

Special Report On the 12th Malaysia Plan 2021 - 2025: 12MP success needs high-quality investments, greater public accountability, whole-nation participation

Cindy Yeap / The Edge Malaysia
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AFTER four postponements, the tabling of the 12th Malaysia Plan (2021-2025) on Sept 27 did not disappoint when it came to the exceptionally high RM400 billion headline development expenditure allocation, bolstered by numbers not traditionally included under the five-year plans. It also acknowledged a number of deep-rooted economic and social shortcomings that need to be corrected fast for Malaysia to progress from upper-middle-income to high-income nation status and remain there.

For example, Malaysia, for the first time, not only acknowledged the lack of high-quality investments required for the nation to move up the value chain but also set a target to have investments in R&D account for 2.5% of GDP by 2025 from 1% of GDP in 2020.

That is a good start if the benchmark is the best in class. South Korea — which reached the threshold of a lower-middle-income country the same year as Malaysia in 1969 but attained upper-middle-income status in 1988 and high-income status in 1995 — has spent more than 2.5% of its GDP on R&D since 2004, according to World Bank data. In fact, the amount spent on R&D has exceeded 4% of GDP since 2012, reaching 4.81% of GDP in 2018, among the world's highest.

To reap the desired high-level productivity gains, Malaysia also needs to significantly raise the quality of R&D spending. Investments were largely “low quality”, with 59.5% going to physical infrastructure in 2019 compared with 48.2% in 2010, while investments in ICT equipment and other machinery and equipment were 20.3% in 2019, down from 26% in 2010.

“This reflects the low adoption of technology and automation among firms to harness the full potential of emerging technology, impacting the productivity and efficiency of firms,” the 12MP report reads.



The low-quality investments were not just in the “hard” infrastructure but also the sufficient and relevant research, development, commercialisation and innovation (R&D&C&I), which weighs on Malaysia’s capacity in the digital economy. Malaysia ranked No 27 out of 64 countries in the Institute for Management Development’s (IMD) World Digital Competitiveness Ranking 2021, which has been led by the US since 2018. Behind are all four Asian Tiger economies: Hong Kong (No 2), Singapore (No 5), Taiwan (No 8) and South Korea (No 12).

Malaysia also sees “limited gains from global value chain participation”, where there is a high use of imported inputs in producing its exports (36.9% in 2015), but Malaysian-made products made up only 18.7% of exports by other economies, data appended in the 532-page 12MP report showed.

Even in the electrical and electronic (E&E) industry, which contributes a significant portion to Malaysia’s exports (45.6% or RM386.1 billion in 2020) and economy, the report notes a lack of R&D activity required for the country to move up the value chain as well as maintain its growth and competitiveness globally.

“The industry is facing a shortage of skilled talent, especially for top-end design engineers and researchers to meet industry needs. In addition, easy access to low-skilled foreign workers has discouraged the E&E industry from innovating and investing in automation as well as new technology to produce high-value products. Furthermore, the industry is mainly focused on back-end manufacturing activities such as assembly, testing and packaging, which are low in value-added, capital intensity and technology complexity,” it notes.

Under 12MP, the E&E industry is targeted to contribute at least RM120 billion to GDP by 2025, up from RM86.1 billion or 6.4% of GDP in 2020.

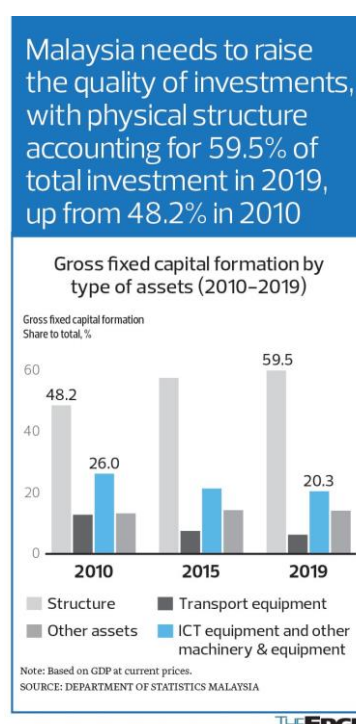
Measure what matters

For the 12MP targets to have a fighting chance of succeeding in helping Malaysia move up the value chain, there needs to be “a proper diagnosis of the problems at hand, proper measurement and breakdown of the targets and goals and publicly assigning responsibilities and KPIs (key performance indicators) to the various ministries and agencies”, says opposition lawmaker Ong

Kian Ming, member of parliament for Bangi and former deputy minister of international trade and industry.

The person in charge and accountable for each specific target needs to be clearly spelt out for public accountability because many of the goals and objectives of 12MP require inter-ministry coordination — often with a lead ministry in charge of chairing the various committees and task forces.

“Without spelling out the process and mechanism, including which ministries are involved and which ministry is in charge, it is likely that the objectives in 12MP will not be moving along,” Ong tells The Edge.



“For example, R&D spending. Mosti (Ministry of Science, Technology and Innovation) is the most likely champion for this goal but it also involves the participation of the Ministry of Higher Education (MoHE) for research initiatives at public and private institutes of higher learning, Miti (Ministry of International Trade and Industry) on technology transfer and R&D, which is linked to tax incentives given by Mida (Malaysian Investment Development Authority), and KPDNHEP (Ministry of Domestic Trade and Consumer Affairs) for patent protection arising from inventions that are linked to R&D, just to name a few.”

Just like each objective and goal outlined in 12MP need to be broken down, what constitutes the 2.5% of GDP spending also needs to be detailed.

“Is it spending on physical infrastructure such as lab equipment and computers for the purpose of research in academia as well as private sector companies such as the glove companies and E&E companies? Does it include training given to scientists, engineers and researchers by private companies for the purpose of talent development so that their R&D capabilities can be enhanced? While the EPU (Economic Planning Unit) may say it does not have the space in 12MP or the jurisdictional control over the relevant ministries to dictate detailed policy instruments, it should be in a position to recommend the breakdown of these high-level goals that 12MP wants to achieve,” says Ong.

Effective monitoring

According to 12MP, the newly formed Research Management Unit (RMU) under the EPU will coordinate and harmonise the funding mechanism of all R&D&C&I activities to ensure that at least half of total R&D expenditure under 12MP will be for “experimental development research with high commercialisation potential”. It is not immediately known, however, whether RMU will be coordinating other aspects in addition to funding.

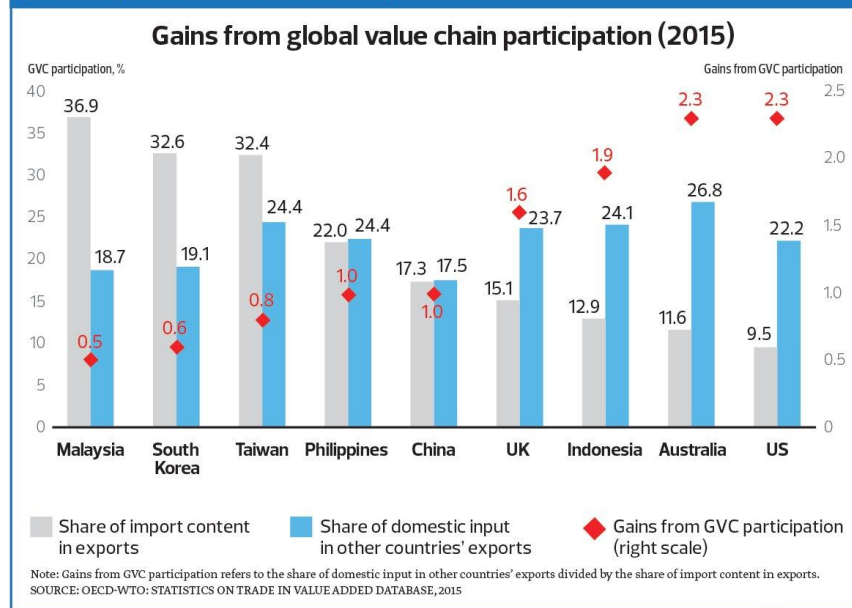
There is a need, for instance, to make sure that any tax benefits given out yield the desired technology transfer.

“Many tax incentives given to companies investing in Malaysia have R&D commitment and human resources training and technology transfer requirements stipulated in the Mida agreement with the foreign investor in question. But the monitoring and reporting on whether these companies comply with these conditions, including those to do with technology transfer, needs to be enhanced significantly and also reported publicly, including as part and parcel of the yearly Mida and Miti report,” Ong says, adding that this would make it easier for EPU to monitor yearly progress on R&D spending and technology transfer.

“MoHE can also be called on to report the progress of R&D grants, which it gives out to the [public and private institutes of higher learning], as part of the KPI for R&D.”

Bolster innovation

Malaysia's gains from global value chain participation are relatively limited



Malaysia has a lot of catching up to do to improve productivity and move up the value chain. R&D expenditure of business enterprises declined from RM10 billion in 2016 to RM6.6 billion in 2018, with the share decreasing from 56.6% to 43.9%. Experimental development research — which includes the pre-commercialisation stage, development of prototypes, proof of concept and pilot projects — was low at 24.5% of total research expenditure in 2018, affecting the rate of commercialisation.

“This was mainly due to a lack of collaboration between universities and industries. Innovation and technology adoption also remain low due to the lack of investment in high-end R&D, insufficient proof of talent in frontier technologies and poor coordination among agencies,” the 12MP report reads.

It notes that Malaysia ranked No 65 out of 137 countries in the product innovation pillar of the Global Entrepreneurship Index (GEI) in 2019, the lowest among Asean countries. Malaysia’s ranking in the Global Innovation Index, meanwhile, dropped from No 32 in 2015 to No 33 in 2020, owing to a lower score in creative outputs as well as in the knowledge and technology output pillars.

“Malaysia, therefore, needs to make a tremendous leap in terms of innovation to become a high-technology-based economy,” the report adds.

Not only do local companies lack experience and readiness to go global, weak branding of products and services, as well as unattractive products, further hampered the penetration of Malaysian companies into the international market.

“Also, local digital solution providers lack the capability to upscale, especially in cloud computing services. This has resulted in the inability to meet domestic demand and compete with global players, especially in providing higher digital technology services,” the 12MP report reads.

This, it adds, was on top of the lack of training and low investment in talent development, which resulted in an insufficient supply of skilled workers and expertise, especially in the area of data science, cybersecurity, digital finance and content development. Not only are

efforts to reskill and upskill workers in digital-related technical skills “inadequate”, but the report also said existing modules on digital learning in schools “do not address the computational and analytical thinking skills required for digital readiness”. That is on top of inadequately trained teachers and insufficient digital infrastructure and devices hampering remote learning for students. Covid-19 has further widened the digital divide.

Be more specific

Much work is needed for more efficient public service delivery as well, with end-to-end digital services in the government sector at only 46.8% in 2020. In addition to the infrastructure gap, there is a talent gap, with public sector training programmes “mainly concentrated on basic digital literacy while upskilling programmes, particularly in data analytics, were limited”, the 12MP report says, adding that training modules were not customised according to the needs of the various agencies.

While Malaysia’s Digital Economy Blueprint (under the MyDIGITAL initiative) has rightly designated Mampu (Malaysian Administrative Modernisation and Management Planning Unit) as the sole agency responsible for driving public sector digital transformation, it may help, for instance, if the government spelt out how many civil servants it wants trained for a number of specific digital skills such as data analytics rather than just saying it wants “100% of civil servants to possess digital literacy in 2025”. Targets under MyDIGITAL include having 250 certified trainers for the Digital Government Competency and Capability Readiness programme by 2025.

Singapore’s digital government blueprint, for instance, committed to training 20,000 officers in data science by 2023, on top of providing their public service officers with specific ICT competencies that are tied to their job functions, among others.

A former consultant with Boston Consulting Group, Ong, who provided pro bono consultation services to businesses and small and medium enterprises (SMEs) looking for solutions to survive Covid-19 in June, said those seeking aid would definitely benefit from “some sort of one-stop centre” that displays all the relevant information, including loans, grants and subsidies available for application and contact numbers to call if they require further information.

“Since digitalisation is an important component of 12MP, I would definitely recommend that the government use more AI (artificial intelligence) to respond to these sorts of needs by SME owners, including chatbots in different languages that can respond to very basic queries and then human call centres to respond to the more complicated queries. There are many programmes out there that SME owners can apply for, but many of them don’t know where to start or how to go about applying for these programmes, loans and grants,” he says.

Greater clarity would be positive for the country’s 1.2 million micro, small and medium enterprises (MSMEs), whose productivity can be enhanced with digitisation. Through better investment incentives, especially in strategic high-impact industries, the 12MP report says private investments are expected to make up more than 75% of the total investment over the 12MP period, up from 70% during 11MP, attaining the level seen prior to the 1997/98 Asian Financial Crisis.

When tabling 12MP on Sept 27, Prime Minister Datuk Seri Ismail Sabri Yaakob said the government “would like the private sector to resume playing a bigger role in driving the country’s economic growth”, assuring that the government would cut red tape, provide

quality and reliable infrastructure and strengthen the ecosystem to support private investment and develop a skilled workforce.

“The National Investment Aspiration (NIA) policy will be the main framework in attracting quality investment and positioning Malaysia as an investment hub in the region,” he said, adding that existing incentives will be reviewed to give focus on advanced technology-based investments that conform with environmental sustainability.

Describing 12MP as one that will enable Malaysia to become a high-income and high-tech nation with a skilled workforce, and a nation that achieves inclusive growth without compromising the environment, Ismail Sabri assured that the government “will work earnestly to improve the well-being of the people and ensure that no one is left behind”.

There is no denying that damage inflicted by the pandemic and previous financial crises stalled Malaysia’s progress towards high-income-nation status. Yet, the headwinds merely amplified a number of pre-existing and deep-rooted economic and social shortcomings rather than being the reason the country is no longer deemed the fifth Asian tiger it was in the 1990s. Having acknowledged a number of shortcomings and missteps, Malaysia needs to take swift corrective actions so that others will learn more from our successes rather than our failures.