



Safety in Malaysian Construction: The Challenges and Initiatives

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The construction industry in Malaysia has embarked on a new era towards the realisation of sustainable and progressive construction. The government had launched the Construction Industry Master Plan 2006-2015 (CIMP) initiated by the Construction Industry Development Board (CIDB) Malaysia last year. Launched with the purpose of gearing up the Malaysian construction industry towards globalisation and competitiveness, the CIMP constitutes seven strategic thrusts which encompass the construction value chain. One of the strategies, strategic thrust 3, emphasises on striving for the highest standard of quality, occupational safety, and health and environmental practices. To keep abreast with development, particularly in relation to the issue of occupational safety and health, construction players should play their roles in consolidating the industry to reach greater heights. Safety in construction must be a priority among the construction fraternity during pre-construction, construction and post construction. A holistic approach of safety must be introduced to the construction industry as a strategic way for construction stakeholders to move up to the greater height in future.

A HOLISTIC APPROACH TO SAFETY PREVENTION

A holistic approach takes into consideration human values, safety and responsibility concerns. The onus is on the management and workers to be responsible for safety issues in construction. Much work is needed to ensure the successful implementation of safety prevention at a construction site. Indeed, safety at a construction site requires the involvement of all construction parties. Hinze and Wilson (2000) had pointed out that the most effective techniques of preventing a hazard are pre-planning for safety, safety orientation, safety training and a written

safety policy. To prevent accidents from recurring, there is also the need to establish a post investigation of the causes. Obviously, the pre-planning of safety is needed to ensure the effectiveness of the safety programme being carried out. It is also suggested that more time be devoted to a site's safety problems by the contractor and workers. Based on one finding, an effective control method for working at height is by providing a life line and steel wire rope for on the edge protection. According to Bobick *et al.*, (1994) it was found that it is preferable to provide a fixed barrier to prevent a worker from falling rather than using Personal Protective Equipment (PPE).

ENFORCEMENT SNAGS

Enforcement against errant contractors and workers should be carried out continuously. Based on this study, it was found that in order to prevent the workers from repeating their offences, they should be penalised. However, some respondents had stated that this was not a proper way to encourage them to be good workers. In actual fact, if enforcement is not carried out regularly, the offences will become second nature and the habit will be hard to break in the future. As a regulatory body, the government has the right to take action against the errant contractor or worker. In serious cases, the developer and consultant would be brought to court to be charged. It is apparent that the country may still lack the manpower for such an operation. Sometimes, when an accident happens and there is a public outcry, the authorities are forced to respond. When the public clamour for tough action, the authorities would promise better enforcement and stiffer punishment. The authorities will need to put recalcitrant contractors out of business. Serious enforcement and inspection has to be made especially for high rise building projects. This is to ensure that all contractors and

workers ensure that the equipment and structures at worksites would not pose a danger to the workers themselves and the public. Perhaps in the future, the authorities would have the right to penalise contractors who defy safety and health guidelines at a construction site. Hence, the errant contractor will not be issued with business licenses. Local authorities can issue and revoke business licences of contractors. Here is another suggestion; the ministry could also publish the names of contractors, details of their projects and their track records in meeting safety guidelines. There is an obvious lapse in adhering to the safety standards. The government should tighten the procedures by conducting a thorough investigation should such accidents occur. Work should only resume after safety procedures that are deemed necessary are carried out. However, according to Koehn *et al.*, (1995) they highlighted that safety cannot be enforced by legislation alone but need the responsibility of the contractors as well as workers to make it successful. A commitment by the workers would also help to reduce the occurrence of accidents at a construction site. Workers can discuss with their management ways to make their worksite safer.

ENHANCEMENT OF SAFETY PROGRAMME

Generally, contractors are aware that they have a role to play in promoting safety programmes and safe behaviour as stipulated in OSHA 1994 Section 17 (Duties of employers and self employed to their employees). They have an obligation to ensure that their workers are not exposed to risks which can affect their safety and health. From a study done previously, it was found that training and education programmes are important to educate workers. According to Hopton (1969), trainings aimed at workers and operators would not only reduce accidents, but may

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also reduce costs and save lives. A study by Toole (2002) had found that if workers do not have proper training on safety, they may not be able to recognise potential hazards at a site. This shows that safety and health training plays a significant role in the enhancement of safety in construction. However, the awareness level of contractors on the need for such training is not satisfactory. They often believe that their money is better spent on meeting necessities than to allocate it for training. Some contractors even believe that safety awareness only comes directly from experience. This is what is happening in some of the construction companies in the Klang Valley. The government has made it mandatory for contractors with a new project to strictly adhere to the requirements of compulsory safety training for their workers. Other obstacles in achieving the full benefits of a safety programme are the attitudes of the management and workers themselves. In order to achieve a good safety performance record, there is a need for comprehensive contribution by the management. The management cannot solely rely on workers who are only carrying out their work as instructed. They must put aside some allocation and resources to organise safety programmes, and the workers are not required to contribute their own money to the programme. Based on several studies, the tool box meeting was found to be an effective way to educate and remind workers of the different aspects of safety and potential hazards. In essence, the meeting is held first thing in the morning prior to starting the day's work. Other programmes include fire fighting course, first aid course, tool box meeting and safety induction. These courses may probably require the services of an expert and some form of payment may be called for. In such instances, the reluctance of a contractor to put aside an allocation may mean that such programmes cannot be organised. The objective of these courses is to ascertain that the workers have the basic information on hazards at a site and methods of prevention.

INTRODUCING A BASIC SKILLS TEST

In an effort to enhance the competency of unskilled workers, especially foreigners,

it has been suggested that it be made compulsory for construction workers to sit for a basic skills written examination on safety. It was suggested by Jaselskis *et al.*, (1996) that the skills test be carried out to determine the competency level of new workers on their specialty, knowledge and awareness. Chin *et al.*, (2001) affirmed that the Singapore government has introduced a skills test to construction workers in the country. Workers who passed the examination would be awarded with a skills evaluation certificate. The Malaysia government still has not introduced this approach to its construction workers. Perhaps in the near future, it could be implemented as an approach to the enhancement of skills and the awareness of safety. They must pass the exam to be licensed to work in the construction industry. If they fail to do so, they may be required to re-seat another exam of safety.

SUB-CONTRACTOR COORDINATION

Good coordination leads to effective communication between the contractor and sub-contractors. This would help the sub-contractor to understand the safety policy of the main contractor. In Malaysia, the current trend is the undertaking of big projects by the sub-contractor. The main contractor would only lobby for the project while construction matters would be handed over to the sub-contractor for a substantial profit. According to Hinze and Gambatase (2003), in order to improve and achieve the safety aspect and safety performance, sub-contractors must have their own safety programmes which can complement the formal safety programmes of the contractor. A contractor should optimize the selection of sub-contractors who have a good combination of technical competency and safety practices. Thus, to achieve a good exercise in safety, better coordination between the main contractor and sub contractor is needed. A study by Koehn *et al.*, (1995) affirmed that the main contractor must make a proper selection of the sub-contractor to ensure that they have the capability in terms of both skills and a safe operating procedure. The main contractor plays a vital role in liaising with the sub-

contractor. Effective communication from both parties would help the safety supervisor and safety officer better coordinate any safety programmes.

WORKERS ATTITUDE

The major problem with regards to the safety issue at a construction site is the attitude of workers. The majority of the construction workers in Klang Valley are from Indonesia, Thailand, Philippines and Myanmar. The behaviour of these workers is influenced by the culture of their home country, which are mainly agriculture based. These workers are probably never exposed to the construction of huge projects like condominiums, apartments and so on. A study by Teo and Phang (2005) found that the attitudes of these workers play a very important part in adopting safe work practices at the workplace. In addition, Wong *et al.*, (2000) found that training plays an important role in changing the attitudes of such workers. According to Vredenburg (2002), in order to change the attitude of these workers, the attitude of contractors must be corrected before the fostering of a safety culture can be successful. This attitude also suggests that, although regulation and enforcement are major factors in keeping a construction site safe, more effort can be done to reduce the hazards at a construction site. The initiatives mooted by the government to attempt new approaches must be upheld. One of the approachable methods the government wanted to introduce was self-regulation in the construction industry. However, Tam and Chan (1999) highlighted Hong Kong's experience in implementing this approach. It is resulted in negative safety when contractors tried to avoid convictions instead of actively eradicating and preventing accidents from happening. Another factor that affects safety is when the management tries to condone the action of workers who sacrifice safety for productivity. This would suggest that promoting safety education and enforcement is a more approachable and effective way.

THE MANAGEMENT'S COMMITMENT

To foster a safety culture at a construction site, contractors should begin by changing their own mindset. The majority of the

contractors in Malaysia fail to instill a safety culture among their staff and workers. The problem is, the officer in charge, especially the safety and health officer, do not have autonomy power to strictly enforce the regulation. They are employed by the contractor. Therefore, the findings support the fact that it is vital for the top management to support the safety and health officer at all times. This statement is supported by Jaselskis *et al.*, (1996) who reported that the commitment and support by the top management would significantly drive up the performance of safety. In some cases, safety and health officers are threatened by their employer not to report an accident to the Department of Occupational Safety and Health (DOSH). Since the government implemented more safety measures and became stricter in terms of enforcement, some companies have resorted to not reporting accidents unless it is a serious one. Hence, who is to blame when the accident rate is still increasing? This is an example of the management not possessing the right attitude in fostering a safety culture. It was similarly found by Kartam and Bouz (1997) that many accidents are not reported because the project manager tries to hide his negligence as well as to protect the company.

THE WAY FORWARD

The construction industry has become pragmatic, sober and somber in their expectations. We need to address its weaknesses, particularly the safety aspect, for it to be more resilient. The stigma of the construction industry as dirty, difficult and dangerous (3-D) has to be eliminated as this will jeopardise the industry's image. Our greatest challenge is time. We noted that the construction industry may help create wealth and hence benefit through production and best practices. The best practices among construction players, especially with respect to safety and health, should be shared among small and medium contractors. Contractors could also contribute and regulate their respective company by practicing self-regulation so that the burden of enforcement agencies and the government could be minimised. Construction players could also play their roles by disseminating their experience knowhow, successful models and step-

by-step approach. There is much that can be achieved with concerted effort from the CIDB and the government on safety and health. Construction players should lend their hand to assist the government through enforcement agencies towards building a Malaysian construction industry that is more sustainable and resilient in the future. ■

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