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A REVIEW ON TVET CURRICULUM PRACTICES IN MALAYSIA

Tazifuzin Azmi1*, Dani Salleh²

- ¹ Ghazali Shafie Graduate School of Government Universiti Utara Malaysia, Kedah, Malaysia Email: tazifuzin@giatmara.edu.my
- ² Department of Planning & Property Development, School Government, Universiti Utara Malaysia, Kedah Email: dani.saleh@uum.edu.my
- * Corresponding Author

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Abstract:

The Malaysian labour market traditionally experiencing a shortage of skilled human resources. Labour shortages in the country, especially in the technical fields have resulted in more foreign engineers were recruited in many areas, especially those that need technical ability. Because of the poor education and training system, the workforce is mostly made up of less-qualified workers. This has created critical skills gaps in almost all sectors of the Malaysian economy. TVET provides specific work to people by learning the principles of technology through extensive educational knowledge following a more specific skill training process.

Keywords:

TVET, GIATMARA, Education Programme, Construction, Good Practice

Introduction

The rapid growth of the construction industry has affected the country's economy and the TVET education system. As advances in the construction industry, TVET training needs to be improved to produce more trained professionals to develop the country. Among the professional practitioners intended by the researchers here are lecturers at the TVET institutes and engineers in the construction industry. These professional practitioners must be equipped with basic skills in construction technology and higher knowledge and need to constantly be



updated and organized to meet the demand in the construction industry sector. In this case, Ismail, Nopiah, Rasul, and Leong (2017) found a shortage of skilled workers has become a worldwide issue. This is also the biggest challenge in the Malaysian construction industry. In addition, the local workers participation is very unfavourable and some understand that skilled workers resulting from vocational training do not meet the needs of the construction industry.

According to Ismail and Abiddin (2014), the situation facing Malaysia today is that most workers have left the construction sector even after training from construction course providers at the Vocational Institute or Institut Latihan Kemahiran Awam (ILKA). As a result, the construction industry in Malaysia are having trouble finding skilled labour and skilled workers, and most importantly, the country must rely on foreign workers to meet the demand of the construction industry are high for getting skilled workers and semi-skilled (Mohamed, Ramendran, & Yacob, 2012) because rapid economic growth in Malaysia and the weak participation of local people in the industry.

In recent years, TVET has become increasingly important and played an important role in the life of the organization. TVET's relationship with unemployment, national productivity and industry has made TVET a political issue (Bews & Rossouw, 2002). In fact, the TVET system is an important part of the economic environment in most countries, especially developed industrial countries. All new technological advances are now being directed towards replacing jobs and changing the need for skills, therefore, there is a great need in terms of a skilled and trained workforce to cope with changing world conditions (Holden, 2004).

Literature Review

According to Zain, Aspah, Abdullah, and Ebrahimi (2017), in fulfilling the desire to increase the economy in the value chain into a high-income economy, Malaysia should increase recruitment at TVET and improve the overall quality of training. If these changes are not made soon, the country is feared to be globally incompetent and will continue to lag. Therefore, Yusop dan Umar (2018) identifying TVET can improve self-skills and foster a desire to reform. Train into the field of TVET train yourself to be independent in doing things. TVET is not only able to produce skilled and trained personnel, but also able to create its own jobs with the skills it has. Each program offered is specifically designed to meet the demands of a current career. The industry that students follow in the final semester will present them with a real work situation, in addition to being able to build confidence and be able to adapt when entering the world of work.

Many developed and developing countries in the world are looking for their TVET systems to respond to global economic changes. Some countries are proactive by adopting long-term strategies that benefit their economies (Comyn, 2009). He further stated that connecting the industry with the TVET system is a top priority and is often the basis of policy reform in some national development and development. Experiments from several developed countries (UK and Germany) and developing countries (Korea and Malaysia) related to TVET will be reviewed. Nevertheless, Kechik (2011) stated that the Tenth Malaysia Plan (RMK 10) for the period 2011 to 2015 showed significant changes to the TVET system in Malaysia. The development of ideas and strategies based on the achievements and progress of foreign countries such as Korea and Germany to become high-income countries is an example for Malaysia to continue to take competitive steps and in the eyes of the world. However, these countries were chosen because of their history in this field and have also solidified wise



achievements in the global workplace as well as socioeconomic achievements. In the meantime, they provide the most comparable data set among countries that have similar educational structures.

In the United Kingdom (UK), decisions on human resource development are taken primarily by organizations in what is referred to as a voluntary approach (Essel, Agyarkoh, Sumaila, & Yankson, 2014). In this approach Page and Hillage (2006) recently mentioned that in the UK there is a voluntary employer training system, under this system employers are the choice of whether they will train their employees or not, with little need. The role of the authority here is to encourage organizations to assume training and development responsibilities. Therefore, the funding of this approach is the opposite of the intervention approach, the government or its agents try to influence the decision-making process within the organization and make decisions that suit the economy (Page & Hillage, 2006). There is a growing impact on institutions and training structures by employers, this leads to changes being made to engage employers, and therefore the government's training system meets the businesses they need. Thus, the nature of the productive system, education and training is determined by market forces, provided that the role of government limited to the establishment of a legal framework in which business activities and training and market failure. Successive UK governments used this national skills system, which gave more responsibility to organisations and individuals to acquire these skills (Beattie, 2002). Ashton and Green (1996) stated that government contributions were needed to shift to a high-skill economy that connects key actors to deliver certain high-skill policies, consisting of policies that affect skills needs. The study highlights also show that when industry fundamentals are affected by rapid change, the government should perform a co-ordinated role according to demand (Ashton & Green, 1996).

Definition of Technical and Vocational Education and Training

Technical and Vocational, Education and Training or widely known as TVET is a term used by UNESCO member countries as one of the main fields for educational programs. Every country in the world implementing a different approach of TVET method, which aims to develop its own state mechanism and allocate resources to certain channels to meet its economic and social conditions (Winch, 2013). In the United States this program called CTE (Career and Technical Education). In South Africa this program named as FET (Further Education and Training). VTET is a term used in Southeast Asia (Vocational and Technical Education and Training). In Australia the terms used are VET (Vocational Education and Training) or VTE (Vocational and Technical Education).

TVET is defined by UNESCO as "a process that involves aspects of education, in addition to general education, technology and science studies relating to the acquisition of practical skills, attitudes, understanding and knowledge related to work in various sectors of life and the economy" (UNESCO, 2016). TVET provides people not only with vocational skills, but with the knowledge, skills and attitudes that are need for participation in the world of work and life (Majumdar, 2011). These include self-awareness, self-esteem and self-esteem, citizenship, communication, and entrepreneurial skills. Through the TVET strategy, UNESCO aims to strengthen the capacity of member countries in the TVET field and to focus on how to change and grow TVET to ensure that all young people and adults can develop the skills needed for work goals in order to move forward with life helping to develop country (UNESCO, 2016).



Definition of Practice

According to Mukhtar and Ahmad (2015), practice is the real application or use of an idea, belief, or method, as opposed to theories relating to it. It is also the customary, habitual, or expected procedure or way of doing something (Ananiadou, 2013). Other words for it include application, exercise, use, action, operation, implementation, execution, enactment, doing. In the context of this paper, practice is the actual implementation of the policies enacted for TVET (Mukhtar & Ahmad, 2015). That is the performance of actions or exercises to realize the expectations of TVET policies.

The most important result of effective human resource development is to open job opportunities. Human resource development is also emerging as one of the main and most effective ways to reduce poverty. Therefore, investment in priority areas such as education and skills development are critical to bridging the gap between recognition-based employees and low-skilled workers (Kazmi, 2007). Musmari (2002) states that therefore education for human resource development can help people acquire skills and knowledge for community development and industrial problem solving that may face society or country.

TVET Curriculum in Malaysia

TVET education in Malaysia designed in such a way as to create a vibrant, technological, globally competitive, respected, and successful nation. In line with that, TVET has an important role as a storehouse of knowledge and human development to produce scientists, scholars, scholars, skilled and semi-skilled workers to contribute to the socio-economic development of the country.

The TVET curriculum began in Malaysia with the formation of the Razak Report in 1956 and the Education Regulations in 1957. Then followed by a series of memoranda and policy formulation such as the Rahman Talib Statement, Education Law 1961, Mahathir Report 1979, The Cabinet Reports of 1995, 1998 and 1999 have laid a solid foundation for the implementation of TVET policies, systems, directions, and curricula in Malaysia (Bahtiar, et al., 2015). Malaysia's ambition to become a developed nation has seen various changes in the TVET curriculum as follows:

- i) Restructuring of Technical High Schools into Vocational High Schools;
- ii) Changes in vision and mission of polytechnics and community colleges in the 2005-2010 Strategic Plan for the Department of Polytechnic and Community Colleges Education;
- iii) The Third Perspective Plan (OPP3) 2001-2010, the Eighth Malaysia Plan (2001-5) and the Ninth Malaysia Plan (2006-10) as a framework for PTV reform towards knowledge-based economic development. During the same period, 25 community colleges and 7 polytechnics were founded;
- iv) Introducing 22 vocational subjects in a day academic school consisting of five main clusters, and;
- v) A new curriculum structure for vocational majors in 2006 was introduced using a modular approach.

TVET Institutions in Malaysia

Currently, the problem of high unemployment due to skills incompatibility with the labour market among young people is no longer something that can be underestimated, but is the *Copyright* © *GLOBAL ACADEMIC EXCELLENCE (M) SDN BHD - All rights reserved*



biggest challenge that needs to be addressed around the world including countries in the Asia Pacific region (Ismail & Abiddin, 2014). Recognizing this fact, the Malaysian government has introduced ACET 2015 by formulating eight main agendas focused on empowering the field of TVET as stated in the Kuala Lumpur Declaration in preparation for meeting the needs of the job market and being able to adapt to the challenges of the 21st century. The agenda outlined in the Kuala Lumpur Declaration is a clear blueprint in line with the 21st century employment needs as outlined in the Malaysia Education Development Plan (Preschool to Post Secondary) 2013-2025 and the Education Development Plan Malaysia (Higher Education) 2015-2025. It will also take steps towards a successful TVET transformation that is also emphasized in the 11th Malaysia Plan (2016-2020). It was approved and adopted by 26 countries including Malaysia, Afghanistan, Bangladesh, Brunei, Cambodia, India, Iran, Japan, Kiribati, Kyrgyzstan, Laos, Maldives, Fiji Islands, Solomon Islands and Marshall, Nepal, Papua New Guinea, Samoa, Singapore, Thailand, Tonga, Turkmenistan, Tuvalu, Uzbekistan, Vanuatu, and Vietnam. This statement thus reflects similarities among ACET delegates that university education is not the only ticket to any job, but they still have options by looking at the potential and skills in it that need to be explored.

Therefore, to identify the true potential of TVET among young people, the member states involved must work hard to agree on strengthening the TVET system to increase its relevance and attractiveness in addition to academia. This certainly demands the responsibility of Asia Pacific member states including Malaysia itself to pledge its full commitment to TVET and sustainable skills development in the region. If the framework focused on this declaration is agreed and implemented by all member states involved, it will certainly be the solution to the problem of high unemployment among young people in the Asia Pacific.

According to the Ministry of Education (2019) TVET institutions in Malaysia are divided into two levels, namely basic and high levels. The centres of basic skills educations are the Vocational College and the Technical High School (SMT). At a higher level, there are two Education Centre's offered by the government, which are Community College, Polytechnic, and ILKA (Ministry of Education, 2019).



Figure 1: TVET Institutions in Malaysia

Source: Adapted from Ministry of Education, 2019



Basic Level

This is a tertiary institution where students plan to advance their career paths. Elementary school students will register online for the courses they are interested in. This application page is usually open after students receive the results of the Penilaian Menengah Rendah (PMR) or PT3 test. For SPM graduates who do not take part in post-PMR skills, they can apply for the General Skills Institute (ILKA) after SPM. At the highest level, there are several institutions that offer skills education (Ministry of Education, 2019).

Like the academic track, students will take the Level 3 or PT3 Assessment Exam at the lower secondary level. After obtained PT3 results, the teacher will usually give students exposure and advice about their tendency to pursue academic achievement or to turn to skills. For students who are more inclined to the flow of skills, they will attend Vocational Schools (KV) or Technical High Schools (SMT) (Hassan, Foong, & Ismail, 2019). For ease of understanding, skill stream is divided into three types:

- i) Technical Course Students will take SPM;
- ii) Vocational Course Students will take the Malaysian Vocational Certificate (SVM)
 & Malaysian Vocational Diploma (DVM);
- iii) Skills Training Course Students will take a Malaysian Skills Certificate.

Technical Course

Technical High Schools usually need better academic achievement. The subjects taught in technical high schools are more about theory than practical. Technical students will take the Sijil Pelajaran Malaysia (SPM) at the end of the semester (Kolej.my, 2018). Students will form to become engineers or play a major role in their fields. Among the subjects covered in the syllabus are physics, chemistry, biology, and engineering drawing. These subjects changed by the course.

Vocational Course

Vocational College was formerly known as a Vocational Training School. Initially, vocational schools have provided skills training for two years. It consists of theories and practical subjects. Vocational school students will take the Malaysian Vocational Education Certificate (SPMV) exam at the end of the semester. Vocational schools also offer a stream of skills (kolej.my, 2018).

Under the new national education policy, the Malaysian government has upgraded all vocational high schools in the country. This means that vocational high schools been converted to Vocational Schools since 2012 (Ministry of Education, 2019). The training duration is extending from two years to four years and students will take the exam for the Malaysian Vocational Diploma (DVM). As per the previous policy, students will be able to attend this college after completing third grade.

Skills Training Course

The Malaysian Skills Certificate is under the National Occupational Skills Standard (SKPK) developed by the Department of Skills Development (JPK) under the Ministry of Human Resources (formerly known as the National Vocational Training Council) (kolej.my, 2019). Malaysia Skills Certificate is a Certificate issued by JPK for a skills training program at the JPK accreditation center. The Malaysian Qualifications Framework or MOH is a qualification system offered at the national level and compared with international best practice. This



managed by the Malaysian Qualifications Agency (AKM), a legal entity under the Ministry of Higher Education (MOHE). This framework divides all qualifications into three sectors, which is related to the types of institutions that offer courses in:



Figure 2: Skills Training Course

Source: Adapted from kolej.my, 2019

Skill training courses involving basic level are offered in the skills sector Malaysian Skills Certificate Level 1-3 while others are high level (kolej.my, 2019).

Higher Level

According to Saibon, Kamis, and Zainol (2019), the current level of marketing of graduates is no longer measured by mere academic achievement but needs balanced with skills including technical and vocational training to be more relevant to changes in the 21st century job market environment of more skilled workers. Currently, the problem of high unemployment due to the mismatch of skills with labor market among young people is no longer an understatement, but the biggest challenge facing the world, including countries in Asia Pacific region. There are three major institutions in Malaysia that offering high-level education in TVET, namely community colleges, polytechnics, and ILKA (Ministry of Education, 2019).

The Ministry of Education has begun in 2017 to announce that admissions to higher level of TVET institutions for all students' recruitments handled by the University Central Unit (UPU) from the application process to the selection (Ministry of Education, 2019).



Figure 3: Higher Level TVET Institutions

Source: Adapted from Ministry of Education, 2019

Community College

Community College is under the Department of Community College (JPKK), the Ministry of Higher Education (MOHE), which is one of the government-owned Institute of Higher Education (IPTA). Community College is one of the TVET institutions that plays an important role in producing skilled workers who are the industry's top choice. The Community College provides skills training in technical and vocational fields including trade, mechanics, electricity, and other fields to meet the high industry demand for skilled labor ahead of the coming 4.0 industrial revolution.

In total, there are almost 103 Community Colleges throughout Malaysia that offer Certificate and Diploma courses as well as several short-term courses to meet the needs of marketers and residents. Short-term courses at community colleges are open to anyone regardless of age and specifically for locals. This allows individuals to increase their additional skills for a better life.





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Polytechnic

The Polytechnic empowered by not only offering education only at certificate and diploma levels, but also offering degree level. There are two types of Polytechnics: Premier Polytechnics and Conventional Polytechnics (kolej.my, 2019).

The Premier Polytechnic is a polytechnic that is comparable to standards at public universities. With the increasing number of high achieving students at SPM, this is certainly a great competition for students. Therefore, the Premier Polytechnic is specifically designed for students who are good at SPM but are not fortunate enough to enrol in a local university. There are 3 types of programs offered namely Diploma, Advanced Diploma and Master's degree. The polytechnic is also open for full time and part time study (kolej.my, 2019).

Conventional polytechnics are common polytechnics that we often hear where the programs offered are Certificate and Diploma level. This study is also open for full time or part time study (kolej.my, 2019).

ILKA

ILKA is a public skills institution consisting of four skills institutions, namely the Youth and Sports Training Institute (ILKBS), the Department of Human Resources Training Institute (ILJTM), Agriculture Skills Training Division (BLKP), and Majlis Amanah Rakyat (MARA). Thus, Ashari, Rasul, and Azman (2014) have stated that Malaysia intends to reach a high-country status by 2020. Therefore, a highly knowledgeable and skilled workforce needed to support these aspirations. In line with the transformation of the Malaysian economy, the ILKA has become one of the main channels to offer highly skilled workers to meet the employment sector. The following is a complete list of training centers under these four skills institutions:

Youth and Sports Training Institute (ILKBS)

The Youth Skills Development Division (BPKB) through the Youth and Sports Skills Training Institute (ILKBS) offers practical and practical training to provide the skills needed by young people to continue their chosen careers after graduation. ILKBS divided into several institutions:

- i) Institut Kemahiran Belia Negara (IKBN)
- ii) Institut Kemahiran Tinggi Belia Negara (IKTBN)
- iii) Akademi Kemahiran Belia Golf (AKBG)

Department of Human Resources Training Institution (ILJTM)

ILJTM was created to produce local talent from the level of training certificates to the Advanced Diploma in various skills courses. Due to rapid technological changes and demands of skilled labor, ILJTM has established several national training institutions. The following is a list of institutions below:

- i) Pusat Latihan Teknologi Tinggi (ADTEC)
- ii) Institut Teknikal Jepun Malaysia (JMTI)
- iii) Institut Latihan Perindustrian (ILP)

Agriculture Skills Training Division (BLKP)

BLKP was originally named the National Agricultural Training Council (NATC), established on October 1, 2002 based on a Cabinet decision on July 22, 2002, which agreed to start the National Agricultural Skills Training Program (PLKPK) to create an adequate agricultural *Copyright* © *GLOBAL ACADEMIC EXCELLENCE (M) SDN BHD - All rights reserved*



skilled workforce. Through the Ministry of restructuring in February 2017, NATC has changed its name to the Agricultural Skills Training Division. PLKPK certification is accredited under the Department of Skills Development (JPK), Department of Human Resources.

BLKP has been appointed as Lead Agency-ILB for agriculture and agro-based industries. BLKP functions as a body that develops, plans, coordinates, and evaluates agricultural skills training. To date, there are 14 Training Centre's that are still active in long-term training programs, namely the Malaysian Skills Certificate / Diploma, Agricultural Certificate, Veterinary Certificate, and Fisheries Certificate throughout Malaysia. Among the BLKP functions are:

- i) Functioning as a management body referred to in the field of agricultural skills training;
- Establish National Occupational Skills Standard (NOSS) and review their ii) suitability from time to time;
- Providing skilled and experienced training packages, learning facilities and iii) faculty based on the National Occupational Skills Standard (NOSS) in agriculture;
- iv) Evaluate the effectiveness and make improvements to the training system from time to time;
- Coordinate the implementation of courses and short-term training (skills v) upgrading) for target personnel and agriculture.

Majlis Amanah Rakyat (MARA)

The institution of expertise under the MARA is called the Mara Institute of Studies (IPMa). The main objectives of IPMa are:

- Develop and implement a recognized and quality Technical and Vocational i) Education Program to provide a high-income career;
- Increasing the number of Bumiputera's involvement in various technical fields ii) in this industry;
- Providing training facilities and infrastructure in line with current developments iii) and technological requirements;
- Improve teacher competence to meet the needs of i-teachers; iv)
- v) To produce competitive and tough technopreneurs;
- vi) Give opportunities for life-long learning.

The following is a list of institutions under IPMa:

- i) GIATMARA Institut Kemahiran MARA (IKM)
- ii) Kolej Kemahiran Tinggi MARA (KKTM)
- iii) MARA Japan Industrial Institute (MJII)

GIATMARA

According to Buntat and Yusof, (2012) GIATMARA was established to encourage the participation of the Bumiputera community in learning the various disciplines of art. The courses offered are closely related to the trade and industry aspects in the short term. Courses that are less than 20 credit hours in less than 16 weeks and lead to only certificates of attendance. GIATMARA also helps school dropouts and unemployed. They are encouraged to participate in the program so that with the skills provided, they can do something for the



country's prosperity (Buntat & Yusof, 2012). GIATMARA formation aims to provide technical and vocational skills training for rural and urban youth. This is to enable young people to acquire skills in preparation for skilled labor and technical entrepreneurs to meet the needs of industry and the needs of economic and entrepreneurial activities locally and nationally (Daud, 2010).

According to the Official Website of GIATMARA (GIATMARA Malaysia, 2019), the establishment of GIATMARA aims to provide technical and vocational skills training to rural and urban youth to enable young people to acquire skills in preparation for a skilled workforce and technical entrepreneurs to meet industry and activity needs economics and entrepreneurship locally and nationally. The budget for managing the GIATMARA operations is fully funded by the Malaysian government through allocations provided through MARA.

GIATMARA began operations in January, 1986 at GIATMARA Jitra (now known as Giat Mara Prima Kubang Pasu) with the first recruitment of 60 trainees in Domestic Electricity, Applied & Iron Bricks, and Iron Crafts. The high response and demand for the GIATMARA program has made Giat Mara grow exponentially in terms of the number and programs offered. At present GIATMARA offers 39 types of courses under 12 types of clusters, namely Mechanical, Architecture, Transportation, Manufacturing, Printing, Electricity, Computers & IT, Fabrics, Electronics / Electronics, Culinary, Hairdressing & Makeup and Hospitality (GIATMARA Malaysia, 2019). To date, there are 667 courses in 230 GIATMARA nationwide with more than 2,000 staff (Harian Metro, 2018).

Situation of Construction Labour in Malaysia

The Malaysian labour market has traditionally experienced a shortage of skilled human resources. The scarcity of workers in the country, especially in engineering, has resulted in more foreign engineers being recruited in many fields, especially those requiring technical expertise (Berita Harian, 2016). A national human resource in Malaysia lack the skills needed by the manufacturing industry, which contributes around 89% to all economic sector's needs (Jabatan Penerangan Malaysia, 2017). Because of the poor education and training system, the workforce is mostly made up of less-qualified workers. This has created critical skills gaps in almost all sectors of the Malaysian economy. Nearly two-thirds of the Small and Medium Enterprises (SME) sector in Malaysia, less than half of the workers have received proper vocational training in their field of work. Malaysian employers often say there is a gap between the skills they need and the skills of Malaysian workers (Mohamed Nor et al., 2015). It shows Malaysian construction industry has experienced a shortage of skilled workers in recent years (Zakaria, 2016).

The need for efficiency and competence have created with the adoption of new technology in most industrial sectors which has resulted in highly skilled demand; This requirement creates the need for skilled foreign workers in many fields to recruit skilled workers, such as engineers to cover severe deficiencies that cannot be met by national workers (Mohamed Nor et al., 2015; Ministry of Information Malaysia, 2017). The situation has worsened lately because countries have tried to implement the technology of the industrial revolution 4.0 (IR 4.0) which has affected most developing countries including Malaysia (Department of Information Malaysia, 2017). As a result, many projects have been planned and are being implemented, including: the petrochemical, chemical, cement, iron and steel industries must employ qualified, efficient, and skilled foreign workers, because local workers cannot meet these high requirements.



TVET Practices in Malaysia

The country's construction industry is projected to grow 7.5 percent, in line with the 5.5 percent Gross Domestic Product Projection (GDP). The positive outlook is driven by government infrastructure projects, especially in the construction sector. The government through the 2018 Budget has emphasized infrastructure spending, especially involving rural areas such as the Pan Borneo Highway project and the East Coast Railroad (ECRL) and Mass Transit (MRT) projects. These projects play an important role in driving the growth of the construction industry and helping to improve the existing railroad system, especially in the Klang Valley and elsewhere (Berita Harian, 2018).

The Construction Industry Development Board (CIDB) previously estimated the value of construction projects worth RM180 billion in 2018 driven by high-impact infrastructure projects that are being planned and are in progress. These include the Integrated Development of Oil and Petrochemical Filtering (RAPID), Kuala Lumpur-Singapore High Speed Train, MRT, Pan Borneo Highway, ECRL and Malaysian People's Housing (PR1MA). According to CIDB statistics, the value of construction projects in 2016 amounted to RM229 billion with 6,855 construction projects recorded. This figure is the highest ever recorded since 2010. Of the RM229 billion, 60 percent or RM137 billion were infrastructure projects, 19 percent or RM43 billion non-housing projects, 18 percent or RM41 billion housing projects and four percent or RM9 billion social facilities projects. Thus, from 2018 to 2020, the government will gradually impose the use of the Industrial Building System (IBS) on the private sector. This is a great opportunity for all industry players to come and be part of the 2016-2020 Construction Industry Transformation Project (CITP) and bring the industry to a higher level. To date, 8087 IBS contractors and 264 IBS component manufacturers have been registered under the Construction Industry Development Authority (CIDB) with the majority in major cities such as Selangor, Kuala Lumpur, Johor, Penang, and Sarawak.

Conclusion

Human resources are an important factor in the economic development of a country. One prosperity of a country is determined by the skill set, and positive attitude of people who will be used by the state. Many countries can develop quickly because of the human resource needs of these countries, including the abilities and skills of trained people. For example, countries such as Japan, Singapore, Germany, and Hong Kong have achieved advanced economic development by mobilizing their human resources. Human resources will directly help eliminate the economic downturn. Therefore, skills for the community must be developed efficiently. Nkondola and van Deuren, (2017) said human resource management is considered an important element in contributing to quality education. Therefore, absolute concern for poor TVET in developing countries will hamper the ability of human resource management in public TVET training providers (ILKAs).

Emphasis should be given to education and quality training to support national economic development in the construction industry-based knowledge. Buntat and Rajuddin, (2004) found that the importance of skilled engineers in the construction sector cannot be denied, because the states must build more ILKA to accommodate the growing demand for skilled workers for the construction industry. The largest and most asset of any country is its people because they exploit all forms of resources in the country. It also depends on the quality of people that can be created by the nation. If we look at some countries that were once very threatened and almost destroyed during World War II. For example, Germany and Japan where their country's



economy almost collapsed due to war. But with the skills emphasized by the state and a high spirit of those embedded in the hearts of the people, they can develop the country in the short term.

This is where technical education and training such as TVET should be empowered by each country so that people play an important role, and human resources in the country can be used as well as its productive potential for fully embraced.

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