

ISSUE BRIEF



PROJECTED IMPACT OF COVID-19 ON MALAYSIAN HUMAN DEVELOPMENT INDEX 2020

Introduction

As we enter the second year of the COVID-19 pandemic, it is increasingly clear that this is a crisis of monumental proportions, with catastrophic effects on people's lives and livelihoods and on efforts to realize the 2030 Agenda for Sustainable Development. Experts predict that years of progress have been either halted or reversed due to the health, economic and social impacts of the pandemic. Globally hundreds of millions of people were pushed back into extreme poverty while governments struggle to prop up the economy to reduce job and income losses. The pandemic has wreaked havoc on children's learning and well-being, and women have suffered a disproportionate share of job losses and increased care work at home.

The Human Development Approach

This brief takes a capabilities approach to document the impact of COVID-19 on human development indicators. A capabilities approach or the human development approach is about expanding the richness of human life, rather than simply the richness of the economy in which human beings live. It is an approach that is focused on people and their access to opportunities and choices. The UNDP Human Development Reports, first published in 1990, documents human development progress across the globe on the premise that people should be given more freedom to live the lives they value i.e., by providing them abilities and a chance to use them. Three foundations for human development are to live a long, healthy and creative life, to be knowledgeable, and to have access to resources needed for a decent standard of living. Once the basics of human

development are achieved, they open up opportunities for progress in other aspects of life. In essence, the capabilities approach argues that the process of development – human development – should at least create an enabling environment for people, individually and collectively, to develop to their full potential and to have a reasonable chance of leading productive and creative lives that they value.

Human Development Index (HDI)

The centrepiece of the Human Development Reports is the construction of the Human Development Index (HDI) as a measure of achievement in the basic dimensions of human development across countries. The annual index ranks each country on a scale of 0 (lowest human development) to 1 (highest human development) based on three goals or outcomes of development: a long and healthy life as measured by life expectancy at birth; knowledge as measured by a combination of average schooling attained by adults and expected years of schooling for school-age children; and a decent standard of living as measured by real per capita gross national income (GNI) adjusted to the differing purchasing power parity (PPP) of each country's currency.¹ The PPP is measured by finding the values (in USD) of a basket of consumer goods that are present in each country. For example, if that same basket of goods costs USD100 in the United States and RM200 in Malaysia, then the purchasing power parity exchange rate between the two currencies is simply USD1 for every RM2. On the other hand, a market-based exchange rate would have been approximately USD1 for every RM4.² Since domestic prices in Malaysia are higher GNI per capita (PPP USD) will be lower than GNI per capita (USD) which uses the market USD : MYR conversion rate.

¹ Todaro, M. and Smith, S., 2015. Economic Development. 12th ed. Harlow: Pearson, pp.1-860.

² This type of cross-country comparison is the basis for the well-known "Big Mac" index, which is published by the Economist

magazine and calculates PPP exchange rates based on the McDonald's sandwich that sells in nearly identical form in many countries around the world.

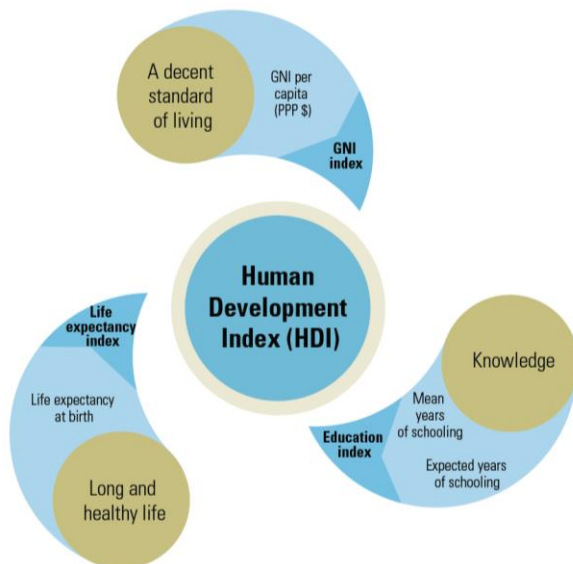


Figure 1. Human Development Index (HDI)

Assessing COVID-19's Impact on Human Development

To assess the COVID-19's impact on human development, the discussion below draws from original calculations of the Human Development Index—by making projections on all three sets of indicators. The education dimension, in particular, is modified to reflect the effects of school closures and mitigation measures i.e., the ability of households to move their children's education online. Projected Gross national income (GNI) per capita for 2020 will be derived using the projected decline in GDP and therefore income. Life expectancy at birth in 2020 (based on United Nations Department of Economic and Social Affairs' 2019 Revision of World Population Prospects) is adjusted by the potential effects of COVID-19 on health, taking the low-impact scenario from a recent study published in The Lancet Global Health for child mortality.³

The simulations presented in UNDP's *Covid-19 and Human Development: Assessing the Crisis, Envisioning the Recovery* report suggest conditions today would correspond to a steep and unprecedented decline in human development.⁴ This is not counting less visible indirect effects, including increased gender-based violence, limited access to justice systems due to movement restrictions and deterioration of mental health since they are yet to be fully documented. The pandemic was superimposed

³ See UNCTAD (United Nations Conference on Trade and Development). 2020. "The Covid-19 Shock to Developing Countries: Towards a 'Whatever It Takes' Programme for the Two-Thirds of the World's Population Being Left Behind." Trade and Development Report Update, March.

on unresolved tensions between people and technology, between people and the planet, between the haves and the have-nots. These tensions were already shaping a new generation of inequalities—pertaining to enhanced capabilities as defined in the 2019 Human Development Report (see Box 1).

With COVID-19, where almost 9 in 10 students out of

Box 1. Enhanced Capabilities (2019 Human Development Report)

Inequalities for some basic capabilities such as primary education, access to mobile phones are already slowly narrowing across most countries, even if much remains to be done. As we enter the 2020s, a new set of capabilities is becoming fundamental to human development. People well empowered with enhanced capabilities today is predicted to get even farther ahead tomorrow.

Enhanced capabilities are at the root of a new generation of inequalities. For instance, the proportion of the adult population with tertiary education is growing more than six times faster in very high human development countries than in low human development countries, and fixed broadband subscriptions are growing 15 times faster.¹ These new inequalities—both between and within countries—are hugely consequential. Shaping 21st century societies, they are pushing the frontiers in health and longevity, knowledge and technology. These are the inequalities that will likely determine people's ability to seize the opportunities of the 21st century, function in a knowledge economy and cope with climate change.

school and deep recessions in most economies (including a 4 per cent drop in GNI per capita worldwide), the projected decline in the Human Development Index—reflecting a narrowing in capabilities—would be equivalent to erasing all the progress in human development of the past six years. It is important, therefore, that conditions in school access are restored so that capabilities related to education would immediately bounce back. The simulations also show the importance of promoting equity in capabilities. In a scenario with more

⁴ UNDP. (2020a). 2020 Human Development Perspectives: Covid-19 and Human Development: Assessing the Crisis, Envisioning the Recovery. New York: Human Development Report Office.

equitable internet access, the decline in human development due to COVID-19 would be significantly less. The following sections describe Malaysia's HDI trends over the years and the projected HDI in 2020 where impacts from the COVID-19 pandemic are taken into consideration.

Pre-COVID: Malaysia's 2019 HDI

Malaysia's HDI value in 2019 is 0.810, an improvement from 0.805 the year before. The score puts the country in the very high human development category, together with two of our ASEAN neighbours, Singapore and Brunei Darussalam.

Malaysia's score is also considerably higher than East Asia and the Pacific region, where the HDI score is 0.747.

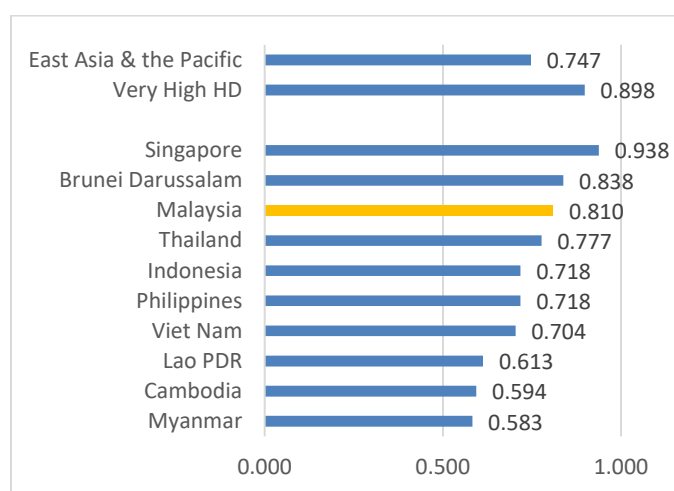


Figure 2. HDI 2019 scores

In terms of ranking, Malaysia is placed 62 out of 189 countries and UN-recognised territories. Between 1990 and 2019, Malaysia's HDI value increased from 0.643 to 0.810, an increase of 26.0 per cent (Table 1). In the same period, Malaysia's life expectancy at birth increased by 5.3 years, mean years of schooling increased by 3.8 years and expected years of schooling increased by 3.9 years. Mean years of schooling represents the average number of years of education received by people aged 25 and older in 2019. For Malaysia in 2019, this is 10.4 years on average, or which translates into Secondary Year 4 or Grade 10. Malaysia's GNI per capita increased by about 177.3 per cent between 1990 and 2019, reflecting its successful transition into a greatly diversified economy supported by a highly skilled labour force and a strong financial system.

Table 1. HDI trends for Malaysia

	1990	1995	2000	2005	2010
Life expectancy at birth	70.9	71.8	72.6	73.6	74.5
Expected years of schooling	9.7	10.2	11.9	12.7	13.0
Mean years of schooling	6.5	7.6	8.6	7.6	9.8
GNI per capita (2017 PPP USD)	9,928	13,659	14,700	17,325	19,881
HDI value	0.643	0.682	0.723	0.730	0.772

	2015	2016	2017	2018	2019
Life expectancy at birth	75.5	75.6	75.8	76.0	76.2
Expected years of schooling	13.5	13.7	13.9	13.7	13.7
Mean years of schooling	10.2	10.2	10.2	10.2	10.4
GNI per capita (2017 PPP USD)	24,118	24,846	25,897	26,557	27,534
HDI value	0.796	0.800	0.805	0.805	0.810

Projected Impact of COVID-19 on HDI 2020

Taking off from the official 2019 data on HDI and its components and given the estimated and assumed impacts of COVID-19 on the HDI components, the 2020 COVID-19-adjusted HDI for Malaysia is simulated using the following assumptions:

- Life expectancy at birth in 2020 (based on United Nations Department of Economic and Social Affairs' 2019 Revision of World Population Prospects) is adjusted by the potential effects of COVID-19 on health. Under this scenario, the country's life expectancy at birth in 2020 is expected to be around the level in 2019. This is the same approach used by the UN Human Development Report Office (HDRO) in its 2020 simulation of the global HDI.⁵
- The Expected Years of Schooling (EYS) formula is derived from the definition of EYS (a linear function of enrollment rates), substituting enrollment rates by an estimate of effective attendance rates. COVID-

⁵ The UN HDRO's results of the global HDI simulation are in UNDP (2020). COVID-19 and Human Development: Assessing the Crisis,

Envisioning the Recovery. 2020 Human Development Perspectives. New York: United Nations.

adjusted EYS is expressed as⁶

$$\text{Adjusted_EYS} = (1 - \text{close}(1 - \text{inet})) * \text{EYS}$$

where close = % of time of school closure⁷; inet = % of households with access to the internet⁸, and EYS = expected years of schooling

- c. The Mean Years of Schooling is assumed to miss two years of annual growth; hence, it will be back to its 2018 level, which is 10.2 years. This is because we assume that school dropout rates and college dropout rates will be higher as some students are forced to work to help relieve economic hardships faced by their families during the pandemic.
- d. The GNI per capita is adjusted using the GDP growth projection rate for 2020 which is -5.6%, based on a report produced by World Bank in June 2020.⁹ The restrictions on mobility, especially on inter-district and inter-state travel, disruptions in supply chain and retail industries weighed on economic activities for most of the year.

Table 2. Simulating the 2020 Human Development Index given COVID-19

Indicator	2019	2020 (project ed)	% Change
Life expectancy at birth	76.2	76.2	0
Expected years of schooling	13.7	12.87	- 6.1
Mean years of schooling	10.4	10.2	- 1.9
GNI per capita (2011 PPP USD)	27,534	25,992	- 5.6
Human Development Index	0.810	0.797	- 1.6

Source: UN Human Development Report 2019 for the 2018 figures. Authors' simulations for the 2020 figures based on HDRO methodology.

In terms of the indicators, EYS in 2020 is expected to show the greatest drop (6.1 per cent). While 89 per cent of households have internet access,¹⁰ the speed differs, making live class sessions particularly challenging for those living in remote rural areas. Low-income households often have to 'ration' the limited number of devices and internet data plan amongst their children. On average, secondary students say

they need about 3GB to 4GB a day for e-learning.¹¹ In April 2020, a Ministry of Education's survey on Teaching and Learning (PnP) online found 36.9 per cent of students nationwide do not have any electronic devices.¹² Only 6 percent had personal computers, tablets (5.67 percent), laptops (9 percent) and smartphones (46 percent).

The negative 5.6 per cent GDP growth projection for 2020 is the cumulative result of various lockdown periods during the year. In May 2020, Prime Minister Muhyiddin Yassin said the country was losing an estimated RM2.4 billion (USD550 million) daily throughout the enforcement of the MCO, which was at the time in its fourth phase. Micro, Small and Medium Enterprises (MSMEs), which employ 48.4 per cent of Malaysia's workforce (DOSM, 2019), remain particularly challenged until today, with many struggling to stay afloat. In April 2020, unemployment in Malaysia rose to 5%, the highest it has been since 1990. Malaysia subsequently eased restrictions and shifted into recovery mode, with unemployment moderating in the latter half of the year. A COVID-19 resurgence towards the end of the year dampened the recovery momentum causing a general weak yearly performance for 2020.

The resulting simulation of COVID-adjusted HDI in 2020 shows a decline of the Malaysia HDI score from 0.810 in 2019 to 0.797, a contraction of 1.6 per cent. Nonetheless, because the level of HDI has been relatively stable for Malaysia, which had increased by only 0.55 per cent on average between 2010 to 2019, even a minor reduction can drastically bring the HDI down to previous levels of development. In the Malaysian case, the projection result is equivalent to erasing progress made in human development over the past five years, back to 2015 (0.796). This is only one year less than the global HDI setback estimated by the UN HDRO using the same principles of adjustment, which estimated that global 2020 HDI has regressed by at least six years.

⁶ The equation follows EYS adjustment used by the "Projected Impacts Of Covid-19 On The 2020 Human Development Index In Cambodia And Its Neighbors" Report, UNDP Cambodia, 2020.

⁷ Actual number of schooling days are not available, but a rough estimate is that schools closed for 5 to 6 months in 2020.

⁸ Household with internet access in Malaysia is approximately 89%, based on Internet World Stats; [Asia Internet Usage Stats Facebook and 2021 Population Statistics \(internetworldstats.com\)](https://www.internetworldstats.com/) accessed 22 July 2021.

⁹ <https://www.worldbank.org/en/news/press-release/2021/06/08/world-bank-global-economic-prospects-2021>

¹⁰ Internet World Stats; Asia Internet Usage Stats Facebook and 2021 Population Statistics (internetworldstats.com) accessed 22 July 2021

¹¹ <http://www.dailyexpress.com.my/news/154979/digital-divide-rural-students-struggle-with-online-learning/>

¹² The survey involved 670,000 parents or a total of 900,000 students.

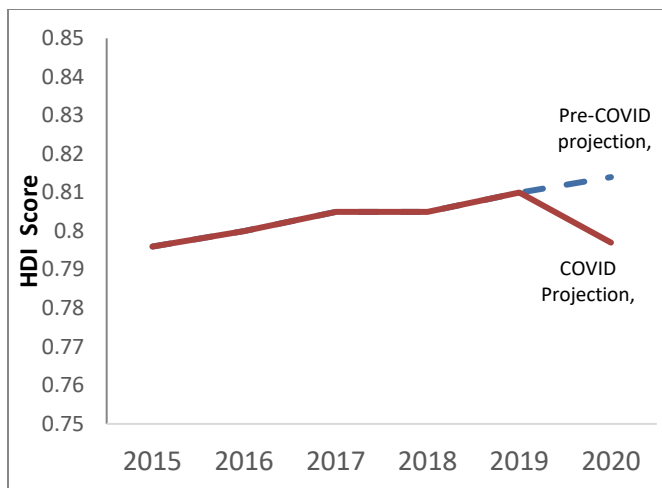


Figure 2. Projected 2020 HDI Score pre and with COVID-19

Concluding Remarks

The COVID-19 crisis poses several special challenges to policymakers, both because of the pre-existing weaknesses of the global economy and because of the special characteristics of this crisis. The key objective of policy responses is to formulate policies that deal with the current crisis and at the same time promotes inclusive human development in the coming years and for future generations. The policies must not allow existing inequalities to be exacerbated by emerging challenges brought forth by the pandemic. People in low-income groups are much more vulnerable, in part because they lack the ability to come up with emergency funds to cope with income shocks and vulnerabilities. The policy response would need to reach the vulnerable through social protection measures to enable subsistence and support their basic capabilities. Digital capabilities play a crucial role in helping to maintain economic and social interactions, including education, continuity of work and business; such that households and micro-businesses without access to stable and affordable internet services and technological devices are at risk of being left behind.

As the 2019 Human Development Report documented, policies supporting equality can promote equality in basic and enhanced capabilities while also promoting inclusive growth.

A wave of innovation and behavioural changes are taking place in society in response to life during the

pandemic. Coupled by re-commitment by the Government, cities, businesses, and industries must ensure that recovery efforts must also tackle growing poverty and inequalities, create better jobs while reducing carbon emissions. The crisis provides an opportunity for countries across the globe to transform for the better, deliver on the 2030 Agenda and promote human development in its truest sense.



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