



5th PRC-ADB Knowledge Sharing Platform Sustainable Vocational Training Towards Industrial Upgrading and Economic Transformation



MALAYSIA'S VOCATIONAL SYSTEM AND HUMAN RESOURCES DEVELOPMENT PLANNING



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CONTENT



HRD Framework and Overview of TVET



Demand for TVET graduates



Mainstreaming TVET under 10th Malaysia Plan

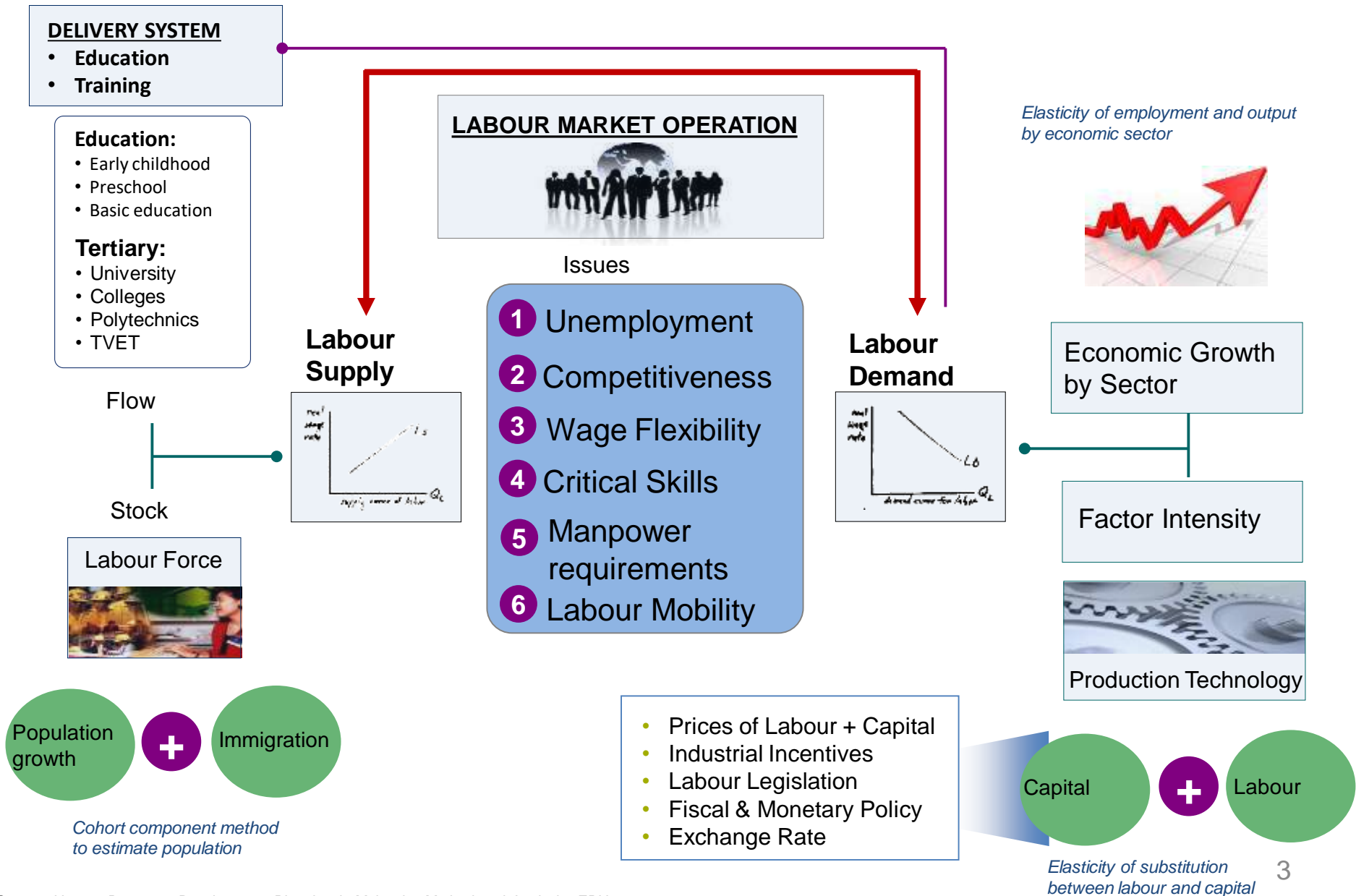


Updates on Rationalisation of TVET

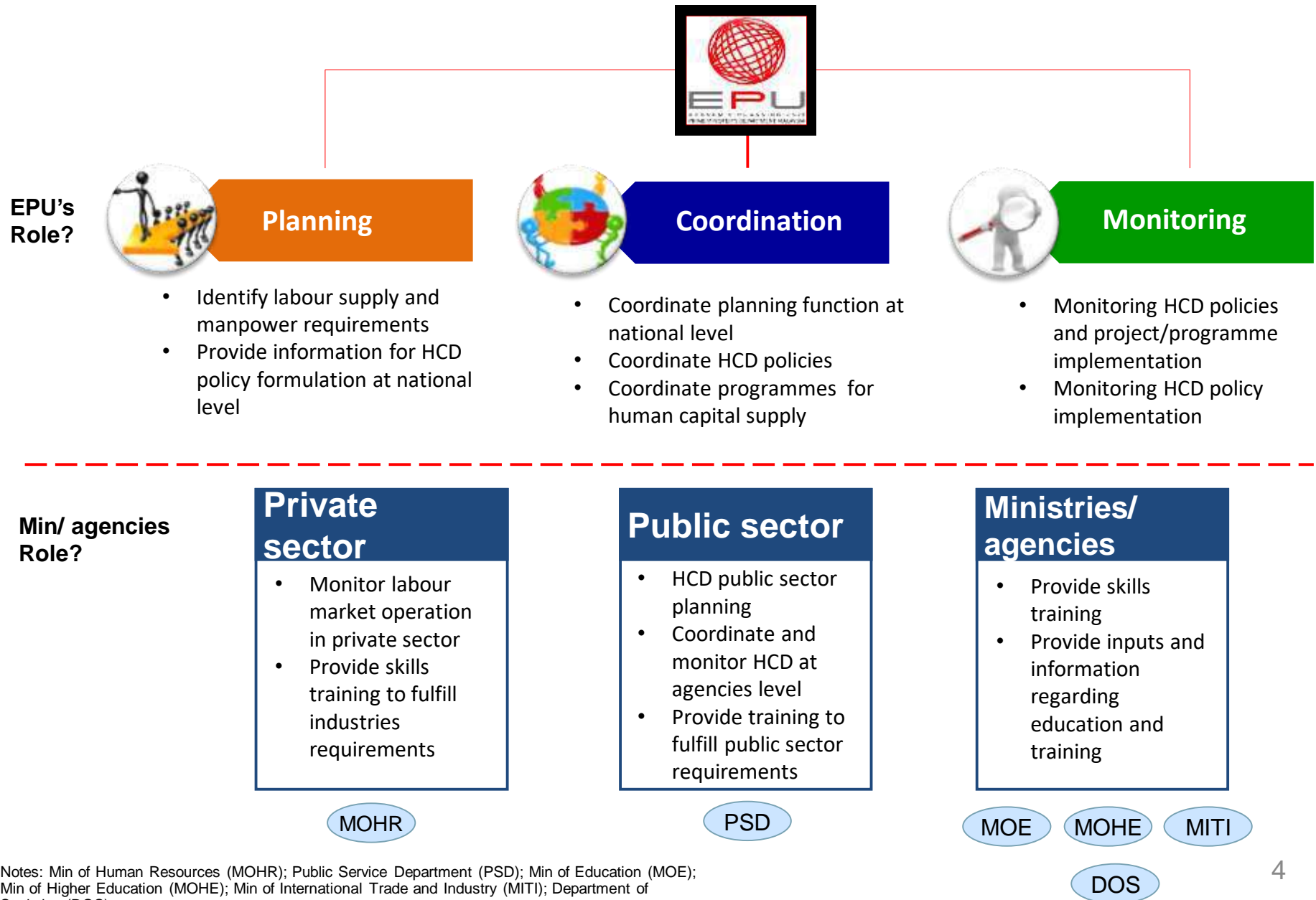


Conclusion

HCD Planning Framework



HCD Planning Machinery



TVET Scenario

TVET is a key sector ...with the Govt. playing an active role

**~1,000 TVET institutes,
45% of which are public sector institutes¹**

**230,000 TVET students
enrolled per annum, with 70% in public
sector institutes**



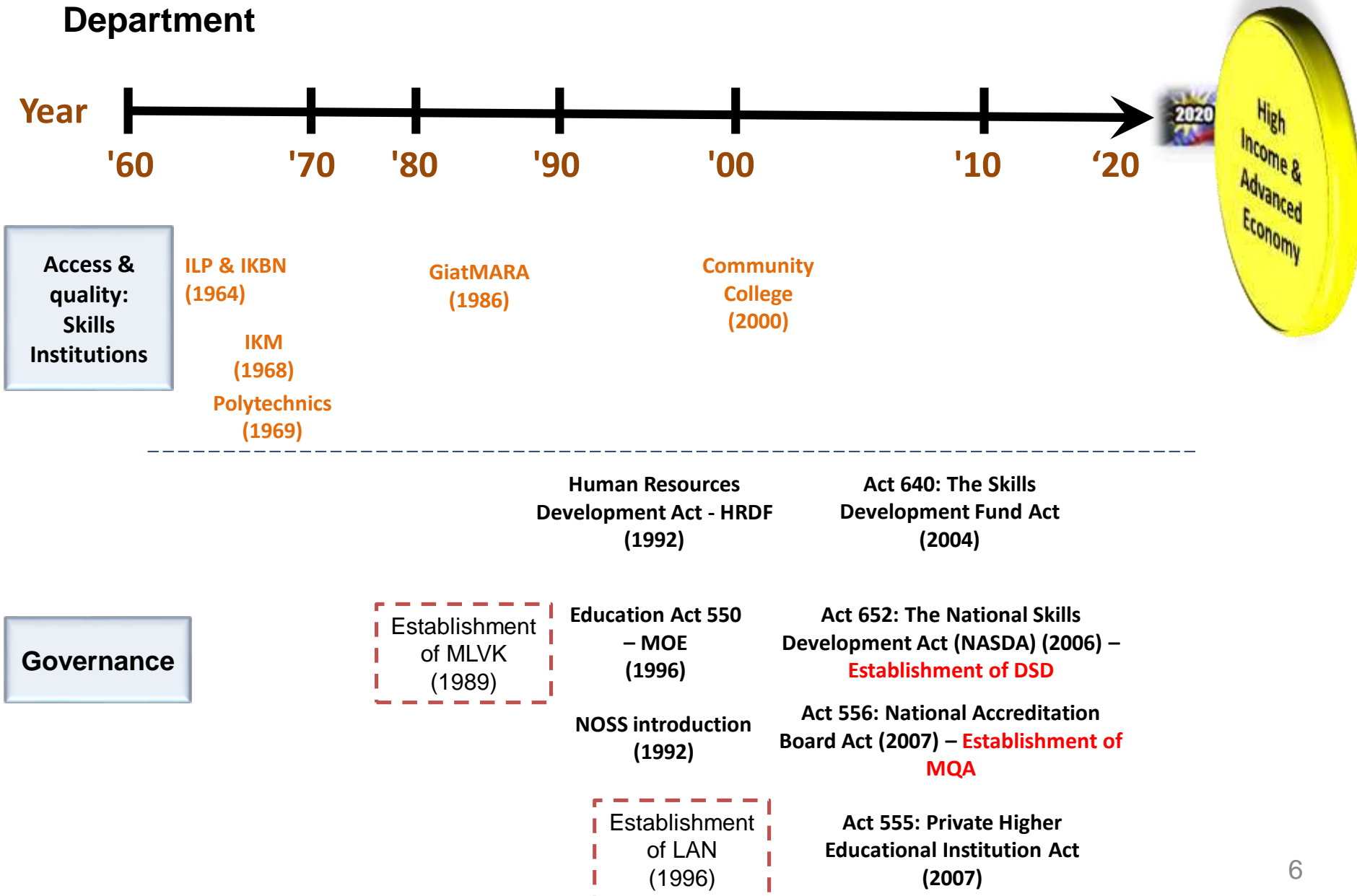
**8 Federal Ministries/ agencies
own, fund and operate the public sector
institutes**

**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 loans²)**

TVET Evolution in Malaysia

- ❑ Establishment of training institute started as early in 1906 by Public Works Department



Access & quality

- Access to TVET are divided into two, Institutions-based training and Industry-based training

Institutions-based training



Continuations of studies for secondary school leavers and workers enrolled in public or private training institutions for formal training based on training curriculum

Skills Training

Industry-based training



Expansion of access to TVET and certification for workers through various programmes such as National Dual Training System (NDTS) and Accreditation of Prior Achievement (APA);

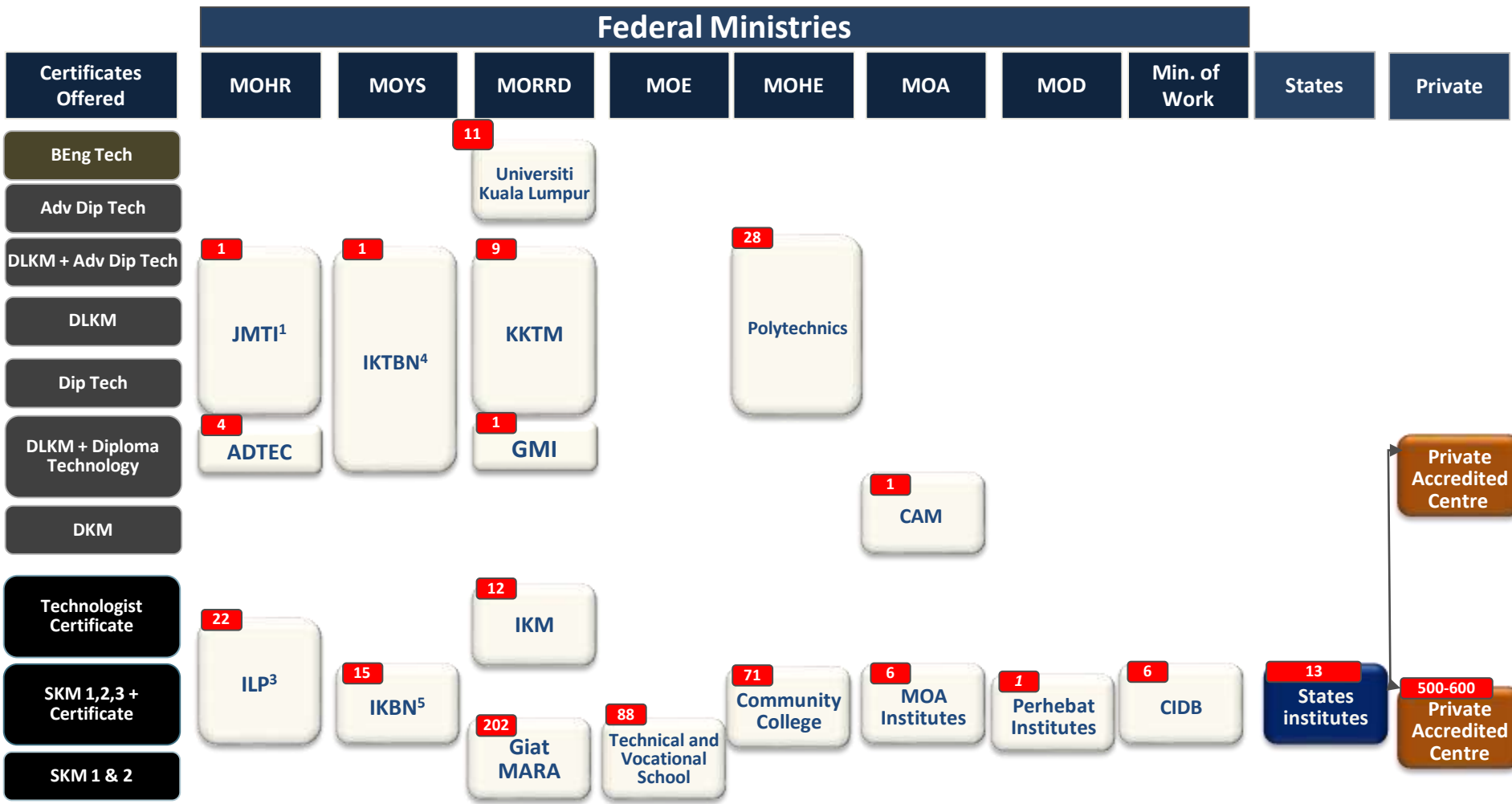


- Certificates
- Diploma and Advanced Diploma;
- Degree and higher

- Malaysian Skills Certificates Level 1, 2 or 3;
- Malaysian Skills Diploma (Level 4); or
- Malaysian Skills Advanced Diploma (Level 5).

Access & quality: Institutions-based Training

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



Access & quality: Industry-based Training



i.e: NDTs and APA under DSD

National Dual Training System (NDTS)

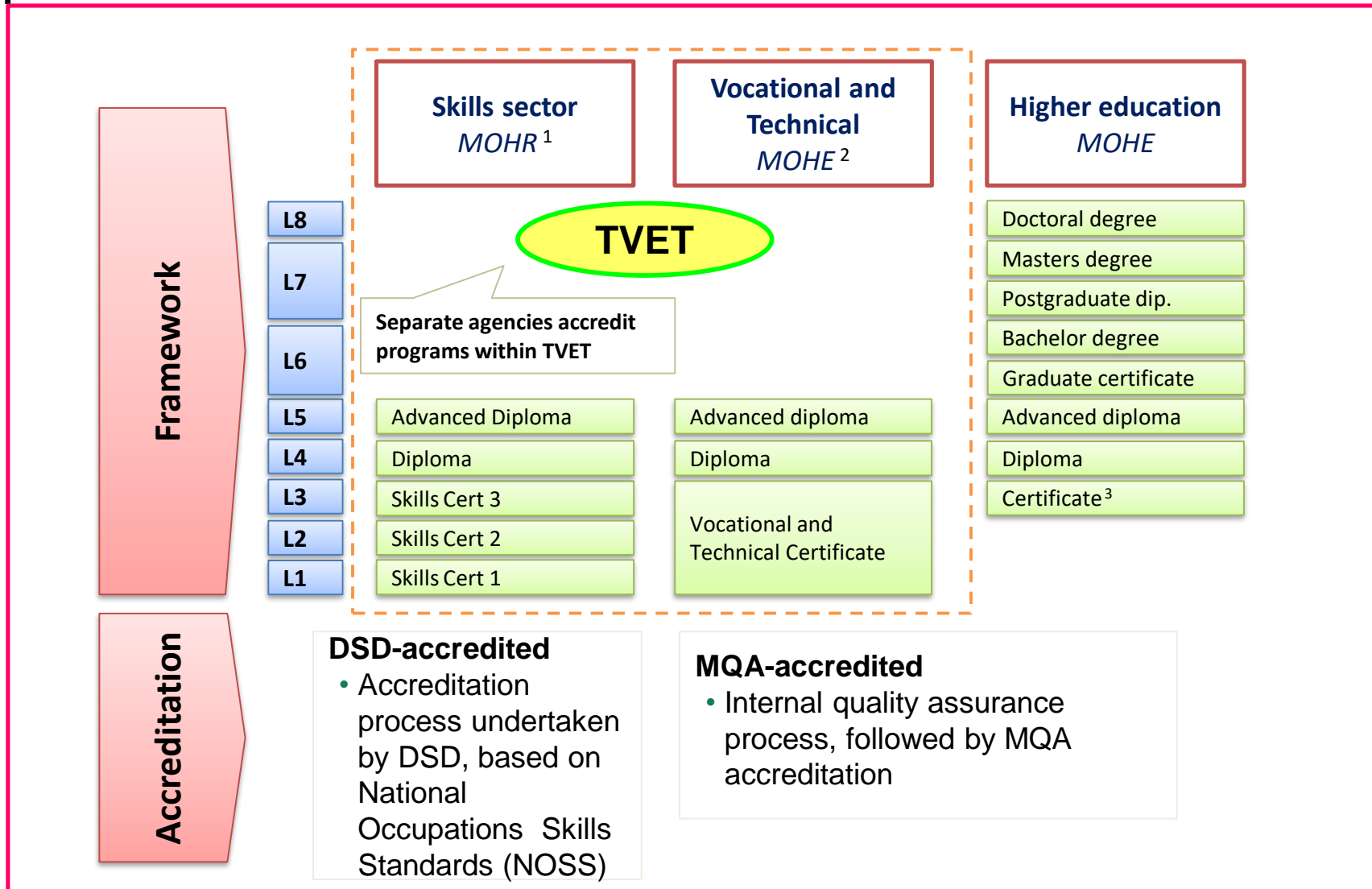
- ☐ Producing K-workers through comprehensive and up-to-date method inline with the industries needs
- ☐ Implementations in 2 locations;
 - training institute – for basic and theories (20-30%)
 - Work place – practical and hands-on (70-80%)
- ☐ 29 training curriculum from 2005 – 2011.
- ☐ [Participation of 26,000 trainees and 1,119 companies from 2007 to 2011.](#)

Accreditation of Prior Achievement (APA)

- ☐ Programme to recognise skills workers expertise through their work experience
- ☐ Workers doesn't have to attend formal training but register and present evidences of the acquired expertise to be evaluated and verified based on specific NOSS requirement
- ☐ [41,725 number of participants graduates under APA programme from 2005 to 2011](#)

Accreditations of TVET sectors

Malaysian Qualifications Framework: "Skills" and "Vocational & Technical" separate sectors with distinct accreditation



1. MOHR- Ministry of Human resource

2. MOHE – ministry of Higher Education

3. Certificates in higher education sector currently in the process of being phased out. Certificates can either be skills-based or knowledge-based

Funding

**National Higher Educational
Fund Act**

**Human Resources
Development Act - HRDF (1992)**

**The Skills Development Fund
Act
(Act 640)**

Governance

Malaysian Qualifications Agency Act
Ministry of Higher Education

Private Higher Educational Institution Act
Ministry of Higher Education

Education Act 1996 (Act 550)
Ministry of Education

**The National Skills Development Act
(NASDA) (Act 652),**
Department of Skills Development

Funding



FUNDING



STUDENT

Scholarship

- PSD / MARA
- Private Companies

Study Loan

- National Higher Educational Fund
- Skills Development Fund (SDF)
- Human Resource Development Fund

INSTITUTION

Buying Places

- Govt buy space in private training institution (highly demanded and not being offer by Public Institutions)

Special Programme funding (High end industry)

- i.e: Plastic industry from manufacturer into designing industry

i.e: Funding for Skills Sector

- ❑ Funding model for Skills sector can be divided into two method namely, tertiary educations and pre-employment / in-service.

Tertiary education

The Skills Development Fund (SDF)

- ❑ The SDF is managed by the Skills Development Fund Corporation which was established through the Skills Development Fund Act 2004 (Act 640)
- ❑ Established in 2000 to provide financial assistance in the form of loans to trainees, particularly to school-leavers undergoing training programmes under the Malaysian Skills Certification System

Pre-employment and In-service

Human Resources Development Fund (HRDF)

- ❑ Establish thru enactment of the Human Resources Development Act in 1992, and establishment of Human Resource Development Corporation (PSMB)
- ❑ Imposition of a levy on employers in services and manufacturing industry sectors to be collected into the HRDF as a central pool of training fund.
- ❑ All employers who have contributed to the levy are eligible to apply for training grants or financial assistance for the purpose of undertaking employees training.
- ❑ The fund aims to enhance private industry role in the provision of training to increase the supply of trained workforce in the country.

Tax Exemption

- ❑ Human resource development (HRD) paid under PSMB is classified as allowable expenses for tax purpose and considered as an expense incurred in the production of gross income

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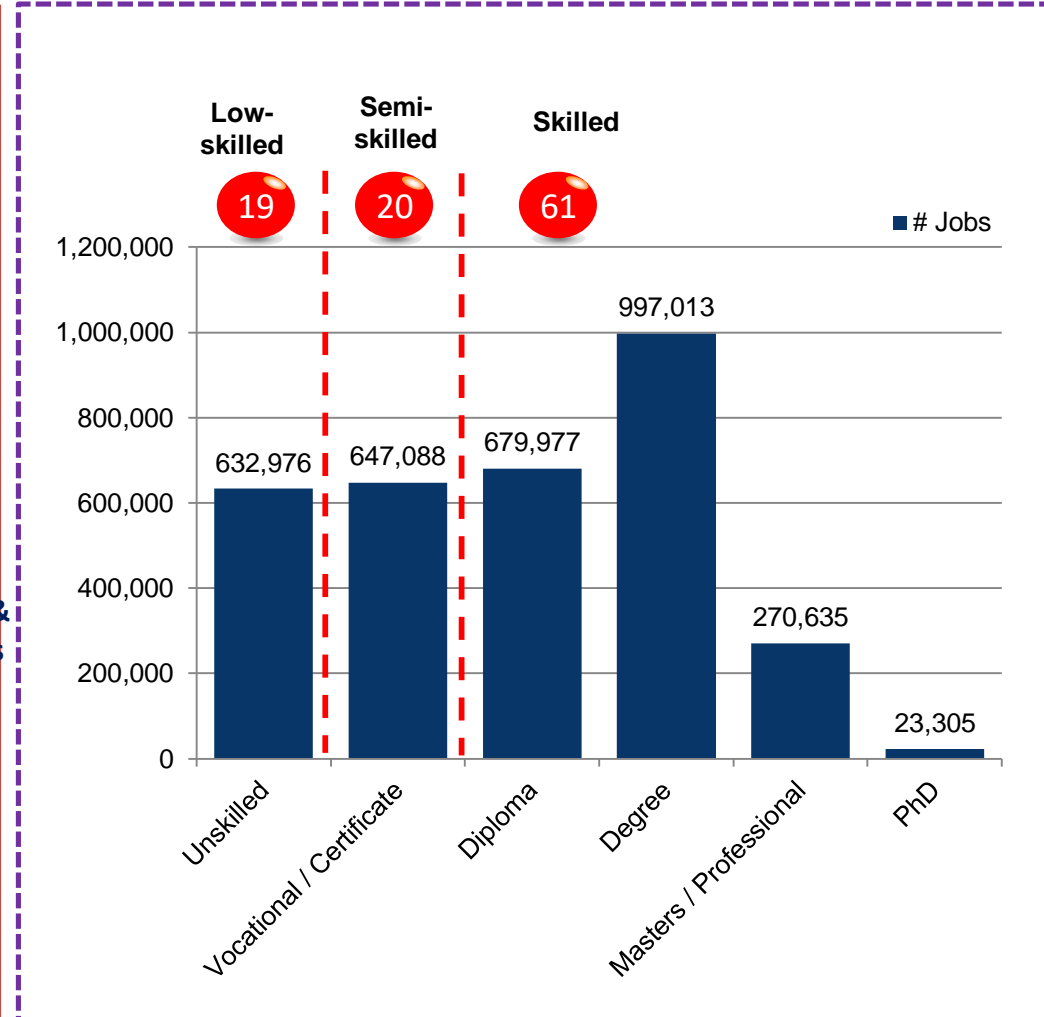


Conclusion

NKEAs Demand

Selected NKEAs to impact economic growth in Malaysia...

....expected to create 3.3 million additional jobs by 2020 (61% skilled)

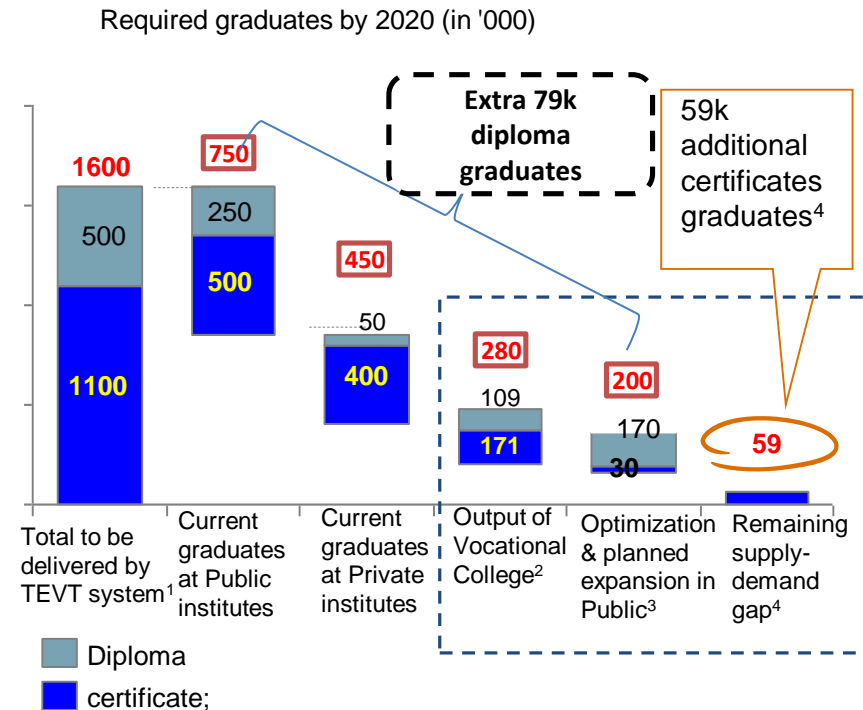


Our national economic growth demands an increasingly higher number of TVET graduates going forward

Economic growth demands additional ~1.3Mn quality TVET workers



High level estimate of increased capacity of TVET institutes required



Assumptions:

1. Total to be delivered by TVET system: graduates required for NKEA (1,330), with 15 to 20% moving to further education + graduates to be delivered for non NKEA sectors based on 2010 data (350,000) and excluding 350,000 diplomas to be produced by universities (public, private and KTAR. – source MOHE).
 2. Output from Vocational Colleges, Ministry of Education (5% from student enrolment).
 3. Optimization: additional capacity and redeployment to diplomas at Polytechnics (target: 356,000 diplomas by 2020), planned new institutes at MOHR and MOYS and hypothesis of potential optimization of utilization rate to 100% vs. 80-90% on average today (excl. Polytechnics).
 4. Total graduates per year: 25 to 30K, or 50K capacity seats based on average of 2 enrolment years per graduate.
- Source: Data request from TVET agencies, Tracer Studies at MOHR, MOYS and Polytechnics, NKEA forecasts, BCG analysis

Up-skilling of workforce to ensure quality flow and stock to support economic growth and industries demand..

Flow

New entry to workforce

Meet industry demand



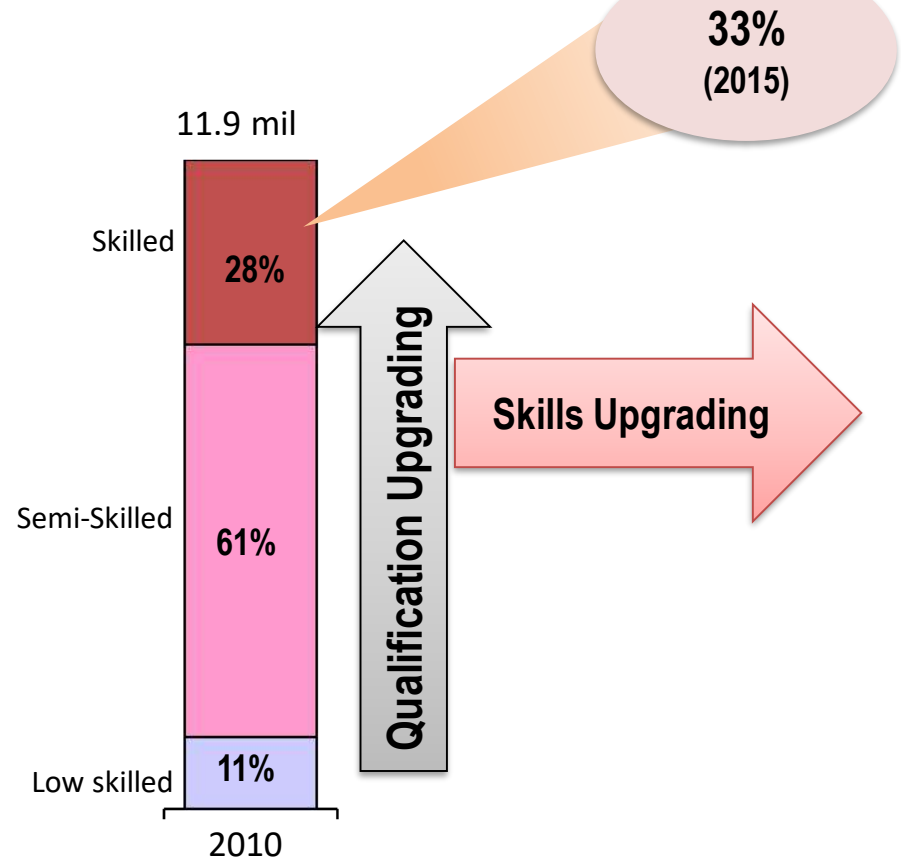
**Bridging Programmel
Finishing School**

**Output from Educations
Institutions**



Stock

Existing Workforce



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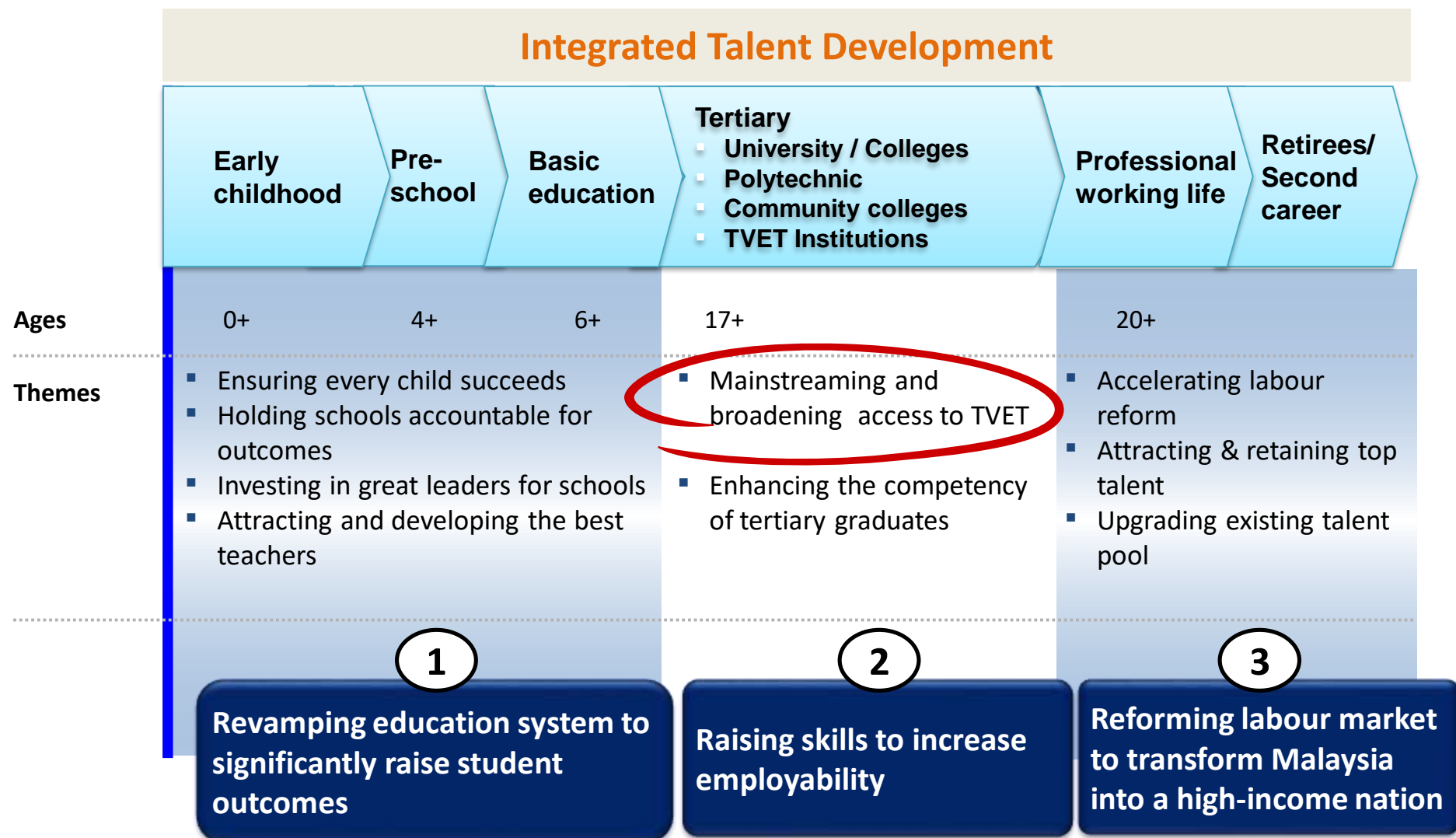
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Conclusion

Integrated Talent Development Framework 10th MP

Comprehensive human capital framework planned in 10MP, addressing entire education and professional cycle, seamless co-ordination and implementation



Mainstreaming and broadening access to TVET

4 strategies towards mainstreaming TVET by 2015 under 10th MP

Improving perception of TVET

National Media Campaign to improve public awareness

Counselors in school to provide comprehensive career guidance in TVET.

Streamlining the delivery of TVET

Funds allocation based on performance of institutes, developing a system to rate the institutions.

Emphasizes on workplace training and expanding the National Dual Training System.

The approach of buying places from private institutions will be increased and expanded.

Upgrading and harmonizing TVET curriculum quality

Harmonize the quality of TVET curriculum and alignment with industry requirement

Establishment and of curriculum bank to deposit all curricula developed

Malaysian Skills Certificate to be adopted as national certificate for TVET

Developing highly effective TVET instructor

Accelerate TVET teaching profession with attractive career options and flexible pathways of entry

Part-time working arrangement will be expanded to encourage participation of instructors from industry

Expanding of Centre for Instructor and Advanced Skills Training with new approaches and methodologies to increase instructors competencies

Why Mainstreaming TVET?

Opportunities for TVET rationalisation....

1

Employer demand

- Demand for skilled workforce expected to rise. About 61% of new jobs created under NKEA initiatives are skilled, of which 1/3 requires TVET qualification. In addition, 20% will be semi-skilled, which also requires TVET qualification.
 - Hence, need to prioritise training of TVET graduates to fulfill most pressing sectors
-

2

Students

- Better definition of educational pathway to support students' intellectual advancement and provide better alignment with industry needs
 - Professional pathway also need to support students' career advancement with better promotion opportunities
 - Repositioning of TVET as a viable alternative to traditional education is crucial
-

3

TVET providers

- Performance and quality of TVET can be further enhanced by utilising demand side funding
 - KPIs and rating system need to be strengthened to enforce quality of providers
 - Enhancement of business and operating models necessary to support rationalisation
-

4

TVET offerings

- Opportunity to rationalise and consolidate TVET course offerings to improve delivery, quality and cost efficiency as well as better match industry requirements
-

5

Governance

- Optimise coordination between Ministries, agencies and institutes
- Need to increase cooperation and linkages with industry players, improve employability and demand of TVET graduates

Study to rationalise TVET was conducted...

- ❑ Boston Consulting Group (BCG) was appointed and monitored by MOHR
- ❑ Study conducted over 16 weeks
- ❑ Findings were tabled to Cabinet Committee for HCD

Findings By BCG

- 1 **Redefine the governance of the TVET sector to drive performance**
 - Introduce a new governance structure (Oversight Body)
 - Enhance governance & delivery of Malaysian Qualification Framework (Merge the Skills and Technical and Vocational sectors)
- 2 **Realign offerings across public institutes to meet economic needs**
- 3 **Utilize funding as key lever to drive direction and performance of institutes**

Cabinet Comm. for HCD 3/20121 (22 Sept 2011)

Decisions;

- EPU, JPM and other stakeholders to review the suggestion for introduction of new governance structure (Oversight Body) and coordination of governance & delivery of MQF;
- Agree for realignment of course offerings to meet economic demands; and
- Funding will be used as a key lever to drive direction and performance of institutions.

Cabinet Comm. for HCD 1/2012 (10 Feb 2012)

Decisions;

- Functions of Oversight Body carried out by natural owner;
 - Establishment of a taskforce lead by MQA to harmonize TVET offering and oversee the implementations of Oversight body functions
- Status quo of Malaysian Qualification Framework BUT;
 - to provide clearer articulations between the sectors
 - to provide better pathways for Recognition of Prior Learning (RPL).

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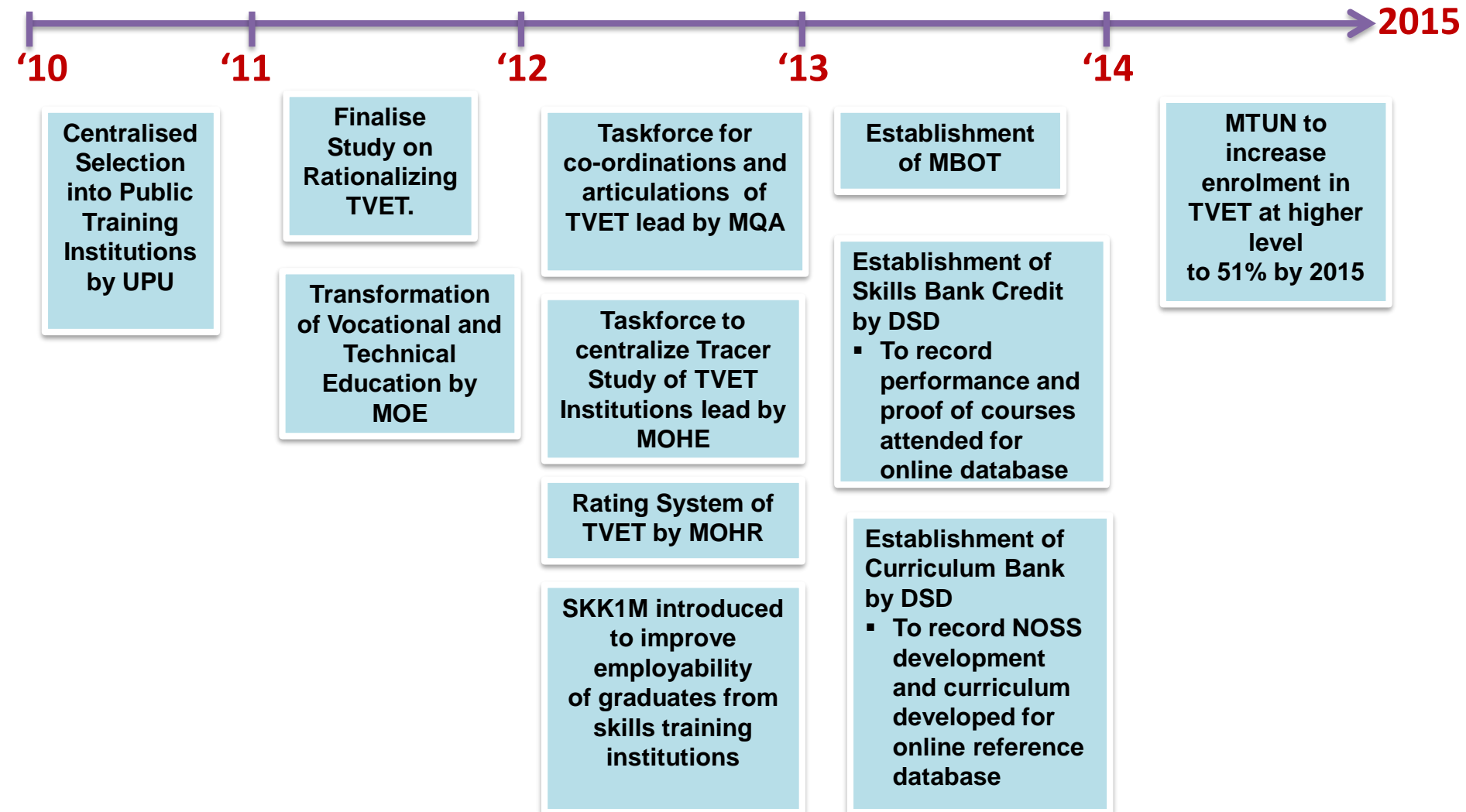
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Conclusion

Timeline: Rationalisation of TVET

EPU to monitor the progress based on timeline



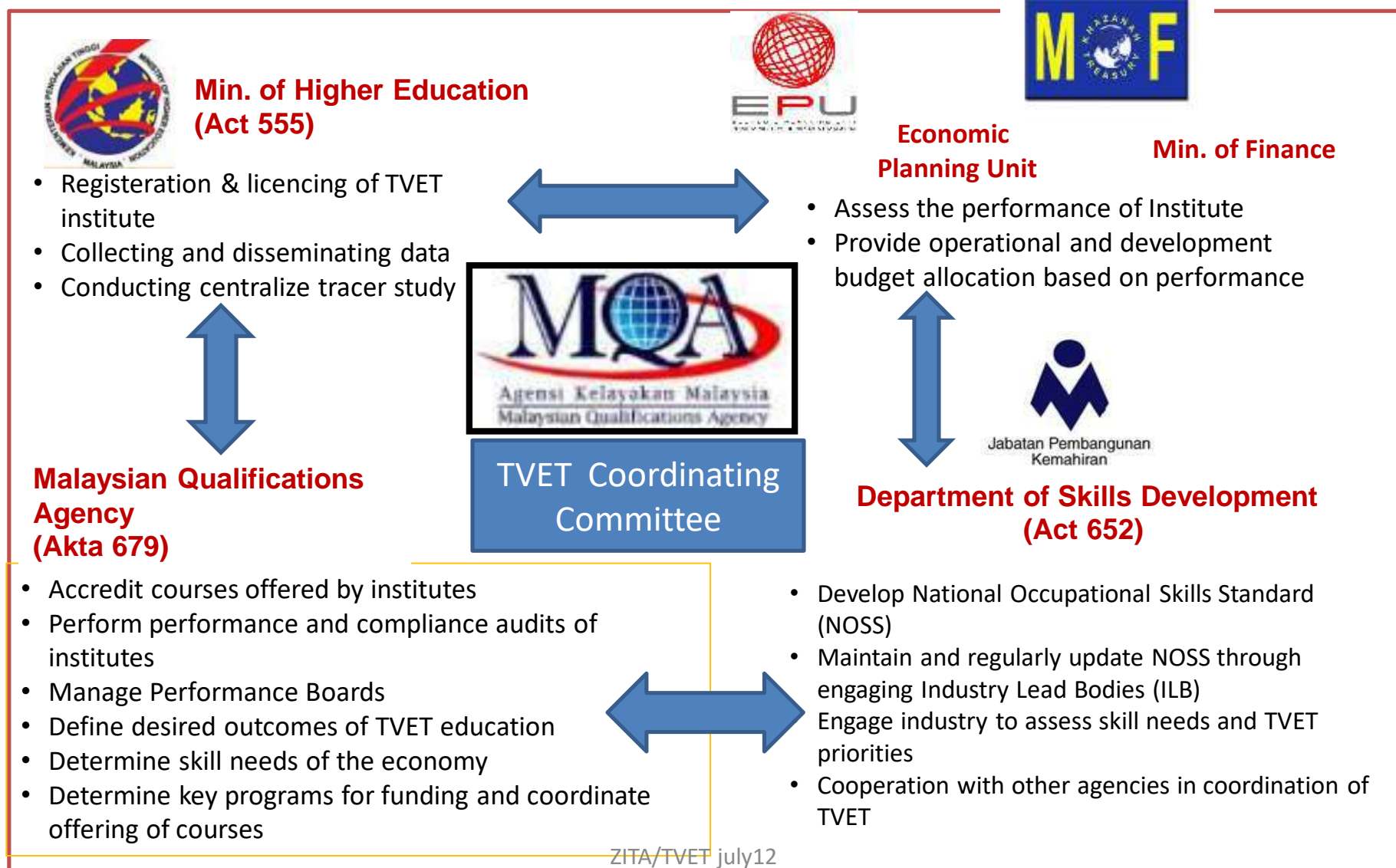
Updates : Centralisation of TVET applications

- Managed by Bahagian Pengurusan Kemasukan Pelajar, Jabatan Pengajian Tinggi.
- Commencement for first intake in 2011

Centralised application for TVET 2012

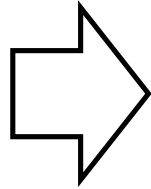
- Institutions to provide consistent projection for new intake
- UPU to offer based on intake capacity projection by institutions
- Decentralization of appeal direct to institutions after first offer by UPU
- Institutions need to report back UPU on actual registered student for data updates
- DSD and UPU to lead the promotions for TVET publicity
- MOHE to update EPU for analysis

Updates: Taskforce for TVET coordinations lead by MQA



Phase 1 : 2012-2013

Phase 2 : 2013-2015



**Phase 1:
Strengthening TVET systems –
preliminary matters**

Activity 1

– Forming of Steering Committee

Activity 2

– Stock Taking

(Gaps, Issues and for Future Planning)

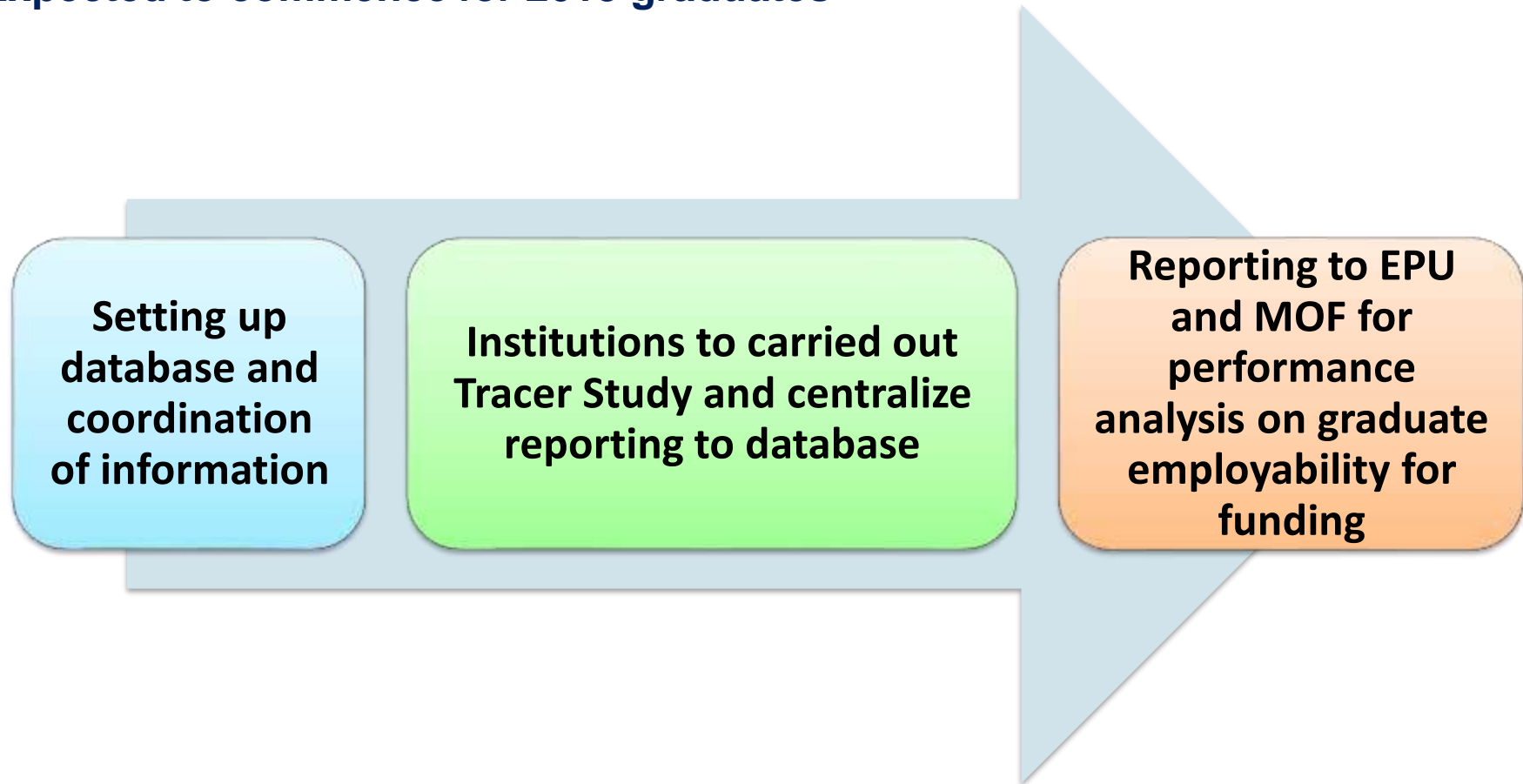
Activity 3

- Review policies and regulations -Planning



Updates: Taskforce for centralisation of tracer study

- **Centralization of tracer study for standardization**
- **A taskforce led by MOHE**
- **Preliminary discussion with agencies on a standardize format**
- **Expected to commence for 2013 graduates**



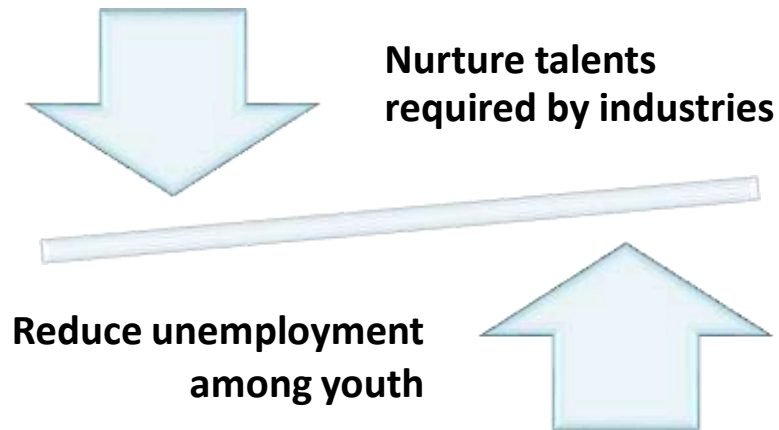
Skim Kemahiran dan Kerjaya 1Malaysia - SKK1M (Scheme for Skills and Career)

Programme designed to assist trainees from public training institutions unable to secure jobs after completion of studies.

OBJECTIVE

OUTCOME

to help improve
employability of youth in
particular those already
in TI's.



DURATIONS

1 – 2 months short training at companies or public training institutions followed with placement in the participating companies upon completion of programmes

COMPONENTS

Induction + core employability skill

- Survey on companies with job vacancies and requirements by participating training institutions
- Established taskforce for monitoring

ACHIEVED TARGET FOR 2012

3,000 participants

TARGET FOR 2013

5,400 participants

Establishment of Malaysian Board of Technologists (MBOT)

MBOT will contribute to support in mainstreaming of TVET

MBOT Functions

Regulate the Conduct and Ethics of the Technologist Profession

- ❖ Determine career path of technologist; and
- ❖ Ensuring quality control of technologist produce.

Assessment of Academic Qualifications

- ❖ Monitoring the qualifications and accreditation of TVET programme based on International Accord such as *The European Federation of National Engineering Associations (FEANI) dan Sydney Accord*;
- ❖ Determine the attribute of technologist for institutions; and
- ❖ Monitor the technologies programme offered by local Universities or institutions.

High Income Economy

- ❖ Ensuring quality technologist to provide skilled worker for industry; and
- ❖ Promoting innovation and creativity to enhance technologist productivity and quality.

TECHNOLOGIST

Technologist are the "doers." They are workers which are highly trained to perform specific tasks. They :

- *design equipment, processes or systems; interpret and prepare specifications, technical drawings or instructions; prepare estimates and manage projects.*
- *specify tests; conduct non-routine tests; develop proto types; operate pilot plants; trouble-shoot complex equipment; resolve production or construction problems; compile experimental data, or prepare reports.*
- *supervise, train, coordinate and assume administrative responsibility for the work of others and participate in short and long range planning.*

Malaysian Technical University Network (MTUN)

MTUN will provide opportunities for TVET graduates to further studies

- ❑ Established in 2006 to educate and train highly skilled human capital to contribute towards industries growth.
- ❑ Four MTUN universities in Malaysia driven by industry needs and equipped with current technologies
- ❑ Practical oriented education system focusing on problem centered learning, action and experiential learning
- ❑ MTUN aim to increase enrolment in TVET at higher level to 51% by 2015



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TVET SECTORS BY 2015

TVET Governance

- Better governance of TVET sector
- Facilitate performance-based mechanism for TVET sector
- Registration of all TVET institutions



Core Principles

Performance-based: institutes accountable for performance

Demand-driven: by students and economic needs

Industry-led: Collaborative development of TVET sectors

Clear governance: Better monitoring of performance



Providers

Institutes:

- High graduate employability and instructor quality
- Efficient budget management & cost per student
- Strong links with industry needs in delivery of quality and number of graduates

Ministries:

- Main drivers of institutes' performance

Industry

- Continuous input into curriculum, content and TVET framework
- Strong collaboration with TVET providers
- Increased employer participation in student-industrial training programs
- Option: ownership, management and operation of some TVET institutes

Students

- Able to make fully-informed decisions on choice of education pathway
- Sufficient number of TVET graduates to meet economic demand
- Highly employable graduates trained with relevant technical and employability skills

THANK YOU

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