CIMB ASEAN RESEARCH INSTITUTE
DEDICATED TO ASEAN INTEGRATION

VOL 1 | PAPER 11 | 04 OCTOBER 2016

AEC BLUEPRINT 2025 ANALYSIS

AN ANALYSIS OF THE ASEAN PRIORITIES ON PRODUCTIVITY, INNOVATION, RESEARCH & DEVELOPMENT AND TECHNOLOGY COMMERCIALISATION

Foreword

The following report is part of a series which attempts to provide a detailed analysis on the ASEAN Economic Community (AEC) Blueprint 2025. Each report will cover a single element of the blueprint, providing a comprehensive look at past achievements, present problems, and the future plans of the AEC. Special attention will be placed upon the strategic measures outlined in the AEC Blueprint 2025. This report aims to provide insight into the viability surrounding regional economic integration under the AEC.

Productivity-Driven Growth, Innovation, Research And Development and Technology Commercialisation

ASEAN has now put a greater priority on productivity, innovation, technology and research and development (R&D) to improve its competitiveness in the global market. These are deemed important components that must be further developed and nurtured if ASEAN wishes to compete in the global scale. These priorities cut across many different sectors or initiatives under the AEC such as global value chain, MSME development, science and technology, and intellectual property rights (IPR). Almost all stakeholders of the AEC will enjoy the benefits if ASEAN member states are able to implement the measures and therefore improve their capabilities in promoting innovation and technology to improve productivity. This report aims at providing some useful information on ASEAN's strategy to increase productivity through innovation and technology, and how the stakeholders may take advantage of it.

A. Targets under the AEC 2015 Blueprint

- This particular section was not separately outlined in the previous AEC blueprint. The words "productivity" and "innovation" were not explicitly used, but implicitly under the ASEAN Socio Cultural Community (ASCC), the measures on "advancing and prioritizing education" and "advancing human resource development" implied that improvement of education and knowledge would lead to better quality of ASEAN human resource. Promotion of technology was not only under AEC, but also ASCC. Development and promotion of information and communication technology (ICT) were outlined under both pillars. Initiative on science and technology was under the ASCC in the previous blueprint, but is now under AEC in the new blueprint.

- Given that the AEC Blueprint 2015 did not outline specifically ASEAN's priorities on productivity, innovation and technology per se, there were not any measured targets to be achieved by the end of 2015.

B. Significant Achievements To Date

- Given that the AEC Blueprint 2015 did not specifically outline ASEAN's priorities on productivity, innovation and technology per se, there were not any measured targets to be achieved by end of 2015.

- However, some indications on the productivity per worker in each ASEAN member state can be described in the following table:

SELECTED LABOUR MARKET INDICATORS IN ASEAN

	Labour Force (000s)	Education and Skills Development			Average Monthly Wage ($)	Labour Productivity (constant 2005 international $)
		Literacy rate, ages 15+ (per cent)	TVET enrollment as share of total secondary enrollment (per cent)	Tertiary gross enrollment rate (per cent)		
Brunei	186	95.4	11.4	24.3	N/A	100,015
Cambodia	7,400	73.9	2.3	15.8	121	3,989
Indonesia	118,193	92.8	18.0	27.2	174	9,848
Lao PDR	3,080	72.7	0.8	16.7	119	5,396
Malaysia	13,785	93.1	6.8	36.0	609	35,751
Myanmar	30,121	92.7	N/A	13.8	N/A	2,828
Philippines	41,022	95.4	N/A	28.2	206	10,026
Singapore	3,444	95.9	11.6	N/A	3,547	98,072
Thailand	39,398	93.5	15.4	51.4	357	14,754
Vietnam	53,246	93.4	N/A	24.6	181	5,440

Source: ASEAN Community 2015: Managing Integration for Better Jobs and Shared Prosperity (ADB and ILO, 2014)

- As the table indicates, the ASEAN labour markets differ significantly in terms of supply, skills, wages and productivity. In terms of enrollment in technical and vocational education and training (TVET), most have not reached sufficient level. The same story goes for university level education. Average monthly wages are high only in Singapore and to a certain extent, Malaysia. In most other countries, the wage level is still low.

- There seems to be a positive correlation between productivity (output per worker per year) and the skills of the labour force.

C. Current Issues and Challenges

- The productivity levels across the ASEAN member states vary quite widely. While this can be attributed to the different sizes of labour force, skills and education levels do play a role, as shown in the positive correlation between productivity and skills levels.

- In most ASEAN member states, the economies are still labour intensive. Development of proper innovation can be useful in improving productivity, without technology replacing the roles of labour force. The challenge then is to enhance productivity while still creating job opportunities for the work force. This would require development of the right technology to fit the condition of the ASEAN economic structure.

D. Plans under the AEC 2025 Blueprint

- Under the AEC Blueprint 2025, greater priority is now given to increasing productivity through further investment in R&D to promote innovation so that the ASEAN human resource can be more competitive, especially if ASEAN wishes to strengthen its position within the value chain of the global production network. If ASEAN is able to fully implement the agreed strategic measures, there is a great chance that its global competitiveness could make a giant leap ahead of the other economic regions.

E. AEC 2025 Blueprint Analysis

Strategic Measure	Current Status and Development
1 Partnerships among the relevant stakeholders	
Enhancing competitiveness • Promote strategic partnerships among the academia, research institutions, and the private sector towards developing capabilities and creating an effective channel for technology transfer and commercialization **Promoting innovation** • Encourage information sharing and networking to stimulate ideas and creativity at the universities and business-level	• Currently involvement of AEC stakeholders, particularly the organisations and institutions, has been improving with the authorities starting to conduct more consultations and cooperation with the stakeholders. • The ASEAN Charter has already listed many organisations that are affiliated with ASEAN and whose scope of work covers the ASEAN region as a whole. These organisations could be better empowered in enhancing ASEAN's competitiveness. • The ASEAN Business Advisory Council (BAC) has yearly consultations with the Leaders during the Summit.
2 Regional IP platforms and infrastructure	
Enhancing competitiveness • Strengthen the competitiveness of the MSMEs sector in ASEAN through the application of science and technology (S&T) tools and methodologies **Promoting innovation** • Place a greater focus on entrepreneurship, and development of business incubator programmes for commercialisation	• Under ASEAN MSME development, improving productivity through technology and innovation has been one priority area. Many activities have been conducted to improve the capabilities of MSMEs in many different industries, for example in agriculture, handcrafts, metal goods, etc. • Entrepreneurship received significant attention in 2015 when Malaysia as the Chair of ASEAN that year organised events to encourage young entrepreneurs in the region, such as the 1st ASEAN Entrepreneurship Summit (1AES). The Malaysian Global Innovation and Creativity Centre (MaGIC) launched the ASEAN Centre for Entrepreneurship (ACE) to support start-ups to expand their businesses regional and globally.

Strategic Measure	Current Status and Development
3 Innovation, technology and R&D	
Promoting innovation • Foster a hospitable intra-ASEAN policy environment for technology transfer, adaptation and innovation, including increased level of as well as supportive fiscal and non-fiscal policies for R&D in both local and foreign owned firms in the region • Focus support on the development of R&D parks, joint corporate, government and/or university research laboratories, R&D centres, and similar S&T institutions and centres • Develop and strengthen ASEAN linkages to global and regional R&D networks	• The ASEAN Committee on S&T (COST) has established nine sub-committees, each of which is responsible for advancement of S&T in areas ranging from biotechnology to space technology and its applications. • The COST has also established working groups to coordinate cooperation with external parties (dialogue partners). • ASEAN R&D institutions have been identified in each ASEAN member state to support the development of relevant technologies and innovations to improve ASEAN's economic competitiveness. The areas covered include biotechnology, engineering, robotics and rice research.
4 Enabling system and environment	
Enhancing competitiveness • Enhance the support system and enabling environment to nurture a highly mobile, intelligent and creative human resource that thrives on knowledge creation and application **Promoting innovation** • Promote strong IPR protection in the region • Promote programmes that enhance ASEAN participation in global and regional value chains and production networks, including programmes and joint promotions that attract leading technology firms to set up shop in the region, develop industrial clusters and support industries, and improved physical and institutional connectivity within the region and with the rest of the world	• ASEAN has been quite committed in promoting S&T in the region. Partnering with the US and China, ASEAN is continuously working towards technology transfer and innovation in many different areas including agriculture, aquaculture, climate change, renewable energy and biogas. • In terms of IPR protection, as described in the analysis paper on IPR, ASEAN has set up IP offices and infrastructure to promote innovation and protect the rights of the innovators. ASEAN has also developed the IP portal to provide relevant and updated information to the stakeholders.

F. Conclusion: Moving Forward with the AEC 2025 Plans

- The large gaps among ASEAN member state in terms of economic development have had direct consequences in the productivity levels across the region. In countries where the productivity is high, the skills level is also above that of other member states. It is then very important to further encourage higher participation in the education system, all the way to higher education, and continuously improve the general quality of education at all levels.

- The link between R&D and quality of education is clear. Research oriented institutions would have higher quality of education. The mutual relationship must continue to be nurtured. A more intensive R&D also contributes to the advancement of technology and innovation, particularly if it is linked and matched with the demand from the relevant parties, such as MSMEs and larger industries, which will in turn lead to higher productivity. Development of technology and innovation must take into account the facts that most economic sectors in ASEAN are still labour intensive and that jobs must continue to be created for the increasing size of workforce.

- Given that the AEC Blueprint 2025 has put a priority on productivity, innovation and technology, the relevant government authorities – those in charge of education, R&D, IPR, S&T, and industry – must start to communicate and cooperate with each other to improve ASEAN's competitiveness. In addition, involvement of the stakeholders must be improved to achieve the desired goals of the blueprint.

- Although the ASEAN BAC has conducted annual consultations with the Leaders at the Summit, this kind of engagement needs to be enhanced in terms of length and quality of discussions to ensure that the private sector's voice is taken into account in the formulation of ASEAN regional economic policies. It would also be useful to expand the consultations to the senior officials and technical levels so that the public-private dialogue could work better especially in the implementation part of the policies.

References

ASEAN Secretariat (2008). ASEAN Economic Community Blueprint
ASEAN Secretariat (2015). ASEAN 2025: Forging Ahead Together
ASEAN Secretariat (2015). ASEAN Integration Report 2015
ASEAN Secretariat (2015). A Blueprint for Growth ASEAN Economic Community 2015: Progress and Key Achievements
Asian Development Bank (ADB) and International Labour Organisation (ILO) (2014). ASEAN Community 2015: Managing Integration for Better Jobs and Shared Prosperity

Contributing Writer:

Dr. Bambang Irawan was formerly an Assistant Director at the ASEAN Secretariat, Jakarta, Indonesia. His portfolio covered cooperation and initiatives under the ASEAN finance integration. In his capacity, he coordinated activities and initiatives under financial services liberalisation, capital account liberalisation, capital market development, insurance and taxation.

Editor:
Jukhee Hong
Contact Details:
Please contact the CARI for information about this paper: enquiries@cariasean.org
Disclaimer:
Any analysis, opinion or editorial contained in this report is based on information sourced from or made available in the public domain. CIMB ASEAN Research Institute (CARI) assumes no liability and makes no guarantee, representation or warranty, whether express or implied, as to the adequacy, accuracy, completeness or reliability of any such information and analysis, opinion or editorial contained in this report. All readers are advised to conduct their own independent verification and/or evaluation of such information and analysis, opinion or editorial.