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# THE STATE OF HIGHER EDUCATION IN SOUTHEAST ASIA

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**SHARE** – Support to Higher Education in the ASEAN Region – is a European Union (EU) Grant funded project with an overarching objective to strengthen regional cooperation, enhance the quality, competitiveness and internationalisation of ASEAN higher education institutions and students, contributing to an ASEAN Community. The main aim of SHARE is to enhance cooperation between the EU and ASEAN to create an ASEAN Higher Education Space.

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# ACRONYMS

| | |
|---|---|
| **ACD** | Asia Cooperation Dialogue |
| **ACD-ACTS** | Asian Credit Transfer System |
| **ADB** | Asian Development Bank |
| **AIMS** | ASEAN International Mobility for Students |
| **ASEAN** | Association of Southeast Asian Nations |
| **ASED** | ASEAN Education Ministers' Meeting |
| **ASEM** | Asia–Europe Meeting |
| **AUN** | ASEAN University Network |
| **AUN-ACTS** | ASEAN Credit Transfer System |
| **AUN-QA** | ASEAN University Network–Quality Assurance |
| **AUN-USR&R** | ASEAN University Network - University's Social Responsibility and Sustainability |
| **AWGHEM** | ASEAN Working Group on Higher Education Mobility 2025 |
| **CAFTA** | China-ASEAN Free Trade Area |
| **CLMV** | Cambodia, Lao PDR, Myanmar, and Viet Nam |
| **COVID-19** | Coronavirus Disease |
| **ECTS** | European Credit Transfer and Accumulation System |
| **EU** | European Union |
| **HEIs** | Higher Education Institutions |
| **IHE** | International Higher Education |
| **LLL** | Lifelong Learning |
| **SEAMEO** | Southeast Asian Ministers of Education Organisation |
| **SEAMEO-RIHED** | Southeast Asian Ministers of Education Organisation Centre Specialising in Regional Higher Education Development |
| **STEM** | Science, Technology, Engineering, and Mathematics |
| **TNHE** | Transnational Higher Education |
| **EU-SHARE** | European Union Support to Higher Education in the ASEAN Region |
| **UIS** | UNESCO Institute of Statistics |
| **UMAP** | University Mobility in Asia and the Pacific |
| **UN** | United Nations |
| **UNESCO** | United Nations Educational, Scientific and Cultural Organisation |
| **VE/COIL** | Virtual Exchange/Collaborative Online International Learning |

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# INTRODUCTION

# I. Introduction

Southeast Asia, a region composed of 11 nations, is among the most diverse in the world. It consists of ten countries from the Association of Southeast Asian Nations (ASEAN) and Timor Leste, the lone non-Member State in the process of accession. In 2020, the total estimated population of the ASEAN stood at 661,826,000 of which 45% live in urban centres. The general population is considered young with 51% in their productive years (20 to 54 years age group) and a third are aged below 20 years. The region comprises of over a thousand ethno-linguistic groups and is home to peoples of various religious backgrounds including Christianity, Islam, and Buddhism.

With a combined economic output of close to USD 3 trillion in 2020, ASEAN Member States are spread across three levels of economic development based on the World Bank country income classification[1]. On one end of the spectrum, there are the high-income economies of Singapore and Brunei Darussalam. In the upper-middle-level income economies are Malaysia and Thailand. Meanwhile Indonesia, the Philippines, Viet Nam, Lao PDR, Cambodia, and Myanmar are considered lower-middle-income economies. For all its diversity, the ASEAN has been moving towards social and economic integration. It envisions itself as an inclusive, harmonious and equitable community with a single market that is fully integrated into the global economy.

One of the areas that is seen to facilitate ASEAN integration is higher education, which has seen rapid growth and internationalisation in the last decade. The ASEAN Socio-cultural Community Blueprint 2025 advocates the promotion of "an innovative ASEAN approach to higher education" which will "promote greater people-to-people interaction and mobility within and outside ASEAN" leading to "the free flow of ideas, knowledge, expertise, and skills to inject dynamism within the region." Yet at the same time, the burgeoning higher education systems continue to be confronted with several challenges amidst the changing political, economic and socio-cultural landscape of the region. Despite such challenges, there is general consensus among ASEAN Member States that an enhanced capacity and harmonised higher education systems will make for a more prosperous region. During its 2015 summit, the ASEAN acknowledged the critical role of higher education in accelerating the region's development agenda.

[1] based on the 2022 country classification by income level

Higher education systems in the ASEAN vary greatly in size and capacity. They are largely still governed by the individual member states designated national bodies/ministries. At the regional level, there are a number of organisations that are active in the development of an ASEAN higher education community, including The ASEAN Secretariat's Education, Youth, and Sports Division; the ASEAN University Network (AUN), and the Southeast Asian Ministers of Education Organization Regional Centre for Higher Education and Development (SEAMEO-RIHED), although these organisations pursue slightly different aims. The ASEAN Secretariat supports global and regional commitments in education by promoting lifelong learning underpinned by the principles of equity, inclusion, and quality. Its specific priorities include advancing future-ready education at basic and higher education levels and technical and vocational education and training; ensuring inclusive education; building the capacity of education personnel; and mobilising resources for education through partnerships with various key stakeholders. The AUN, as an ASEAN Sectoral Ministerial Body, aids in the development of a regional identity while creating a platform to allow the region's leading higher education institutions to collaborate. Meanwhile, SEAMEO-RIHED facilitates cooperation among its member countries by providing formal policy platforms for governments, policy makers, and universities and coordinating their efforts to foster efficiency and effectiveness of higher education in the Southeast Asian region. More recently, and largely in light of the effects of the COVID-19 pandemic on higher education, SEAMEO-RIHED has shifted its focus towards enhancing higher education for the sustainable future of the region.

To the extent that higher education plays a part in the development of ASEAN, policymakers and other stakeholders must be informed about recent trends and issues in order to act responsively to the region's needs and circumstances. This report looks into the challenges and opportunities in sustaining higher education developments in Southeast Asia. It builds on the findings of previous state of play studies such as the UNESCO Asia-Pacific Bureau for Education and SEAMEO-RIHED's "Higher Education in South-East Asia" report (2006) and the Asian Development Bank's "Higher Education Across Asia: An Overview of Issues and Strategies" report (2011).

This study sought to answer the question, "What is the state of play of higher education in Southeast Asia?". To this end, the research team conducted a systematised review of literature which examined the following dimensions of higher education in the region:

a. Recent developments, planned initiatives, and key issues to be addressed;
b. Challenges and opportunities at the regional and national levels on specific thematic issues; and
c. Issues and themes should be further addressed by policy development, reforms, and research.

This report uses the broader geographical term, Southeast Asia, when referring to the region. However, ASEAN may also be used especially when referencing policies, documents, and statistics produced by the organisation. Hence, the terms Southeast Asia and ASEAN may be used interchangeably throughout the report.

The Results section presents the findings of the systematised review where included reports are mapped by thematic areas. The Discussion explores the recent developments and challenges in higher education at the regional level in the following thematic areas: Access, Equality, Diversity, and Inclusion; Relevance to the Changing World of Work; Internationalisation; Regionalisation; and Systems Restructuring and Reforms. Finally, the Conclusions and Recommendations section outlines policy and knowledge gaps that should be addressed by higher education policy development, reforms, and future research in Southeast Asia.

# METHODOLOGY

# II. Methodology

The systematised review of literature on higher education in Southeast Asia followed a three-stage procedure detailed below:

### 2.1. Literature Search

A search for relevant studies from the academic platform *Scopus* using the keywords "higher education + ASEAN", "higher education + Southeast Asia" was conducted. The search covered studies written in English published from the year 2010[2] to 2022. In order to maintain quality and eligibility assessment, the team skimmed through the full-text articles to further evaluate the quality and eligibility of the studies. In addition, non-academic literature, or addressed in this report as grey literature, such as reports and policy documents were identified using the same keywords and the following institutions' repositories or websites: ASEAN Secretariat, SEAMEO-RIHED, SHARE, UNESCO, ADB, Asia-Europe Foundation, and the British Council. The results were complemented by citation searching, which is a method of finding relevant studies or documents by looking at cited references.

### 2.2. Study Selection

To ensure consistency in the selection of literature, an inclusion and exclusion criteria (Table 1) was developed and applied throughout the search. Preliminary relevance of studies was determined by the article's title. The research team performed parallel independent assessments of the manuscripts. Discrepancies between the reviewers' findings were discussed to reach consensus among members of the research team before obtaining the full-text articles.

[2] According to Chao (2020), although the ASEAN as a regional framework has existed since 1967, the regionalization of higher education in Southeast Asia only started in 2007 when the Southeast Asian Ministers of Education Organisation – Regional Center for Higher Education and Development (SEAMEO-RIHED) explored the development of an ASEAN Higher Education Area or Common Space. For this reason, the literature search scope will be limited to publications from 2007 onwards.

**Table 1:** The Study's Inclusion and Exclusion Criteria

| Inclusion Criteria | Exclusion Criteria |
|---|---|
| 1. peer-reviewed academic articles published in Scopus;<br>2. regional/country reports and policy documents from relevant institutions' repositories and websites;<br>3. studies whose titles contain at least one of the combinations of the descriptors defined in this review;<br>4. articles written in English;<br>5. articles published between 2010 and 2022;<br>6. open access articles or articles accessible through the permits of the research team members' institutions | 1. articles published in other databases;<br>2. studies whose titles do not contain the defined descriptors;<br>3. articles in other languages;<br>4. news articles, opinion pieces, keynote speeches, events, books, book chapters, commentaries, conference proceedings;<br>5. studies published before the period set for the search articles with limited and/or paid access that were not accessible through the research team members' institutions |

### 2.3. Content Analysis

The full text of the selected studies and documents from the previous stage were then downloaded for content analysis. A combination of deductive (using the key issues identified in the Terms of Reference) and inductive (other themes arising from the analysis) approaches were employed in identifying thematic areas. Coded excerpts were then sorted according to theme.

# RESULTS

# III. Results

The systematised literature search yielded a total of 275 academic articles from Scopus and 122 reports from the online repositories of pre-determined organisations. Applying the study's inclusion and exclusion criteria, 47 articles and 20 reports were included in this study. Figure 1 provides a visual representation of the literature selection process indicating the number of academic and grey literature that were considered in each stage. Table 2 presents the results of the mapping exercise applied to the grey literature where content was analysed and sorted according to theme.

**Figure 1:** The Literature Selection Process

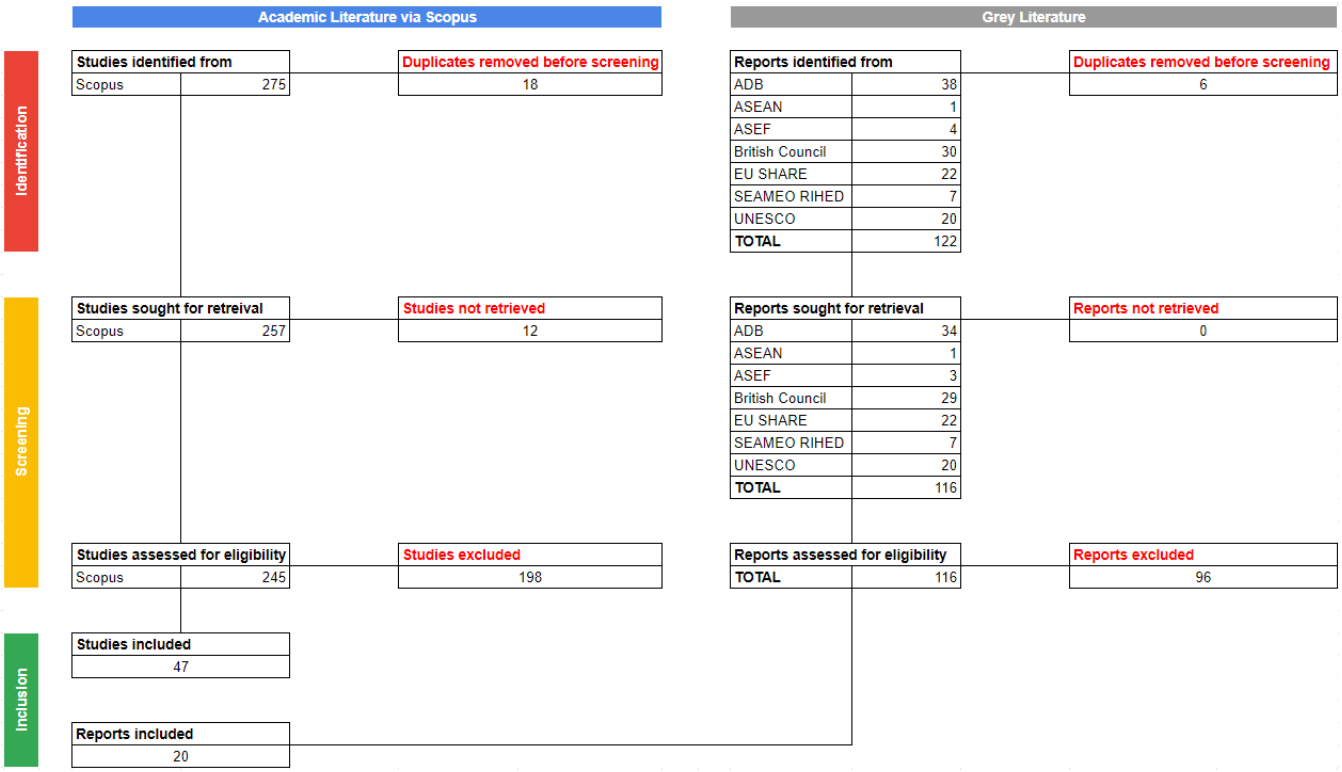


**Table 2:** Mapping of Grey Literature

| REPORT TITLE | PUBLISHED | ORGANISATION | EDI | Relevance to the World of Work | Internationalisation | Regionalisation | Reforms and Restructuring |
|---|---|---|---|---|---|---|---|
| UNESCO Higher Education Global Data Report | 2022 | UNESCO | x | x | x | | x |
| Closing the gaps: What does an equity agenda look like in Asia-Pacific? | 2018 | UNESCO | x | | | | |
| The Transition from Secondary Education to Higher Education: Case Studies from Asia and the Pacific | 2017 | UNESCO | x | | | | x |
| Blended Learning for Quality Higher Education: Selected Case Studies on Implementation from Asia-Pacific | 2017 | UNESCO | x | | | | x |
| Higher Education in Asia: Expanding Out, Expanding Up | 2014 | UNESCO | x | x | | | x |
| Administration and Governance of Higher Education in Asia: Patterns and Implications | 2012 | ADB | | | | | x |
| Private Higher Education Across Asia: Expanding Access, Searching for Quality | 2012 | ADB | | | | | x |
| Higher education across Asia: An Overview of Issues and Strategies | 2011 | ADB | x | x | x | x | x |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Graduate Employability in ASEAN: The Contribution of Student Mobility | 2022 | SHARE | | x | x | x | |
| SHARE Mapping and Identification: Study of Virtual Exchange Schemes in ASEAN | 2022 | SHARE | | x | x | | |
| Mapping and Identification of Digital Credit Transfer System Needs in ASEAN | 2022 | SHARE | | | x | x | |
| Study on Enhancing Intra-ASEAN University Mobility | 2020 | SHARE | | | x | x | |
| Higher Education Quality Assurance in the ASEAN Region | 2019 | SHARE | | | | x | x |
| Quality Assurance Arrangements Related to National Qualifications Frameworks in ASEAN | 2018 | SHARE | | | | x | x |
| Higher Education Quality Assurance in the ASEAN Region | 2016 | SHARE | | | | x | x |
| Mapping Student Mobility and Credit Transfer Systems in ASEAN Region | 2016 | SHARE | | | | x | |
| Degree Structures in the ASEAN Region | 2016 | SHARE | | | x | x | x |
| ASEAN Qualifications Reference Framework and National Qualifications Framework | 2015 | SHARE | | | | x | x |

| | | | | | | |
|---|---|---|---|---|---|---|
| Achieving Inclusive Higher Education in the ASEAN Region | 2022 | Asia-Europe Foundation | x | x | | |
| The Shape of Global Higher Education: Understanding the ASEAN Region | 2018 | British Council | x | x | x | x |

# DISCUSSION

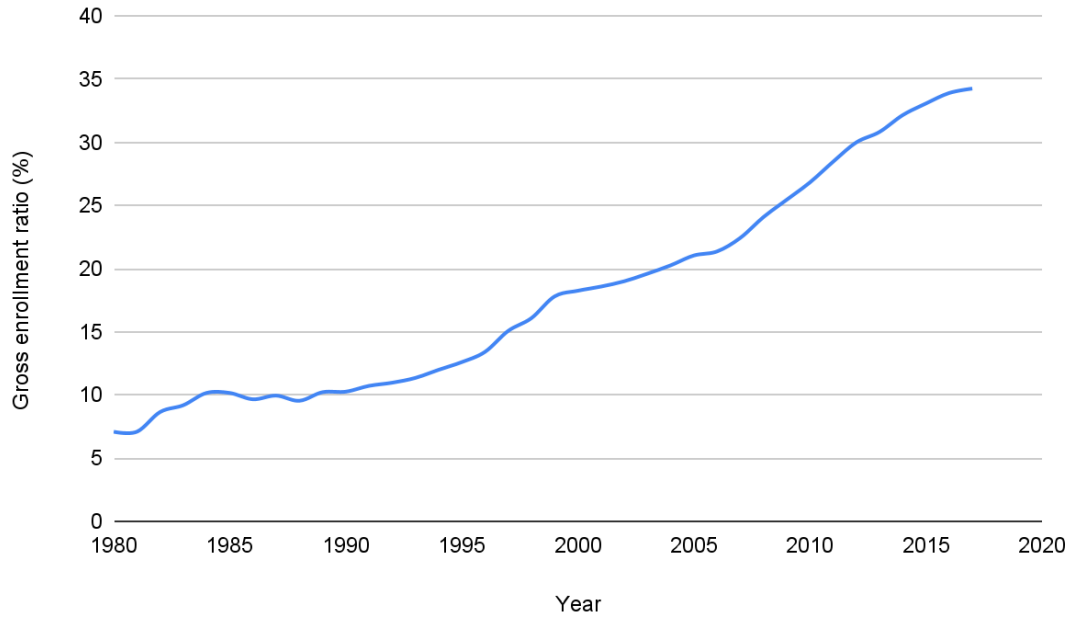
# IV. Discussion

Recent developments and challenges in higher education in Southeast Asia are discussed in the following section. The discussion covers five thematic areas which include Equality, Inclusion, and Diversity (EDI); Relevance to the Changing World of Work; Internationalisation; Regionalisation; and Systems Restructuring and Reforms.

## 4.1. Equity, Diversity, and Inclusion

An overarching trend that characterises many higher education systems around the globe is the massification of higher education to provide educational opportunities for all (UNESCO & SEAMEO-RIHED, 2006). In Southeast Asia, access to higher education appears to have expanded significantly over the past forty years (see Figure 2 below) as a result of economic and demographic changes. An increase in the school-age population coupled with an expanding middle class and a rising demand for higher-level skills has led to a growth in gross tertiary education enrolments in the region (ADB, 2011; Atherton, Dumangane, & Whitty, 2016; UNESCO & SEAMEO-RIHED, 2006). However, despite the overall upward trend in tertiary enrolment in the region, CLMV countries continue to lag behind, where Cambodia, Lao PDR, and Myanmar represent the lowest enrolment ratios in the region (Table 3).

**Figure 2:** Regional gross enrolment ratio (%) for Southeast Asia, 1980-2017 (UIS)[3]




[3] UIS. (n.d.). Retrieved October 23, 2022 from http://uis.unesco.org/en/news/uis-releases-more-timely-country-level-data-sdg-4-education

**Table 3:** Gross enrolment ratios (%) for tertiary education, by country (UIS)

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Brunei Darussalam** | 17.4 | 22.43 | 24.34 | 29.29 | 35.56 | 34.87 | 35.07 | 31.2 | 30.77 | 31.99 |
| | 12.74 | 16.4 | 17.25 | 21.23 | 28.99 | 26.88 | 27 | 24.44 | 23.89 | 25.35 |
| | 22.49 | 28.98 | 32.04 | 38.05 | 46.92 | 43.66 | 43.99 | 38.71 | 38.42 | 39.36 |
| **Cambodia** | 14.89 | ... | ... | ... | 13.14 | ... | 11.76 | 12.18 | 11.85 | 12.89 |
| | 18.23 | | | | 14.39 | | 11.94 | 12.07 | 10.21 | 11.87 |
| | 11.42 | | | | 11.81 | | 11.58 | 12.28 | 13.54 | 13.93 |
| **Indonesia** | 26.3 | 30.43 | 31.06 | 30.9 | 33.25 | 35.44 | 36.44 | 36.31 | ... | ... |
| | 28.4 | 29.85 | 29.43 | 29.18 | 31.51 | 33.26 | 34.01 | 33.75 | | |
| | 24.21 | 31.02 | 32.73 | 32.66 | 35.05 | 37.7 | 38.99 | 38.99 | | |
| **Lao PDR** | 17.81 | 17.67 | 19.02 | 18.37 | 18.17 | 17.26 | 15.74 | 14.97 | 14.45 | 13.48 |
| | 20.58 | 19.43 | 20.31 | 19.08 | 18.66 | 17.35 | 15.44 | 14.43 | 13.67 | 12.6 |
| | 14.99 | 15.88 | 17.71 | 17.65 | 17.67 | 17.17 | 16.05 | 15.52 | 15.25 | 14.38 |
| **Malaysia** | 36.15 | 37.61 | 39.07 | 39.51 | 45.59 | 46.76 | 43.72 | 45.13 | 43.06 | 42.57 |
| | 31.15 | 32.23 | 33.25 | 33.89 | 39.84 | 43.15 | 40.55 | 40.66 | 37.71 | 37.05 |
| | 41.41 | 43.29 | 45.22 | 45.43 | 51.66 | 50.58 | 47.07 | 49.85 | 48.74 | 48.44 |
| **Myanmar** | 14.18 | 13.53 | ... | ... | ... | ... | ... | 18.82 | ... | ... |
| | 12.14 | 12.19 | | | | | | 15.63 | | |
| | 16.2 | 14.86 | | | | | | 21.98 | | |
| **Philippines** | 30.8 | 31.21 | 33.52 | 35.36 | 37.8 | 40.42 | 35.48 | 29.55 | 31.62 | 33.37 |
| | 27.57 | 28.07 | 29.73 | 31.33 | 32.99 | 35.29 | 30.78 | 25.61 | 27.49 | 29.24 |
| | 34.13 | 34.46 | 37.47 | 40.11 | 42.84 | 45.81 | 40.42 | 33.69 | 36 | 37.75 |
| **Singapore** | ... | ... | ... | ... | ... | 83.94 | 84.79 | 88.89 | 91.09 | 93.13 |
| | | | | | | 77.86 | 78.94 | 82.91 | 85.58 | 88.38 |
| | | | | | | 90.57 | 91.2 | 95.42 | 97.09 | 98.27 |
| **Thailand** | 52.26 | 50.68 | 49.85 | 50.18 | ... | 49.29 | 47.25 | 45.95 | 44.85 | 42.64 |
| | 45.99 | 43.8 | 42.38 | 42.74 | | 41.05 | 39.46 | 38 | 37.56 | 35.79 |
| | 58.6 | 57.67 | 57.47 | 57.79 | | 57.77 | 55.31 | 54.21 | 52.44 | 49.78 |
| **Viet Nam** | 24.95 | 25.19 | 25.19 | 30.72 | 29.07 | 28.54 | ... | ... | 28.64 | ... |
| | 24.63 | | 26.37 | 29.91 | 29.0 | 25.53 | | | | |
| | 25.28 | | 23.95 | 31.57 | 29.16 | 31.72 | | | | |

... : missing data
black - ratio for both sexes
blue - ratio for males
red - ratio for females

Expanding access to higher education has also led to a diversification of education provision through privatisation. Based on UIS data (Table 4), more than half of the total share of enrolment in tertiary education in several Southeast Asian countries (Cambodia, Indonesia, Malaysia, and the Philippines) is in private HEIs. Additionally, according to Atherton et al. (2018), the number of HEIs have increased over time from 2010-2012 to 2015-2017 in all except two ASEAN Member States (Indonesia and Singapore). As shown in Table 5 below, the number of private HEIs has grown notably in Thailand (from 73 to 455 HEIs) and Viet Nam (from 29 to 305 HEIs), while public HEIs decreased from 98 to 66 and 187 to 64, respectively.

**Table 4:** Percentage of enrolment in tertiary education in private institutions (UIS)

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Brunei Darussalam** | 7.3 | 10.9 | 6.6 | 9.5 | 13.3 | 11.1 | 13.4 | 12.3 | 10.7 | 10.2 |
| **Cambodia** | 60.0 | ... | ... | ... | ... | ... | 62.8 | 64.4 | 68.1 | ... |
| **Indonesia** | 61.7 | 66.2 | 67.1 | 66.9 | 65.0 | 62.8 | 61.0 | 59.4 | ... | ... |
| **Lao PDR** | 25.8 | 27.8 | 29.2 | 30.6 | 28.4 | 29.2 | 24.7 | 22.4 | 20.6 | 19.2 |
| **Malaysia** | 37.0 | 37.4 | 38.8 | 37.6 | 48.2 | 48.1 | 48.4 | 49.4 | 46.8 | 43.3 |
| **Myanmar** | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| **Philippines** | 59.3 | 58.0 | 57.1 | 56.8 | 55.8 | 54.1 | 54.3 | 53.5 | 52.7 | 53.8 |
| **Singapore** | 65.3 | 66.0 | ... | ... | ... | 35.5 | 27.7 | 26.0 | 23.2 | 21.1 |
| **Thailand** | 18.3 | 16.3 | 16.4 | 15.8 | ... | 15.6 | ... | ... | ... | ... |
| **Viet Nam** | 15.0 | 14.9 | 14.0 | 13.8 | 13.0 | 12.9 | ... | ... | ... | ... |

... : missing data

**Table 5:** Number of public and private HEIs among ASEAN Member States (Atherton et al., 2018)

| | Number of public higher education institutions | | Number of private higher education institutions | |
|---|---|---|---|---|
| | 2010-2012 | 2015-2017 | 2010-2012 | 2015-2017 |
| **Brunei Darussalam** | 4 | 6 | ... | 6 |
| **Cambodia** | 38 | 54 | 46 | 72 |
| **Indonesia** | 83 | 81 | 2,818 | 2,431 |
| **Lao PDR** | 22 | 85 | 31 | 83 |
| **Malaysia** | 20 | 20 | 500 | 599 |
| **Myanmar** | 171 | 169 | ... | 35 |
| **Philippines** | 220 | 231 | 1,636 | 1,712 |
| **Singapore** | 5 | 9 | 47 | 30 |
| **Thailand** | 98 | 66 | 73 | 455 |
| **Viet Nam** | 187 | 64 | 29 | 305 |

... : missing data
Note: Branch campuses of foreign universities were grouped under private higher education institutions

Despite the fact that higher education has become accessible to more students in the region, greater privatisation has unequally benefited students with higher socioeconomic status (ADB, 2011). Evidence from several studies support the claim that social background continues to determine educational access (Atherton et al., 2016). This issue marks the difference between improved access as a function of "the proportion of the target population reached by the education system", and equity, which involves "the extent to which these opportunities are made available to all segments of the population, without restriction to factors beyond an individual's control such as gender, socioeconomic status, or rural-urban location" (p. 39). According to statistics drawn from the UNESCO's World Inequality Database on Education (WIDE)[4] significant gaps in higher education participation (Figure 3) and tertiary completion rates (Figure 4) exist across four Southeast Asian countries based on location and socioeconomic status, whereby urban and affluent students are more likely to attend and complete higher education compared to their rural and less wealthy peers. Meanwhile, in Malaysia, it was found that only 5% of young adults in the lowest income bracket complete a Bachelor's degree compared to 40% in the highest income bracket (Symaco & Tee, 2019). The same gaps in higher education participation in Southeast Asia exist on the basis of gender. Based on UIS data (Table 3 above), while the overall enrolment in tertiary education has increased over time, males in most ASEAN Member States are less likely to enrol in university compared to their female peers.

[4] At the time of writing, data on the WIDE database was only available for four Southeast Asian countries: Cambodia, Myanmar, Thailand, and Viet Nam.

**Figure 3:** Higher education attendance in Cambodia, Myanmar, Thailand, and Viet Nam (UNESCO WIDE)

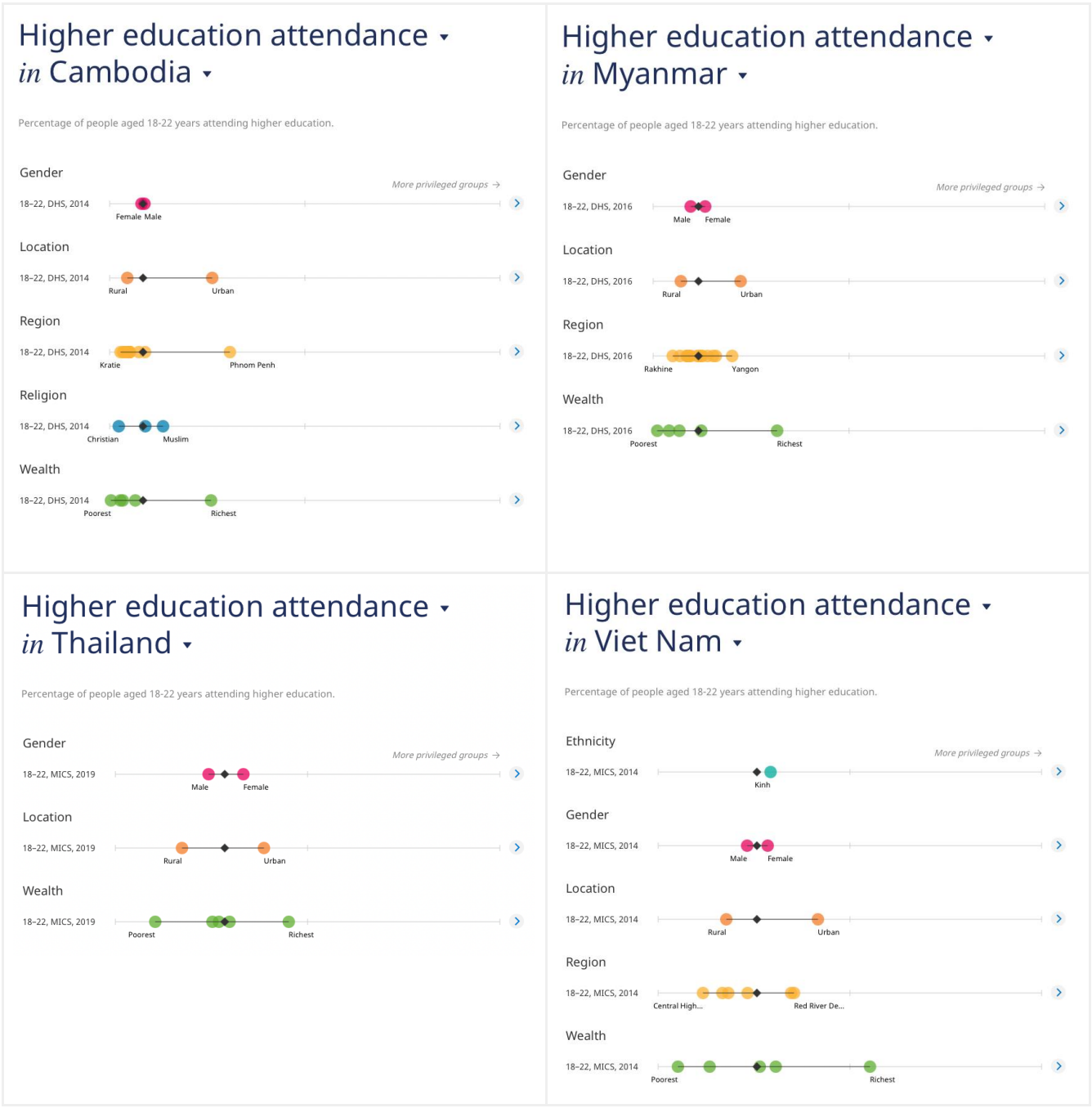
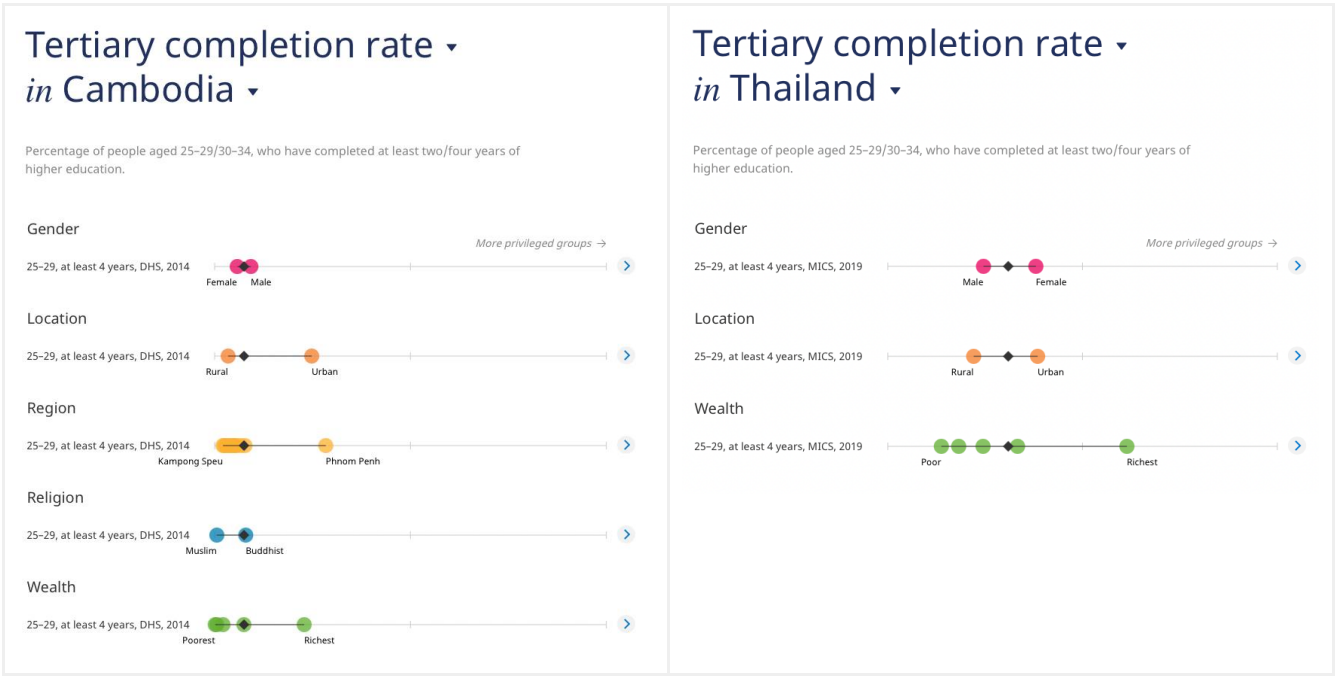


**Figure 4:** Tertiary completion rates in Cambodia and Thailand (UNESCO WIDE)

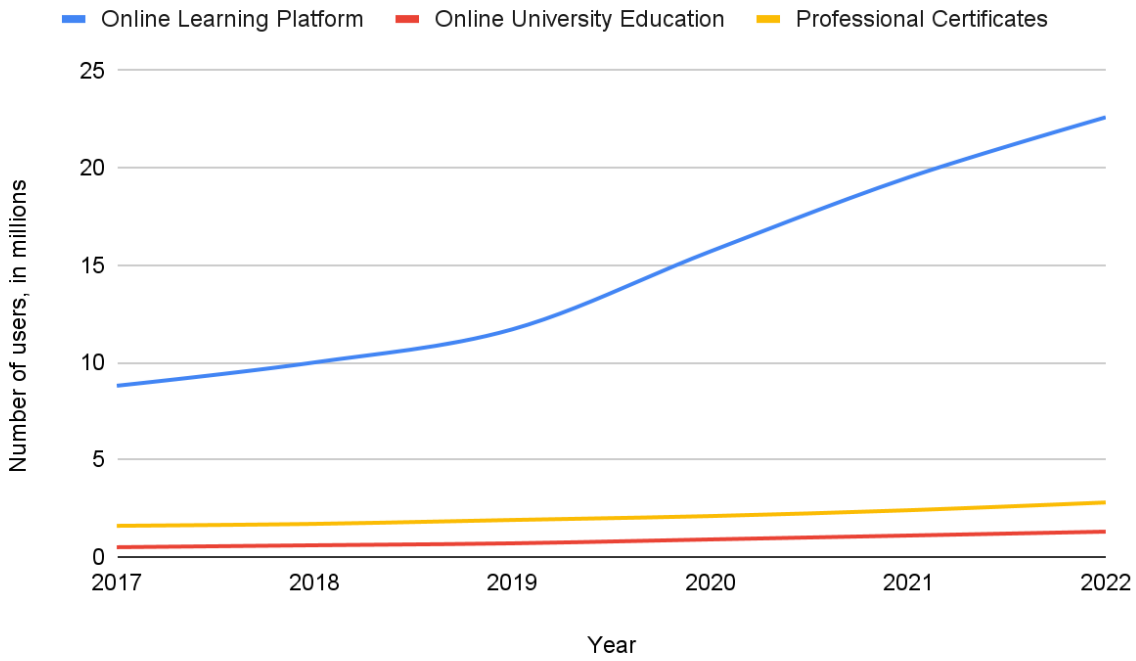



As a response to this issue, equitable access has received a renewed impetus in public policy in recent years. For instance, one of the goals of the United Nations 2030 Agenda for Sustainable Development is to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all", including higher education (SDG 4). Moreover, the Roadmap on the ASEAN Higher Education Space launched in 2022 also aims for an equitable, diverse, and inclusive higher education by ensuring that "all target groups, genders are facilitated and supported to have equal access to development opportunities so as to promote equal opportunities for all in ASEAN higher education". The Bali Declaration on the Enhancement of the Role and Participation of the Persons with Disabilities launched in 2013 also specifically pays attention to the vulnerabilities experienced by persons with disabilities, including in higher education. Meanwhile, distance and online learning modalities have been increasingly pursued in the region as a cost-effective measure to further expand access to higher education (ADB, 2011). According to data from Statista (2022), the number of users of online education platforms[5] in the Southeast Asian market[6] will continue to rise until 2026, including online university education. Figure 5 below shows the number of online education users in Southeast Asia between 2017 and 2022.

[5] Statista. (2022). Retrieved October 29, 2022 from https://www.statista.com/outlook/dmo/eservices/online-education/southeast-asia. Statista defines the online education segment as 'the transfer of knowledge or skills, whether self-paced or instructor-led, through online platforms. It includes public and private university designed and delivered courses and credentials, online learning platforms such as Coursera, and professional certifications offered by institutes. It does not include blended learning, virtual learning environments, and B2B companies.

[6] At the time of writing, data for Southeast Asia only covers Indonesia, Thailand, and Viet Nam.

**Figure 5:** Number of online education users in the Southeast Asian digital market (Statista, 2022)




Meanwhile, the COVID-19 crisis has revealed a wide gap in technological infrastructure that further aggravates equitable access in higher education in the region. For instance, only less than 60% of the population from Thailand and Cambodia and around 40% from Myanmar and Viet Nam have access to the internet, compared to more than 80% of people from Singapore, Brunei, and Malaysia (Butcher & Loots, n.d.). COVID-19 has also highlighted prevailing social and educational inequalities during school closures and the move towards home-based learning (Lefievre et al., 2022), especially around students' access to devices and resources and a lack of appropriate teaching materials for students from disadvantaged backgrounds (ASEAN Secretariat, 2020). The Declaration on Digital Transformation of Education Systems in ASEAN launched in 2020 specifically acknowledges access and equity issues in digital transformation, declaring the need to "engage the private sector in working together to come up with innovative digital literacy solutions, enabling access to digital technologies and connectivity especially for the most marginalised" (p. 3).

At the national level, and as described by Atherton (2021), a number of Southeast Asian countries have also taken efforts to address equity through higher education policies. For instance, Malaysia's 2015-2025 Higher Education Blueprint indicates its commitment to reducing achievement gaps between urban and rural, rich and poor, and male and female students by 50%. In Thailand, a quota is applied for students from ethnic minority backgrounds in specific public and autonomous HEIs. Meanwhile, Indonesia has declared a public commitment to equity within ministerial decrees or higher education laws tied with anti-discriminatory practices. At the regional level, SEAMEO-RIHED works to empower Southeast Asian HEIs to improve access, quality, and research capacity (Salmi, 2018). Additionally, ADB also supports equity issues through policy work, technical assistance and financing higher education projects (ibid).

Despite the launch of equity-focused initiatives, a number of challenges persist in the region. For instance, Salmi (2018) found that governments in Southeast Asia do not view equity in higher education as a policy responsibility for them. Atherton (2021) also posits that there remains a limited understanding of equity target groups in national policies, with socioeconomic background and disability status being the most common objects of policy action. Those with rural backgrounds, indigenous populations, gender groups, older or mature students, refugees, orphans, and victims of sexual or historical violence are often not specifically targeted by affirmative policy action towards equity and inclusion (Atherton, 2021). Meanwhile, in Lefievre et al.'s (2022) survey among HEIs, only around 56% of the 134 respondents (89 of which are from the ASEAN region) reported having diversity or inclusion strategies, and they tend to associate inclusion with terms such as "disability", "ethnicity", and "race." Overall, they identified a range of financial (insufficient monetary support), institutional (e.g. lack of political will and involvement by relevant stakeholders), and cultural barriers (e.g. lack of attention to a wider spectrum of marginalised groups) that slow down the progress towards equitable higher education. Additionally, ADB (2011) has shown how the massive expansion of higher education access has led to the unwanted consequence of a decline in instructional quality due to a shortage of qualified teaching staff as well as public investment failing to grow proportionately with the demand. In this scenario, it is important for governments, HEIs, and the private sector to explore a wider range of funding models to ensure that access, equity, and quality are tackled in a balanced manner (ibid.).

The rich cultural, linguistic, religious, and identity diversity in Southeast Asia continues to present both opportunities and challenges. For instance, people-to-people connectivity in the region has been slowed down by academic (curriculum and standards) and linguistic differences between higher education systems (MPAC, 2025). Sanger (2020) also argues that while diversity in the classroom promotes student learning (communication, argumentation, critical thinking, and problem-solving skills) and faculty's professional growth through the exchange of new ideas and ways of thinking, it can also lead students to feel invisible and alienated, especially when teaching approaches and learning materials fail to acknowledge the learners' backgrounds and needs. For instance, a study by Arunasalam & Burton (2018) among Malaysian nursing students participating in transnational higher education (TNHE) revealed that the students experienced a mismatch between the Western style of the "flying faculty" and the Malaysian approach to teaching and assessment, thus revealing the need to promote cultural sensitivity to maximise the benefits of intercultural learning. A lack of academic infrastructure and a hyperfocus on Western literature and teaching materials were also pointed out in Azmawati et al.'s (2016) study on teaching ASEAN Studies in an Indonesian university, highlighting the importance of paying equal attention to local narratives and forms of knowledge production in higher education spaces.

Lastly, efforts to collect comprehensive and comparable data on access, participation, and success in higher education among a wide variety of subgroups must be strengthened, establishing the evidence base from which specific equity and inclusion policies and programmes may be designed (ADB, 2011, Atherton et al., 2016). As Atherton et al. (2016) argue, data collection is an important first step in order to achieve equitable access in higher education.

## 4.2. Relevance to the Changing World of Work

According to the OECD (2021), megatrends and the COVID-19 pandemic have resulted in a shift in labour market and skill needs in Southeast Asia. In light of globalisation and rising international trade, Southeast Asian countries have increasingly become important importers and exporters in the global market. To further drive economic activity and productivity, firms in the region will need a wide range of basic and advanced skills from its employees. Technological advancements such as Artificial Intelligence, Internet of Things (IoT), robotics, machine learning, and automation (Table 6 below) also pose a threat of job loss to the manufacturing, construction, and retail and services sector, which account for a significant proportion of the workforce. As the region faces a unique opportunity to pursue long-term growth by moving away from low-wage labour-intensive industries towards investing in innovation and high skill-intensive industries (ADB, 2014), upskilling has increasingly become a need to ensure continued economic growth and its workforce's employability.

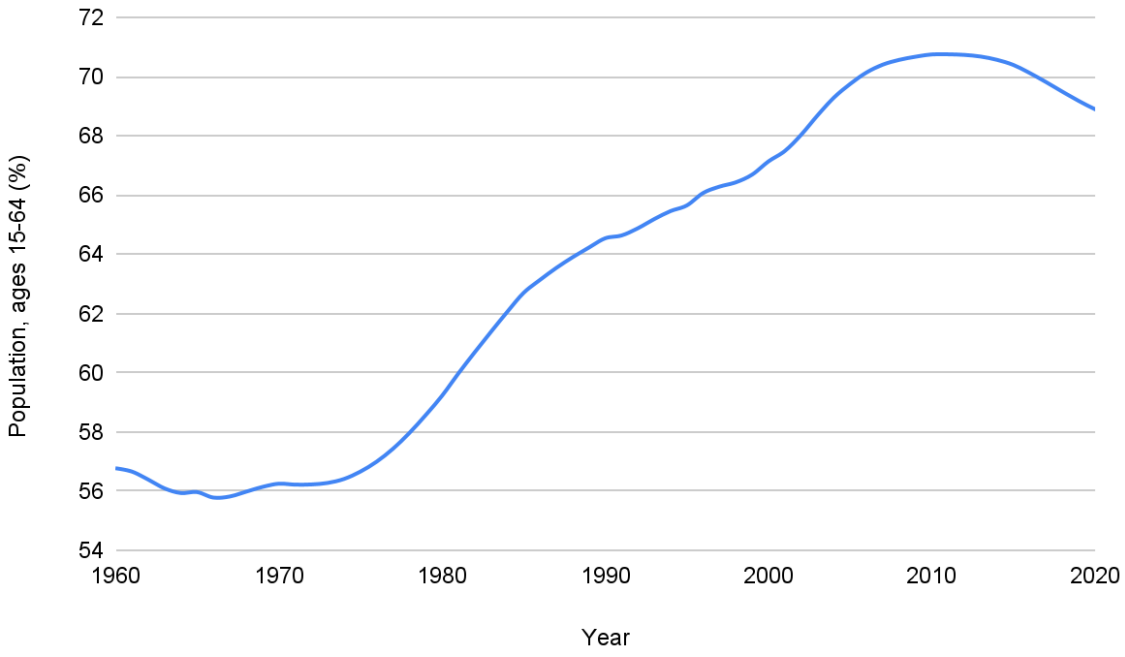
**Table 6:** Technology trends over the next 10 years (ASEAN Digital Masterplan, p. 25)

| Important existing trends that will continue | Future trends |
|---|---|
| **Internet**: will continue to be there in its current form and evolve to provide a wide range of Cloud services | **AI**: will be very powerful in specific problem areas |
| **Connectivity**: Has mostly reached the point of delivering all we need where it is geographically available | **Big Data**: Valuable in delivering new insights through data analytic |
| **Virtual Reality and Augmented Reality**: VR will remain niche but AR might play a larger role | **Robotics**: Could automate more |
| **Robotics**: Currently widely used in manufacturing | **Autonomous vehicles**: will evolve slowly and have limited impact by 2025 |
| **IoT**: will deliver productivity gains and better working devices | **3D printing**: could substantially reduce time to marker of new products |

The ASEAN heads of government acknowledged this issue and launched the Kuala Lumpur Declaration (ASEAN Secretariat, 2015) in 2015, which highlighted the importance of entrepreneurship and access to education to enhance human capital development and sustainable livelihood in Southeast Asia. In 2019, the ASEAN Declaration on Industrial Transformation (ASEAN Secretariat, 2019) expressed the need to devise a consolidated strategy to promote innovation and technology-driven industries in the Southeast Asian region as well as enhance human resource development, digital literacy, and the upskilling and reskilling of the workforce, among others.

Demographic shifts also affect the nature of skill needs in Southeast Asia (OECD, 2021). While the region has mostly benefited from a "demographic dividend" over the past 60 years, there is evidence of a slowing down of the growth of the working-age population (Figure 6 below), with a decrease in the number of people ages 15-64 in Brunei Darussalam, Cambodia, Indonesia, Malaysia, Singapore, Thailand, and Viet Nam (Table 7 below). In order to compete and benefit from its talent pool, Southeast Asia must continue to invest in its workforce's skills development – especially digital skills – as well as incentivise the labour market participation of groups from traditionally marginalised groups such as women and older people. Additionally, climate change and the move towards a green economy have deepened the vulnerability of specific groups, including informal workers. As such, there is a need for them to participate in upskilling and transition to new jobs being generated in the formal green economy (ibid.). On the other hand, while the high migration activity from and towards the Southeast Asian region provides opportunities to fill skills gaps by retaining skilled work (ibid.), it also presents a heightened need for language skills and open-mindedness in order to adapt to intercultural settings.

**Figure 6:** Population ages 15-64, % of the total population (World Bank)[7]




[7] World Bank (n.d.). Retrieved October 29, 2022 from https://data.worldbank.org/indicator/SP.POP.1564.TO.ZS?end=2021&locations=Z4&start=1960&view=chart

**Table 7:** Population aged 15-24 years in thousands (UIS)

| | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|---|
| **Brunei Darussalam** | 70 | 70 | 70 | 69 | 69 | 68 | 67 |
| **Cambodia** | 3,187 | 3,143 | 3,080 | 3,024 | 2,989 | 2,969 | 2,967 |
| **Indonesia** | 44,472 | 44,951 | 45,402 | 45,754 | 45,972 | 46,132 | 46,123 |
| **Lao PDR** | 1,411 | 1,408 | 1,403 | 1,400 | 1,401 | 1,401 | 1,406 |
| **Malaysia** | 5,673 | 5,652 | 5,626 | 5,588 | 5,533 | 5,473 | 5,401 |
| **Myanmar** | 9,634 | 9,692 | 9,748 | 9,795 | 9,830 | 9,862 | 9,881 |
| **Philippines** | 20,042 | 20,200 | 20,338 | 20,459 | 20,567 | 20,707 | 20,807 |
| **Singapore** | 772 | 751 | 723 | 692 | 663 | ... | ... |
| **Thailand** | 9,627 | 9,557 | 9,448 | 9,320 | 9,186 | 9,052 | 8,909 |
| **Timor-Leste** | 263 | 269 | 274 | 278 | 283 | 287 | 291 |
| **Viet Nam** | 15,124 | 14,578 | 14,053 | 13,620 | 13,321 | 13,134 | 13,090 |

... : missing data

The Southeast Asian economy has further revealed a number of challenges and opportunities after the COVID-19 pandemic hit in 2020. It disproportionately affected young people in Southeast Asia, whereby the youth unemployment rate rose from 8.9% in 2019 to 10% in 2020 (ASEAN Foundation, 2022). According to the ASEAN Comprehensive Recovery Plan (ASEAN Secretariat, 2020), the high informality in Southeast Asia coupled with inadequate social security and dependence on labour-intensive sectors aggravate the challenges faced by the region. On the other hand, while many informal and gig economy workers lost their jobs, other job opportunities and the demand for certain skill sets emerged (OECD, 2021). COVID-19 accelerated the use of digital platforms (LinkedIn Southeast Asia Jobs on the Rise Report 2021), thus boosting the demand for workers with advanced ICT skills, including specialised engineers, cyber security professionals, and data analysts.

As a response, the Declaration on Digital Transformation of Education Systems in ASEAN (ASEAN Secretariat, 2020) highlighted the importance of digital literacy skills for an inclusive, equitable, and future-ready education. It also underscored the need for closer collaboration with the private sector for labour market skills training, innovative solutions to enhance digital literacy, and foster open access to learning and resources. Meanwhile, the Declaration on the ASEAN Comprehensive Recovery Plan (ASEAN Secretariat, 2020) indicated, among other measures, the need to facilitate human capital development by promoting digital and 21st century skills[8] training and capacity building especially for women, youth, and MSMEs. This will allow Southeast Asia to leverage the region's growing share of the digital economy, which is expected to grow by 6.4 times from US$31 billion or 1.3% of GDP in 2015 to US$197 billion or 8.5% of GDP by 2025 (ibid., p. 34). In addition, the Roadmap of the ASEAN Declaration on Human Resources Development for the Changing World of Work launched in the same year (ASEAN Secretariat, 2020) indicates the need to use innovation and technology in teaching and learning strategies, not only as a response strategy post-crisis but also to deliver on the SDGs 4, 5, and 8, and the ASEAN vision towards "an ASEAN workforce that is

[8] According to ADB (2011), 21st century skills include digital literacy and numeracy skills, critical thinking and problem solving, creativity and innovation, cross-cultural and collaboration and global citizenship.

future ready and equipped with competencies that enable them to actively and effectively contribute to the sustainable development, competitiveness and resilience of ASEAN" (p. 7). This also points to the higher demand for Science, Technology, Engineering, and Mathematics (STEM) graduates in the region, as well as the growing need for job creators and entrepreneurship skills as a 21st century competence (Atmojo et al., 2019). Overall, the region faces the challenge of equipping the world's third-largest labour force with the skills needed to support growth and inclusiveness (MPAC 2025, ASEAN Secretariat, p. 8).

In order to continue its post-pandemic recovery and growth, Southeast Asia will need to address important digital skills gaps among the youth through higher education, among others. According to UNICEF (2021), young people in the region believe that digital literacy would improve their ability to learn better and improve other skills. However, while the majority of young people in Southeast Asia report having a moderate level of digital literacy, those from CLMV countries, from rural areas, with an ethnic minority background, and from an older age group are more likely to report lower skill levels. Additionally, the share of youth currently engaged in enhancing their digital skills is shown to be lower for youth from the 15-24 age range, from rural areas, with ethnic minority backgrounds, and with disabilities (ibid.). A similar study conducted by the ASEAN Foundation (2022) revealed that around one in two young Southeast Asians perceive the need to improve their basic digital skills, while almost three in four respondents (72.3%) perceive no or low advanced digital skills.[9]

To tackle the changing labour market demands post-pandemic, the ASEAN Comprehensive Recovery Framework (2020) highlights the need to more closely collaborate with the private sector to improve access to digital technologies especially for marginalised populations, as well as a stronger focus on labour market skills training through tertiary and vocational learning pathways, with the goal of bridging the skills gap and equipping citizens with tools for the changing world of work. Additionally, it emphasises the importance of enhancing young people's 21st century skills and boosting ICT's take-up in education. In addition, the ASEAN Declaration on Human Resource Development in the Changing World of Work (2020) reiterates the importance of the aforementioned priorities, including the need to equip teachers to teach 21st century skills; encourage companies to provide skills training, internships, and apprenticeship opportunities by providing incentives and recognition; enhancing education-industry collaborations; and building the capacities of governments, educational institutions, and the private sector to engage in skills forecasts and labour market-oriented education and trainings. The latter will respond to a long-standing issue of a lack of understanding and available information among students on the available jobs and careers available to them after graduation (ADB, 2011; Lim et al., 2022). Moreover, the ASEAN Digital Masterplan (2025) reiterates the importance of providing more opportunities to develop advanced digital skills such as coding, hackathons, and innovation challenges; developing syllabi for coding and programming training courses; and harmonising ICT qualifications across Southeast Asian countries to enhance the attractiveness of studying digital skills.

[9] According to the report by ASEAN Foundation (2022), advanced digital skills include web development, programming, and data analysis, while basic digital skills refer to computer literacy, use of productivity programmes such as Microsoft Office, cloud computing, video conferencing, and digital design.

In spite of the strong policy impetus to drive digital transformation and skills development in the region, a number of challenges remain to be addressed. For instance, digital adoption remains slow among CLMV countries, thereby limiting their ability to make the most of the growing internet economy in the region[10]. Gaps in digital capacity and infrastructure also pose a barrier in making online learning available for all, including unreliable and slow internet connection, the high cost of devices, the lack of skills in using digital tools, and quality concerns. To mitigate these issues, improved instructional design, training for teaching staff, and evaluation mechanisms for student learning should be adopted (ADB, 2011).

In addition, despite the wider access to higher education in the region overall, concerns around graduate unemployment and skills mismatch appear to persist (ADB, 2011). According to a large-scale survey conducted by the World Economic Forum (2019) on young people in six ASEAN countries, a large proportion of the respondents perceive the most lack in their language skills (such as the ability to communicate in multiple languages), advanced digital skills (such as programming and data analytics), and maths and science skills – skill sets that are paramount if a move towards knowledge-based industries is desired. The shortage of graduates from STEM fields (ADB, 2011) (Table 8 below) and the lack of researchers in some countries (Plaza, 2018; Salihu, 2020) will stall the region's innovation and economic growth and development. For instance, despite the Philippines having one of the highest tertiary education participation rates in the region, the country only has 81 researchers per million population in contrast with 205 for Indonesia and 115 for Viet Nam (Plaza, 2018).

**Table 8:** Percentage of graduates from Science, Technology, Engineering, and Mathematics programmes in tertiary education, both sexes (UIS[11])

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Brunei Darussalam** | 20.7 | 18.3 | ... | ... | 30.5 | ... | ... | 39.2 | 40.1 | 38.4 |
| **Cambodia** | ... | ... | ... | ... | ... | ... | ... | ... | 23.2 | ... |
| **Indonesia** | ... | ... | ... | ... | 17.3 | 18.6 | 18.5 | 19.4 | ... | ... |
| **Lao PDR** | 13.5 | 12.0 | ... | 11.8 | 12.4 | 16.9 | 22.5 | 23.1 | ... | ... |
| **Malaysia** | 37.8 | 31.6 | ... | ... | ... | ... | ... | 40.8 | 39.2 | 38.9 |
| **Myanmar** | ... | ... | ... | ... | ... | ... | ... | 33.7 | ... | ... |
| **Philippines** | ... | ... | ... | ... | 25.0 | 24.6 | 28.7 | 23.9 | 23.8 | 22.8 |

[10] ASEAN Secretariat. (2020). Initiative for ASEAN Integration Workplan IV (2021-2025). Retrieved October 22, 2022 from https://asean.org/wp-content/uploads/IAI-workplan-IV.pdf

[11] UIS. (n.d.). Retrieved on October 29, 2022 from http://data.uis.unesco.org/index.aspx?queryid=3442#

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Singapore** | ... | ... | ... | ... | ... | 34.5 | 34.9 | 34.7 | 35.4 | 36.3 |
| **Thailand** | ... | ... | ... | ... | 26.8 | 27.9 | ... | ... | ... | ... |
| **Viet Nam** | ... | 24.0 | ... | ... | 23.4 | 22.7 | ... | ... | ... | ... |

... : missing data

In order to respond to the changing labour market needs in a timely manner, HEIs in Southeast Asia must work towards enhancing the relevance of curriculum and instruction (ADB, 2011), including work-based learning modalities such as internships. In fact, according to the World Economic Forum (2019), around 81.4% of youth in the region value internships equally or more highly than skills training in school-based settings. Entrepreneurial and language skills must also be continued to be cultivated, considering the aspirations of young people towards setting up their own businesses and working for foreign multinationals (ibid). For this, mobility schemes for study and work placement must be pursued, considering their potential to develop language skills and knowledge of local and regional markets (Lim et al., 2022; AHDO & ASEAN Foundation, 2021). Lastly, skills training and job opportunities must be pursued with EDI principles in mind, especially for women and those living in remote areas (ASEAN Secretariat, 2020).

## 4.3. Internationalisation

Higher education internationalisation has been on the rise since the turn of the 21st century. In the ASEAN region, internationalisation is embraced at both the global and regional levels (Evision et al., 2021; Yodpet et al., 2022). In addition, internationalisation is viewed as a substantial stimulus to strengthen the performance of ASEAN HEIs (Khalid e. al., 2019). Table 9 provides a summary of the findings of Khalid et al. (2019) on higher education internationalisation trends among ASEAN Member States, with revisions made by the authors.

In a study on international higher education (IHE) that focused particularly on the ASEAN, Atherton et al. (2018) found that IHE strategies can be located within the broader higher education planning frameworks of the majority of ASEAN Member States. The study further reveals that the generation of bilateral agreements and memorandums of understanding with foreign education ministries on different forms of collaboration is widespread in Southeast Asia. In addition, there have been concerted efforts within the region to streamline visa procedures to aid student mobility.

On the other hand, Atherton et al. (2018) concludes that IHE in the ASEAN continue to be constrained by challenges pertaining to collection and publication of data, monitoring of TNHE providers, funding of international student scholarships, reductions in internal capacities of HEIs due to brain drain, and foreign language competence especially in CLMV countries.

**Table 9:** Higher Education Internationalisation Trends in ASEAN (Khalid et al., 2019,revised by authors)

| Degree of Internationalisation | Country | Internationalisation Trends |
|---|---|---|
| High | Singapore | Increasing public expenditure<br>Promoting international academic cooperation within and beyond SEA<br>Emphasising cutting-edge research and development, and innovation<br>Emphasising international profile and partnerships<br>Hosting overseas branch campuses & being the third country for TNHE<br>Promoting image as an educational hub |
| Medium | Brunei<br>Indonesia<br>Malaysia<br>Philippines<br>Thailand | High demand from international students enrolling in HEIs<br>Emphasising education quality<br>Lowering public expenditure by shifting cost to students<br>Recruitment of international faculty/researchers<br>Emphasising international research-oriented policy<br>Promoting TNHE<br>Controlled/limited overseas branch campuses, but the number of branch campuses are increasing |
| Low | Cambodia<br>Lao PDR<br>Myanmar<br>Viet Nam | Trying to improve education access, equity, and quality<br>Under-resourced human capital and financial support for international activities<br>Low number international faculty and staff<br>Limited enrolment of international students<br>Promoting academic and student mobility through a number of (inter)regional initiatives<br>Promoting research-oriented policy (though with limited success)<br>More opportunities for private HEIs<br>Increasing engagement in TNHE |

### *International Student Mobility*

Southeast Asian countries have for a long time been characterised as one of the largest exporters of quality students to developed countries (Chao, 2020; Dang, 2013; Ho, 2014; Lim et al., 2022; Umemiya, 2008; Zheng et al., 2013). Table 10 shows the top destinations among ASEAN outbound students for 2019 in which Australia, Japan, and the United States consistently rank among the top 5 for most Member States. Between 1990 and 2019, UNESCO reported that outbound internationally mobile students from Viet Nam to the U.S. increased by 1,676%, from Thailand to the UK by 147%, and from Indonesia to Japan by 373%.

**Table 10:** Total Students Abroad and Top Destinations among ASEAN Outbound Students, 2019 (adapted from UIS, cited in Lim et al., 2022, p. 26)

| | Top 1 | Top 2 | Top 3 | Top 4 | Top 5 |
|---|---|---|---|---|---|
| **Brunei Darussalam 2,486** | Malaysia 842 (33.9%) | United Kingdom 824 (33.1%) | Australia 334 (13.4%) | United States 53 (2.1%) | New Zealand 45 (1.8%) |
| **Cambodia 7,562** | Australia 1,877 (24.8%) | Thailand 1,550 (20.5%) | United States 799 (10.6%) | Viet Nam 695 (9.2%) | Japan 631 (8.3%) |

| | | | | | |
|---|---|---|---|---|---|
| **Indonesia**<br>**55,961** | Australia<br>12,852 (23%) | Malaysia<br>9,902 (17.7%) | United States<br>8,039 (14.4%) | Japan<br>4,722 (8.4%) | United Kingdom<br>3,420 (6.1%) |
| **Lao PDR**<br>**9,202** | Viet Nam<br>6,277 (68.2%) | Thailand<br>944 (10.3%) | Australia<br>327 (3.6%) | Japan<br>214 (2.3%) | Hungary<br>162 (1.8%) |
| **Malaysia**<br>**55,311** | Australia<br>14,125 (25.5%) | United Kingdom<br>13,470 (24.4%) | United States<br>6,710 (12.1%) | Japan<br>2,681 (4.8%) | Indonesia<br>1,745 (3.2%) |
| **Myanmar**<br>**13,158** | Japan<br>3,336 (25.4%) | Thailand<br>2,690 (20.4%) | United States<br>1,950 (14.8%) | Australia<br>1,366 (10.4%) | Korea, Rep.<br>692 (5.3%) |
| **Philippines**<br>**26,162** | Australia<br>10,082 (38.5%) | United States<br>3,368 (12.9%) | Canada<br>2,814 (10.8%) | Japan<br>1,079 (4.1%) | Saudi Arabia<br>896 (3.4%) |
| **Singapore**<br>**21,666** | Australia<br>6,797 (31.4%) | United Kingdom<br>6,322 (29.2%) | United States<br>3,887 (17.9%) | Malaysia<br>750 (3.5%) | Germany<br>650 (3%) |
| **Thailand**<br>**32,066** | Australia<br>6,819 (21.3%) | United Kingdom<br>6,696 (20.9%) | United States<br>5,775 (18%) | Japan<br>3,140 (9.8%) | Indonesia<br>996 (3.1%) |
| **Viet Nam**<br>**132,559** | Japan<br>40,633 (30.7%) | United States<br>25,183 (20%) | Korea, Rep.<br>19,098 (14.4%) | Australia<br>15,959 (12%) | Canada<br>9,243 (7%) |

In terms of inbound international student statistics, there is a notable disparity between country groups in the region. In 2017, the share of international students in higher education was reported to be significantly lower in CLMV countries, ranging from 0.1-0.5% of the total tertiary education cohort in each country, compared to other ASEAN Member States such as Malaysia where international students make up 9.6% of students in tertiary education. The main reasons for this observed trend include the lack of English language courses in universities which ensure that credits for these courses can be transferred, the low reputation of HEIs in the region in the World Education Atlas, and the lack of capacity of the international offices of universities in CLMV countries to attract potential students (Hill et al., 2021; Phuong & McLean, 2016).

On the contrary, Singapore has been a favoured destination of international and intra-regional students. In 2014, Singapore welcomed 52,959 international students from 120 countries. The country is reaping the benefits of the vision it set in 1997 to become an international academic city and a global leader in the educational market (Evision et al., 2021; Ho, 2014; Symaco & Tee, 2019; Umemiya, 2008; Yodpet et al., 2022). The "look West", or "skewed West" orientation of Singaporean higher education system involves developing an international curriculum, expanding international student numbers, promoting student exchanges with recognised international partners and recruitment of international faculty, publishing in international journals, and strengthening international research collaborations. These internationalisation

efforts serve to attract international students to Singapore, bring foreign campuses to this country, and set up world-class partnerships (Ho, 2014; Feuer & Hornidge, 2015).

Malaysia, which has also seen a remarkable increase in international students over the years, welcomed 63,625 international students from 160 nations in 2014 and set a target of 200,000 international students by 2020 (Snodin, 2019). Malaysia has been attractive to students within and outside the Southeast Asian region, especially those from the Islamic world, because of the country's Islamic background and because teaching was conducted in both Arabic and English (Ho, 2014; Welch, 2012). This country is also a well-known host for TNHE, having branches of eight foreign universities, mainly from the UK and Australia (Sengupta, 2015). This point is linked to TNHE, which will be discussed in more detail in a later section.

Another example is Thailand. In Thailand, efforts have been made to recruit more foreign students to boost academic reputation and improve the standing of its universities in league tables. According to Snodin (2009), student mobility is the most common international initiative promoted among HEIs in Thailand. The number of international students in this country has also increased. For instance, there were 18,814 international students from 139 countries enrolled in Thai universities in 2013, compared with 16,000 foreign students in 2008.

International partnerships also contributed to inbound mobility in the region. It is presented in more detail in the next section on inter-regional collaboration.

***Inter-regional Collaboration***

It is important for Southeast Asian countries to collaborate with other countries in the area of higher education both within and outside the region. The purposes of cross-regional and inter-regional collaboration are to enhance economic competitiveness as well as social and cultural understanding, whereby educational cooperation plays a crucial role. According to Welch (2009), increasing globalisation of higher education creates new challenges but also opens up prospects for new regional alliances. Some significant inter-regional collaboration includes China-ASEAN Free Trade Area (CAFTA), ASEAN Plus 3 (ASEAN member states plus China, Japan, and Korea), ASEAN-EU, and ASEM.

*CAFTA*

China-ASEAN cooperation was founded to provide solutions to regional problems and is built on shared social and cultural similarities in their histories. Some Southeast Asian countries (e.g., Viet Nam, Lao PDR, Indonesia) adopted Chinese customs, educational philosophies, architectural style, cuisine, and even government administrative hierarchy (Rui, 2012). CAFTA has considered a Bologna style process and attempted to establish a higher education area (Zheng et al., 2013). To encourage collaboration, the Chinese government signed a mutual agreement on degree recognition with Thailand (2007), Philippines (2009), and Viet Nam (2009) and provided a large number of scholarships for ASEAN students at national and provincial level. In addition, China-ASEAN Double 100,000 Students Mobility Plan was implemented to enhance human capital and exchange. Around 79,000 ASEAN students studied in China, which accounted for 16% of all international students in this country (Yodpet et al., 2022). In addition, the Chinese government also supports the ASEAN states by launching Confucian institutes in ASEAN countries (Kaewkumkong, 2022). Until 2019, there are 37 institutions and 17 classes operating in ASEAN countries,

except in Brunei Darussalam and East Timor. Thailand has the highest number of Confucian institutions, followed by Indonesia, the Philippines, Malaysia, Lao PDR, Cambodia, Singapore, and Viet Nam (Kaewkumkong, 2022; Rui, 2012; Yodpet et al., 2022).

*ASEAN-EU*

ASEAN is one of Europe's significant "neighbour regions" (Pohlzen & Niedermeier, 2019, p. 481). In 2002, the EU launched a five-year programme named the ASEAN–EU University Network Programme. Another project, the European Union Support to Higher Education in the ASEAN Region (SHARE), came into existence in 2010. SHARE, as a capacity-building project, is also a mutual-learning process whereby the EU promoted Bologna's norms and assisted ASEAN higher education. In Dang's (2017) comment, SHARE has changed ASEAN "from a passive learner to an active partner, who is not only interested in norm-taking but also willing to engage in norm-making" (p. 428). SHARE supports ASEAN's sector governance in regional higher education, the national implementation of regional quality assurance, and qualifications frameworks. SHARE also pilots an Erasmus-style student mobility scheme within the region and between the region and the EU and a credit transfer system in ASEAN (Hill et al., 2021).

Both programs, ASEAN–EU University Network Programme and SHARE, prioritised low-income Asian economies, and their missions included strengthening the capacity of Asian universities and promoting the Western concepts of academic freedom, institutional autonomy, and democracy (Dang, 2017). In these projects, ASEAN was "the follower", learning from the Bologna Process of the EU to create its own process. Another project, the ASEMundus project, running from 2009 to 2012, was constructed on a more equal partnership. 260 Asian universities of high reputation joined Erasmus Mundus programs, hosting European students and professors. The participation of strong Asian universities in ASEMundus, according to Dang (2017), shifted the focus from '"teaching Asia"' to "'needing Asia"' (p. 428). Some international projects between EU and ASEAN have also been implemented to address regional problems, such as the three-year AsiFood (2015– 2018) as a collaborative research effort to tackle food safety and food epidemics in the region (Anal et al., 2020).

*ASEM*

The Asia–Europe Meeting (ASEM) is an inter-regional forum for regional cooperation and policy development. ASEM was launched at a summit of heads of states in 1996 and initially an informal dialogue between Asian and European leaders. At present, it consists of two international organisations (the European Commission and the ASEAN Secretariat) and 46 countries, including 27 EU member states 13 ASEAN countries, plus three other Asian countries (China, Japan and South Korea). ASEM has developed from a summit meeting into a process involving different actors from ministers, senior officials, and technical experts to university rectors and academics, working on multiple topics and initiatives, including education. It has risen from a sub-topic within the "socio-cultural pillar" to being an important and strategic act of cooperation by ASEM education ministers (Dang, 2013). The political aim is that the ASEM education process will bring Asia and Europe together at an ideological level for intellectual convergence and intercultural understanding. The ASEM education process involves many actors through multi-level partnerships (i.e. students, researchers, university rectors, education ministers).

Through ASEM activities, the EU and ASEAN strengthen their cooperation through mutual assistance and exchange, building trust and confidence in each other (Dang, 2013, 2017). ASEM is built on a series of

meetings, initiatives and projects, including the ASEM Lifelong Learning (LLL) Hub. The ASEM LLL Hub has now become an official network of Asian and European HEIs, aiming at excellence in comparative research on lifelong learning, offering research-based education policy recommendations, and developing mutual understanding between Asia and Europe. The hub becomes a network to facilitate production of knowledge and exchange of experiences, staff and student mobility, dissemination of research and good practice among researchers and HEIs in both regions, and creation of sustainable human resources. Socialising into ASEM, ASEAN "simply learns to play by the rules of a new social context and does not necessarily change their interests" (Dang, 2013, p. 113). When ASEAN countries deal with a "much more defined regional entity such as the EU" in ASEM meetings, ASEAN regional identity is triggered to occur (Dang, 2013, p. 114). In turn, the EU also accepts and treats ASEAN as a regional entity. As such, socialisation outside a region can also help develop a sense of regionalism among ASEAN member states (Dang, 2017).

*ASEAN Plus 3*

The ASEAN+3 grouping (ASEAN, China, Japan, and Korea) was established in 1997 to promote East Asian political and economic cooperation. Higher education has been one sector which has gained increasing attention of the leaders of these nations. Through multiple programmes such as the ASEAN University Network (AUN), increasing linkages between HEIs in these countries as well as research collaboration and staff mobility have been put in place (Rui, 2012; Yodpet et al., 2022). Another example of ASEAN's collaboration with the other 3 countries is ASEAN+3 Collaborative Academic Programme, bearing resemblance to the European Erasmus scheme (Dang, 2017). ASEAN+3 also focuses on promoting mobility by annually granting various types of scholarships to Southeast Asian students (Rui, 2012; Yodpet et al., 2022) (e.g., AUN exchange program and CAMPUS Asia), arranging QA activities, and developing a credit transfer system to achieve the cooperation goals. Furthermore, ASEAN also relies on the neighbours' resources for specific projects and keeps in check bilateral leverage that China or Japan may have over the ASEAN member states (Dang, 2017; Stubbs, 2014).

***Transnational Higher Education***

Southeast Asia has been a hub for TNHE since the late 1990s, playing host to campuses of prominent universities from developed countries (e.g. the establishment of Monash University in Malaysia, and the Royal Melbourne Institute of Technology in Viet Nam, both in around 1998) (Hong & Songan, 2011; Arunasalama & Burton, 2018). Leading this trend is Malaysia which has positioned itself as an educational hub for transnational developments (Sa-ngiamwibool & Wisaeng, 2021; Sidhu & Christie, 2015). In other member states in the region, for example Cambodia, students from high socioeconomic status alternatively choose to further their study at branch campuses of Western universities, such as American University of Phnom Penh and Paragon International University (Yodpet et al., 2022).

Participating in TNHE offers students from Southeast Asia the opportunity to obtain an international education while staying in their home country or in a third country in the region (Malaysia nurses attending a TNHE course in Malaysia a study Arunasalama and Burton (2018), or in a third country (e.g., a transnational MATESOL program collaborated by a New Zealand university and a Singapore institution offered for Southeast Asian students in Yeo and Newton's (2021) study). Moreover, it is seen to promote English proficiency and students' intercultural understanding as they are exposed to people of diverse backgrounds and perspectives. While TNHE has been criticised for being accessible only to the elite, in many cases, it

demonstrates offering students collaboration, inclusivity and empowerment when students from rural backgrounds have a chance to learn from and work with international friends (Arunasalama & Burton, 2018; Yeo & Newton, 2021). TNHE in the region is also an opportunity for students to gain exposure to and develop lingua franca English, especially students from Southeast Asian nations where English is used as an additional/foreign language. It means that students will be exposed to a variety of Englishes in the region and encouraged to appreciate and embrace these regional varieties rather than idealise native-speaker varieties (Yeo & Newton, 2021). These qualities of TNHE can contribute to sustaining values of inclusivity and empowerment in the region. In addition, the COVID-19 pandemic has impacted the global mobility of students dramatically and has turned TNHE to be a more favourable choice for students due to pandemic-related health risks and politically-motivated travel restrictions. However, as there may be fewer opportunities for students and lecturers to travel overseas, authentic interaction and exposure to culture and language may be limited. Online/virtual mode of TNHE will be a substitute, especially when online learning can greatly support research collaboration between HEIs in the region (Rocina, 2015).

Although TNHE has gained students' preferences, students report a number of challenges, mostly in terms of cultural norms in teaching and learning, that overlap with EDI issues (see Section 4.1.). For example, the Malaysian nurses in Arunasalama and Burton's (2018) research were not familiar with Western critical analysis and thinking because the notion of critical thinking and analysis is absent from the language and cultural frames of Malaysian society. Students were also unfamiliar with challenging teachers' authority or contesting textbook knowledge. The intercultural differences in pedagogical approaches led to difficulties in communication and interactions between flying faculties from the UK and the nurses, as well as the disorientation, anxiety, and self-doubts among the students themselves (ibid.).

## 4.4. Regionalisation

As mentioned in the introduction, there are three organisations that are active in the development of an ASEAN higher education common space: the ASEAN Secretariat, AUN, and SEAMEO-RIHED. Khalid et al. (2019) maintain that the programs and strategies implemented by these organisations have the potential to generate considerable benefits such as knowledge sharing, intensification of cross-cultural understanding, and regional unification and peace. On the other hand, they argue that regionalisation efforts taken as a whole represent a fragmented landscape of mutually exclusive and overlapping intraregional and cross-regional political and economic interdependencies (Khalid et al., 2019).

### *Fostering a Regional Identity*

The regionalization of higher education in the ASEAN has shifted its focus from tackling issues in the 1990s to enhancing ASEAN identity and regional economic competitiveness in the 2000s. ASEAN member states tend to cooperate and seem to be allies at the inter-regional level to counter macro-level global pressures, but they are observed to be competing as well with each other at the intra-regional level to safeguard national benefits (Lorenzo, 2022). Yodpet et al. (2022) claim that although the ASEAN has made remarkable progress in security, social, and economic development, it is education that has the potential to "raise ASEAN awareness and foster a regional identity".

To achieve the goal of building a regional identity, multiple region-wide initiatives have been taken. For example, AUN developed the AUN ASEAN Studies Academy with 21 modules that were ASEAN-focused such as Historical Development in ASEAN Economic Integration, ASEAN Security Cooperation, and Peace and Conflict Management. However, these materials were distributed among AUN participating HEIs only, and these materials were no longer available on the AUN ASEAN Studies Academy website. In Indonesia and Malaysia, two Southeast Asia-focused modules were integrated into the curriculum of two universities based on the project called "Teaching ASEAN" (Azmawati & Quayle, 2017). One module was offered for a second-year undergraduate class at a university in Indonesia, entitled "International Relations in Southeast Asia". The other was taught to third-year undergraduate students in Malaysia and named "Regionalism in World Politics: The Case of ASEAN". Both modules were taught in English (Azmawati & Quayle, 2017). It was reported that students were excited and engaged in activities embedded in the modules such as making movies with the theme "We are Southeast Asian and we are proud of it" and posting them on Youtube. Although the initiative yielded some positive results in terms of increasing awareness of the region among students, the long-term impacts were dim, and it was still a challenge to replicate these modules in other institutions and in other member states of the region. Furthermore, the national framing, or the "ASEAN pedagogy", might influence the way materials were prepared and taught, leading to limited contact and exchange between students in different countries (Azmawati & Quayle, 2017).

ASEAN's regional identity formation constitutes and is constitutive of region-building processes. Dang (2017) identified three underlying mechanisms of ASEAN higher education regionalism: harmonisation, socialisation, and mutual learning. Through harmonisation, policy actors and leaders of all member states are brought to the table to construct and agree on the actualisation of a common higher education space and regional identity. Through socialisation, ASEAN higher education learns, adapts, and applies the norms from other regions. Through mutual learning, ASEAN higher education (re)constructs its identity in relation to other regions and also to transform its own position in the inter-regional cooperation process and in the international arena.

***Harmonisation of Higher Education***

Southeast Asian nations have planned the harmonisation of higher education, creating a common space to achieve a regional identity. Higher education systems in Southeast Asian countries are strongly motivated to improve their international reputations, expanding labour mobility, increasing competitiveness of and within the ASEAN economic zone, and promoting cross-cultural understanding in the region for ASEAN community building and regional identity. There have been various initiatives to achieve the goal of harmonisation, including creating a regionally aligned credit transfer system (Chan, 2012; Chou & Ravinet, 2017; Yavaprabhas, 2014), building a quality assurance framework for mutual recognition of qualifications, facilitating intra-regional student and staff mobility, and enabling barrier-free mobility of highly educated labour across Asia.

Harmonisation functions as a mechanism of higher education regionalism among the nations in the Southeast Asia region. Initially, it was only an idea to prompt dialogue (Dang, 2017), and was inspired by lessons learned from the Bologna Process to build a higher education common space in Southeast Asia (Chao, 2020). Along with time, it has become a discourse that embodies a strong force in multiple regional organisations, channelling political thoughts and actions in the direction of forming a regional identity and

elevating regional competitiveness. Nonetheless, researchers have criticised the primacy of harmonisation of higher education as the main driver for regional economic gains because it may impede other values of cross-border research collaborations, such as addressing cultural, relational, and historical issues.

While harmonisation is a taboo term in policy documents in the EU, it means different things in Southeast Asia. It is about having a common understanding of different processes and how each nation fits and compares to each other (Khalid et al., 2019). Harmonisation is a "work-in-progress", a journey towards something better, and there is agreement on the overall objectives and the extent to which each nation can progress" (Dang, 2017, p. 423). Unlike in the EU where harmonisation through the Bologna Process skews more towards creating a highly standardised higher education zone, in the ASEAN, member states link together with respect to their own system, principles, and values. For instance, a Vietnamese official saw harmonisation as an open-door opportunity to the national higher education systems to keep pace with the region and attract intra-regional students. Another Filipino official thought of harmonisation as a collective effort to excel and compete well with other regions in the world (Dang, 2017). To this end, this harmonisation is "mosaic harmonisation", embracing collaboration to seek points of linkages (Kuroda, 2009).

***Quality Assurance among Higher Education Systems***

Quality assurance (QA) is a "hot issue in Southeast Asian countries" (Umemiya, 2008, p. 278). The ASEAN aims to strengthen its credibility and competitiveness through the ASEAN Economic Community. To this end, the mutual recognition of qualifications and standards within different professions in the region needs to be achieved where quality assurance is integral to the process.

The past decades have witnessed multiple collaboration initiatives among QA agencies and HEIs for QA at the regional level (Umemiya, 2008). While ASEAN Member States have been trying hard to establish their own QA systems as part of their restructuring and reforms process (see section 4.5 in this report), QA activities at the regional level have also recently been promoted by multiple organisations, including AUN. Initiated in 1998, AUN-QA developed standards and mechanisms for QA , expecting to gain mutual recognition among the member HEIs while respecting the differences in culture and resources of the HEIs (Dorojat et al., 2015; Khalid et al., 2019; Umemiya, 2008). This organisation developed guidelines on QA in 2004 called "ASEAN University Network quality assurance guidelines" for its member institutions in the region with the aim of establishing an internal quality assurance system for the network's member universities for the harmonisation goal of higher education in the region. The formulation of AUN-QA policies and activities was significantly influenced by a similar version in Europe. At the same time, AUN-QA also relied on its own resources to achieve its goal: developing the four less developed ASEAN countries (i.e., CLMV countries) based on the support by the more developed members (Singapore, Malaysia, Thailand, Indonesia, the Philippines, and Brunei Darussalam). AUN promotes the use of its QA guidelines specifically for the ASEAN region also because of the ambition to achieve a common higher education space, and also to bridge the (economic as well as management and administrative capacities of the higher education sector) gaps between the member states (Umemiya, 2008; Khalid et al., 2019). The outcome was a total of 11 criteria for six categories: (1) quality assurance system; (2) teaching and learning; (3) research; (4) services; (5) ethics; (6) human resource development. Through workshops held by AUN-QA, good practices were shared among member HEIs. The long-term vision of AUN-QA was to develop a QA system that would work as a regional accreditation scheme and had equivalent values with international accreditation schemes.

According to Umemiya (2008), AUN-QA could be considered "a collective effort" (p. 190) by HEIs within the ASEAN region to not only improve the region's competitiveness but also to contribute to the region's integration and development.

SEAMEO-RIHED has also been active in promoting a common higher education space since 2008 and has initiated the foundation of the ASEAN Quality Assurance Network (AQAN) – the network of agencies and ministries in charge of external quality assurance processes (e.g. accreditation, quality audits, etc.) in the region. AQAN also inspects the research undertaken in a university and measures research outputs (Lorenzo, 2022). The implementation of a regional QA framework is one of the core activities in the higher education management landscape in the region (Yodpet et al., 2022). By introducing the QA framework, higher education systems in Southeast Asian countries will be able to improve the research capacity, enhance the academic reputation of HEIs, and facilitate intra-regional and international student mobility. Malaysia and Singapore are the regional leaders in QA frameworks for the ASEAN platform, with professionals from both countries consistently making up a high proportion of the membership in regional QA and accreditation agencies. Malaysia and Singapore can be regarded as "careful arbiters of external standards and internal drivers of regional standards" (Feuer & Hornidge, 2015, p. 339).

In the report commissioned by EU SHARE entitled "*State of Affairs and Development Needs: Higher Education Quality Assurance in the ASEAN Region"*, Niedermeier and Pohlenz (2016) conclude that there is a strong need to clarify the roles of QA organisations in the region and to clearly define the purpose of harmonisation and a regional framework. This is in order to ensure that the stakeholders in HEIs are more knowledgeable and subsequently better able to support these changes. The report further recommends that with the release of the ASEAN Quality Assurance Framework (AQAF), the stakeholders in the region should consider how to make sure that the national bodies comply with these standards (Niedermeier & Pohlenz, 2016).

***Credit Transfer Systems***

The history of the academic credit system in Southeast Asia is short, especially for countries like Lao PDR and Myanmar (Hotta, 2020). An aligned credit transfer system (CTS) in the region was envisioned to contribute to the higher education common space, ease student mobility and enable students to acquire different kinds of knowledge and skills from other nations in the region (Altbach & de Wit, 2015; Knight, 2016).

Southeast Asia, like many regions elsewhere, was inspired by the Bologna Process, along with the European Credit Transfer and Accumulation System (ECTS). ECTS was a supporting mechanism enabling various types of educational mobility without having to bridge the gaps between academic credit systems. The development of European regional reform of higher education and the establishment of the European Higher Education Area (EHEA) (Chou & Ravinet, 2017) set an example for other regions, including Southeast Asia, to create a similar higher education common space.

During the last decades, different types of CTS have been developed within the region. In 1999, the University Mobility in Asia and the Pacific (UMAP) developed the UMAP Credit Transfer System (UCTS) for their student mobility programs. In 2008, the Asia Cooperative Dialogue (ACD) proposed to use the Asian

Credit Transfer System (ACD-ACTS) for future student mobility among their member states including 18 countries from the regions of East, Southeast, and South Asia and the Middle East. In 2009, AUN developed the ASEAN Credit Transfer System (AUN-ACTS) to promote student mobility among selected universities of the 10 ASEAN Member States.

The latest credit transfer system to be developed in the region is the Asian Academic Credits (AACs) which was seen to replace the UCTS in 2013 (Hotta, 2020). In order to disseminate and promote the use of AACs among HEIs in the Asian region, the ASEAN+3 Education Ministers Meetings have already established some specific guidelines for regional student exchanges and approved the concept of AACs. The approval by the ASEAN+3 Ministers of Education Meeting in 2018 signalled the starting point for some level of governmental recognition and permission for universities to use AACs (Hotta, 2020). If AACs can be widely recognised and applied, it will facilitate wider inter-regional collaboration within Asia in general and across regions, as well as different mobilities forms including physical and virtual mobilities.

Among the various credit transfer systems in the Southeast Asian region, UCTS seems to be the most widely used. However, it is not without its flaws. The study in 2009 published in European Journal of Social Science *"Lessons from the Joint UKM-UDE (Malaysia-Germany) Student Mobility Programs"* reveals that UCTS has been poorly put into practice and used by very few HEIs (as cited in Hénard et al., 2016). Additionally, the review of the M-I-T (Malaysia-Indonesia-Thailand) Student Mobility Programme pilot project showed that UCTS was inconsistently used and had limited usefulness.

Another report commissioned by EU SHARE entitled "*Mapping student mobility and Credit Transfer Systems in ASEAN region"* reveals that the coexistence of various CTS that are used by a severely limited number of universities in the region poses challenges to student mobility (Hénard et al., 2016). The report further finds that the use of different grading scales, the lack of consensus among existing credit systems, and the fact that diploma supplements and a learning outcomes approach are rarely implemented reduces students' interest in credit transfer (ibid.). That ASEAN Member States are at different stages in the development of their respective national QA frameworks also creates further challenges to the development of a CTS that can be widely adopted by HEIs in the region (ibid.).

***Intra-regional Mobility***

Promoting student, faculty, and staff mobility has been a key priority in ASEAN higher education. Enhancing student mobility was a key area identified for regional higher education harmonisation (Chou & Ravinet, 2017; Khalid et al., 2019), especially when in the long run, student mobility can be a base for labour mobility. Regional student mobility schemes in Southeast Asia are mainly comprised of SEAMEO-RIHED's ASEAN International Mobility for Students (AIMS), the ASEAN University Network ASEAN Credit Transfer System (AUN-ACTS), and the EU-SHARE Scholarship (SHARE, n.d.). To date, a total of 5,000 students have benefitted from mobility through AIMS (SEAMEO-RIHED, n.d.), almost 600 through AUN-ACTS, and around 400 intra-regional mobility recipients through EU-SHARE (SHARE, n.d.). As a response to COVID-19, EU-SHARE scholarships for Virtual Exchange (VE) and Collaborative Online International Learning (COIL) were also launched in order to continue to give students an international experience amidst the health crisis.

Despite these initiatives, the scale of student mobility among the ASEAN Member States is still limited (Azmawati & Quayle, 2017). Table 11 shows Intra-ASEAN Higher Education Mobility Statistics in 2019. According to Chao (2020), the percentage of intra-ASEAN mobile students is still significantly low, and with a slow rise (1.87% and 6.9% in 1999 and 2015 respectively). This limitation stems from issues such as the incompatible degree system, non-transferable credit system and language barriers, visa and administrative issues, and higher education in the region lacking competitiveness (Khalid et al., 2019; Lim et al., 2022).

**Table 11:** Intra-ASEAN Higher Education Mobility, 2019 (adapted from UIS, cited in Lim et al., 2022, p. 27)

| From \ To | Brunei Darussalam | Cambodia | Indonesia | Malaysia | Myanmar | Lao PDR | Philippines | Singapore | Thailand | Viet Nam |
|---|---|---|---|---|---|---|---|---|---|---|
| **Brunei Darussalam** | a | ... | 12 | 162 | n | n | ... | ... | 8 | n |
| **Cambodia** | n | a | 25 | 145 | n | 48 | ... | ... | 1,550 | 683 |
| **Indonesia** | 58 | ... | a | 8,440 | 5 | n | ... | ... | 410 | n |
| **Malaysia** | 116 | ... | 1,745 | a | n | n | ... | ... | 245 | 7 |
| **Myanmar** | n | ... | 20 | 457 | a | 7 | ... | ... | 2,690 | 48 |
| **Lao PDR** | n | ... | 8 | 10 | n | a | ... | ... | 944 | 6,895 |
| **Philippines** | 26 | ... | 56 | 328 | ... | n | a | ... | 296 | 43 |
| **Singapore** | 29 | ... | 57 | 772 | n | n | ... | a | 31 | n |
| **Thailand** | 52 | ... | 996 | 881 | 10 | n | ... | ... | a | 25 |
| **Viet Nam** | n | ... | 55 | 64 | n | 235 | ... | ... | 863 | a |

... : missing data

n : nil or negligible

a : not applicable

The diversity in the quality of higher education and the degree of internationalisation among ASEAN Member States (see Table 9 in 4.3), to some extent, influences the mobility flow of students within the region. For example, students from Cambodia, Lao PDR, Myanmar, Viet Nam, and Indonesia tend to choose Thailand for educational exchange programs, while Thai or Malaysian students aspire to study in Singapore or Brunei. Further, Chao (2020) identifies geographic and cultural bias in intra-ASEAN mobility. For instance, roughly 93% of Indonesian students tended to go to Malaysia, while approximately 83% of Malaysian students chose Indonesia. Meanwhile, 82% of Myanmar students decided to have mobility experience in Thailand, and 77% and 22% of Lao PDR's students went to Viet Nam and Thailand respectively. These numbers imply that possible impacts of cultural closeness (Buddhist or Islamic) and geographic proximity can channel the student mobility flow within the region (Chao, 2020). At present, Lao PDR has the highest ratio of number of students studying in Southeast Asian countries out of its total outbound students (over 80%), followed by Cambodia (32.8%) and Myanmar (27.9%) respectively. Meanwhile, Viet Nam is the top sending country with over 82,000 students studying abroad, but only 2.2% of them study in the region (Chao, 2020). Singapore has risen to be a major hub within Southeast Asia, becoming a favourable option for further studies for students from middle-class background families within the region (Ho, 2014). Besides geographical and cultural proximity, scholarships are also an important enabler of intra-regional mobility (Snodin, 2019; Lim et al., 2022). Even for self-funded students, the low cost of tuition fee and living expenses

in most Southeast Asian countries is an inhibiting factor. Additionally, the bureaucracy in higher education systems, together with complicated visa procedures, cause difficulties for mobile students (Lim et al., 2022; Snodin, 2019). In some countries such as Thailand (Snodin, 2019) where English is not a second language, international students find it a challenge when administrative papers, websites, or information is in local language.

At the same time, mobility patterns and the formation of an academic community within the region is still weak. According to a study by Yonezawa et al. (2016) on STEM academics, the academic links established through colonisation and international cooperation tend to persist, thus directing outside-the-region academic mobility patterns. For instance, the post-colonial linkage encourages many academics in Singapore, and Malaysia to maintain a strong connection with UK academic communities while establishing and strengthening links with academics in other countries such as the USA, Australia, and Japan. In addition, a collective will among academics, universities, and states, to create a regional arena for academic mobility is lacking, and the commonality of the academic profession in Southeast Asia is currently limited (Yonezawa et al., 2016).

Although student mobility is encouraged in the region, some researchers have expressed their doubts over its inclusivity and access. First, Chao (2020) argues that multiple intra-regional programs serve the purpose of higher education cooperation between countries, rather than regional community building. Second, due to the gaps in economic strength and cultural diversity, intra-ASEAN mobility seems to be divided into distinct flows in which students from certain countries will choose some specific countries as discussed above. This hampers a vision of region-wide student mobility. Third, some mobility schemes overlap each other, and the relationships among these schemes are not evident (Chao, 2020). Fourth , student mobility programs may only serve a small margin of the student population, leading to limited access to knowledge offered for underprivileged students (Chao, 2020; Lim et al., 2022; Yodpet et al., 2022). Last but not least , the dominant use of the English language in a lot of ASEAN countries runs the risk of "an imperialist mechanism that perpetuates and maintains a colonial mentality which also embodies what knowledge is produced, what kind of knowledge is used, how it is transmitted, who benefits from such, and most importantly what counts as knowledge" (Yodpet et al., 2022, p. 8). In this sense, local knowledge, language, culture, and values can be marginalised.

Nonetheless, on a positive note, the recent study by Lim et al. (2022) on intra-ASEAN mobility programs highlights how mobile graduates had a chance to embed in the local cultural landscape, learned the local language, and enhanced their employability thanks to their improved competences and skills. The intra-regional mobility would also contribute to the future labour mobility as students in the region started to envision pursuing an international career in neighbouring countries, while labour market representatives highly regarded intra-regional mobility as an valuable asset for their organisations when they planned to expand their presence in the region (Lim et al., 2022). A way to further increase access to student mobility is through VE/COIL programmes. With an improved infrastructure and heightened interest among students to participate in online learning, these programmes can serve as a complement to physical mobility (Lim et al., 2022). It also fosters inclusivity by exposing more students to an international experience as well as developing 21st century skills including intercultural competences (Ikeda & Ahmad, 2022). Other policy recommendations to promote and sustain intra-regional mobility can be found in Lim et al. (2022), such as pursuing structured university-industry partnerships to raise awareness of employers and students about

the mobility schemes within the region, and to incorporate internships or employment opportunities for mobile students during the mobility time.

***Sustainability of a Higher Education Common Space***

The higher education common space in the region aims for structural convergence whilst retaining institutional and national diversity, and embracing heterogeneity in culture, language, and population of ASEAN Member States. This common space not only facilitates the value of cultural diversity but also addresses issues such as widening access to education, promoting inclusiveness, and enhancing employability. In that sense, ASEAN higher education area is not created out of a need for a standardised or identical higher education system across its member states, but a common area that can support the mobility of students and faculty, and the comparability of degrees within the region (Chou & Ravinet, 2017; Khalid et al., 2019).

Regionalising higher education is deemed significant among Southeast Asian nations, and harmonisation is a powerful mechanism for regionalism (Hill et al., 2021; Khalid et al., 2019; Dang, 2017). Although harmonisation has been built on small steps and at a slow pace, the gap between higher education systems among the member states has not yet been bridged. The degree of participation among countries has also varied. According to Dang (2017), Myanmar does not always participate in regional meetings while Lao PDR and Cambodia, and Singapore are on two opposite ends of the spectrum in their resources and capacities. Furthermore, Lao PDR and Cambodia have insufficient resources to enact regional projects, while Singapore's ideas and solutions seem beyond the reach of other members.

Having been founded before the establishment of ASEAN, SEAMEO has focused on its members' nation-building missions, including access to basic education for all, teacher education, technical and vocational training, public health, community nutrition, tropical medicine, and agriculture (Dang, 2017). For the past decades, SEAMEO has shifted from the inward-looking agenda of building cultural independence and intra-regional solidarity to a more outward-looking goal of increasing regional economic competitiveness and regional position in the international arena. Together with the establishment of ASEAN Education Ministers' Meeting (ASED) in 2006, SEAMEO and ASED have been dedicated to harmonise ASEAN higher education systems, to create an ASEAN knowledge-based society and to "increase the visibility of ASEAN globally" (ASEAN, 2015). Dang (2017) has seen it as "a conscious attempt to transform ASEAN into a "region-for-itself" capable of acting as a regional entity for repositioning itself in relation to other regions and powerful countries" (p. 418). In a way, ASEAN has tried to actualise its both new and old agendas in the higher education common area: search for a new identity of "region-for-itself" while not undermining the previously known "region-in-itself" constituted by geographical proximity, shared colonial experiences, and common interest in decolonisation (Dang, 2017).

In order to sustain a common space of higher education in the region, researchers have called for better collaboration between regional member states in research activities. AUN serves as an academic network to strengthen mutual understanding among academic staff and students in the member HEIs through various collaborative links (Khalid et al., 2019; Sa-ngiamwibool & Wisaeng, 2021; Umemiya, 2008), including (1) academic staff and student mobility; (2) collaborative research activities; (3) information sharing; and (4) promotion of ASEAN studies. AUN also facilitates collaborative research and solidarity among scholars

from its participating universities. It offers platforms and encourages ASEAN-related studies and ASEAN visiting professors programmes (Lorenzo, 2022). Joining AUN, SEAMEO-RIHED is also tasked to carry out the vision of research alignment and the embedding of research infrastructures to facilitate cross-border research engagement within the region and bolster the quality of regional HEIs research performance and researchers' reputation. SEAMEO-RIHED manages research clusters, research mobility and exchange programmes. This pan-regional body also takes responsibility for managing ASEAN Citation Index (ACI), a regional database that indexes all records and citations in ASEAN journals with the aim of boosting the visibility of ASEAN research. In the Philippines, the use of ACI is welcomed because it signals scientific excellence and HEIs contribution to knowledge production (Lorenzo, 2022). It is also incorporated in the promotional instruments of HEIs, incentivising competitiveness among researchers and among HEIs. However, cross-border research is still limited and less robust in comparison to other regional activities (e.g., cultural exchange or student mobility). In addition, the regional grant for research projects named ASEAN is hardly known to the researchers within the region.

At the present, there are political and sociocultural differences that result in variations in curricula, programs, instruction, and degrees. Language and communication barriers must be addressed while an ASEAN-wide integrated QA mechanism is expected so that mutual trust and recognition can be gained. These can be managed in ways that allow for the creation of communal ASEAN quality control structures (i.e. the ASEAN Qualification Agency), degree structures, and credit transfer systems. Although the region has made significant achievements in security and political areas (Khalid et al., 2019), and enhanced connections among HEIs in the region will assist in sustaining the higher education common space. Additionally, the current debate on the sustainability of the common area for higher education in the region revolves around the interplay of institutional, national, regional, and international funding sources, and the extent to which these can be identified, pursued, and secured for the actualisation of the higher education common space. The sustainability of funding for various initiatives and programs in the region, such as intra-regional mobility schemes, remains a challenge because intra-ASEAN mobility programs are not directly funded by the ASEAN Secretariat or ASEAN countries, with the exception of bilateral agreements and initiatives (Chao, 2020). This challenge is specifically acknowledged in the Roadmap on the ASEAN Higher Education Space 2025's Key Area 6, which sets out to "design and set the foundation that ensures sustainability (technical/human and financial resources) of the ASEAN Higher Education Space". Similarly, fundings for research collaboration and research into ASEAN or the Southeast Asian region lacks financial support from ASEAN bodies. Rather, financial sponsorship comes from other actors such as private companies, international development banks, or through extra-regional partnerships like ASEAN+3, ASEAN-Republic of Korea, ASEAN-Japan Cooperation, and ASEAN-China Dialogue Relations (Lorenzo, 2022).

Given its unprecedented growth, ASEAN's capacity to take part in global politics, economics, trade, and mobility has increased significantly. However, as a region, ASEAN is challenged to navigate the pressure of competitiveness at the global scale, reinforcing regional identity, while not overlooking the diversity in indigenous knowledge and cultures of the countries that make up the geographic region. Southeast Asia continues to evolve, shape and be shaped. It is a project in-the-making. "It emerges within a geographically charged region with major world powers vying to use Southeast Asia as a tool" (Yodpet et al., 2022, p. 11). Therefore, it is crucial that the region finds itself an educational identity or role that distinguishes it from the rest of the world.

## 4.5. Systems Restructuring and Reforms

Due to the wide economic disparity among ASEAN Member States, the underlying goals of higher education systems and activities of HEIs in each country may differ. Most HEIs in the region focus on meeting the demands of economic growth and capacity building (Khalid et al., 2019; Symaco & Tee, 2019; Yodpet et al., 2022). Higher education in Southeast Asia has undergone extensive changes and has encountered numerous challenges. In this section, most notable reforms in the national higher education systems in Southeast Asia member states will be discussed, including privatisation and decentralisation, the establishment of a national QA system, the shift to education sustainability and partnership, and changes in curriculum and teaching and learning paradigm shifts.

***Privatisation and Decentralisation***

Higher education systems in many ASEAN Member States are significantly moving towards privatisation and decentralisation by increasing university autonomy and the number of private institutions, and weakening governmental control over education. Nonetheless, the governance of higher education in most Southeast Asian countries is currently still centralised. According to Welch (2020), it can be explained by the fact that "the colonialist legacies make Southeast Asian governments reluctant to cede much control to either regional higher education initiatives, or to higher education institutions" (p. 2074). In Confucian heritage systems such as Viet Nam or Singapore, hierarchy is key, influencing behavioural norms and practices in the national higher education system. Only a few top-tier HEIs could enjoy greater institutional autonomy, for example, in Indonesia, only until the late 1990's could some top HEIs have limited self-government (Welch, 2020). Centralised governance also prevents HEIs from proactively participating in regional initiatives. Although a series of reforms aiming at providing more autonomous rights to the universities have been carried out in recent years, especially in Singapore and Thailand, power still lies in the hands of the Ministry of Education or equivalent authorities. These authorities play a significant role in decision making and policy implementation issues such as funding allocation, performance assessment, enrolment planning, and policy making. For instance, in Cambodia and Lao PDR, even modest changes to training programs must be approved by the Ministry. In Cambodia, public universities are line-managed by as many as 15 different ministries (Hayden, 2019). Therefore, a call for more institutional autonomy has been made so that HEIs in Cambodia will be able to attract international staff (Hill et al., 2021). Singapore has set an example in reforming its national higher education system. According to Ho, (2014), multiple changes in the tertiary system in Singapore have been made to sustain the recruitment of international students, including giving HEIs autonomy in financial and operational autonomy, attracting international personnel including foreign researchers and academics, increasing research funding to strengthen university research capacity, building Singaporean HEIs international status, and building on university-industry relations to commercialise university research.

Across the region, although governments in many Southeast Asian countries wish to expand university access, they are less keen to provide equivalent funding. Specifically, Indonesia shifted the share of education resources toward basic and away from higher education. In Malaysia, public universities were corporatised and foundations and subsidiaries were established to mobilise funds. In Thailand, investment expenditure in higher education was halved. In the Philippines, the government provided scholarships for students to study at tertiary level on a limited scale (Postiglione, 2011). Such budget cuts, caused by the

growing gap between enrolments and government support and economic crisis in the region, put pressures on HEIs, leading to the expansion of private HEIs, and privatisation of public sector HEIs (Feuer & Hornidge, 2015; Hong & Songan, 2011; Postiglione, 2011; Welch, 2020). Without proper regulation, corruption and inequality may occur, causing issues such as diploma mills, diploma fabrication, misuse of funds, or lowering education quality. These problems have been detected in Malaysia, Thailand, Viet Nam, or Cambodia (Rungfamai, 2018; Welch, 2020). Although corruption issues are common problems in other regions as well, researchers have underlined the influence of governance culture as a possible cause for these issues in Southeast Asia.

***Establishing and Developing National Quality Assurance Systems***

The introduction of quality and QA policies in education, particularly in higher education, was influenced by the marketisation and privatisation of higher education with an aim to focus on outcomes relevant to multiple stakeholders (Darojat et al., 2015). HEIs in the region have shown commitment to implement QA paradigms in their distance and hybrid mode of education operations as distance education expands and demand grows for improved quality and accountability. Many HEIs in Southeast Asian nations have formally established centralised QA units to control and manage the quality of their programs. They have been actively engaged in implementing internal quality audits (self-evaluation), and involving external QA agencies to assess their programmes quality. In general, QA within national systems in ASEAN countries has been conceptualised as follows (1) meeting customers' needs and government QA standards, and (2) compliance with external quality standards. Quality is primarily about standards or criteria by which their products and services meet students' requirements as major customers. In this sense, quality can be assessed in student support areas, including learning materials and instructional delivery to support student success. Darojat et al. (2015) take some examples of student support in infrastructure such as providing various tools for distance learning (e.g., computer-assisted instruction, e-learning, etc.), physical infrastructure (e.g., classrooms and Internet access), and human resources (e.g., certified tutors, academic advisors). In the report commissioned by EU SHARE entitled "*State of Affairs and Development Needs: Higher Education Quality Assurance in the ASEAN Region",* Niedermeier and Pohlenz (2016) conclude that some ASEAN countries have external QA frameworks in place, which are developing over time without clear definition of the main aspects of the framework at the time of initiation. Niedermeier and Pohlenz (2016) suggest that the main pillars of the QA systems should be set in order to avoid uncertainties and ambiguous communications. The report also reveals that governmental independence of external QA agencies in ASEAN is scarce or currently in transition to more independence (Niedermeier & Pohlenz, 2016). The authors hold that if QA is done to build trust in a harmonising higher education space, it is crucial to have independent bodies who conduct the assessments and decide upon the award or denial of accreditation so that they can be trusted by all stakeholders.

***Education for Sustainability and Partnership***

The diversity and growth in the Southeast Asian region are evident in the development of the higher education systems within each country. The perceived role of HEIs in promoting civil engagement and serving broader social responsibility that engages the community and services for the public good has been increasingly emphasised. For a region characterised by diverse socio-economic, political, and cultural conditions like Southeast Asia, it is important that HEIs complement and instruct values critical to a

sustainable future, tackling global and regional problems (environmental issues, income disparities, and human rights and security). Due to its geographical-geologic features, many countries in the region have suffered a number of devastating natural disasters (e.g., typhoons, volcanic eruptions, earthquakes). Therefore, educational collaborative models with two-way transfer of knowledge and skills between HEIs and communities have been helpful in enhancing mutual sharing knowledge In other words, universities better understand and respond to the needs of the community and at the same time learn from the indigenous knowledge of the local community (Symaco & Tee, 2019). The ASEAN University Network - University's Social Responsibility and Sustainability (AUN USR&S) initiative is an example of such collaboration. Through the AUN USR&S, frameworks were proposed to guide HEIs in expanding social and community outreach, including (1) Teaching and Learning, Research and Academic Services, (2) University's Governance and Administration; (3) Community Involvement, and (4) Campus Life (AUN, 2010). Below are some more examples of collaboration between HEIs and communities in member states in the region.

In Indonesia, different HEIs have carried out workshops on disaster risk comprehension, improved capacity building (in technical and financial aspects) for farmers in rural areas, conducted assessment and exploitation of clean water, and established a disaster management centre. In Malaysia, University of Malaya in Malaysia facilitated collaboration between researchers from multiple fields and a community of Iban indigenous people who shared their knowledge about their environmentally sustainable practices in the rainforest, and the researchers helped them to market the products they made. Other HEIs in Malaysia also saw it as their social responsibility to help improve the nation's quality of life, social well-being and human capital potential. They also attempted to strengthen cooperation with NGOs or corporations and businesses for research-based capacity building, and implementation of sustainable development activities.

In Singapore, a highly targeted environmental education campaign was initiated, in which university staff and a student environmental group worked together to organise formal and informal campaigns, or re-designing the signage and recycling bin areas. In the Philippines where the young population seek upward social mobility through higher education, HEIs provide financial assistance to students (Symaco & Tee, 2019). The Ateneo de Manila University also has an active immersion programme which allows students to do advocacy work, join communities, and engage with the marginalised sectors. The Ateneo de Zamboanga University School of Medicine has been committed to improving health living conditions in communities.

Another example is the collaboration between academics and students, and local experts in sharing indigenous knowledge and practice of traditional medicine, agriculture and crafts in Thailand (e.g., cultivating a vegetable patch, increasing crop productivity, improving fruits and vegetable preservation practices). HEIs also had projects to address health concerns among the population, or to assist in building and construction (e.g., building a treehouse, or designing an energy-friendly solar project). These examples of education for sustainable development attempts not only help students to have exposure to the real world, assist communities, strengthen collaboration among multiple stakeholders, but also foregrounds HEIs strategic partnership with businesses, NGOs, or private organisations.

***Curriculum Design, and Teaching and Learning Approaches***

In response to changes in Southeast Asia socially, culturally, and economically, HEIs in the region have been actively implementing transformations in their curriculum and existing teaching and learning systems to meet different learning needs of their students (Mohamad Nasri et al., 2021). These reforms include incorporating student-led learning, well-being and self-leadership skills, service learning, or technology-based learning into the curriculum (Davis et al., 2021; Gan et al., 2022; Mohamad Nasri et al., 2021; Romoli et al., 2022; Yodpet et al., 2022). The changes mark a cultural shift of HEIs from "institution[s] of knowledge production and teaching delivery toward one[s] of fostering self-discovery and personal growth" (Gan et al., 2022, p. 2).

First, many Southeast Asian countries have implemented student-led education, incorporating student well-being and leadership skills into their curriculum. For instance, CLMV countries have been active to switch towards a more student-centred model of teaching and learning (Hill et al., 2021). In Malaysia, since 2018, an HEI has offered students one "EmPOWER" programme in its compulsory year. This programme supports students' self-discovery, personal growth, and life skills (e.g., sense of purpose, self-reflection, self-awareness, interpersonal communication, emotional awareness). These skills prove to be even more critical during and after the COVID-19 crisis. This new change in curriculum is innovative, given the cultural and academic contexts of Southeast Asia in particular and Asia in general are ones that traditionally emphasise academic achievement and professional qualifications for future gains of economic and social mobility (Gan et al., 2022).

Second, service learning, as a form of experiential education in which students engage in activities that address human and community needs together, has gained more attention of curriculum designers in HEIs in the region. For instance, from 2019, all university students in Malaysia, whether private or public, need to take a minimum of 20 hours of service-learning activities in their study program. The service-learning experience can be a course itself or an embedded component (Yodpet et al., 2022). International service-learning trips (ISLTs) are another way to attract foreign students. ISLTs are structured academic experiences in a country different from their school where students participate in an organised service activity. In Singapore, for example, medical students were able to participate in ISLTs, practising medicine in a supervised manner in a resource-limited environment. This allows students to observe the reality of the health-care system, gain medical experience, clinical competence, cultural understanding, and self-efficacy (Davis et al., 2021). ISLTs can be short, lasting one week, but bring academic and social benefits for students.

Third, as a response to internationalisation and regionalisation trends in higher education, there have been noticeable efforts, especially among CLMV countries, to improve English language proficiency and professional development of staff and students (Evison et al., 2021; Hashimoto, 2022). In Viet Nam, the national government has invested in faculty development to increase the number of faculty having doctoral degrees as a strategy of human resources development (Phuong & McLean, 2016; Evison et al., 2021). In 2008, the Vietnamese Government issued Decision 1400 on "The Teaching and Learning of Foreign Languages in the National Education System Project, 2008–2020" (also known as Project 2020) with the expectation that enhanced foreign language capacity would increase the nation's competitiveness within the ASEAN community. In Cambodia, the Cambodian government recognised the need for English for Specific Purposes course development in tertiary institutions (Petrakia & Khat, 2022). According to Martin

and Richie (2020), English is the scientific *lingua franca* in the region, and the push for international (English) curricula in universities stems from the development of the ASEAN Community. The policy to teach STEM (Science-Technology-Engineering & Medical) in English has now been implemented, such as in Malaysia (Noor & Crossley, 2013). For example, there is a strong need to enhance the English proficiency of doctoral nursing students in Asian countries, particularly in this era of globalisation and international movement of health professionals (Molassiotis et al., 2020).

Furthermore, in the globalisation and IT era, the ASEAN Declaration on Industry Transformation to Industry Revolution 4.0 (4IR) reaffirms the regional commitment to digital transformation and innovation (Hong & Songan, 2011; Jamaludin et al., 2020; Khlaisam & Songkram, 2019; Romli et al., 2022; Sa-ngiamwibool & Wisaeng, 2021; Wongwuttiwat, 2016). Therefore, ICT education and online distance learning have gained renewed interest from HEIs in the region and become one of the key developments in the pedagogy and curriculum in HEIs in the region. Besides, the advent of the COVID-19 pandemic has instantly shifted the educational practices from conventional physical attendance to remote and online learning. ICT-based education will help overcome crucial challenges related to equitable access to quality education (Hong & Songan, 2011). In Thailand, virtual learning environments are also argued to be able to impart 21st century skills to ASEAN learners, facilitating ASEAN students' collaboration for group projects and peer feedback from different locations (Khlaisang & Mingsiritham, 2016; Khlaisam & Songkram, 2019).

Despite the efforts to restructure, there exist challenges in realising the reforms in higher education among the member states in the region. First, not all teachers are willing and comfortable to apply new pedagogical approaches because they still value traditional custodial ways of teaching (Mohamad Nasri et al., 2021). Second, the uneven access to the Internet among member states can pose challenges to ICT-based learning and teaching (Sa-ngiamwibool & Wisaeng, 2021). According to Hong and Songan (2011), countries in the region can be classified into three stages of ICT development: (1) countries already integrating the use of ICT in the higher education system (e.g., Singapore); (2) countries starting to apply and test various strategies (e.g. Brunei Darussalam, Malaysia, the Philippines, and Thailand); and (3) countries which have just begun and are more concerned with ICT infrastructure and connectivity installation (e.g., Cambodia, Lao PDR, Myanmar, Viet Nam, and Timor-Leste). Third, researchers have pointed out common challenges faced by HEIs in online distance learning , such as catering for students' diverse cultural background, or addressing equity and access to online distance learning among students of different socioeconomic and racial backgrounds, and ethnically marginalised students (Mohamad Nasri et al., 2021). Furthermore, online learning may not always support and maintain interactions between teachers and learners as learners may just keep silent and thus increase teachers' anxiety. Last but not least, in order to respond to the IR4.0, higher education systems within the region have prepared to develop an educational ecosystem that embraces interrelated components, including knowledge, industry, and humanity. Although it seems that higher education in the region showed high readiness of respondents Education 4.0, concern was raised about the financial and managerial readiness of institutions across the region (Jamaludin et al., 2020).

# CONCLUSIONS AND RECOMMENDATIONS

# V. Conclusions and Recommendations

Southeast Asia is a region of diverse linguistic, cultural, economic, and human capital. It is a vibrant and rapidly growing global player in the market, with a sizable population of youth and working age people, expanded access to higher education, and a rising trend in intra-regional student and labour mobility. Indeed, the region is faced with a unique opportunity to leverage its resources and further enhance the individual and collective well-being of people in the region.

## Balance the expansion of educational access with equitable policies and practices in higher education

The region has experienced an overall growth in higher education participation over the last forty years. The expanded number of school-age children and an expanding middle class increased the need to widen access to higher education, largely through the expansion of private HEIs. However, despite the overall upward trend in tertiary enrolment in the region, CLMV countries continue to lag behind. Cambodia, Lao PDR, and Myanmar represent the lowest enrolment ratios in the region. The privatisation of HE has also led to unequal access, especially for less affluent students from rural and remote areas, and issues around ensuring quality.

***For policymakers.*** Governments must build on the policy impetus provided by the UN 2030 Agenda on Sustainable Development and the Roadmap on the ASEAN Higher Education Space 2025 and strengthen their efforts to establish and implement equitable higher education policies at the national and local levels. They must invest in the provision of targeted financial assistance such as scholarships in collaboration with private entities, philanthropists, and NGOs. Considering studies by Lefievre et al. (2022) and Atherton et al. (2021) on EDI, other non-monetary instruments such as appointment of special support centres and outreach programmes to raise aspirations and readiness among vulnerable groups must be considered. An increased focus on broadening our understanding of underserved groups beyond socioeconomic, gender, and disability status must also be pursued, especially to include those from rural and remote locations, refugees, orphans, older or mature students, those from indigenous backgrounds, those with care responsibilities, and victims of sexual or historical violence, among others. Special attention must be observed for between-country differences, promoting structural and funding support for Southeast Asian countries that need them the most. Lastly, investment in digital infrastructure, access to devices, and capacity building must be pursued in order to further expand higher education access.

***For HEIs.*** Universities can also adopt specific institutional policies to work towards more equitable access and participation in HEI, supplementing governmental efforts by aligning their work with the UN 2030 Agenda and the Roadmap on the ASEAN Higher Education Space 2025. They may also provide bursaries and other forms of targeted assistance for underserved groups to allow them to successfully participate and complete their programmes. Equally importantly, training for teaching staff to be sensitive and respond to linguistic, cultural, religious, and political diversity, encouraging the use of local narratives and forms of knowledge production in higher education spaces. Moreover, and coupled with a robust digital infrastructure and access to devices, HEIs must build on the growth of online learning modalities to expand their educational offer to students, providing options for quality hybrid and online distance learning as cost-

effective options for underserved groups (e.g., those with caring responsibilities, students in non-urban areas, those with mobility constraints, and working or mature students, among others).

## Leverage the fast-growing digital economy and sustain post-pandemic growth by investing in digital and 21st century skills in partnership with public and private stakeholders

Firstly, Southeast Asia's share of the digital economy is rising and is expected to grow even more from US$31 billion or 1.3% of GDP in 2015 to US$197 billion or 8.5% of GDP by 2025 (ASEAN Secretariat, 2020). The COVID-19 pandemic, amidst its negative impacts, also accelerated the use of digital platforms in the region, thus boosting the demand for workers with advanced ICT skills, including specialised engineers, cyber security professionals, and data analysts. Online and distance learning modalities have also increased as a result, providing a cost-effective measure to further expand access to higher education.

***For policymakers.*** Financial investments to enhance digital infrastructure must be pursued in order to overcome barriers for digital skills development and online learning in higher education in the region in line with the ASEAN Comprehensive Recovery Framework and the ASEAN Digital Masterplan 2025, especially for CLMV countries where students continue to struggle with stable internet connection and access to affordable devices. The continued adoption of internal (e.g., AUN-QA) and external (e.g., AQAN) QA mechanisms, coupled with financial support to provide training for teaching staff on online pedagogies, tailored teaching materials, and student evaluation, must be supported.

***For HEIs.*** To take advantage of this growth, the increased number of tertiary-educated graduates in Southeast Asia must be equipped with digital, language, entrepreneurship, STEM, and other 21st century skills to sustain digital, international, and knowledge-based jobs. Upskilling and reskilling the working population would boost the innovation capacity in the region, expanding the pool of highly skilled professionals that can fill and even create new jobs and technology. Current initiatives to incorporate work-based learning modalities, intra-regional student mobility, work placements, service learning, and innovation activities such as hackathons must be continuously supported in partnership with governments, companies, and civil society actors (philanthropists, NGOs, advocacy groups) in order to adequately prepare Southeast Asian graduates for the changing world of work. Online distance learning and VE/COIL must also be incorporated into the curriculum to further hone students' digital literacy skills. Lastly, HEIs must also take an active role in enhancing their internal and external QA mechanisms as well as adopting best practices in teaching-learning, evaluation, and research (among others) towards their students' and graduates' skills development.

## Promote increased people-to-people connectivity through virtual and hybrid mobility programmes within Southeast Asia and with other regions

Intra-regional mobility and people-to-people connectivity has been one of the avenues through which community building has been pursued in Southeast Asia, as stipulated in the Master Plan on ASEAN Connectivity 2025 and the ASEAN Socio-cultural Community Blueprint 2025. Over the past decades, various efforts to support student mobility have been pursued in the region, fostering networks of sending and host universities and providing scholarships for short-term academic exchange. Recent data shows that a total of 5,000 students have benefitted from mobility through AIMS, almost 600 through AUN-ACTS, and around 400 intra-ASEAN and 100 EU-ASEAN scholarship recipients for EU-SHARE. As a response to COVID-19,

VE/COIL programmes were also launched, providing students the opportunity to participate in an international and intercultural academic setting in the midst of the pandemic. Despite significant progress, access to student mobility remains limited especially for underprivileged students and exchange mainly occurs along mobility corridors. Other forms of mobility, including cross-border internships, research visits, and service learning remain ad-hoc and disjointed, limiting their potential to foster skills development and labour mobility in the region. The lack of a streamlined study visa process also impedes on the increased uptake of mobility. Lastly, the sustainability of funding also remains a challenge for intra-ASEAN student mobility schemes and research collaborations, as they are not directly funded by ASEAN bodies.

***For policymakers.*** VE/COIL programmes must be pursued as a staple complement to physical mobility programmes to boost cost-effectiveness as well as allow more students to engage in international spaces and develop intercultural competences. Meanwhile, the limited research collaborations in the region can be enhanced through capacity building, financial incentives, and networking platforms to support academic and research partnerships. For this, national governments must continue to engage in dialogues to align study visa requirements and potentially explore a common study visa scheme in the region both as a way to streamline the application process as well as to establish a mechanism to systematically gather student mobility data in the region. Meanwhile, issues around credit transfer must be addressed in order to boost student mobility, including clearer information and procedures, the harmonisation of grading scales, academic calendar, and learning outcomes between sending and host universities and students.

As for financial sustainability, ASEAN bodies must continue to build on the Roadmap on the ASEAN Higher Education Space 2025's Key Area 6, which sets out to "design and set the foundation that ensures sustainability (technical/human and financial resources) of the ASEAN Higher Education Space". This requires financial ownership among regional bodies and Southeast Asian national governments to invest in a common higher education and research space. Partnerships with actors such as philanthropic foundations, private companies, international development banks, and extra-regional entities must also be strengthened and nurtured in order to ensure the financial sustainability of mobility initiatives in the region.

***For mobility programmes.*** Mobility programme organisers should continue collaborating with policymakers and HEIs for greater harmonisation and credit transfer to boost student mobility, including the use of digital credentials. In addition, a monitoring mechanism to gather mobile students' data and feedback must be pursued in order to continuously improve the student mobility schemes in the region.

***For HEIs.*** HEIs must take advantage of international and intra-regional networks to participate in student mobility schemes and provide an international and intercultural experience to as many of their students as possible. Clear information on available mobility schemes credit transfer must be provided before and after completion of the exchange programme. HEIs are also encouraged to strengthen the capacity of their administrative and teaching staff to provide a positive student experience.

## Support the systematic collection of data and research on Southeast Asian issues on higher education, including EDI, mobility, and post-graduation trajectories

Large databases, including the UIS and World Bank's EdStats, allowed for robust research to be carried out on higher education issues in Southeast Asia. However, systematic collection of comparable and complete data remains to be a challenge, in addition to the variable definitions and methodologies adopted in data collection. For instance, the definition of mobile students varies between countries, thereby affecting data comparability (UNESCO, n.d.).

***For policymakers.*** While challenging, countries are encouraged to invest time and resources in regularly collecting data related to salient higher education issues such as access, equity, mobility, skills development, and labour market participation, whenever possible. Developing comparable data would also require shared cross-country understanding of specific indicators, thereby prompting the need for regional cooperation (Atherton et al., 2016). In addition, parallel initiatives, such as the establishment of a common study visa scheme in the region, can provide an added benefit of systematically collecting inbound and outbound mobile students (Atherton et al., 2018). Overall, it is recommended that funding be earmarked for applied research - including qualitative, quantitative, longitudinal, comparative, and case studies - on the outcomes of higher education policies and programmes in order to support evidence-based policymaking in the region.

***For mobility programmes and HEIs.*** If available infrastructure and resources permit, mobility programmes and HEIs in the region must also work towards data collection related to socio-demographic composition, qualitative feedback on student experience, and alumni tracer studies in order to enhance various aspects of higher education provision in the region. Collecting and analysing such data can also provide them with a basis on which to justify funding, showcase achievements, and identify areas for further improvement.

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