11th Malaysia Plan: TVET as Game Changer

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Deputy Secretary General (Policy and International)
Ministry of Human Resources

Experience and Specialisation

27 years of experience in the public sector focusing on human capital issues include:

- Economic modelling - Economic-wide model on HRD and labour market
- Forecasting – demography; labour market; and agriculture sector projection
- Demand side HCD planning – labour market analysis
- Involvement in formulation of economic plan documents

Technical assistance on HCD planning:

- Sudan - The Long-Term Perspective Plan 2003-2027;
- Saudi Arabia - The Long-Term Strategy 2005-2025;
- Philippines - Region of Mindanao

Previous Institutions

- Economic Planning Unit:
  - Human Capital Development
  - Agriculture Section

- Ministry of Human Resources:
  - Director of Institute of Labour Market Analysis and Information (ILMIA)

Education

- Bachelor in Economics & Administration (Rural Economics)
  University of Malaya, 1986
- Post Graduate Diploma in Economics, University of Manchester, United Kingdom, 1995
- Master of Arts in Economics, University of Manchester, United Kingdom, 1996
Highlights of the
ELEVENTH MALAYSIA PLAN, 2016-2020

In retrospect ...

Malaysia has recorded rapid socio-economic development ...

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<tbody>
<tr>
<td>Absolute poverty rate, 2014</td>
<td>0.6%</td>
<td>RM6,141 Average household income, 2014</td>
<td>76.1% Home ownership, 2014</td>
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<tr>
<td>Access to potable water</td>
<td>95.1%</td>
<td>Access to electricity supply</td>
<td>97.6%</td>
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<tr>
<td>Ranking</td>
<td>18/140 Most competitive nation, 2015</td>
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But many challenges remain ...

- **External**
  - Low world price of commodities
  - Depreciating value of Ringgit
  - Slowdown in China

- **Internal**
  - Low productivity level
  - Slow economic structural transformation
  - Lack of high-income jobs and skilled workers
  - Declining comparative advantage in exports
  - Limited fiscal space
  - Half of households remain in the lower middle-income group
THEME OF THE ELEVENTH MALAYSIA PLAN (11MP)

“Anchoring growth on people”

1. People are the bedrock of the nation
2. Preparing people for the future
3. Everyone enjoys growth and development

The 11MP has 6 strategic thrusts to address the needs of the rakyat and 6 game changers to accelerate Malaysia’s development ...

1. Enhancing inclusiveness towards an equitable society
2. Improving wellbeing for all
3. Accelerating human capital development for an advanced nation
4. Pursuing green growth for sustainability and resilience
5. Strengthening infrastructure to support economic expansion
6. Re-engineering economic growth for greater prosperity
Strategic Thrust 3
Accelerating human capital development for an advanced nation
Main strategies and selected outcomes

Game Changer
Enabling industry-led Technical and Vocational Education and Training (TVET)
60% of the 1.5 million jobs that will be created during the Eleventh Plan will require TVET-related skills

3.7% Labour productivity growth rate per annum
40% Compensation of employees to GDP in 2020
RM 2,500 Monthly median wage in 2020

Top 100
100% Student enrolment from preschool to upper secondary

Transforming TVET to meet industry demand
225,000 Intake of SPM leavers to TVET programmes

Strengthening lifelong learning for skills enhancement
58% Increase in number of employees that will benefit from expansion of the HRDF act

TVET Establishment

1964
- IKBN Dusun Tua under MoYS, to provide skills training.
- ILP Kuala Lumpur under MoHR, to provide skills training.

1969
- Ungku Omar Polytechnic under MoE, to provide TVET training.

1986
- GIATMARA Pekan, and 2 other institutions under MARA, to cater skills training for the less academically inclined students.

1998
- JMTI under MoHR, cooperation between Malaysia-Japan to provide TVET training for industry
- UniKL MiAT under MARA, to provide TVET training for higher education

2000
- ADTEC Batu Pahat under MoHR, to provide high-skilled TVET training.
- Kolej Kemahiran Tinggi MARA Pasir Mas under MARA, to provide high-skilled TVET training.

2001
- Community College under MoE, to provide TVET training and lifelong learning
- Akademi Binaan Malaysia under CIDB, MoW for skills training in construction

2004
- Kolej Pertanian Bukit Tangga under MoA, to provide skills training in agriculture.

1968
- IKM Jasin under MARA, to provide skills training

1983
- CIAST commissioned under the ASEAN HRD Project in collaboration with MoHR, for training of TVET instructors.

1992
- GMI under MARA, to provide high-skilled TVET training.

1999
- MTUN consists of 4 public universities to provide higher education for TVET

2012
- Vocational College, under MoE to provide TVET training for post lower secondary students.
TVET Scenario

TVET is a key sector …with the Government playing an active role

~1,000 TVET institutes, 45% of which are public sector institutes

200,000 TVET students enrolled per annum, with 70% in public sector institutes

At least 6 Ministries own, fund and operate the public sector institutes

2 very distinct agencies regulate the sector (i.e., Department of Skills Development and Malaysian Qualifications Agency)

At least RM1.3Bn Govt. funding allocated in 2010 to operate the public institutes (excluding student loans)

1. Excludes state institutes  2. Students loans in 2010: 0.5Bn to student in public and 0.1Bn to students in private

Access & quality: Institutions-based Training

- Currently more than 1,000 institutions offering TVET from federal ministries, state skills centres and private providers.

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<table>
<thead>
<tr>
<th>Qualifications</th>
<th>MoHR</th>
<th>MoYS</th>
<th>MoRD</th>
<th>MoE</th>
<th>MoA</th>
<th>MoW</th>
<th>MinDef</th>
<th>States</th>
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<tr>
<td>Degree in Engineering Technology (Level 6)</td>
<td>6</td>
<td>12</td>
<td>13</td>
<td>19</td>
<td>20</td>
<td>23</td>
<td>24</td>
<td>25</td>
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<tr>
<td>Advanced Diploma and Diploma in Technology (Level 4 &amp; 5)</td>
<td>7</td>
<td>16</td>
<td>17</td>
<td>21</td>
<td>22</td>
<td>26</td>
<td>27</td>
<td>28</td>
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<tr>
<td>Japanese Advanced Skills Diploma and Advanced Diploma in Technology</td>
<td>8</td>
<td>18</td>
<td>19</td>
<td>21</td>
<td>22</td>
<td>26</td>
<td>27</td>
<td>28</td>
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<tr>
<td>Malaysian Advanced Skills Diploma and Advanced Diploma in Technology (Level 4)</td>
<td>9</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>26</td>
<td>27</td>
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<tr>
<td>Malaysian Skills Diploma and Diploma in Technology (Level 4)</td>
<td>10</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
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<tr>
<td>Malaysian Skills Certificate (Level 3) and Certificate of Technology (Level 3)</td>
<td>11</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
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1. Excludes state institutes  2. Students loans in 2010: 0.5Bn to student in public and 0.1Bn to students in private
TVET Issues and challenges

**Uncoordinated governance**
- Two accrediting bodies
- Unclear TVET articulation
- Lack of industry input in curriculum design

**Lack of recognition for Technologist**
- Technologist not recognised as professionals
- Wage premium in public and private sector
- Limited access to Higher Education

**Fragmented TVET Delivery**
- Multiple Providers
- No specialization in public TVET
- No rating system for performance

**Competency gaps among instructors**
- No centralised database on instructor profile
- Minimal industry exposure
- Skills deficiencies

**TVET Issues and Challenges**

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**TVET as Game Changer**

**Transforming TVET to meet industry demand**

**Strengthening the governance of TVET for better management**, through streamlining of the national qualification network, and harmonizing various rating systems across both public and private TVET institutions

**Enhancing the quality programmes to improve graduate employability**, by enabling industries to lead curriculum development, enhancing cost efficiency and increasing enrolment

**Rebranding TVET to increase its attractiveness**, by promoting TVET as an attractive career choice
TVET ASPIRATIONS

Transforming TVET by enabling industry led approach is crucial to produce skills human capital that meet the industry demand and support the migration of all economic sectors.

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<tr>
<th>Governance</th>
<th>As at</th>
<th>To be</th>
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<tr>
<td>2 Accreditation Agencies (MQA and DSD) with different sets of qualifications</td>
<td>▪ Single qualification system adopted by both MQA and DSD</td>
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<tr>
<td>▪ Different quality rating systems for public and private TVET institutions, depending on which Ministry the institution is registered with</td>
<td>▪ Single rating system for both public and private TVET institutions</td>
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<tr>
<th>Programme Delivery</th>
<th>As at</th>
<th>To be</th>
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<tr>
<td>Design and delivery of curriculum led by individual TVET institutions or Government</td>
<td>▪ Design and delivery of curriculum led by industry, in partnership with TVET institutions and Government.</td>
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<td>▪ No specialization amongst TVET institutions</td>
<td>▪ Institutions to specialise in and create Centre of Excellence in niche areas of expertise</td>
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<th>Capacity</th>
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<td>164,000 intake per annum in 2013</td>
<td>▪ 225,000 intake per annum in 2020, by maximising use of existing institutions</td>
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<th>Profile</th>
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<th>To be</th>
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<tr>
<td>▪ Limited recognition and low premium</td>
<td>▪ Career of choice for students</td>
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**By 2020:**
- Higher enrolment in TVET, 45% from total SPM leavers (225K students).
- Only 5% direct entry to Labour Market after SPM

**Expected Post-SPM Pathways in 2020**

Pathways of SPM leavers (2010)
- 237K Diploma/Near Diplomists (52%)
- 113K Technical Education & Vocational Training (25%)
- 102K Labour Market (23%)

Pathways of SPM leavers (2012)
- 239K Diploma/Near Diplomists (50%)
- 147K Technical Education & Vocational Training (31%)
- 85K Labour Market (19%)

Expected Pathways of SPM leavers (2020)
- 250K Diploma/Near Diplomists (50%)
- 225K Technical Education & Vocational Training (45%)
- 25K Labour Market (5%)
**Expected Outcomes:** TVET under 11th MP

- **Students:** Clear education pathways and employment with better income
- **Institutions:** Specialisation and optimization
- **Programme:** Industry compliance and high employability
- **Instructor / Lecturers:** Highly skilled and better delivery
- **Industry:** Better engagement with Institutions

**Becoming a high income nation**
The priority sectors will be the growth engines for the economy

The manufacturing sector will transition towards more high-value, diverse and complex product.

Conclusion
A greater collaboration among us is a must

Game changer to transform Malaysia into a high-income nation whilst strengthening the civil society by 2020

Provide highly-skilled human capital & a progressive life-long learning workforce

Address present & future demand-supply gap & skills gap focusing on high-priority sectors
### Way forward

#### Issues

**Low Income**
TVET graduates are earning very low wages in the industry

**Funding Not Demand Driven**
Current funding model is not outcome driven

**Instructor Quality**
TVET public instructors have little to no industry experience and industry attachment

**Industry Skills Gap**
Jobs being created in the industry are low skilled to semi-skilled jobs

#### Short Term Solutions

**Tracer Study**
TVET Tracer Study to cover all TVET institutions across different Ministries & agencies

**Contestable Funding**
TVET institutions to compete for allocation based on number trained and selection by industry to provide services

**Matching Grant**
Grants given to TVET institutions which obtained assistance from industries in the form of training, equipment and consumables.

**Instructor Exchange**
Exchange programme to upskill instructors for learning and developmental growth

**Localised Customisation & CoE**
Transform selected TVET institutions to become CoE meeting the TVET needs of priority sectors at specific locations

#### Long Term Solutions

**Operational Efficiency**
Benchmark TVET institutions efficiency such as comparing cost per person trained

**Performance Based Funding**
Leveraging on data such as tracer on employability and income earned to drive allocation of funding to TVET institutions

**Instructor Exchange**
Recognise & require industry experience for TVET instructors

**Industry Experience**
Corporatise CoE public TVET institutions to be governed and run by industry

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**Thank you**