

IV

PILLAR



Empowering Human Capital





Introduction

Knowledgeable and innovative human capital is an important factor to support economic growth. As such, accelerating human capital development will continue to be a priority in the remaining Plan period, 2018-2020. Efforts on human capital development will enhance access to quality education and training as well as provide opportunities for quality employment towards building a more inclusive, equitable and prosperous nation.

Initiatives will be intensified to enhance access to quality education as well as improve training. At the same time, the labour market will be reformed to ensure quality employment that offers high salary and wages as well as better work terms and conditions. Efforts will be undertaken to create a more conducive working environment to increase labour efficiency and productivity. These measures will ensure future employees are equipped with relevant skills for quality employment.



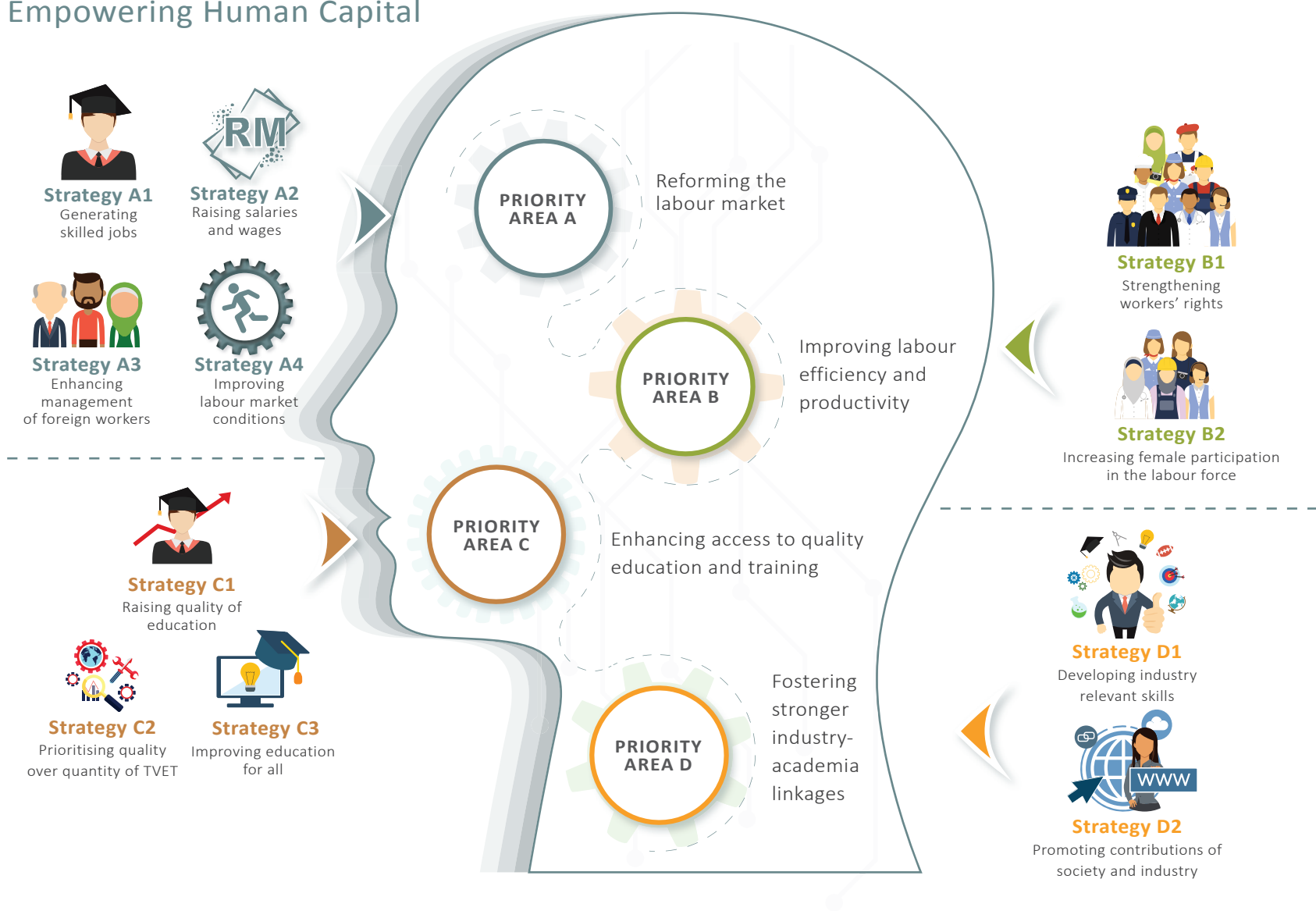
New Priorities and Emphases, 2018-2020

Focus will be given on reforming the labour market to produce competent and skilled workforce towards supporting the economic growth. This reform is needed to address job mismatch which resulted in graduate underemployment, high youth unemployment and slow wage growth as well as over-reliance on low-skilled foreign workers. Efforts will be undertaken to ensure more skilled

jobs be created and provide Malaysians with opportunities to earn high salary and wages under better working conditions. In addition, student outcomes and industry involvement will be improved to develop world class talent. The priority areas and strategies towards empowering human capital are as shown in *Exhibit 4-1*.

Exhibit 4-1

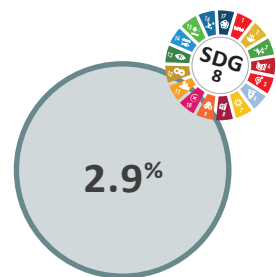
Empowering Human Capital





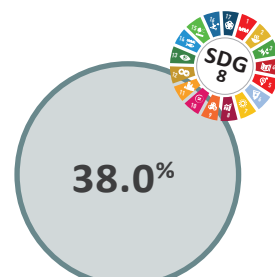
Selected Targets, 2020

Reforming the labour market



2018-2020

Labour productivity growth



Compensation of Employees to GDP



Monthly median wage

Improving labour efficiency and productivity



Review labour laws: Employment Act 1955, Trade Union Act 1959 and Industrial Relations Act 1967

Enhancing access to quality education & training

Fostering stronger industry-academia linkages



Malaysia aims to be at least on par with the international average in TIMSS and PISA assessment



Student enrolment for preschool and secondary level



Intake of SPM leavers into TVET programmes



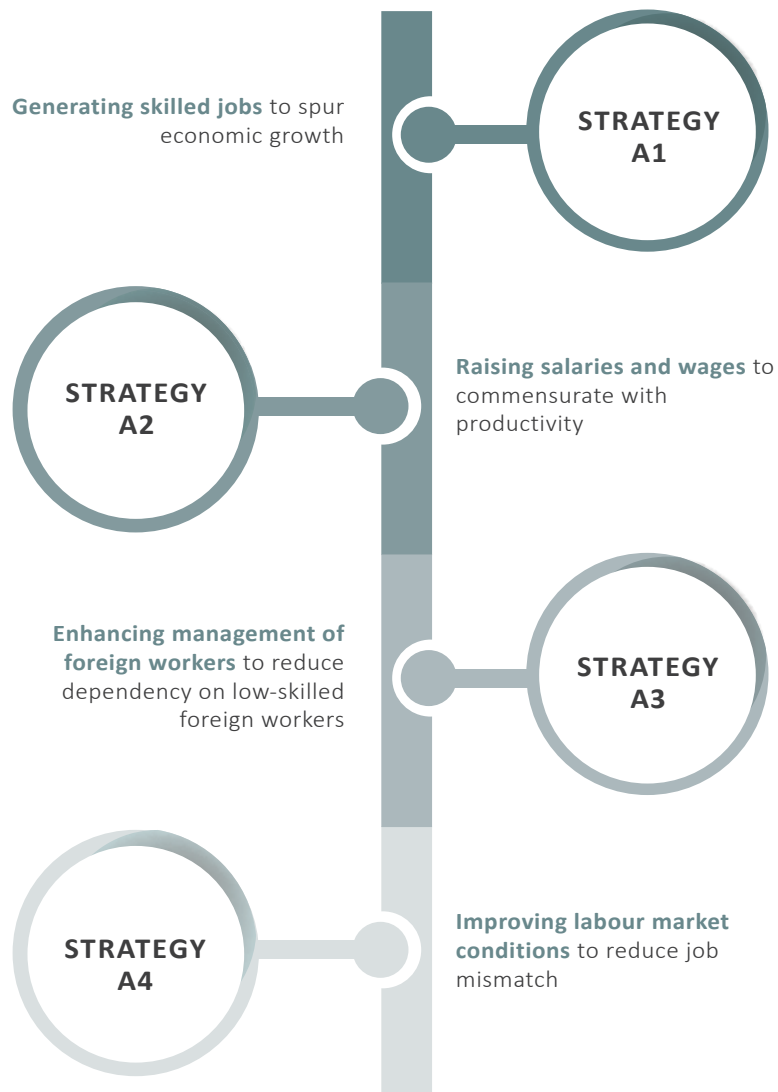
2 universities in the top 100 of the QS World University Rankings



TVET graduates employed within 6 months of graduation

Priority Area A: Reforming the Labour Market

Labour market efficiency is a vital contributor to boost economic growth. Hence, reforming the labour market is necessary especially in ensuring quality employment, high salary and wages as well as providing a more conducive working environment. In the remaining Plan period, four main strategies to reform the labour market will be implemented as follows:



Strategy A1: Generating Skilled Jobs

The composition of jobs in Malaysia is mainly concentrated in semi- and low-skilled categories. Various initiatives will be undertaken to generate skilled jobs which focus on encouraging automation and innovation, identifying critical skills as well as addressing skills shortage in the remaining Plan period. The implementation of these initiatives will spur economic growth towards achieving advanced nation status.

Encouraging automation and innovation

In order to generate skilled jobs with higher salary and wages, efforts will be undertaken to encourage innovation, automation, adoption of new technology and commercialisation of intellectual property. In this regard, high quality investment will be given priority in order to create more skilled jobs in the economy. The list of industries that qualify for incentives under the Promotion of Investments Act 1986 will be revised in order to attract high quality investments.

Identifying critical skills required by industry

The Industry Skills Committee (ISC) identifies critical skills required by the industry and facilitates policy interventions to address critical skills shortage. In this regard, a Critical Occupations List (COL) has been developed by the Critical Skills Gap Committee under the ISC to address skills imbalances and job mismatch. The COL report will be continuously updated to identify shortages of workers in critical occupations that will have an impact on the economy. The Government will intervene based on the report by reprioritising the field of studies and leveraging the Malaysian diaspora.

Addressing skills shortage

Critical skills shortage will be addressed through upskilling and reskilling programmes to equip graduates with specific industry-required skills. In order to address skills shortage on a more sustainable basis, the Technical and Vocational Education and Training (TVET) and higher education curriculum will be continuously revised to keep pace with the dynamic requirements and demands of the industry. This is imperative especially in embracing the Fourth Industrial Revolution (4IR) where skills demanded by the labour market are rapidly evolving.



Strategy A2: Raising Salaries and Wages

A study¹ conducted in 2016 showed that a majority of TVET graduates earned below RM1,500 per month, while based on Graduate Tracer Study in 2017 showed that almost half of the total graduates earned less than RM2,000 per month. Thus, the Government is committed to address this issue through initiatives such as continuous review of minimum wage policy and establishment of National Wage Index (NWI). In addition, expansion of Productivity-Linked Wage System (PLWS) and implementation of comprehensive upskilling and reskilling programmes will be intensified to improve labour productivity towards raising salaries and wages.

Reviewing minimum wage policy continuously

The Government is committed towards reviewing the minimum wage policy once in every two years and addressing the issue of differential in the minimum wage level between Peninsular Malaysia, Sabah and Sarawak. In this regard, effective from 1 January 2019, the monthly minimum wage will be standardised at RM1,050 nationwide. Enforcement will be enhanced to ensure compliance.

Establishing National Wage Index

Besides the minimum wage, there is also concern about the starting salary for employees, which do not commensurate with the level of qualification, especially those with tertiary education. As such, the Government will launch the NWI by 2019 as a guide and benchmark for employers in determining the right wage level for employees in accordance with their qualifications and skills level. The NWI will be developed by consolidating wages data from multiple sources for better representation.

Improving labour productivity

Concerted efforts will be undertaken to broaden the implementation of the PLWS to ensure that wages commensurate with higher productivity. In addition, the Human Resources Development Fund (HRDF) will continue to focus on upskilling and reskilling programmes. The HRDF will also expand the coverage

of sectors to qualify for funding to enable more employees to be trained. These training programmes aim to create skilled employees with higher productivity and earn higher wages.

Strategy A3: Enhancing Management of Foreign Workers

A number of sectors continue to employ a high proportion of low-skilled foreign workers despite the overall reduction in the number of registered foreign workers. These sectors include construction, agriculture as well as manufacturing. In the remaining Plan period, measures undertaken will include reducing dependency and improving management of low-skilled foreign workers.

Reducing dependency on low-skilled foreign workers

Efforts to reduce dependency on low-skilled foreign workers will be intensified, among others, by encouraging automation and mechanisation, particularly in the manufacturing and agriculture sectors. As for the construction sector, the adoption of Industrialised Building System (IBS) will be further promoted with the intention to reduce the number of low-skilled foreign workers. A progressive multi-tiered levy system that is based on the proportion of foreign workers employed will be implemented to strictly reduce and regulate the number of foreign workers. In addition, a study will be undertaken to analyse the socio-economic impact of employing low-skilled foreign workers.

Improving management of foreign workers

The Employer Undertaking initiative will be enforced to enable better management and safeguard welfare of foreign workers. The initiative, among others, will require employers to be responsible for the payment of levy, provision of housing and basic amenities as well as ensuring foreign workers return home upon completion of employment contract. Furthermore, the Employment Act 1955 will be amended to impose mandatory requirement for employers to credit salaries of foreign workers through the banking system to enable better management such as to prevent exploitation as well as monitor remittance by foreign workers.

¹ Based on Study on the Demand and Supply of Human Capital Requirements on TVET, 2016.

Strategy A4: Improving Labour Market Conditions

Malaysia has maintained full employment since 1992. However, the unemployment rate among youth aged 15 to 24, particularly those with tertiary educational attainment remains high. This is partly due to the mismatch between the skills acquired by graduates and those required by the industry. In the remaining Plan period, there is a need to improve labour market conditions through the establishment of one-stop job centres and enhancement of labour market database.

Establishing one-stop job centres

In response to labour market mismatch, the functions of urban transformation centres and rural transformation centres will be expanded as one-stop centres for job seekers, incorporating training and job matching services. These one-stop job centres will also provide advisory services and information on training and job opportunities. In addition, the COL report will be made available at one-stop job centres as reference to students and the industries in order to minimise job mismatch.

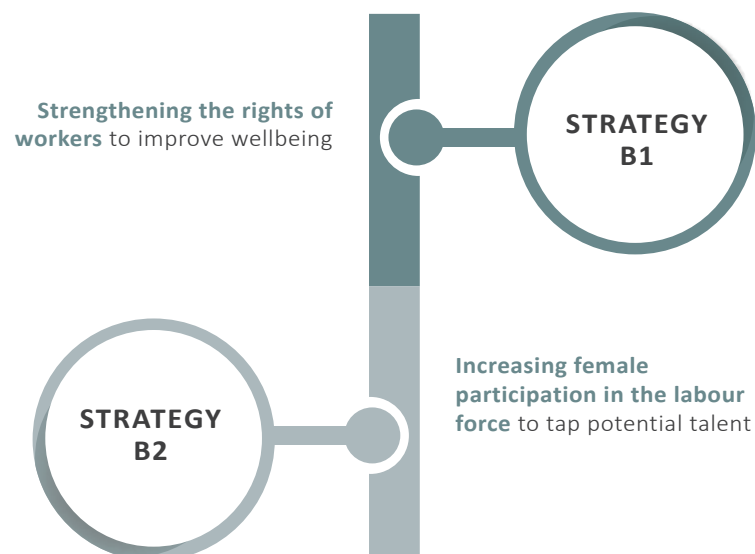
Enhancing labour market database

Measures will be undertaken to provide comprehensive and timely labour market data to identify and understand labour market issues, determine future direction and make informed decisions on national policies. The Malaysian Bureau of Labour Statistics database will be strengthened, integrating data from various Government agencies to facilitate evidence-based decision making and policy assessment. The data will be collated from the Department of Statistics Malaysia, Ministry of Human Resources, Employees Provident Fund and Public Service Department.

Priority Area B: Improving Labour Efficiency and Productivity

A conducive working environment is essential to ensure quality employment that will contribute to greater efficiency and productivity. In this regard, measures to improve working

conditions include efforts to ensure workers have rights and adequate representation in engaging with employers. At the same time, women participation in the labour market will be increased to tap the potential skilled talent and increase inclusivity in the workforce. In the remaining Plan period, priority will be given to implement the following strategies:



Strategy B1: Strengthening the Rights of Workers

Compensation of Employees (CE) is low in Malaysia which indicates incommensurable of employee compensation compared to labour productivity gains as reflected by the marginal increase in share of CE to Gross Domestic Product (GDP) from 33.6% in 2013 to 35.2% in 2017. Moreover, Malaysia's CE to GDP is relatively lower compared to Singapore and Republic of Korea. The lower level of CE in Malaysia has been partly attributed to the weaker bargaining position of employees. In the remaining Plan period, the rights of workers will be strengthened through revision of labour laws and comprehensive implementation of Employment Insurance System (EIS).



Reviewing labour laws

The Government will continue to uphold the rights of workers, to be on par with international standards and enhance compliance to International Labour Organization (ILO) standards. In this regard, Malaysia will promote principles and rights in several areas, such as freedom of association, right to collective bargaining, elimination of forced labour and elimination of discrimination in respect of employment. These measures also aim to create a conducive working environment in respect of minimum wages, working hours as well as occupational safety and health. Towards this, several legislations will be reviewed, including the Employment Act 1955, Trade Union Act 1959 and Industrial Relations Act 1967.

Implementing Employment Insurance System comprehensively

The Government will take a comprehensive approach to strengthen the social protection system for workers, particularly in the face of future challenges. With the advent of 4IR, it is envisaged that the speed of technological change may lead to lay-offs. In this regard, the implementation of the EIS beginning 1 January 2018 provides a safety net for all local employees in the private sector in the event of unanticipated loss of employment. The insured employees will receive benefits encompassing, among others, job search allowance, training, job placement and career counselling. The introduction of EIS reflects the fundamental change in approach from protecting jobs to protecting workers. In the remaining Plan period, focus will be given to the efficient and effective implementation of EIS and improve fund management.

Strategy B2: Increasing Female Participation in the Labour Force

The female labour force participation rate (FLFPR) has been significantly lower than the male, despite the higher enrolment of females in public universities. The FLFPR in Malaysia was also lower

than other countries in the region such as Singapore, Thailand and Vietnam. In the remaining Plan period, measures will focus on improving FLFPR through the implementation of flexible working arrangements as well as expansion of minimum maternity leave and providing better childcare facilities.

Implementing flexible working arrangements

A study² in 2014 found that the lower FLFPR was attributed to difficulty in balancing home and work commitments. In this regard, several private sector employers have embraced flexible working arrangements to better attract and retain female talent. The Employment Act 1955 and respective Labour Ordinances of Sabah and Sarawak allow the implementation of flexible working arrangements, subject to mutual agreement between employees and employers. Hence, the implementation of flexible working arrangements will be further encouraged in both the private and public sectors.

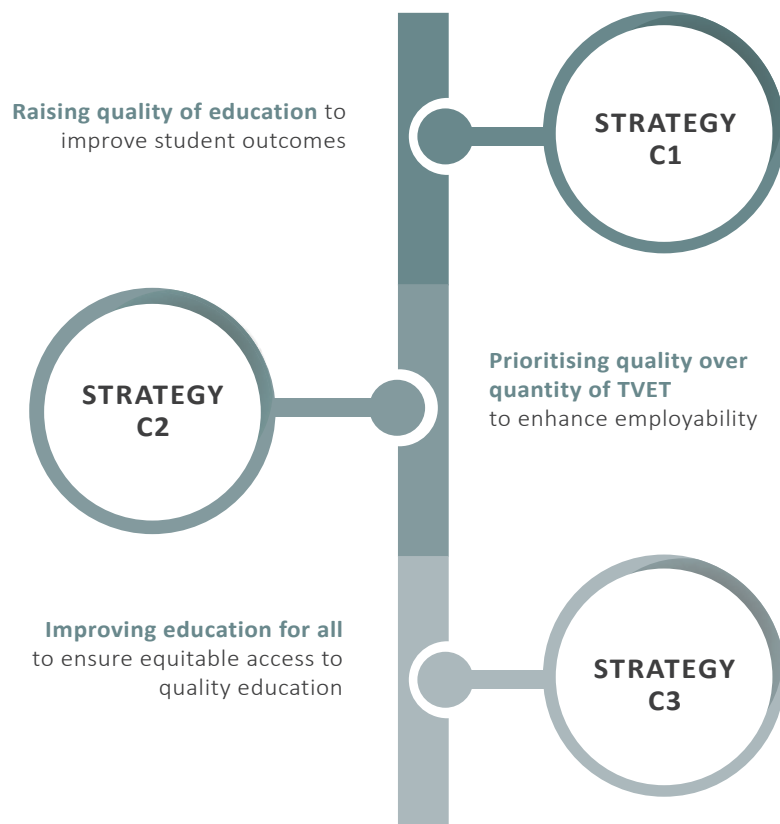
Expanding minimum maternity leave and increasing the role of women in leadership

The Employment Act 1955 will be amended to increase the minimum maternity leave from 60 to 90 days in the private sector to further support working mothers. In addition, regulations on childcare facilities will be reviewed to better facilitate employers to establish childcare centres at the workplace or within the vicinity of the workplace. Meanwhile, all Government agencies will be required to provide childcare facilities, beginning January 2019. In addition, to increase the role of women in leadership and policy-making, efforts will be continued to achieve the target of at least 30% participation of women in the board of directors of State Owned Enterprises (SOEs), statutory bodies and public listed companies by 2020.

² Based on Study to Support the Development of National Policies and Programmes to Increase and Retain the Participation of Women in the Malaysian Labour Force: Key Findings and Recommendations by Ministry of Women, Family and Community Development and United Nations Development Programme (2014).

Priority Area C: Enhancing Access to Quality Education and Training

Efforts to endow human capital to ensure equitable access to quality education and training for the *rakyat* will be intensified. Students will be equipped with robust knowledge and diverse skills across all education levels to increase employment opportunities and promote economic growth. In the remaining Plan period, priority will be given to implement the following three strategies:



Strategy C1: Raising Quality of Education

In line with the Malaysia Education Blueprint (MEB) 2013-2025 (Preschool to Post-Secondary Education) and MEB 2015-2025 (Higher Education), transformation of the education system emphasises quality, equity, access, unity, efficiency and inclusivity. Hence, to raise the quality of basic education, which covers preschool, primary and secondary education, the initiatives will focus on enhancing science, technology, engineering and mathematics (STEM) education as well as raising English language proficiency. Other initiatives will also include intensifying higher order thinking skills (HOTS) in teaching and learning, promoting virtual learning environment and intensifying continuous professional development for teachers. Meanwhile, the higher education will emphasise raising quality of graduates and academic programmes as well as attaining excellence in the governance of Institutions of Higher Education (IHE). Nevertheless, the Government will review both the MEBs to further enhance the educational ecosystem to meet the present and future challenges. The review will focus on strategies to make public schools as the preferred choice of the people and to empower IHE for continuous improvement. Besides ensuring a higher standard of education, this measure will also inculcate good values and positive work culture as practised in Japan.

Basic Education

Enhancing science, technology, engineering and mathematics education

One of the priorities to strengthen the quality of basic education is to further enhance STEM learning based on real-life concept and hands-on activities. The National STEM Centre will develop the latest teaching and learning methods to train teachers to become STEM specialists. These methods will incorporate inquiry, logical reasoning, collaboration and exploration components to develop abilities for students in applying knowledge and skills. Practical science will be revived to provide students with hands-on experience and better understanding of STEM education.



Raising English language proficiency

In order to raise English language proficiency in schools, the modular-based curriculum will be given greater emphasis to inculcate positive behaviour towards the learning and usage of the English language. In addition, English language mastery and teaching skills among teachers will be intensified. Meanwhile, more schools will be encouraged to implement the Dual Language Programme (DLP) through the teaching of mathematics and science subjects in English. The DLP provides options for parents in determining the language preferred for education of the children.

Intensifying higher order thinking skills in teaching and learning

Teaching and learning will emphasise HOTS and adopt more innovative approaches to develop 21st century skills such as collaborative skills, digital literacy, critical thinking as well as problem-solving skills. In this regard, the school-based assessments will increasingly incorporate HOTS questions. The questions pertaining to HOTS that require analytical thinking and knowledge application will be gradually increased from 20% to 40% in the *Ujian Penilaian Sekolah Rendah* and *Sijil Pelajaran Malaysia* (SPM) by 2020.

Promoting virtual learning environment

The virtual learning environment in schools will be enhanced with the development of better e-learning materials in collaboration with IHE, Government agencies and private institutions. In this regard, Information and Communication Technology modules in schools will be continuously reviewed to keep abreast with the latest technological advancements. In addition, awareness on cyber security and safety will be incorporated into the school curriculum. Teachers will also be trained with sufficient skills and knowledge to design and develop e-learning materials which will be contextualised to the learning needs of the schools.

Intensifying continuous professional development for teachers

Efforts to enhance competency of caregivers in early childhood care and education (ECCE) centres and teachers at all school levels will be undertaken through the provision of specialised and professional training programmes. In addition, public and private preschool teachers must be at least diploma holders in ECCE by 2020. Competency-based professional development programmes will also be conducted for in-service teachers to enhance their managerial, pedagogical and soft skills. Meanwhile, the National Professional Qualification for Educational Leaders course for potential headmasters and principals will be continued to improve their leadership skills.

Higher Education

Raising quality of graduates and academic programmes

In line with the MEB 2015-2025 (Higher Education), concerted efforts will be directed towards raising the quality of graduates and academic programmes as well as strengthening research capabilities. The Blueprint aims to uplift the quality of graduates based on six primary attributes, namely ethics and spirituality, leadership skills, national identity, language proficiency, thinking skills as well as knowledge. This will be achieved through various approaches which include enhancing soft skills, expanding entrepreneurship education, intensifying industry involvement in curriculum development and practical training as well as strengthening Massive Open Online Courses (MOOC)³. Core initiatives to further strengthen and raise the quality of graduates and academic programmes include realigning and eliminating low impact programmes, intensifying involvement of industry players in learning and teaching as well as implementing the Integrated Graduate Employability Structured Programme (i-GESP). In addition, efforts will be directed towards enhancing the implementation of

³ The MOOC initiative is intended to encourage online and lifelong learning pursuits among Malaysians through diversification of classroom experience and unlimited open access participation via the internet. Accredited MOOC do not necessarily originate from Malaysia but can also be accredited by international MOOC providers.

internship programme and industrial certification for graduates. These initiatives will equip university students with necessary skills to build resilience and improve employability. In addition, the inculcation of entrepreneurial skills will be intensified to transform graduates mindset from being job seekers to becoming job creators. Moreover, initiatives to strengthen research capabilities in IHE will be undertaken to enhance the functions of Higher Institution Centre of Excellence (HICoE)⁴, increasing commercialisation of research, development and innovation (R&D&I) output and ensuring demand-driven research.

In ensuring future human capital meet the needs as well as embrace the challenges posed and opportunities created by the 4IR, a comprehensive framework for higher education, namely Framing Malaysian Higher Education 4.0: Future-Proof Talents has been introduced. The aim of this framework is to produce ethically and morally upright citizens who are spiritually grounded to cope with the demands of the 4IR. It also focuses on a more flexible and dynamic curriculum mode which can be adapted taking into account the changing needs of the industry. In this respect, IHE will be allowed to offer 30% of the curriculum in this mode. Concurrently, transformative learning and teaching delivery that include student self-directed learning, peer-oriented learning, virtual-based learning and experiential learning will be introduced.

Attaining excellence in the governance of Institutions of Higher Education

Public universities have demonstrated significant progress in international rankings, particularly in Quacquarelli Symonds (QS) World University Rankings 2018/2019. All research universities recorded a remarkable improvement in the global standings. The University of Malaya has made it to the top 100 universities in the world, ranked at the 87th place. Meanwhile, the Universiti Kebangsaan Malaysia joined the world's top 200 universities, ranked at 184th.

Moving forward, public universities will be encouraged to leverage their autonomous status and become financially sustainable. Initiatives to diversify sources of income include measures such as establishing endowment funds and providing consultancy services. A performance-based funding mechanism anchored on outcomes, national priorities and innovation will be introduced. This will ensure better optimisation of resources towards prioritising student outcomes and raising the excellence of the universities. The funding allocation will be determined by four main components, namely per-student funding, key performance indicator-linked incentive, special initiative incentive and innovation incentive. Meanwhile, the *Akta Universiti dan Kolej Universiti 1971* will be reviewed with the intention to repeal and replace with a comprehensive and better law. This is to guarantee better quality of higher education and more academic liberty as well as freedom of speech and association. Student unions will also be empowered to operate independently without intervention, in accordance with the practice in developed countries.

Strategy C2: Prioritising Quality over Quantity of TVET

There is a mismatch between the industry demand for technical and vocational skills and the skills acquired by the students from TVET institutions. In the remaining Plan period, emphasis will be given to review TVET programme offerings, implement harmonised accreditation system and strengthen TVET as the preferred education pathway. The implementation of these initiatives will ensure the delivery of quality TVET programmes, hence improving its attractiveness.

⁴ HICoE status is given to centres of excellence with high potential and capabilities in term of expertise, infrastructure and output produced to further expand the designated research niche areas of HICoE.



Reviewing TVET programme offerings

Public TVET institutions will continuously review existing programmes by eliminating low impact programmes, focusing on high employability programmes and specialising in niche areas. As such, focus will be given in upgrading equipment and machineries instead of building new institutions. Centres of excellence will also be established whereby industry players will collaborate and share equipment, consumables and other facilities as well as jointly develop customised training programmes together to meet industry demand. Comprehensive efforts will be intensified to enable industry collaboration, particularly in curriculum design and delivery of training programmes, to ensure TVET graduates are more hands-on and industry ready. Moving forward, concerted efforts will be undertaken to rationalise TVET including optimising existing TVET institutions capacities.

Implementing harmonised accreditation system

The harmonised accreditation system and quality assurance will be implemented through the adoption of the Code of Practice for TVET Programme Accreditation under the revised Malaysian Qualifications Framework (MQF). The revised MQF will focus on three major components, namely the entry requirement to tertiary level, industry involvement as well as curriculum design and delivery which will allow mobility of students among all TVET institutions, including the Malaysian Technical University Network (MTUN). Therefore, the implementation of the harmonised accreditation system will provide opportunities for TVET graduates to pursue further studies as well as transition from TVET into the academic stream. In addition, individuals with working experience but lack formal academic qualification will have the opportunity to pursue further studies. Meanwhile, the harmonisation of various rating systems across public and private TVET institutions will be strengthened to enhance comparability. The system will assess the quality of institutions and programmes based on outcome indicators such as industry engagement, graduate employability and salary earned.

Strengthening TVET as the preferred education pathway

Greater collaboration between public and private sectors is required to uplift the perception towards TVET as a preferred choice. In this regard, impactful promotional activities will be intensified to increase the attractiveness of technical and vocational related jobs especially among young Malaysians. Promising career opportunities and showcases of success stories will be highlighted to boost the image of TVET. Furthermore, the industry will be involved in student recruitment and job placement to secure employment for graduates. The TVET stream will also be enhanced to provide students with better pathways to pursue higher education. The MTUN institutions will align the courses to cater for demand in TVET. Towards this end, the number of MTUN bachelor's degree programmes in engineering technology will be increased from 50% to 75% by 2020, providing greater opportunities for TVET diploma graduates to further studies.

Strategy C3: Improving Education for All

Malaysia is making progress in providing basic education for the *rakyat*, where primary education has achieved the universal enrolment⁵ rate. However, continuous efforts are essential to improve access to quality education for every child, particularly for the less privileged and those with specific education needs. In the remaining Plan period, emphasis will be given towards strengthening efforts to boost school performance and improving school infrastructure including in rural as well as remote areas for better student learning. In addition, focus will be given to reduce the rate of dropouts and improve education for student with special education needs.

Strengthening efforts to boost school performance

Initiatives to improve student outcomes especially in rural and remote areas will include the deployment of qualified School Improvement Specialist Coaches+ (SISC+) and School

⁵ Universal enrolment refers to enrolment which has reached 95% based on definition by the United Nations Educational, Scientific and Cultural Organization (UNESCO) Institute of Statistics.

Improvement Partners+ (SIPartners+). The SISC+ will assist teachers in improving teaching and learning methods to deliver 21st century pedagogy whereby teachers will be facilitating students in active learning. Meanwhile, SIPartners+ will enhance the managerial skills of school heads to ensure every school has high quality leaders and a competent and supportive leadership team to boost school performance.

Improving school infrastructure for better student learning

In ensuring a safe and conducive learning environment for all students, about 400 dilapidated schools in rural areas mainly in Sabah and Sarawak have been identified to be repaired or upgraded in the remaining Plan period. In addition, dilapidated religious schools will be identified and registered as *Sekolah Agama Bantuan Kerajaan*, enabling the schools to receive assistance and enhancing the quality of education. This will ensure emphasis is given to improve the infrastructure of existing schools, as opposed to continuously focusing on building new schools.

Reducing the rate of dropouts

A collaborative approach with local authorities and community leaders will be undertaken to assist schools in reducing dropouts rate and identifying school-going age children who have never attended school. Intervention programmes will be carried out to bring dropouts back to schools. In addition, students who are at risk of dropping out will also be identified and initiatives will be taken to retain them in the school system. Efforts will also be enhanced to raise parental awareness on the benefits of sending children for six years compulsory schooling as stated

under Education Act 1996 for all Malaysian children. Meanwhile, the pedagogy of Islamic Education and Moral Education will be continuously enhanced to inculcate good value and reinforce positive attitudes, integrity and accountability among students. School programmes, such as weekly assemblies and co-curricular activities, will emphasise social responsibilities as well as community services to foster friendship and stronger ties among students and communities.

Improving education for students with special education needs

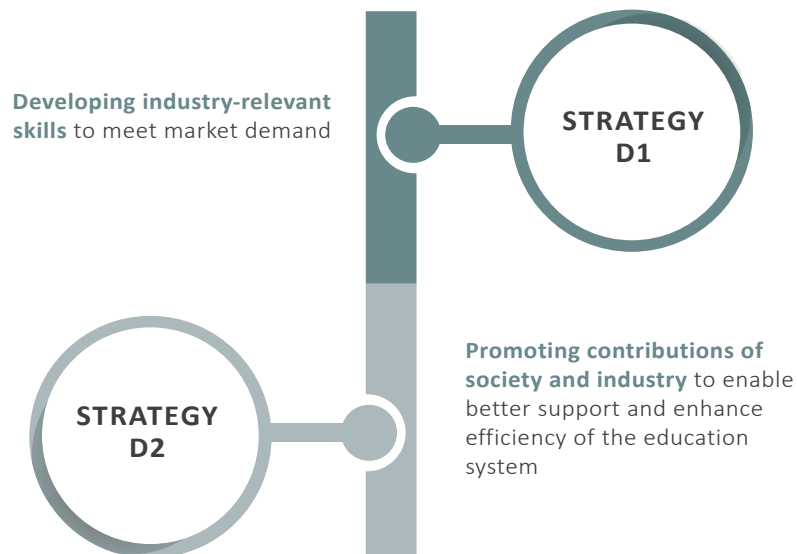
Focus will be given to expand the capacity in educating students with special education needs⁶ in special education schools, integrated special education programmes and inclusive education programmes. The Government will also assess the adequacy of existing facilities to enable students with special education needs to receive appropriate education based on the learning needs. In addition, efforts to enhance special education will also include early interventions, training for teachers and provision of classroom equipment.

Priority Area D: Fostering Stronger Industry- Academia Linkages

Greater industry and academia collaboration is needed to uplift the standard of education and training to produce quality human capital. This collaboration will assist in matching the demand and supply to ensure efficiency in the labour market. Towards this end, priority will be given to implement the following strategies:

⁶ Ministry of Education provides three schooling options for students with special education needs:

- i) Special education schools are for students with special education needs consisting of those hearing, seeing and learning disabilities;
- ii) Integrated special education programmes for students with special education needs in mainstream schools; and
- iii) Inclusive education programmes for students with special education needs, whereby students are placed in regular classes in mainstream schools, together with the mainstream (typical) students.



Strategy D1: Developing Industry-Relevant Skills

Efforts will be undertaken to ensure graduates are equipped with industry-relevant skills to produce quality human capital that meets industry demand. In the remaining Plan period, various initiatives will be undertaken to enhance industry-based programmes, increase employability of graduates and recognise technologists as professionals for TVET sector. In addition, IHE will focus on intensifying industry-academia collaboration, while HRDF will expand the Future Workers Training (FWT) scheme.

Enhancing industry-based programmes

Training programmes will be implemented based on modular and short-term training courses, especially professional certifications recognised by the industry. Bridging programmes will be continued to provide graduates with on-the-job training in equipping graduates with necessary experience and skills to increase employability. More campaigns promoting bridging programmes will be carried out to further encourage industry and graduates participation. Public TVET institutions will be

encouraged to actively engage industry in the implementation of modular courses and flexible training programmes through contestable funds and matching grants. The National Dual Training System will be expanded to more public TVET institutions in driving greater collaboration with the industry. Moreover, TVET institutions will be encouraged to learn and adopt the best practices from Japan, particularly by incorporating knowledge and skills of latest technologies in the teaching and learning. In addition, the Government will continue to encourage the industry to provide more apprenticeship programmes for TVET students, towards producing industry-ready TVET graduates.

Increasing employability of TVET graduates

The quality of TVET graduates have yet to meet the industry requirements despite strong demand for skilled workers. The TVET Graduate Tracer Study System will be utilised to capture, among others, data on graduate employability, salary trends and occupational preferences. The result will assist in the development of TVET-related policies as well as determine the distribution of allocation. In this regard, a target of 85% graduate employability will be set to measure the quality and performance of public TVET institutions in producing skilled graduates. In addition, equipping TVET students with essential soft-skills and positive working attitude are imperative to improve employability. Furthermore, entrepreneurial components will be embedded as part of the learning modules to prepare TVET graduates with the necessary knowledge and skills to become job creators.

The ISC and state skills development centres will identify relevant and highly demanded competencies through continuous collaboration with the industry, particularly in the design and delivery of the TVET curriculum to reduce skills mismatch and prepare future talent. In addition, the Industrial Attachment Training programme introduced in 2017 for TVET instructors will be expanded to create a larger pool of dynamic instructors with industry exposure. The programme will further increase the competencies of TVET instructors.

Recognising technologists as professionals

The Malaysia Board of Technologists (MBOT) will continue to upgrade the competencies of TVET practitioners especially TVET instructors through recognised professional certifications. The MBOT will intensify efforts to promote educational and professional training in technology- and technical-related fields. The MBOT will also serve as a networking platform that encourages collaboration and partnership among members. In addition, the Technology Expert Panel under the MBOT will be empowered to encourage industry involvement in technology consultations and promote talent mobility through stronger international collaboration.

Intensifying industry-academia collaboration

The higher education sector will also intensify industry-academia collaborations in line with the quadruple helix model, representing a partnership between universities, industry, Government and community. Industry-academia collaborations will be pursued, especially in enhancing graduate employability, research and development, community outreach and financial sustainability of universities. In this regard, public universities will continue to expand programmes such as Industry Centres of Excellence (ICoE)⁷ and Public-Private Research Network (PPRN). The PPRN programme will focus on linking the small and medium enterprises (SMEs) with selected IHE or potential supply chain vendors to improve their products and services for market expansion. Therefore, upscaling of the SMEs will provide new job opportunities for graduates. In addition, the collaboration will simplify processes to enable SMEs to utilise IHE in obtaining solutions through R&D&I.

Expanding the Future Workers Training scheme

The FWT scheme under the HRDF will be expanded to promote pre-employment training, focusing on emerging technologies related to the 4IR. Hence, HRDF will collaborate with the

industry to equip future workers with relevant skills to meet industry demand. Special focus will be given to digitalisation, automation and mechanisation training programmes.

Strategy D2: Promoting Contributions of Society and Industry

Efforts will be undertaken to engage parents, the community and the private sector as partners in education. The focus will be to harness the competitive advantage of the different parties to deliver quality education in an integrated, effective and efficient manner. In the remaining Plan period, measures will be directed to scale-up private sector involvement to complement and support Government initiatives. These include strengthening community support for education, expanding public-private collaboration as well as leveraging endowments and developing sustainable *waqf* for IHE.

Strengthening community support for education

The Government will foster greater collaboration with the private sector, including social enterprises and civil society in line with national objectives and priorities particularly through corporate social responsibility (CSR). The CSR activities will continue to be promoted to support enrichment programmes and extra-curricular activities such as motivational and team building workshops as well as environmental awareness. In addition, participation of parent-teacher association and school alumni will enhance the effectiveness of school programmes in terms of funding, volunteer work and engaging experts.

Expanding public-private collaboration

The Trust School programme, a public-private collaboration, aims to transform the education ecosystem to enhance the governance as well as teaching and learning methods. This programme will be expanded to at least 90 schools by 2020 to

⁷ The ICoE programme creates an avenue for industry players to establish laboratories and teaching facilities within the universities to provide students with exposure to the latest technologies.



improve performance of students. The Trust School programme will also be adapted in public schools through the *Transformasi Sekolah 2025* (TS25) programme. The Government aims to expand the TS25 programme to 1,000 schools by 2020 and all schools by 2025.

Leveraging endowments and developing sustainable waqf

In strengthening financial sustainability, public universities will be encouraged to continue reaching out to industry and alumni to leverage endowments for research chairs and develop

waqf. Approaches such as providing naming rights to buildings and matching grants will be expanded to further incentivise contributions to IHE. In addition, efforts to develop sustainable *waqf* which is able to generate income to partially finance public universities will be intensified, guided by the University Transformation Programme: Enhancing University Income Generation, Endowment and *Waqf* (UniTP Purple Book). The UniTP Purple Book provides steps in implementing *waqf* and proposes models of *waqf* governance at public universities.

Conclusion

During the remaining Plan period, efforts will be intensified to promote quality employment by reforming the labour market and improving labour efficiency and productivity. These efforts will involve several strategies including generating skilled jobs, raising salaries and wages, enhancing management of foreign workers, improving labour market conditions and increasing female participation in the labour force. Meanwhile, emphasis will be given to enhance access to quality education and training, raise the quality of TVET and foster greater industry-academia linkages. These strategies aim to empower human capital as well as produce competitive and resilient human capital to support the national aspiration to become an inclusive and developed nation.



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C H A P T E R