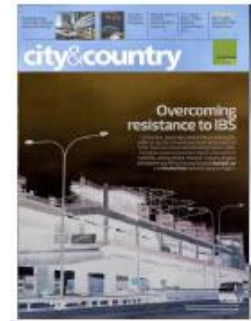




Headline	Overcomin resistance to IBS
MediaTitle	The Edge
Date	30 Nov 2015
Section	City & Country
Page No	CC1,CC4,CC5
Language	English
Journalist	Racheal Lee & Natalie Khoo
Frequency	Weekly



Availability of cheap labour a hindrance

BY RACHEAL LEE AND NATALIE KHOO

The adoption of the Industrialised Building System (IBS) in Malaysia's construction industry is still rather slow, especially in the private sector, as contractors are more likely to use the conventional construction method that they are used to and more comfortable with.

The high cost of IBS components, lack of standardisation, inadequate supply of skilled workers and accessibility to cheaper untrained foreign workers are the major reasons for the low adoption of the building system in the private sector, says Noraini Bahri, head of IBS Centre at the Construction Industry Development Board (CIDB).

She adds that contractors prefer to hire foreign labour due to the lower wage factor and availability. "Foreign workers are willing to work long hours and can easily be moved from one site to another."

Noraini says CIDB is looking mainly at the private sector moving forward, since IBS has already been made mandatory for the public sector with all projects valued at more than RM50 million required to achieve a minimum IBS score of 50, out of 100. CIDB and the Ministry of Urban Wellbeing, Housing and Local Government are also working together to prepare a framework to implement IBS through the local authorities and local councils.

Noraini says CIDB is looking mainly at the private sector moving forward, since IBS has already been made mandatory for the public sector with all projects valued at more than RM50 million required to achieve a minimum IBS score of 50, out of 100. CIDB and the Ministry of Urban Wellbeing, Housing and Local Government are also working together to prepare a framework to implement IBS through the local authorities and local councils.

"There is a need to realign the industry's framework to increase private sector participation as the sector is still in a nascent state with a huge potential for IBS," she says. "The challenges and industry resistance must be overcome with private sector participation from the onset of the implementation planning."

Also known as prefabrication, IBS is a term used for a technique of construction whereby components are manufactured in a controlled environment, either on or off site, then placed and assembled into construction works.

MKH Bhd managing director Tan Sri Eddy Chen says it is important to increase the application of IBS as companies in the industry are currently labouring under tremendous pressure to deliver their projects in a timely manner and many contractors are facing the problem of labour shortage.

"The plunge in the ringgit is also affecting foreign labour in Malaysia because their pay is less

when converted to US dollars. Many would choose to work elsewhere, where the currency has not declined as much."

Chen chaired the Malaysian Industry-Government Group for High Technology's (MIGHT) IBS task force more than 10 years ago. A subsequent task force report was handed over to the then prime minister Tun Abdullah Ahmad Badawi. However, there has been no groundbreaking improvements since then, he says.

MIGHT, an organisation under the Prime Minister's Department, was formed in 1993. Its core purpose is to address the country's needs in response to the effects of globalisation and trade liberalisation on future economic growth through the accelerated use of high technology.

S P Setia Bhd executive vice-president Kow Choong Ming says the availability of labour will result in the construction industry continuing to use the conventional construction method.

"Unless there is an incentive for construction companies to use IBS, which uses less labour for the same finished products, the way the construction industry operates in Malaysia is unlikely to change in the short or medium term," he says. "IBS produces a consistent quality of finished products and has less wastage. At the same time, construction at the site is cleaner."

The developer has its own precast division, Setia Precast Sdn Bhd, which uses load-bearing wall components. All its precast components are prefabricated at a casting yard offsite before being transported to a construction site to be installed piece by piece using tower cranes. Since 1997, it has completed more than 20,000 medium-cost apartments in Pusat Bandar Puchong, Bukit Indah Ampang, Precinct 9 and Precinct 15 in Putrajaya, and Setia Alam.

Setia Precast is currently involved in the building of affordable medium-rise apartments in Setia Alam such as Seri Jati, Seri Baiduri, Seri Intan, Seri Kasturi, Seria Mutiara and Seri Pinang. It is also involved in the Perumahan Penjawat Awam 1Malaysia project in Precinct 17, Putrajaya.

Does IBS lead to higher costs?

Even if projects can be completed earlier using IBS and developers enjoy faster profit returns, it may not be good news for some developers as it must

be synchronised with their cash flow. "Instalment payments by purchasers' banks sometimes lag behind developers' claims," Chen explains.

He says the main drawback of IBS has always been the upfront capital outlay, especially in acquiring the formwork, plant and machinery needed to erect the components. This means that IBS providers need greater volume to justify investing in the upfront cost.

The impact on cost is especially obvious for developers that use non-standardised architectural building designs, as the formwork cannot be used repeatedly. Hence, it is advisable to use IBS in high-rise developments due to the volume and repetitive nature of the construction.

As IBS component suppliers and contractors are small in number and scale due to low demand, the industry may not have the muscle to sustain bigger projects and many developers may be hesitant about engaging these smallish providers as they are concerned about reliability.

"To move forward, I believe there needs to be some consolidation and mergers to enable the industry to scale up," says Chen. "Some government intervention may be necessary. For example, CIDB may need to take the lead in bringing all the IBS component suppliers and contractors together to enable them to build up and sync with the industry."

Noraini concurs, saying that there is a general perception that most manufacturers are single plant operators concentrated in selected states, propagating their own proprietary system and not operating in full capacity.

"At the moment, the general consensus is that the existing manufacturing base is inadequate to support the construction industry — there is a lack of innovative design and support personnel."

Kow says it is more efficient and time-saving if the components' repetition factor is high. "However, IBS requires a higher initial set-up cost and for it to work, it has to be considered at the planning stage and not as an afterthought. It also requires economies of scale for the components required. Technical staff is needed as this form of construction is more specialised. Building layouts have to be designed to be IBS friendly."

Also, without sufficient supplies, it is difficult to ensure competitive pricing for IBS components.

Sam Tan, managing director of contractor turned developer Ken Holdings Bhd, says the lack of supply leads to developers having to invest in factories that provide IBS components and it will take years for them to break even.

"If there are no economies of scale, material prices won't go down and it is then cheaper to use labour and the conventional method. And we also have to take into consideration the cost of transport and cranes," he says. "Mega infrastructure and repetitive projects such as MRT works can use IBS because of the economies of scale and it is cheaper for them to do so as well. However, it is not for normal housing projects."

Tan notes also that the materials used in IBS are more expensive. For example, IBS uses concrete and aluminium, which cost much more than the bricks and timber used in the conventional method.

"We [Ken Holdings] have partially moved to IBS in our Ken Rimba project in Shah Alam because the quality is better," he says. "And our structure cost is 30% higher compared with the conventional construction method."

While Noraini agrees that the cost of IBS components remains high without economies of scale, she says a study done by Jabatan Kerja Raya on seven IBS projects and seven conventional projects showed that the difference in the cost per sq m is becoming smaller with time, as contractors become familiar with IBS.

"[It is a] reduction in overall construction cost of up to 15% due to overheads," she adds.

Coordination required

IBS is not the preferred choice of designers as it is perceived as limiting creativity in design and architectural expression, says Noraini. The system also requires all parties involved, including architects, civil and structural engineers, mechanical engineering engineers and surveyors, to communicate and integrate from the beginning in the construction industry value chain to ensure the effectiveness of the components produced.

"IBS requires comprehensive details when planning as the construction of such a building starts with the production of components in a factory," she says. "If the conventional method of appointing consultants is used, whereby an architect is appointed first before the civil and structural engineers and

later, the mechanical engineering consultants, this may result in reduced performance in the construction of IBS buildings.”

Kow emphasises the importance of systematic planning, which includes considerations for logistics for transport, production and installation. “It is also important for a contractor’s technical staff to work closely with the consultants to ensure a higher degree of buildability. It is critical that components planned for the construction are standardised and modular coordination is in place.”

It is said that IBS will eventually result in lower overheads and construction costs. However, even if there are the cost savings, Raine & Horne International Zaki + Partners Sdn Bhd senior partner Michael Geh says there is no assurance that the cost savings on the developers’ side would translate into cost savings for buyers.

“The government hopes to transfer the cost savings to buyers, but if it does not regulate the selling price, buyers may not benefit from it,” he says.

Users’ perception is another major issue for IBS, according to Stephen Yew, executive director of property consultant The One Property Group. “Users tend to think that IBS buildings have leakage problems and cannot be renovated. However, through the advancement of technology and better planning and design, IBS buildings/housings have now improved in terms of performance and can be renovated.”

The government announced in Budget 2016 that RM500 million will be allocated as promotional fund for IBS, but this would only be for contractors of Grade G5 and below. Under the Construction Industry Transformation Plan launched last September, the government plans to induce faster adoption of IBS by recommending easier and simpler procurement processes for IBS components.

Nevertheless, industry players say the government’s move to limit the IBS promotional fund to only contractors of Grade G5 or below will hinder the success of the system in the country.

LJM Land Bhd managing director Edward Chong says the restriction is surprising. “In order for IBS to be successfully implemented in Malaysia, the incentive should be applicable to all contractors irrespective of grade.”

According to Chen, lower-grade contractors are unlikely to access the fund because they may not have the means to start an IBS system, let alone benefit from the incentives.

“The incentives should be given to those who are already using IBS but are unable to grow it due to low volume and lack of capital. This has been the bane of the widespread adoption of IBS.”

To move the IBS agenda forward, Chong says various government incentives should be given to encourage the private sector to use the system, such as tax relief, higher plot ratio, faster approval process and lower premium for developers; duty exemption and capital allowance for contractors; and double tax deduction, duty exemption for equipment and capital allowance for component makers. ■