

CHAPTER 6

Recommendations for the ASEAN–Japan Economic Partnership for a Sustainable and Resilient Future

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CHAPTER 6

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In light of the 50th anniversary of Association of Southeast Asian Nations (ASEAN)–Japan friendship and cooperation in 2023, the following measures are proposed to strengthen future ASEAN–Japan cooperation. Although they range from easily implementable to more arduous, these policy recommendations provide a clear, decisive path for ASEAN and Japan to collaborate in the future.

6.1. Promote Trade and Investment

6.1.1. Deepen ASEAN–Japan Economic Integration

6.1.1.1. Upgrade the ASEAN–Japan Comprehensive Economic Partnership

One way to promote trade and investment amongst ASEAN and Japan is to upgrade the ASEAN–Japan Comprehensive Economic Partnership (AJCEP). As stated in Chapter 1, this can occur through the following three actions.

First, the AJCEP should expand its coverage to include provisions of the Regional Comprehensive Economic Partnership (RCEP) agreement to maximise the benefits of both agreements. The comprehensive provisions of the RCEP aim to enhance regional production networks and to improve competitiveness, while the mechanisms of the AJCEP – such as higher tariff concession rates and the creation of sub-committees for sanitary and phytosanitary standards and technical barriers to trade – aim to facilitate trade liberalisation and develop the capacity of ASEAN Member States (AMS). By ensuring compatibility between the two agreements, ASEAN and Japan can strengthen their competitiveness of production networks through their deep economic integration.

Second, the AJCEP should be upgraded to expedite the development of trade in services, investment, and other provisions between ASEAN and Japan. The

AJCEP currently lacks provisions on e-commerce, the application of information technology, performance requirements, competition, ratchet mechanisms, and non-conforming measures. It also lacks mechanisms for negotiations across chapters, such as the investment chapter and trade-in-services chapter. Further, the AJCEP does not have appropriate measures against anti-competitive activities, the confidentiality of information, and consumer protection. Addressing the lack of ideal provision, the AJCEP should promote a digital transformation in ASEAN and Japan and effectively and efficiently utilise digital technology in trade liberalisation and facilitation.

Lastly, establishing the AJCEP Secretariat should be considered. Given the complexity of creating a single, continent-wide market for goods, services, and investment, the establishment of the AJCEP Secretariat would provide institutional support to enforce rules and to monitor implementation of the agreement.

6.1.1.2. Equip Companies with Relevant Information on Economic Partnership Agreements and Free Trade Agreements

As observed in the Chapter 2 survey, optimising the application of complex economic partnership agreements (EPAs) and free trade agreements (FTAs) can contribute significantly to improving the ease of doing business for companies. Presently, the application of EPAs or FTAs is at the sole discretion of companies throughout ASEAN. According to JETRO (2022), only around 60% of Japanese companies importing and exporting in ASEAN have used EPAs or FTAs, and some did state that they do not utilise them due to 'not knowing the schemes and procedures (37.1%)' and '[being] not sure the goods can be applied [under] the scheme (31.9%)'. The same survey showed that some businesses cannot decide on the application of EPAs or FTAs; they eventually fail to apply for any of them.

A mechanism should thus be introduced to enable companies to optimise trade costs using EPAs or FTAs. As in Japan, providing a consultation service for businesses on this subject would be useful.¹ It would also be convenient if application decisions could be made automatically. The use of private-sector trading platforms in determining which EPAs or FTAs are applicable can also be considered, although such cases have not yet been observed.

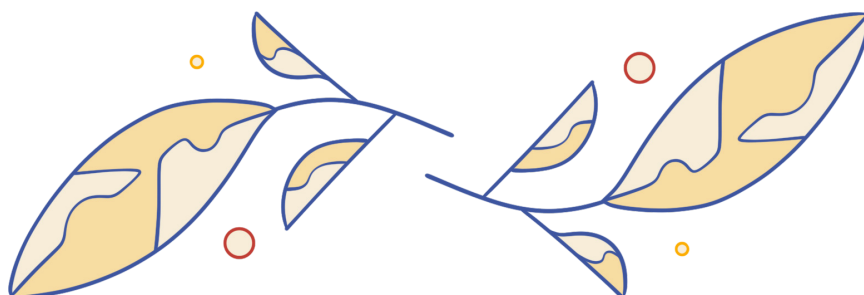
6.1.1.3. Introduce Fast-Track Trading Schemes under Certain Conditions

ASEAN and Japan should introduce a multinational fast-track trading scheme to expedite customs clearance procedures for specific goods under certain conditions. This would benefit intraregional economic activities in two ways.

¹For example, the Japan External Trade Organization (JETRO) consults on EPAs for Japanese companies located overseas. See JETRO Malaysia, Our Services, <https://www.jetro.go.jp/malaysia/services.html>

The first benefit would be the rapid supply of goods in emergencies. As in the European Union (EU), consideration in ASEAN and Japan should be given to items of extreme urgency, including drugs and daily life support supplies, due to the region's proclivity towards disasters. A study should be conducted, focussing on goods that should be considered in accordance with the existing customs clearance rules in each country.

The second benefit is for the stimulation of business activity in specific industries. Indeed, the fast-track mechanism does not have to be an initiative that applies only to emergency relief supplies; it can also help distribute components and goods in specific industries to support substantial industrial development. As indicated in the Chapter 2 survey, some respondents pointed out the long lead times for customs clearance for various parts and goods. The implementation of an ASEAN–Japan fast track for goods to specific industries and technology areas where business needs are high could encourage rapid research and development in the region. Such an initiative within ASEAN–Japan could foster specific industries and technology areas throughout the region, improving the doing business environment and enhancing the region's attractiveness as an environment for creating innovation. Early development of successful cases will make it easier to expand to other areas of interest and to implement fact tracks multilaterally.



6.1.1.4. Accelerate Efforts to Prevent Corruption amongst Customs Officials

According to the Chapter 2 survey, companies conducting business in various AMS continue to be concerned about corruption, particularly facilitation payments. ASEAN and Japan should thus promote initiatives to improve customs compliance in each country to combat corruption. This can be done by developing anti-corruption manuals and training programmes to raise awareness of corruption amongst customs officials.

Corruption is facilitated by human intervention in trade operations. Corruption will fall, therefore, by minimising face-to-face interactions. Expanding the electronic scope of national single windows (NSWs) and strengthening connectivity with private-sector trading platforms are therefore effective anti-corruption measures, as they promote the digitalisation of a series of trade operations. Efforts towards digitalisation should thus be encouraged.

6.1.2. Strengthen Supply Chain Resilience

6.1.2.1 Build a Data Supply Chain Ecosystem to Strengthen Competitiveness of International Production Networks

As discussed in Chapter 3, three trends effect supply chains: the rising diversity of consumers and technological advancement of industry, growing supply chain risks, and emerging social values. These trends are leading to more complex supply chains that require distinct models to address customer preferences, technological advancements, and risks such as global pandemics and disputes between economic giants. Moreover, environmental regulations, human rights measures, and climate change now impact business activities, and achieving carbon neutrality will shape future supply chains. Companies are now required to comply with green procurement standards, human rights protections, and regulations on chemicals contained in products.

To establish a competitive digital supply chain ecosystem in ASEAN, the Economic Research Institute for ASEAN and East Asia (ERIA) initiated a project on the digital supply chain ecosystem in ASEAN and Japan by convening a study group of experts from business associations and academia. Without efficient data sharing, companies cannot understand what is happening in emergencies, such as disasters and pandemics, and cannot meet global requirements on sustainability and human rights issues. Companies need to participate in these discussions on data sharing, the benefits of sharing data, and how it can create more competitive business operations. Governments also need to be included, as supply chains are international. ASEAN and Japan should thus seek to build a data supply chain ecosystem to efficiently respond to these supply chain shifts and to maintain their competitiveness.

6.1.2.2. Expand the Scope of Digitisation of the Intraregional Trading System

The initiative to expand the scope of digitised operations in NSWs is ongoing, and the ASEAN Single Window – to which NSWs are connected – should also be continued. The connectivity between the ASEAN Single Window and Japan must be enhanced for the trading environment within the region, as the complete online processing of bills of lading and certificates of origin falls under this link.

In particular, the electronic exchange of certificates of origin, which has been successfully demonstrated between Japan (TradeWaltz) and Thailand (National Digital Trade Platform), is improving the ease of ASEAN–Japan trade customs clearance operations. Thus, system connectivity amongst the ASEAN Single Window, NSWs, and Japan through private-sector trading platforms should be encouraged. It is important to promote intracountry and multilateral digitisation using the same protocols and with the necessary financial assistance and human resources.

6.1.2.3. Provide Information on Alternative Sources of Parts and Materials for Supply Chain Resilience

As the Chapter 2 survey indicated, supply chain disruptions are a concern for companies. It is desirable to have a network domestically or internationally that allows for alternative sources of materials and inventory supply if the typical supply chain is shut down in an emergency. A supply chain will be more resilient if it can better manage the domestic shortage of commodities and distribute them to the businesses that require them when needed.

Advanced technologies (e.g. blockchain) can help achieve a resilient supply chain. TradeWaltz's supply chain management functions are backed by blockchain as a core technology. Those functions enable user companies to track their trading items. TradeWaltz (2021) announced its successful real-time tracking of package delivery status; the private-sector trading platform can provide faster, more accurate information on the location of cargo both domestically and internationally. As the number of users of this platform increases, the scope of visibility of the inventory situation in Japan will expand. It may be thus possible to minimise the impact of supply chain disruptions by using such inventory information, even in the event of customs closures in an emergency.

As stated previously, the linkage between private-sector trading platforms and NSWs is ongoing (i.e. Japan and Thailand). In addition to promoting NSW operations, necessary knowledge should be transferred on the implementation of these private-sector trading platforms in AMS.

6.2. Encourage a Digital and Innovative Economy

6.2.1. Promote Start-ups

6.2.1.1. Build an ASEAN–Japan–Wide Entrepreneurial Ecosystem

To achieve sustainable growth, innovative activities and entrepreneurship in both ASEAN and Japan must be fostered. The concept of innovation encompasses two phases: the production of scientific knowledge or technology, followed by its deployment. ASEAN and Japan possess complementary strengths in terms of innovation. According to Kimura and Oikawa (2022), Japan has accumulated significant research and development stock, while ASEAN boasts an energetic entrepreneurship culture based on its abundant young population. Collaborative efforts between ASEAN and Japan, therefore, can facilitate sustainable growth in both economies.

According to Rosiello, Vidmar, and Ajmone Marsan (2022), several factors are necessary for a thriving entrepreneurial ecosystem. Access to markets for new goods and services is vital, with geographic location or positioning within global value chains affecting access to buyers. Networks of entrepreneurs enable

knowledge, skills, and capital to flow, while leadership provides vision and role models, requiring engagement from serial entrepreneurs committed to their local areas. Access to finance – preferably from investors with entrepreneurial knowledge – ensures investments in uncertain and long-term business projects. Finally, diverse and synergetic human resources, including well-functioning universities, can serve as significant sources of new spin-offs that support ecosystem development. ERIA established the new Centre for Digital Innovation and Sustainable Economy to serve as a platform for start-ups and other relevant stakeholders, both virtually (e.g. knowledge centre) and physically (e.g. co-working space). This centre can serve as a catalyst for the development of an ASEAN–Japan-wide entrepreneurial ecosystem.

6.2.2. Encourage Innovative Smart Cities

6.2.2.1. Promote Citizen–Driven Smart Cities

ASEAN needs an innovation hub to promote economic development and to compete globally. Smart cities can play a role, as they can drive innovation. Innovation is not solely driven by technology but also by people. To ensure that smart cities are successful and sustainable, they must prioritise the needs and desires of their residents who want access to good urban amenities and a better place to live and work; therefore, citizen-driven smart cities, which emphasise resident-centred urban development, are crucial.

As the global trend is shifting towards people-driven smart cities, it is essential to focus on democratic, inclusive, and resident-centred urban development in Asia. Japan is already making advanced efforts towards this goal, prioritising liveability and well-being through its Society 5.0 concept, a human-centered, 'super-smart' society that balances economic advancement with social problem-solving.² Although cities in ASEAN face various challenges – such as insufficient responses to digitalisation and basic infrastructure development – they do possess unique, people-centred social characteristics that increase interest in citizen-driven city planning.

ERIA, in collaboration with Kyoto University and various universities in AMS, organised the Asian Inclusive Smart Cities conference. There, it is crucial to showcase city planning projects that respect Asian values, involve the business community, and develop new city evaluation indicators and standardisation to realise democratic, inclusive, and resident-centred urban development unique to Asia.

² Government of Japan, Cabinet Office, Society 5.0, https://www8.cao.go.jp/cstp/english/society5_0/index.html

6.2.3. Secure Intellectual Property Rights

6.2.3.1. Introduce a Unified Scheme to Enable Intellectual Property Protection

A unified ASEAN–Japan scheme for intellectual property protection should be introduced to ensure that innovative technologies and products created by companies and research institutes are protected wherever they are developed in the region. The EU system example, in which a standard patent application is filed and examined by a common patent office in the region, should be emulated. The single European patent system, scheduled to be introduced in 2023, is another form of intellectual property rights integration that ASEAN should model.

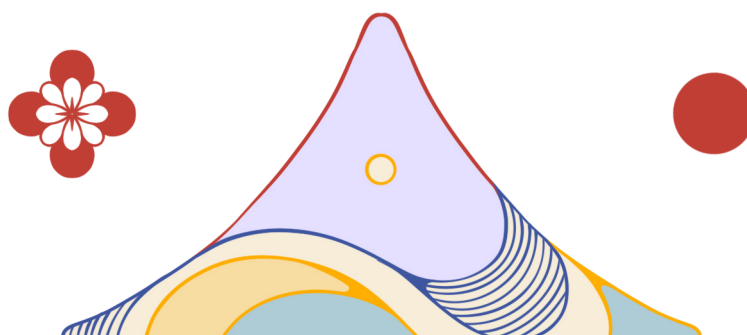
In addition, the intellectual property application process should be operated online as much as possible. The application platform should be accessible to applicants located in AMS as well as Japan. Developed AMS can take the lead in establishing such a scheme by leveraging their deep and wide knowledge of intellectual property right schemes, which has been attractive to foreign entities.

The patent examination process in AMS should also be sped up. Japan already provides support for the dispatch of human resources to improve patent examination in some AMS (e.g. Indonesia and Viet Nam). Similarly, countries with knowledge should provide assistance to less-developed countries where patent examination work is still in its infancy. Japan and Singapore can advise on how new technologies, products, and services should be subjected to patent examination in accordance with local patent rules.

6.2.4. Ensure Regulatory Reform

6.2.4.1. Introduce a Regulatory Sandbox System

ASEAN–Japan regulatory sandboxes should be promoted to prevent current regulations from hindering business creation for innovation activities in the region. By introducing regulatory sandboxes, regulatory authorities can authorise the demonstration of new technologies to entities in a particular case. Based on the output of the demonstration, regulators can decide whether to implement regulatory reform in each country.



As in Singapore, a regulatory sandbox can be pursued first in each AMS to encourage innovation activities. Global entities can participate in demonstration projects from outside of the AMS in which the demonstration site is located to welcome innovative ideas and other resources with diversified backgrounds. For example, a consortium involving companies and parties from multiple countries could be required for demonstration projects so that foreign-affiliated enterprises with innovative and challenging technologies can be involved.

As in Spain, AMS should consider implementing pilot projects in which the content demonstrated in a specific country can lead to regulatory reform throughout ASEAN. The establishment of such a demonstration scheme and support for regulatory reform after the demonstration can be supported by developed countries. It is also important to build a scheme enhancing information sharing regarding the results of these regulatory sandboxes.

6.3. Aim for a Sustainable Future

6.3.1. Support Carbon Neutrality

6.3.1.1. Prioritise Technology Development, Demonstration, and Supply Chain Creation towards Carbon Neutrality

To achieve carbon neutrality in ASEAN, policymakers must prioritise technology development, demonstration, and supply chain creation towards this goal. Given the diverse economic development levels amongst AMS and their need for affordable electricity to support further growth, policymakers should also consider a mix of fossil fuel-fired power generation and clean energy options.

Recent research, such as Kimura et al. (2022), highlighted the importance of utilising various low-carbon technologies – including combined-cycle gas turbine; coal and ammonia co-combustion; gas and hydrogen co-combustion; storage batteries; and carbon capture, utilisation, and storage – in addition to renewable energy installations throughout the region. However, the cost of these technologies is currently high for ASEAN, which has limited funds to invest in them. Therefore, policymakers must identify more cost-effective technologies by prioritising investments in technologies that have lower costs, higher efficiency, and greater scalability. By doing so, policymakers would ensure that the transition to a carbon-neutral economy in ASEAN is both feasible and financially sustainable.

Japan needs to develop and to demonstrate these technologies; it had one of the highest number of renewable energy patents in the world from 2015 to 2020.³ As

³ According to Statista, of the top 100 companies that filed the green patents between 2015 and 2020, those in Japan accounted for the largest share, at more than 30%. See Statista, Distribution of Green Patent Filings Worldwide as of 2020, by Select Country, <https://www.statista.com/statistics/859805/share-green-patent-filings-globally-by-country/> (accessed 1 May 2023).

part of Japan's vision of an Asia Zero Emission Community, Japan plans to develop more energy transition technologies, including carbon capture, utilisation, and storage, in cooperation with AMS. By promoting these technologies, it is contributing to an environmentally friendly Asia while gaining new business opportunities. For example, Japanese companies are involved in carbon capture, utilisation, and storage projects in Australia, which aims to provide 50% of the co-firing energy of coal-fired power plants with ammonia by 2028 (Nemoto, 2022). Such a technology should be used help promote the energy transition in ASEAN.

Additionally, ASEAN and Japan must work collaboratively to promote the development of supply chains that establish the foundation for the energy transition as well as cost savings. By prioritising technology development, demonstration, and supply chain development, ASEAN can move closer to achieving its goal of carbon neutrality.

6.3.1.2. Promote Financial Support for Energy Transition Technologies

The current green taxonomy being developed in the EU and Singapore focusses mainly on green technologies, leaving out some of the phased transition technologies that AMS still require, such as ammonia co-firing. To ensure that the necessary technologies for ASEAN's energy transition are appropriately funded, a common taxonomy should be established for ASEAN.

The Asia Transition Finance Study Group (2022) published the first version of the taxonomy, and ERIA (2022) also released a transition finance technology list. To facilitate transition finance in Asia, however, these documents must be updated regularly, and stakeholder relationships should be expanded and strengthened. By establishing a common taxonomy, ASEAN can effectively fund and implement the necessary technologies for its energy transition.

6.3.1.3. Improve Energy Efficiency and Connectivity

Improving energy efficiency and enhancing energy connectivity are crucial steps for ASEAN to achieve its energy transition goals. In terms of energy efficiency, there is much potential for improvement in ASEAN, particularly in the industrial, transport, and construction sectors. However, there is a shortage of experts capable of developing and managing energy efficiency projects. Therefore, continuous support for capacity building is essential to spread energy efficiency and savings knowledge and skills throughout ASEAN, such as through the ASEAN–Japan Energy Efficiency Partnership.

Enhancing energy connectivity through regional cooperation, such as through the ASEAN Power Grid (APG), is also key to optimising electricity through the efficient

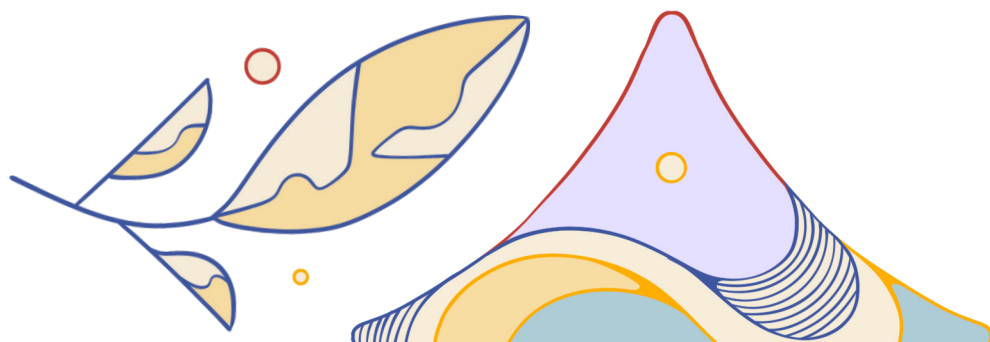
use of low-carbon technologies, including renewables. The APG offers numerous benefits, including heightening investments on a regional scale, balancing excess supply and demand, and accelerating the development and deployment of renewable power generation. To realise the APG, ASEAN needs to engage in continuous discussions from a long-term perspective while involving countries with relevant expertise, such as Japan, those in Europe, and the United States. However, realising the APG requires resolving complex issues such as building consensus amongst stakeholders, establishing a power trading institution, designing a power market, and developing the necessary infrastructure. To this end, ERIA has made recommendations for a multilateral power trading institution and a road map for its establishment, which should be pursued (Noord Pool Consulting, 2018).

Japan would also benefit from the APG, as the efficient supply of renewable energy through the grid would enable many Japanese companies in ASEAN to conduct their business activities using green energy, enhancing their social reliability and brand. In addition, the ability to connect large amounts of renewable energy to the grid would create more opportunities for Japanese companies to penetrate ASEAN as power producers.

6.3.1.4. Introduce Emissions Trading Schemes

Consideration should be given to establishing an intraregional emissions trading scheme between ASEAN and Japan that would allow carbon dioxide emissions to be traded between companies, thereby achieving regional harmonisation. First, AMS should consider introducing emissions trading schemes within their own countries. It would be effective to transfer the knowledge of Japan, which is already conducting demonstration experiments in its domestic market. In addition, they should form common rules for the future harmonisation of such schemes.

Then, ASEAN and Japan – which has had difficulty establishing a huge market on its own like China – should aim to create an integrated market like that of the EU. International standards and best practices should be adopted as a preliminary basis for further communication and cooperation. Furthermore, a fund could be established between ASEAN and Japan to support the establishment of a carbon trading market in AMS by promoting it as a regional initiative. Indeed, ASEAN and Japan should deepen the dialogue on the development of carbon trading markets and establish a common language for all countries to design market mechanisms (Liu and Nedopil Wang, 2021).



6.3.1.5. Promote Carbon Credit Initiatives

Japan announced its bilateral carbon credit efforts, which have been operating since November 2022, as an international initiative. In addition to the four AMS that are already taking part, it is hoped that Japan will promote cooperation with the six other AMS in the future. By making these bilateral carbon credit initiatives an international standard, further promotion of ASEAN–Japan initiatives can be expected.

6.3.2. Foster a Circular Economy

6.3.2.1. Provide Technology and Know-How Related to Resources Recovery and Reuse

The adoption of EU-type uniform rules can facilitate resources recovery and reuse initiatives in the region in a single step. The progress of such initiatives varies amongst AMS, underscoring the importance of supporting institutional design and operation specific to each country. In this regard, Japan's technology and knowledge in resources recovery and reuse, refined through years of rules-making and operational experience, can be instrumental.

Effective waste collection rules and their proper implementation are imperative. The design of such rules should be predicated on the principles of extended producer responsibility (EPR) practiced by the EU, Japan, and other nations. With the growing concern over marine plastics, many developing countries are exploring the adoption of EPR for packaging and container waste (Johannes et al., 2021). In this context, Japan's experience with the Containers and Packaging Plastics Law could provide valuable insights to ASEAN.

Governments should formulate strategies for expanding waste collection and ensuring sound waste disposal (Johannes et al., 2021). Defining the roles and responsibilities of the entities involved in the recycling process, as seen in Japan's laws and regulations, can prove effective in AMS.

6.3.2.2. Develop a More Efficient System for Distributing Recycled Products

To promote the widespread use of recycled products, industry standards should be established between ASEAN and Japan. To foster the participation of private companies and other stakeholders, an integrated market should be established that spans across borders. When devising product and service standards, established standards from the EU, other countries, and relevant international organisations should be referenced. Additionally, these standards must be readily applicable to all businesses to create a larger market and to attract more private sector participants.

6.3.3. Reform the Food and Agriculture Sector

6.3.3.1. Prioritise Dissemination of Innovative Technologies and Human Resources for Resilient Food and Agriculture Systems

To realise a resilient and sustainable agriculture and food system throughout ASEAN, innovative technologies should be developed and disseminated between ASEAN and Japan. Ongoing projects, such as Greenhouse Gas Mitigation in Irrigated Rice System in Asia (MIRSA), Accelerating Application of Agricultural Technologies for Resilient and Sustainable Agriculture and Food System in the Asia Monsoon Region, and Smart Agriculture Pilot Project, are expected to facilitate the dissemination of innovative technologies and be scaled up in the future. However, as each AMS's priorities, policies, and technical circumstances for application of innovative technologies differ, it is important to note that there are no 'one-size-fits-all' solution.

Human resources development for officials and stakeholders engaged in resilient and sustainable agriculture is also essential. Ongoing projects such as the Capacity Building Project for Farmer's Organizations to Support the Development of Food Value Chains in ASEAN Countries, Human Resource Development Project in Food-Related Areas through Partnership Program with Universities in ASEAN Region, and Project for Enhancing the Understanding of Good Agricultural Practices by Japan-ASEAN Partnership are capacity-building projects featuring ASEAN-Japan cooperation. These projects have already trained many ASEAN officials and stakeholders, have been highly evaluated by AMS, and should continue.

6.3.3.2. Facilitate ASEAN Regional Guidelines for Sustainable Agriculture in ASEAN

ASEAN and Japan should intensify their partnership to facilitate the implementation of the *ASEAN Regional Guidelines for Sustainable Agriculture in ASEAN* (ASEAN, 2022). The Japan International Research Center for Agricultural Science recently launched the Green Asia initiative to support the realisation of these guidelines, which includes disseminating knowledge on basic agricultural technologies and sustainable practices in the Asia Monsoon region. The active involvement of AMS is strongly recommended. Moreover, ERIA initiated a research project that aims to enhance sustainable agriculture and food systems in AMS with support from Japan. This project includes a scoping study that identifies key sustainable priorities and strategies for agriculture and food systems in each AMS, as well as assesses each country's readiness in implementing the guidelines. Reporting the outcomes of these projects to the relevant ASEAN sectoral body is crucial to realise the guidelines, including formulating action plans for their implementation.

6.3.3.3. Expand the Scope of the ASEAN Plus Three Emergency Rice Reserve

The recent occurrence of external shocks, such as the COVID-19 pandemic and the escalation of geopolitical tensions, have had a negative impact on food security globally and regionally. This, in turn, has led to an unprecedented increase in food prices. In this context, the ASEAN Plus Three Emergency Rice Reserve (APTERR) can play a pivotal role in ensuring regional food security during short-term crises, particularly in relation to rice supply. As stated in Chapter 3, the APTERR has recently released 7,138 metric tonnes of rice from Japan and the Republic of Korea to mitigate emergency situations, including the COVID-19 pandemic, in Cambodia, Lao People's Democratic Republic, Myanmar, and the Philippines. Given the APTERR's success in addressing these short-term crises, the possibility of expanding its scope beyond rice to include other key crops warrants consideration.

6.3.3.4. Establish a New Framework for Food and Agriculture Cooperation

Given the increasing number and diversity of ASEAN–Japan cooperation projects, a new framework should be established for the ASEAN Plus Japan Ministers on Agriculture and Forestry (AMAF+Japan) to further enhance food and agriculture cooperation, in addition to the existing ASEAN Plus Three Ministers on Agriculture and Forestry (AMAF+3) framework. This is particularly relevant as ASEAN–Japan cooperation approaches its 50th anniversary; therefore, the first meeting of AMAF+Japan should be held during this year to commemorate the occasion.

6.3.4. Increase Inclusive Health Care

6.3.4.1. Evolve Universal Health Coverage Schemes

ASEAN and Japan should collaborate to evolve their universal health coverage (UHC) schemes to align with the region's modern demographic and epidemiological needs. Japan's successful deployment of a composite approach,⁴ implemented in a stepwise manner while keeping premiums low for socio-economically disadvantaged individuals, is an example to follow. It is therefore recommended that ASEAN consider a composite approach to existing UHC scheme options to ramp up coverage penetration, particularly for the informal sector and primary

⁴ The composite approach refers to an amalgamation of two UHC models that emerged in the early 20th century: the Bismarck model, centred on social insurance and employer-based coverage; and the Beveridge model, funded through taxation. Japan successfully integrated these models into its UHC framework in the latter part of the 20th century. In contemporary usage, the composite approach has taken on a broader connotation, signifying the use of diverse best practices culled from developed and developing countries worldwide. These practices may encompass national health insurance, pooling and redistribution mechanisms, cross-subsidisation, and public-private partnerships. While a UHC template may provide a useful starting point, it is incumbent upon countries to identify and to implement best practices that align with their distinct cultural and contextual exigencies.

care. Additionally, aiming for administrative efficiencies and preparing for the shift towards mandatory UHC enrolments should be priorities. Building the collaboration scheme between the public and private sector is also necessary. To provide long-term care for as many people as possible, for example, the private sector must be utilised. Research and development on antimicrobials and to ensure the supply chain of medical devices and drugs are additional significant topics.

ERIA has commenced projects aiming to establish mutually beneficial relationships through the formulation of an industry–government–academia–medicine collaboration mechanism.

6.3.4.2. Develop the Health Care Workforce, and Deploy Technology

ASEAN and Japan should focus on boosting the region's health care workforce and embracing a technology strategy to address regional health disparities and to improve patient outcomes. To achieve this goal, they need to leapfrog the UHC model through technology by providing base enablers such as internet access and mobile wallets. Additionally, they should continue digitalisation efforts in various areas, including cloud; electronic medical records; and low-bandwidth health care apps for telehealth, decentralised patient education, and social media. Viet Nam's successful issuance of 97 million digitalised social security numbers through the VssID mobile app should serve as an example under which UHC design could be revolutionised.

Data should be collected to provide insights required to construct policies and to monitor implementation outcomes effectively. Creating consolidated health care databases, implementing digital transformation best practices, and integrating diverse health care information such as vaccine records and newborn screenings are necessary steps to provide better health care outcomes.

6.3.4.3. Tackle Chronic Diseases, and Step up Preventative Efforts against Infectious Diseases

To effectively address lifestyle and chronic diseases, which inevitably grow as economies develop, ASEAN and Japan should consider equipping more institutions with faculty to boost the number of available physicians. They should also prepare the primary care community for more specialty training, which is a proven technique in Japan. This means providing educational materials and incentivising wearable medical technologies for improved data sharing, particularly for diabetes. For more niche domains like rare diseases and cancers, they should consider increasing the volume of screening and establishing cross-border specialist-to-specialist networks.

To step up preventative efforts for infectious diseases, which will continue to be a challenge for ASEAN and Japan, they should increase the availability of and access to immunisation programmes, which are one of the most cost-effective public health interventions available. For example, the Ministry of Health, Labour, and Welfare in Japan collaborates with the Ministry of Education on vaccine awareness programmes. Additionally, ASEAN should ensure population vaccine records become digitised to help governments track and manage future outbreak scenarios.

6.3.4.5. Utilise Public–Private Partnerships to Achieve Universal Health Coverage

Japan's successful implementation of UHC was largely due to the collaboration between the government and private primary care providers, including small hospitals, which effectively managed the demand on the health care system. Therefore, it is essential to leverage the private sector for global best practices, particularly in areas such as supply chain and logistics, as seen during the COVID-19 pandemic.

As the middle class develops in ASEAN, models for the privatised provision of health care services should be leveraged. Moreover, the private sector can serve as a valuable source of innovation and financial contributions, such as through taxation, employment, and other joint investment schemes. To further promote UHC, a new flagship programme should be undertaken, establishing national preventative care centres, to share lessons beyond AMS and to train the next generation of leaders.

The potential of private financial resources should also be explored. One approach is to capitalise on underutilised private insurance, which can serve as financial security for populations, provided that essential health care is publicly available. Additionally, social impact bonds can be a viable strategy to promote preventive health measures, as demonstrated by the Hiroshima Prefecture, where social impact bonds increased colorectal cancer screening rates, leading to cost savings in downstream medical expenses and a return on investment for private investors. Another option to explore is the adoption of public–private financial schemes from other regions, which can be adapted to the specific UHC context of the ASEAN region.

To improve health care outcomes by collaborating with the private sector, health care literacy should be emphasised, preventative health behaviours should be promoted, and self-care capabilities in AMS should be enabled. Employers can also lead by example by supporting UHC programmes to achieve scale. For instance, in Japan, employers are required to provide annual medical check-ups for their employees, which can serve as a model for other countries to follow.

6.3.5. Endorse Sustainable Tourism

6.3.5.1. Promote and Manage Tourism as a Tool for Regional and Local Development and Revitalisation

Japan can assist ASEAN in achieving sustainable economic growth, especially in local and rural areas, as well as in safeguarding the environment and cultural heritage by promoting community-based and people-centred tourism. Japan has a history of utilising domestic and national tourism to stimulate regional development and revitalisation, which was aided by the development of its extensive transport infrastructure. More recent policies aimed at domestic tourism have sought to leverage the country's abundant natural and cultural resources to promote sustainable economic growth. Horita and Kato (2018) noted that two key terms, *Kankō* and *Machizukuri*, are used in Japanese tourism. *Kankō* refers to the specific role of tourism in regional/local destination development, while *Machizukuri*, which is one of the most prominent concepts in the Japanese approach to tourism, refers to sustainable community development focussed on social capital; community unity; and resilience based on regional knowledge, wisdom, and sense of place. By highlighting such ideas, ASEAN can achieve sustainable economic growth, particularly at the local level and in rural areas, while also promoting and preserving the environment and its rich cultural heritage. Japan's experience in this area could be valuable in assisting ASEAN in achieving these goals.

6.3.5.2. Engage Local Communities

Japan can support ASEAN's pursuit of sustainable tourism development by sharing its experience of actively engaging local communities in the development and use of spaces for tourism and leisure. Oura (2018) studied the development of national forest management and policy in Japan and its relationship to tourism policy, finding that collaboration in forest management under the concept of 'forests for people' has brought about wider public participation in management. Further implementation of such initiatives is necessary to promote the development of forest tourism in Japan.

Similarly, Horita (2018) noted the engagement of local communities in the development and use of urban spaces for tourism and leisure in larger metropolises and small and medium-sized cities in Japan. However, there are still tensions between development-oriented approaches based on economic growth and collaborative management approaches based on valuing the locality and promoting citizen participation in local management. ASEAN is also emphasising the need for greater citizen engagement and empowerment in pursuing sustainable tourism development.



6.3.5.3. Prepare for Disasters

Japan can share its experiences with ASEAN in promoting tourism development in the aftermath of disasters. Kato (2018) emphasised the importance of tourism in the recovery process following the 2011 Tōhoku earthquake and tsunami, particularly in helping affected communities maintain their connection to their places. Traditional ecological knowledge-based tourism played a crucial role in supporting communities and enhancing resilience.

Additionally, Japan's experience in reducing the vulnerability of international visitors to disasters, such as earthquakes, tsunamis, typhoons, and floods, is instructive. National and local governments and the tourism industry have utilised digital technologies, such as mobile safety apps and social media, to disseminate up-to-date and accurate multilingual information. ASEAN's emphasis on digital technologies as an enabler for sustainable tourism development makes this aspect particularly relevant.

6.3.5.4. Measure Sustainable Tourism

Japan has extensive experience in establishing the necessary governance structures and generating relevant information to support the design of appropriate tourism policies. This experience can be leveraged to help AMS facing similar challenges. In Japan, building cooperative arrangements involving various stakeholders in the tourism sector, including local public bodies, residents, and the tourism industry, has been crucial to ensuring environmental protection as the core of sustainable growth in the tourism sector. This approach has been effective in creating more efficient management and promotion of regional tourism, with increased numbers of destination management organisations.

To benchmark the state of sustainability nationally, the Japan Tourism Agency (JTA) conducted a national survey amongst Japan's local governments in 2018, focussing on key elements such as transport, accommodations, and infrastructure (JTA, 2019). Following the survey results, JTA established the Sustainable Tourism Promotion Office and developed a set of internationally recognised sustainable tourism indicators to serve as a national guideline and to facilitate local implementation. This resulted in the creation of the Japan Sustainable Tourism Standard for Destinations (JSTS-D) (JTA, 2019), based on Global Sustainable Tourism Council (GSTC) standards adapted to the Japanese context, which is now used to certify industry operators as sustainable to an international standard.

The JTA experience in developing and implementing its version of the GSTC criteria can provide useful insights on how AMS can adapt the criteria to their contexts. ASEAN recognises that partnerships formed amongst intergovernmental departments, tourism businesses, civil society, local communities, tourists, international organisations, and other stakeholders are essential building blocks for sustainable tourism development. Therefore, the Japanese experience in establishing appropriate governance structures and monitoring mechanisms to support sustainable tourism development is ideal for AMS.

6.3.6 Address the Digital Divide amongst Micro, Small, and Medium-Sized Enterprises

6.3.6.1. Close the Gap

ERIA's ongoing studies have demonstrated that bridging the digital divide amongst micro and small and medium-sized enterprises (SMEs) requires more than just improving information and communications technology (ICT) infrastructure and financial resources. A skilled workforce with both ICT expertise and fundamental business knowledge is essential to utilise these ICT tools. To address these challenges in an efficient manner, ASEAN and Japan should collaborate with private companies, such as Japan's multinational ICT solution providers.

One issue that requires attention is the business knowledge gap that many micro and SMEs face. This is a fundamental issue that must be addressed if micro and SMEs are to improve their businesses using digital tools. Enhancing the business knowledge of micro and SMEs is a difficult task, but ASEAN and Japan can work together to share knowledge and lessons learned from their respective micro and SME policy experiences. For instance, Japan's Small and Medium Enterprise Agency and METI have launched an evidence-based policymaking initiative for micro and SME policies, which can serve as a useful model for ASEAN.

6.4. Build a Professional Workforce for the Future

6.4.1. Address the Mismatch between Human Resources Skills and Industry Needs

6.4.1.1. Define Human Resources Skills Standards

As a region, ASEAN–Japan must determine what type of human resources will be required in the future. By defining these skill sets, human resources development programmes can be developed that align with future industry requirements. Existing standards established by the International Labour Organisation (ILO) and the EU should be used as a reference where appropriate. In addition, Japan's

Digital Skill Standard⁵ focusses on the integration of business and digital skills, which is an approach that should be adopted in the future, as individuals who can utilise digital technology for business are in high demand.

The penetration of Industry 4.0 will drastically change the region's industrial structure. At the same time, new technologies will develop and spread quickly; the required skill sets will likely change as well. Therefore, the skill sets to be developed within the region should be a framework that is continually updated, responding flexibly to industry demands. Reskilling and upskilling are essential to keep up with the pace of change and to remain competitive.

6.4.1.2. Incorporate Common Skills into Educational Programmes

ILO and the EU initiatives provide relevant e-learning resources in addition to defining skill sets on their respective websites. Integrating the skill sets defined by ASEAN and Japan into educational programmes would ensure consistency between education and employment, especially since the Chapter 2 survey revealed skill gaps between human resources and skills required by companies. These skill sets should not be limited to specific engineers or occupations but should be applicable to a wide range of business professionals and candidates such as students in higher education or relevant educational institutions like technical and vocational education and training (TVET).

To provide education for these skill sets, a wide range of educational institutions should be involved, including primary and secondary schools, universities, graduate schools, and TVET institutions. For example, Japan's KOSEN programme,⁶ which aims to produce highly skilled technical personnel, can be linked to the skill sets defined by ASEAN and Japan to supply the region's labour market with students who possess both advanced technical and business skills applicable to Industry 4.0. These initiatives can be conducted at specific educational institutions, and implementation can be widely publicised.

Education is not only for students and the younger generation. A scheme should also be developed to offer lifelong learning programmes according to a defined skill set, including post-employment reskilling and upskilling. This programme should be linked to the human resources exchange programme between ASEAN and Japan, which requires cooperation with a wide range of stakeholders, including educational, business, and research institutions.

⁵ Government of Japan, METI, Digital Skill Standards, https://www.meti.go.jp/policy/it_policy/jinzai/skill_standard/main.html [in Japanese].

⁶ KOSEN is the colleges of technology in Japan that are established by National Institute of Technology and provides engineering education to students who graduated junior high school or the equivalent. KOSEN has academic exchange programmes with 11 universities in the Philippines, Singapore, Thailand, and Viet Nam. See National Institute of Technology, Academic Exchange Agreements, What Is KOSEN, <https://www.kosen-k.go.jp/english/what/educationssystem/academic/>

6.4.2. Foster Inclusive Education

6.4.2.1. Enhance Inclusive Education through Digital Technologies

The partnership programme between ASEAN and Japan aimed at providing inclusive education to individuals with limited access to education can be strengthened by improving network infrastructure and education programmes. EU assistance in improving the educational environment in neighbouring Eastern European countries and providing inclusive educational programmes through public–private partnerships in the Philippines could serve as models for ASEAN and Japan.

To improve the network infrastructure within ASEAN, advanced technologies such as 5G networks with high-speed connections could be utilised instead of the existing network system. 5G infrastructure should thus be widely implemented within ASEAN.

To provide inclusive education, collaboration between the government or public agencies and private sectors (e.g. EdTech start-ups) should be considered, following the example of CrowdSwyft. Many companies provide EdTech services in ASEAN and Japan, and collaborating with them may help promote digitalised education in AMS. Partnerships with regional stakeholders can be employed to teach students how to use tablets and to monitor their learning progress as well.

Moreover, it is essential to prepare educators to utilise digital technology. Enhancing their digital literacy and educating them about the potential of digital education are thus necessary.

6.4.3. Ease the Mobility of Human Resources

6.4.3.1. Expand Mutual Recognition Arrangements

ASEAN mutual recognition arrangements presently encompass eight domains,⁷ which parallel those of Europe. Broadening the range of vocational qualifications in AMS would bolster the portability of human resources.

While mutual recognition arrangements are currently operating in AMS, their extension to Japan would amplify the mobility of qualified human resources

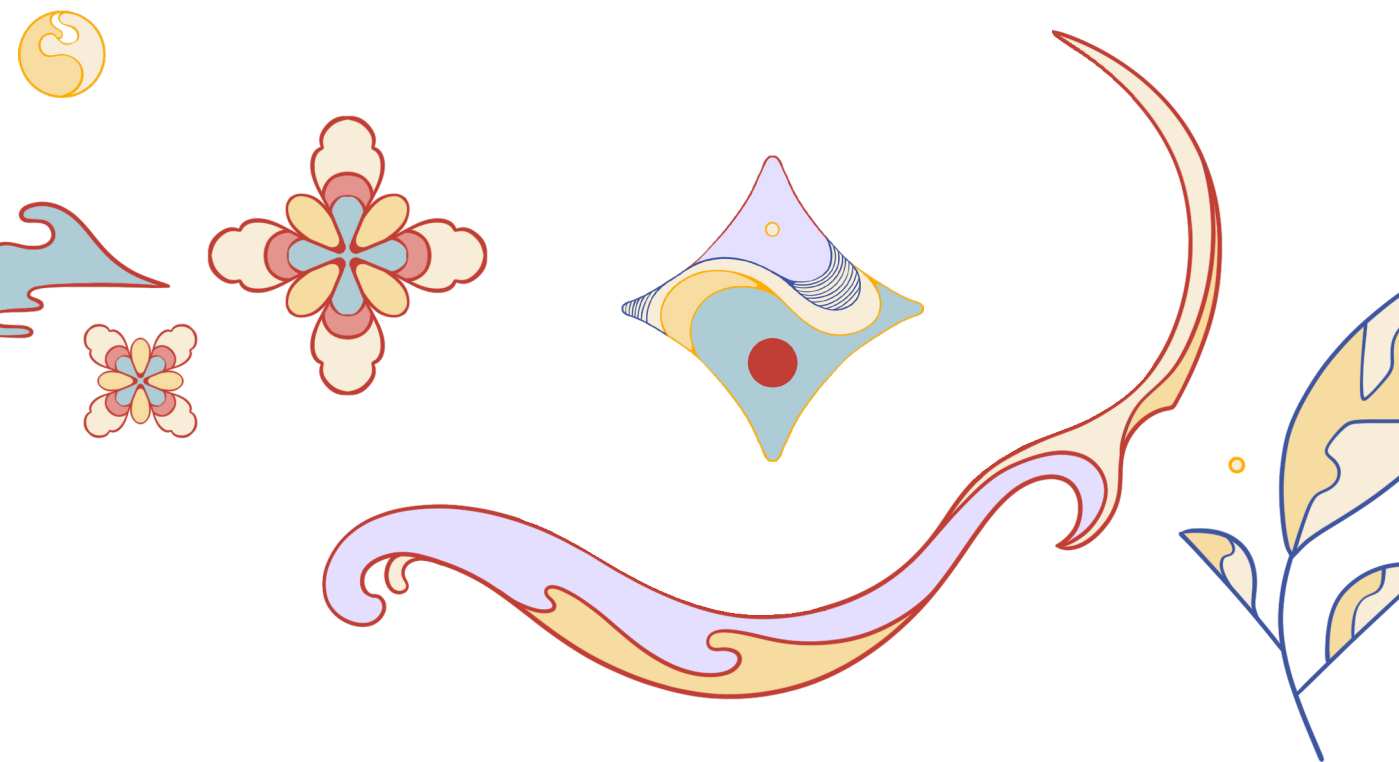
⁷ ASEAN mutual recognition arrangements are the framework to support liberalising and easing trade in services with the aim of facilitating the mobility of professionals or skilled workers in ASEAN. It covers engineering services, nursing services, architectural services, surveying qualifications, dental practitioners, medical practitioners, tourism practitioners, and accountancy services. See ASEAN, ASEAN Mutual Recognition Arrangements, Invest in ASEAN, <https://investasean.asean.org/asean-free-trade-area-agreements/view/757/newsid/868/mutual-recognition-arrangements.html>

between ASEAN and Japan. Any effort to establish mutual recognition of qualifications between ASEAN and Japan must consider the recognition criteria, with due regard to the prerequisites of Japanese occupational qualifications to sustain their level of service and competitiveness in the labour market.

6.4.3.2. Mutually Recognise Academic Credits and Degrees

Standardising the educational qualifications and professional standards recognised by the ASEAN–Japan regional mutual recognition arrangement is imperative. Ensuring that vocational qualifications meet a minimum standard of quality would contribute to maintaining high levels of service quality.

The expansion of applicable personnel is desirable to provide a diverse range of human resources with specialised skills for the labour market. A continued expansion of schools, applicable faculties, and programmes within the ASEAN Credit Transfer System is also needed. Additionally, mutual recognition of credits and study plans for training programmes during training periods should be implemented, building upon the existing ASEAN Credit Transfer System.⁸ A common academic credit transfer framework for Asia for use by universities in ASEAN is currently being built (SEAMEO RIHED, 2019). To expand the recognition of degrees, degree exchange programmes should be linked to the qualifications approved by the mutual recognition arrangements.



⁸ AUN, ASEAN Credit Transfer System (AUN-ACTS), Thematic Networks, <https://aunsec.org/discover-aun/thematic-networks/aun-acts>

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