

# Education for Sustainable Development (ESD) in Malaysia: Policy, Program, and Evaluation

Siti Eshah Mokshein  
*Universiti Pendidikan Sultan Idris*  
Perak, Malaysia

**Abstract**—In education, sustainable development (SD) targets and indicators have been clearly stated in SDG4. Malaysia's commitment to promoting SD is evident from the integration of SD indicators in the national policy frameworks, including the National Education Blueprints since the 1970s. This paper discusses several government policies, programs, and projects on SD, particularly in education. It also discusses the evaluation of the country's success in meeting the SDG4 targets and indicators, challenges and constraints in the implementation, and opportunities for the future. The author also suggests that data collected for various educational projects such as World Education Indicators (WEI) project and Quick Facts for instance be used for the calculation of enrolment and participation rates, pupil-teacher ratios, teacher salaries, teacher qualifications, educational attainment, and education expenditures, while the national census data and national exams data be used to estimate the achievement of the students alongside the international studies such as TIMSS, PISA, and TALIS for international comparisons of students' achievement.

**Keywords**—ESD in Malaysia, policy, program, evaluation

## I. INTRODUCTION

Several definitions of ESD have been put forward, including the one by R. Goodland and G. Ledoc (1987) - a pattern of social and structured economic transformations or development which optimizes the economic and societal benefits available in the present, without jeopardizing the likely potential for similar benefits in the future. A primary goal of sustainable development is to achieve a reasonable and equitably distributed level of economic well-being that can be perpetuated continually for many human generations.<sup>1</sup>

<sup>1</sup> (R. Goodland and G. Ledoc. "Neoclassical Economics and Principles of Sustainable Development" *Ecological Modeling*. Vol 38, 1987. In Siti Eshah Mokshein, Siti Eshah Mokshein, ESD in Malaysia: An Overview, archive.ias.unu.edu/resource\_centre/Malaysia\_EducationReport\_Aug2004.doc )

In the early 2000s, UNESCO defined ESD as a system where everyone has the opportunity to benefit from quality education and learn the values, behaviors, and lifestyles required for a sustainable future and for positive societal transformation. In the 2030 Agenda for Sustainable Development Goals adopted in September 2015, the definition becomes clearer and the targets for each goal are clearly stated. For ESD or SDG4, it is to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all by 2030<sup>3</sup>.

## II. OVERVIEW OF EDUCATION IN MALAYSIA

Education in Malaysia is under the responsibility of the federal government and all educational matters are under the jurisdiction of the Ministry of Education (MOE). It is a centralized system with common curricula and examination systems throughout the country.

At the federal level, MOE translates the National Educational Philosophy (NPE) into educational policies, plans, programs, and projects in accordance with the national aspirations and objectives and co-ordinates the implementation. The Educational Planning Committee (EPC) chaired by the Education Minister is the highest decision-making body in the MOE. This committee is responsible for the formulation, coordination, and implementation of general policy guidelines concerning education. Other decision-making committees in the MOE include the Central Curriculum Committee (CCC), Development Committee, Finance Committee, Heads of Professional Divisions Committee, and the Central Staff Development Committee. The implementation of the educational policies, programs, and projects at the state level are carried out by the State Education Departments (SEDs) with the help of the District Education Offices (DEOs).

<sup>3</sup> (Economic Planning Unit, Prime Minister Department Malaysia, Voluntary National Report 2017 on Sustainable Goals.)

MOE provides 11-year basic education to all children in the country, including children from disadvantaged backgrounds and children with special needs. To facilitate this, the automatic promotion system between grade levels has been introduced and numerous educational programs have been established to cater to the needs of the various groups. At the primary level, all students undergo a similar program while at the secondary level, a variety of subjects are offered and students may opt for different programs. Students graduating from the secondary schools may continue their studies either in Form 6, matriculation or other pre-university programs, polytechnics, community colleges, industrial training colleges offered by other government agencies, or private colleges. At the preschool level, however, education is provided by several government agencies (including MOE) and private entities using a common curriculum guideline produced by the MOE.

### III. GOVERNMENT POLICY ON ESD

The term ESD started to gain popularity in Malaysia in the late 1990s even though the spirit and aspiration of sustainability have always been given emphasis as the development approach in the country since the 1970s. Elements of sustainability are integrated into all the Malaysia 5-Year Development Plans. In the 1970s for instance, the New Economic Policy (NEP) aimed to eradicate poverty and restructure societal imbalances was launched. All subsequent five-year national development plans have underscored the elements of sustainable development, encompassing sustainable economic growth; growth with equitable distribution to all sections of society; balanced development; access to basic infrastructure and utilities; access to education and healthcare services; and mainstreaming of environmental conservation<sup>3</sup>.

The national Outline Perspective Plans (OPP) that have been implemented through a series of the national 5-Year Development Plans beginning in the mid-1960s underpin all aspects of socio-economic development in Malaysia. Among others, major thrusts of the Plans include unity strengthening; poverty eradication; reduction of social and economic inequality and imbalance; equity in economic growth; reducing disparities in economic development between states and between urban and rural; restructuring the society; promoting human resource development; making science and technology an integral component of socio-economic planning and development; and protection of the environment and ecology.

The national SD policy is well-documented in several Government blueprints. The emphasis on sustainable development is clearly reflected in the

previous Prime Minister Mahathir Mohamad's foreword in the Mid-Term Review (MTR) of the Eighth Malaysia Development Plan (2001-2005) as follows:

*"While pursuing higher economic growth, we must also ensure that the ethical and moral basis of our actions is not eroded.... We need to reinforce and practice values that demonstrate our abiding concern for fellow members of the society, particularly those who are disadvantaged and in the greatest need. Civic consciousness must entail consideration and protection of the environment."*

*Mid-Term Review, 8th-DP, Economic Planning Unit.*

The integration of the economic, social and environmental dimensions of development to promote SD was strengthened in the MTR. The MTR document has dedicated a chapter discussing the national agenda and issues of SD. Emphases are placed on improving the quality of life, changing consumption and production patterns, protecting the environment, and managing the natural resource base for economic and social development. A set of SD indicators have been developed to be used in monitoring progress and to ensure that targets are achieved. In the aspect of life quality, indicators include a steady rise in GDP per-capita income and a corresponding decrease in poverty incidence, as well as continued enhancement in health, education, transport and communication, working and family life as well as public safety. To promote sustainable human settlements, housing and other social services are continually accorded priority.

With regards to environmental and natural resources management, the adoption of Environmental Quality Act 1974 (EQA), National Forest Act 1984, Environment Protection Enactment 2002, National Environment Policy 2002, Environmental Quality Control of Emissions from Motorcycles Regulations 2003 (besides other manuals and handbooks), and the establishment of numerous improvement programs and projects including the Biodiversity-Biotechnology Council, National Oceanography Directorate, and the National Highlands Conservation and Management Strategy reflect the Government's commitment to address environmental and resources issues. In the Plan period, the Government continued efforts to efficiently

achieve SD and to mitigate the environmental impact of development activities.<sup>2</sup>

With the launching of the New Economic Model (NEM) whose main goals include high income, inclusivity, and sustainability launched in 2009, Malaysia’s commitment towards sustainability of the future is further continued. The NEM provides the basis for Malaysia’s development plans until 2020. The current Eleventh Malaysia Plan 2016–2020 (11MP) is premised on these three goals, where people are the center of all development efforts, complemented by ensuring that no section of society is left behind in participating and benefiting from the nation’s development. Critically, the 11MP is aligned to most of the global Sustainable Development Goals (SDGs)<sup>3</sup>.

**IV. ESD TARGETS AND INDICATORS**

The 2030 Agenda for Sustainable Development has 17 targets and 169 indicators that are clearly spelled-out encompassing economic, social and environmental aspects. Education plays a central theme throughout the 2030 Agenda, which includes a stand-alone education goal and education-related targets within 7 others of the 17 Sustainable Development Goals (SDGs)<sup>3</sup>.

The fourth goal of the SD Agenda known as SDG 4 (or earlier known as ESD) aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all by 2030. The goal consists of 10 targets encompassing many different aspects of education. There are seven targets which are expected outcomes and three targets which are means of achieving these outcomes. To ensure that the goals and targets are achieved, a set of indicators have been identified to guide the SDG4 monitoring and evaluation. Details of the targets and indicators are presented in Table 1.

**TABLE I. SDG4 (ESD) TARGETS AND INDICATORS**

Target	Indicators
Target 4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes. (7)	4.1.1 Proportion of children and young people (a) in Grade 2 or 3; (b) at the end of primary education (✓) and (c) at the end of lower secondary education (✓) achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex. (✓) 4.1.2 Administration of a nationally-

<sup>2</sup> Economic Planning Unit, Prime Minister’s Department (2003). Mid-Term Review of Eighth Development Plan 2001-2005. In Siti Eshah Mokshein, Siti Eshah Mokshein, ESD in Malaysia: An Overview, archive.ias.unu.edu/resource\_centre/Malaysia\_EducationReport\_Aug2004.doc )

<sup>3</sup> (Economic Planning Unit, Prime Minister Department Malaysia, Voluntary National Report 2017 on Sustainable Goals.)

Target	Indicators
	representative learning assessment (a) in Grade 2 or 3; (b) at the end of primary education: (?) and (c) at the end of lower secondary education. (✓) 4.1.3 Gross intake ratio to the last grade (primary education, lower secondary education). (✓) 4.1.4 Completion rate (primary education, lower secondary education, upper secondary education). (✓) 4.1.5 Out-of-school rate (primary education, lower secondary education, upper secondary education). (✓) 4.1.6 Percentage of children over-age for a grade (primary education, lower secondary education). (✓) 4.1.7 Number of years of (a) free and (b) compulsory primary (✓) and secondary education guaranteed in legal frameworks.
Target 4.2 By 2030, ensure that all girls and boys have access to quality early childhood development, care, and pre-primary education so that they are ready for primary education. (5)	4.2.1 Proportion of children under 5 years of age who are developmentally on track in health (✓MOH?), learning (✓?) and psychosocial well-being (??), by sex. 4.2.2 Participation rate in organized learning (one year before the official primary entry age), by sex. (✓) 4.2.3 Percentage of children under 5 years experiencing positive and stimulating home learning environments (?). 4.2.4 Gross early childhood education enrolment ratio in (a) pre-primary education (✓) and (b) early childhood educational development (?). 4.2.5 Number of years of (a) free and (b) compulsory pre-primary (?) education guaranteed in legal frameworks Target
Target 4.3 By 2030, ensure equal access for all women and men to affordable quality technical, vocational and tertiary education, including university. (3)	4.3.1 Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex. (? who keeps the data?) 4.3.2 Gross enrolment ratio for tertiary education by sex. (✓) 4.3.3 Participation rate in technical-vocational programmes (15- to 24-year-olds) by sex. (✓)
4.4 By 2030, substantially increase the number of youth and adults who have	4.4.1 Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill. (??)

Target	Indicators
relevant skills, including technical and vocational skills, for employment, decent jobs, and entrepreneurship. (3)	<p>4.4.2 Percentage of youth/adults who have achieved at least a minimum level of proficiency in digital literacy skills. (??)</p> <p>4.4.3 Youth/adult educational attainment rates by age group, economic activity status, levels of education and programme orientation (census data??)</p>
Target 4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations. (4)	<p>4.5.1 Parity indices (female/male, rural/urban, bottom/top wealth quintile and others such as disability status, indigenous peoples and conflict-affected, as data become available) for all education indicators on this list that can be disaggregated. (??)</p> <p>4.5.2 Percentage of students in primary education whose first or home language is the language of instruction. (✓?)</p> <p>4.5.3 Extent to which explicit formula-based policies reallocate education resources to disadvantaged populations.</p> <p>4.5.4 Education expenditure per student by level of education and source of funding (✓)</p> <p>4.5.5 Percentage of total aid to education allocated to least developed countries (?)</p>
Target 4.6 By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy. (3)	<p>4.6.1 Proportion of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex. (✓ census, WEI)</p> <p>4.6.2 Youth/adult literacy rate. (✓ census, WEI)</p> <p>4.6.3 Participation rate of illiterate youth/adults in literacy programs (??)</p>
Target 4.7 By 2030, ensure all learners acquire knowledge and skills needed to promote sustainable development, including among others through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and nonviolence, global citizenship, and appreciation of cultural diversity and of culture's contribution to sustainable	<p>4.7.1 Extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in (a) national education policies, (b) curricula, (c) teacher education and (d) student assessment. (???)</p> <p>4.7.2 Percentage of schools that provide life skills-based HIV and sexuality education. (✓?)</p> <p>4.7.3 Extent to which the framework on the World Programme on Human Rights Education is implemented nationally (as per the UNGA Resolution 59/113). (??)</p> <p>4.7.4 Percentage of students by age group (or education level) showing adequate understanding of issues relating to global citizenship and</p>

Target	Indicators
development. (5)	<p>sustainability. (??)</p> <p>4.7.5 Percentage of 15-year-old students showing proficiency in knowledge of environmental science and geosciences. (✓?)</p>
4.a Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all. (3)	<p>4.a.1 Proportion of schools with access to (a) electricity (✓); (b) Internet for pedagogical purposes (✓); and (c) computers for pedagogical purposes (✓); (d) adapted infrastructure and materials for students with disabilities (✓?); (e) basic drinking water (✓); (f) single-sex basic sanitation facilities (✓); and (g) basic handwashing facilities (as per the WASH indicator definitions) (?).</p> <p>4.a.2 Percentage of students experiencing bullying in the last 12 months (✓?).</p> <p>4.a.3 Number of attacks on students, personnel, and institutions (✓?).</p>
Target 4.b By 2020, substantially expand globally the number of scholarships available to developing countries, in particular, least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training, information and communications technology, technical, engineering and scientific programs in developed countries and other developing countries. (2)	<p>4.b.1 Volume of official development assistance flows for scholarships by sector and type of study. (??)</p> <p>4.b.2 Number of higher education scholarships awarded by beneficiary country. (??)</p>
Target 4.c By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States. (5)	<p>4.c.1 Proportion of teachers in (a) pre-primary education (✓?); (b) primary education (✓); (c) lower secondary education (✓); and (d) upper secondary education (✓) who have received at least the minimum organized teacher training (e.g., pedagogical training) pre-service or in-service required for teaching at the relevant level in a given country, by sex.</p> <p>4.c.2 Pupil-trained teacher ratio by education level (✓).</p> <p>4.c.3 Percentage of teachers qualified according to national standards by education level and type of institution (✓).</p> <p>4.c.4 Pupil-qualified teacher ratio by</p>

Target	Indicators
	education level (✓?).  4.c.5 Average teacher salary relative to other professions requiring a comparable level of qualification (✓).  4.c.6 Teacher attrition rate by education level.  4.c.7 Percentage of teachers who received in-service training in the last 12 months by type of training.

Sources: UNESCO Institute for Statistics, February 2018. UNESCO Institute for Statistics Quick Guide to Education Indicators for SDG 4 References UNESCO (2016). Education 2030: Incheon Declaration and Framework for Action for the Implementation of Sustainable Development Goal 4. ED-2016/WS/28. Paris: UNESCO. <http://unesdoc.unesco.org/UJis/cgi>. In The first Malaysia Voluntary National Report 2017, Economic Planning Unit, Prime Minister Department Malaysia.

#### V. SDG4 (ESD) AND OTHER RELATED EDUCATION PROJECTS

Since the 1990s, Malaysia has involved in several international education projects such as the Millennium Development Goals (MDGs), Education for all (EFA), World Education Indicators (WEI), Trends in Math and Science Study (TIMSS) and PISA. These projects are looking at the quality of education from different aspects and each has their own indicators that allow international comparisons and benchmarking to be made. The MDGs, for instance, focused more on enrolment and participation rates at the primary level of education, while TIMSS and PISA are more concerned with the students’ achievement at certain levels of education in specific subject areas such as math, science, and reading, besides thinking skills. The WEI, in turn, are more concerned with the enrolment and participation rates, student-teacher ratios, class size, teachers’ salaries, teachers’ teaching hours and education expenditure as a percent of GDP and government expenditures at different levels of education.

SDG4 has a broader focus than its predecessors, Millennium Development Goal (MDG) 2, “Achieve universal primary education” and MDG 3, “Promote gender equality and empower women”. From a statistical point of view, the MDG framework was built on a set of concrete, measurable indicators and helped to improve national capacity for monitoring in many developing countries. SDG 4 targets, on the other hand, are more complex and contain several concepts that were never measured before at the global level, creating new challenges for developing the indicators which can monitor progress towards SDG4<sup>3</sup>.

#### VI. ESD IN THE EDUCATION BLUEPRINTS

As in other sectors, educational policies and priorities in Malaysia are systematically linked to the national development plans. Thus, MOE is committed

to providing education and training services that are in line with the major thrusts in the national Outline Perspective Plans and the 5-Year Development Plans. With regards to ESD, MOE views that providing quality education to all children, regardless of their backgrounds, is one of the effective strategies in promoting sustainable development. Thus, much effort is directed at strengthening existing programs, equipping schools with better technology facilities, and providing an appropriate curriculum that may be required for a sustainable future.

Malaysia’s consistent commitment towards ESD is evident in the educational blueprints. In the Education Development Plan 2000-2010 targeting providing quality, world-class education, for instance, the focus was on the goals, issues, and strategies for preschool and primary education; secondary education; tertiary education; support programs; financing of education; educational management and ICT in education.

In the Malaysia Education Blueprint (Preschool to Secondary) 2013-2025, more rigorous strategies to provide equitable, quality education for all have been specified through the 11 shifts (Figure 1). The implementation of the plan is divided into three waves - Wave 1 (2013-2015): Supporting teachers and focusing on core skills; Wave 2 (2016-2020): Accelerate system improvement; and Wave 3 (2021-2025): Move towards excellence with increased operational flexibility. Five aspirations for the education system are accessed from preschool to secondary level (100% participation rates across all levels); quality (Top third of countries in international assessment); equity (50% reduction in achievement gaps - urban-rural, socio-economic, gender); unity (An education system that gives children shared values and experiences by embracing diversity); and efficiency (A system which maximises student outcomes within current budget)<sup>5</sup>. Several key-outcomes have also been identified as follows:

- All students (100%) are literate in Bahasa Malaysia and numerate after 3 years of schooling; target for English literacy is determined after the baseline is established
- 92% preschool, 98% primary, 95% secondary enrolment
- 25% reduction in the urban-rural gap
- Malaysia’s performance at par with the international average at the next TIMSS and PISA cycle
- 100% preschool to secondary enrolment
- 50% reduction in the urban-rural gap, 25% reduction in the socio-economic and gender gap
- Malaysia’s performance on TIMSS and PISA in the top third of systems
- Maintain or improve enrolment

- Maintain or improve urban-rural gap, 50% reduction in the socio-economic and gender gaps



Fig. 1. Eleven shifts in the Malaysia Education Blueprint (Preschool to Secondary) 2013-2025, MOE5

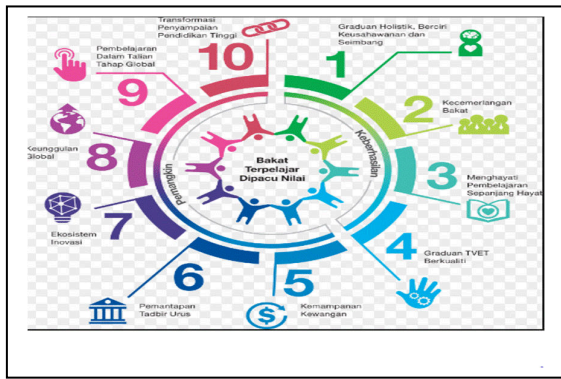


Fig. 2. Ten Shifts in the Education Blueprint (Higher Education) 2015-2025

The Malaysia Education Blueprint (Higher Education) 2015-2025 shares similar aspirations as in the preschool to secondary education, which are access, quality, equity, unity, and efficiency. The preschool, primary, secondary, and higher education systems share a vision of what the outcome of a Malaysian education should look like, and what that means for individual students. The Ministry emphasizes the balance between both knowledge and skills (*ilmu*) as well as ethics and morality (*akhlak*). The student aspirations in the MEB are built around six primary attributes: ethics and spirituality, leadership skills, national identity, language proficiency, thinking skills, and knowledge. These are the same six attributes for students that the higher education system is anchored on. Transformation in tertiary education is driven by 10 shifts (Figure 2).

In the current 11<sup>th</sup> Malaysia 5-Year Development Plan, the 17 SDG targets are mapped with specific development projects or initiatives. Goal 4 ‘ensure inclusive and equitable quality education and promote lifelong learning opportunities for all’ is mapped with strategic thrust 3, Education Blueprint 2013-2025 (Preschool to Secondary), Malaysia Education Blueprint (Higher Education 2015-2025), National Higher Education Strategic Plan and Blueprint on Enculturation of Lifelong Learning 2011-2020<sup>3</sup>.

VII. EVALUATION - CHALLENGES, CONSTRAINTS, AND OPPORTUNITIES

Although Malaysia has sound and clear policies towards promoting SD, constraints do exist in the implementation. Based on a preliminary assessment of data availability in January 2017<sup>3</sup>, 93 indicators (39 percent of 244 indicators) were identified as “available” or Tier 1. Another 41 indicators (17 percent) were described as “partially available”, and 64 indicators (26 percent) were “partially available but need further development”. Collectively, the 105 indicators with partial data availability were identified as Tier 2 indicators, that is, indicators where a methodology has been established but data is not easily available. As for Tier 3 indicators, Malaysia identified 28 indicators (12 percent) for which data are “not available” and 13 indicators (5 percent) “not relevant” to Malaysia. Considering the numerous indicators proposed and their associated costs, Malaysia will identify priority indicators to measure its development efforts and build statistical capacity. In another round of categorization exercise using an SDG priority framework led by DOS in 2017 for instance, 78 Government agencies and eight ministries were identified as data providers.

In the 2017 Voluntary National Report, only three indicators on ESD have been reported, namely enrollment rates for primary school (97.2%) and enrollment rate for secondary school for both boys and girls (90%) in 2016, and 48% enrollment for higher education in 2012 (70% higher than in 2002). Achievement on other indicators have not been reported due to several reasons – either the data are partially available (for instance data collected for different projects/ purposes, but the ownership belongs to different agencies or ministries; available data are incomplete or exist in different formats; available data lack of details), or data for some indicators are simply unavailable because they have never been gathered before, or the indicators are not relevant in the context of Malaysia. I have marked in Table 1 ESD indicators that I think the Ministry of Education and other related ministries can provide the data (✓) and some which are not quite clear as to who owns the data, or who should

coordinate the data and operational definition of those indicators (?).

If the data are readily available for about 41 percent of all the SDG indicators, I believe that at least education data collected for various educational projects can be used for more than half of the SDG4 indicators. On one hand, data gathered annually for the Education Statistics by the Ministry of Education, data gathered for the World Education Indicators (WEI) project and Quick Facts, for instance, can be used for the calculation of enrolment and participation rates, pupil-teacher ratios, teacher salaries, teacher qualifications, educational attainment, and education expenditures. On the other hand, national census data and national exams data can be used to estimate the achievement of the students, while data from the international studies such as TIMSS, PISA, and TALIS can be used for international comparisons of our students' achievement.

No doubt there are still grey areas for some indicators, especially where data are not readily available. Most of the indicators are involving numbers and percentages to determine the quality of education. Even though data are not necessarily easy to gather, the percentages and numbers can be calculated because they are quantitative in nature. But there are also challenging indicators such as 'the extent to which...' where they require clear operational definitions and sometimes subject to interpretations.

Another challenge in SDG monitoring and evaluation is that not all the data required for SDG4 indicators lie with MOE. At the same time, there are also education-related targets in the other 7 SDGs. Thus, collaboration and coordination between all parties involved are very crucial to ensure necessary data are gathered.

The National SDG Roadmap 2016–2020 documents the participatory processes involved in these efforts. Participation has been received from states, Government agencies, non-government organizations (NGOs), civil society organizations (CSOs), and the private sector, driven by the Economic Planning Unit (EPU), and supported by the United Nations Country Team (UNCT) in Malaysia. Multiple stakeholders have been consulted, producing a detailed mapping of the SDGs, target, and indicators to the 11MP strategies, action plan/initiatives, and outcomes via the Cluster Working Committees (CWCs) and Tasks Force under each Goal. SDG4 is under CWC Human Capital, and this is the opportunity for agencies, academia, and individuals to contribute to the SDG4 indicators.

### VIII. CONCLUSION

Malaysia's commitment to promoting sustainable development (SD) is evident from the integration of SD

indicators in the national policy frameworks. As for ESD, SDG4 targets and indicators have been put in place in the Education Blueprints. What is important next is to ensure the full implementation of these policies and programs and monitor the achievement of the related indicators. This would certainly require commitment from the various government agencies, private sectors, and the Malaysian society at large. This also opens the opportunity for the public, academia and interested individuals to carry out research and provide data needed for SDG4 indicators, particularly where data are not readily available or hard to get.

### REFERENCES

- [1] Curriculum Development Center, Ministry of Education (1983). *New Curriculum for Primary Schools*.
- [2] Curriculum Development Center, Ministry of Education (1990). *Integrated Curriculum for Secondary Schools*.
- [3] Curriculum Development Center, Ministry of Education (1998). *Teachers' Guide for Environmental Education across Curriculum: New Curriculum for Primary Schools*.
- [4] Curriculum Development Center, Ministry of Education (1998). *Teachers' Guide for Environmental Education across Curriculum: Integrated Curriculum for Secondary Schools*.
- [5] Curriculum Development Center, Ministry of Education (2001). *Integrated Curriculum for Primary Schools: Mathematics*. Retrieved from <http://www.myschoolnet.ppk.kpm.my>
- [6] Curriculum Development Center, Ministry of Education (2004). *Syllabus*. Retrieved from <http://www.myschoolnet.ppk.kpm.my>
- [7] *Definitions of Sustainable Development*. Retrieved from <http://www.sustainableliving.org/appen-a.htm>.
- [8] Economic Planning Unit, Prime Minister's Department (2003). *Mid-Term Review of Eighth Development Plan 2001-2005*.
- [9] Educational Planning & Research Divisions, Ministry of Education. *Educational Statistics 2000 – 2003*.
- [10] Economic Planning Unit, Prime Minister Department Malaysia, *Voluntary National Report 2017 on Sustainable Goals*. Retrieved from <https://sustainabledevelopment.un.org/content/documents/15881Malaysia.pdf>.
- [11] Goodland, R and Ledoc, G. "Neoclassical Economics and Principles of Sustainable Development" *Ecological Modeling*. Vol 38, 1987. Retrieved from <http://www.sustainableliving.org/appen-a.htm>
- [12] Ministry of Education. *Malaysia Education Blueprint 2013-2025 (Primary to Secondary)*
- [13] Ministry of Education. *Malaysia Education Blueprint 2015-2025 (Higher Education)*
- [14] Siti Eshah Mokshein, *ESD in Malaysia: An Overview*. archive.ias.unu.edu/resource\_centre/Malaysia\_EducationReport\_Aug2004.doc