Learning	
3. Numeracy	8. Thinking Skills	
4. Writing	9. Computer Use	
5. Oral Communication		

# 7.2 Essential Skills Depth

Employers and their supervisors or forepersons would have specific expectations related to the depth of skills needed to complete sub-tasks assigned on a job. These expectations are the most immediate description of the skills and experience that secure work.

For each of the nine blocks or groups of skills identified in essential skills breadth, further breakdown of tasks and examples (see Table 6).

Table 6. Example of Essential Skills Depth

Thinking Skills
1. Problem Solving
2. Decision Making
3. Job task planning
4. Significant use of memory
5. Finding Infromation

#### 7.2 Technical Skills Breadth

These are the most common descriptions of the "scope of the trade". Descriptions identify the broad blocks/tasks of work or categories of expertise that are allocated to the trades.

Table 7. Example of Technical Skills Breadth

Technical Skills Breadth for Bricklayers		
Block A	Work related activities	
Block B	Masonry walls & columns	
Block C	Chimneys, fireplaces, masonry heaters,	
	refractory materials	
Block D	Construction/layout masonry arches	
Block E	Restoration	
Block F	Ornamental Masonry	

# 7.3 Technical Skills Depth

The expected depth of expertise in a trade is less obvious, but is revealed in the duration of training allocated to the sub-tasks in the blocks or categories that define breadth. Similarly, depth might be revealed in the number of sub-tasks and the details attached to each. One possibility is that specialized training offered by equipment and material manufacturers and private trainers may reveal the most important new skills that add depth to one branch of a trade.

Table 7. Example of Technical Skills Depth

Technical Skills Depth for Bricklayers		
Block B: Masonry walls & columns		
Task 9: Build wanner walls		
Sub-task 9.01	Inspects sustrates, anchors & flashings	
Sub-task 9.02	Installs flashings	
Sub-task 9.03	Lays out walls & coursings	
Sub-task 9.04 Installs accessories		

Based on data and explanation above, lack of skill is principal problem of Indonesian construction labour who working in Malaysia. Improvement of skill level will influence to wage rate. Improvement of skill must be adapted from skill requirement in Malaysia, through tracking skills in the depth and breadth of skills.

# 8 CONCLUSION

Indonesia is the biggest country that sending construction labours in Malaysia. The Indonesian construction labours in Malaysia were largely unskilled and semi skilled labours. The most trade of Indonesian construction labours in Malaysia are carpenters, bricklayers, plumbers, plasterers and painters.

Improvement of labour skill level will influence to wage rate. Improvement of skill level must be adapted from skill requirement in Malaysia. Tracking skills in the depth and breadth of skills at construction labour user in Malaysia will required to know skill requirement. Equation of perception from participants in construction labour market is very important to get balances between availability and requirement of skills labour.

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