



ASEAN BUSINESS ROADMAP

TOWARDS EPICENTRUM OF GROWTH









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FOREWORD FROM THE CHAIR OF ASEAN-BAC 2023



"It is with great honor and responsibility that we bring forth this policy paper, which is aimed at guiding the Southeast Asian nations towards a future defined by sustainable growth, collective prosperity, and resilience. The role of the ASEAN Business Advisory Council (ASEAN-BAC) is more crucial than ever in aligning our economic strategies with the larger regional and global realities.

In the context of a rapidly evolving world, ASEAN stands at the crossroads of opportunity and challenge. Our region, home to over 650 million people and an impressive diversity of cultures and economies, has become

an epicenter of growth and dynamism. The past few decades have seen ASEAN transform into a significant hub of economic activity, a testament to our collaborative spirit and shared vision of an integrated region.

ASEAN's continued growth trajectory is underpinned by the principles of regional economic centrality, an endeavor aimed at realizing an innovative and inclusive ASEAN. This aspiration necessitates policies that not only facilitate the efficient movement of goods, services, investments, and skilled labor across our borders but also provide an environment conducive to entrepreneurship, innovation, and sustainable development.

The pressing global issues of our time, including the climate crisis, economic inequality, and the need for sustainable, inclusive growth, add an extra layer of urgency and complexity to our policy deliberations. There is an increasing recognition that our collective economic prosperity must not come at the expense of our planet or the well-being of our most vulnerable communities.

This policy paper reflects our ongoing commitment to these lofty ideals. It is our attempt to further consolidate ASEAN's place as an epicenter of growth while also ensuring that this growth is inclusive, sustainable, and resilient in the face of emerging global challenges. The policies advocated herein are driven by a profound belief in ASEAN's potential and a strong commitment to safeguarding the interests of our people.







Our work is informed by a deep understanding of the region's diverse economies, its vibrant business community, and the hopes and aspirations of its people. In it, you will find our reflections on the strategic role of micro, small, and medium enterprises (MSMEs), the need for a shift towards a green economy, and the power of technological innovation in accelerating our region's economic integration. We highlight the importance of food security in our geopolitical landscape and the necessity to safeguard against health threats, ensuring resilience in the face of transmissible and non-transmittable diseases. The recent pandemic has shown us how important this is.

This paper was not the work of one, but of many. We strongly appreciate the hard work that has been put into this paper, from our policy managers, legacy leads, knowledge partners, institutional partners, as well as all stakeholders across ASEAN Member States and ASEAN Dialogue Partners Countries that we have met with during our roadshow. We are grateful for their relentless support and insightful knowledge.

We hope this paper will continue to inspire meaningful conversations, encourage collaborative actions, and ultimately guide our region towards a future that we all aspire to. A future where ASEAN continues to be a beacon of growth, a model of regional integration, and a testament to the power of shared vision and collective action."

M. Arsjad Rasjid P. M.

Chair of ASFAN-BAC 2023







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THEME OF INDONESIA'S ASEAN-BAC CHAIRMANSHIP

ASEAN is a region rich with potential and under Indonesia's ASEAN-BAC 2023 Chairmanship, we aim to embrace it to the fullest. Therefore, we have adopted the theme "**ASEAN Centrality: Innovating Towards Greater Inclusivity**".

Our theme highlights centrality as the destination, innovation as the vehicle, and inclusivity as the non-negotiable practice throughout the Chairmanship. In addition to that, we have planned for the ASEAN-BAC theme to go together with the theme of Indonesia's ASEAN Chairmanship "ASEAN Matters: Epicentrum of Growth".

As the amplifier of the voices of private sectors across the ASEAN region who aims to achieve regional economic integration and strengthen cooperation across different sectors, we are also implementing the **5Ps** which stands for **people, planet, prosperity, peace,** and **partnership**. Through this, we are hopeful that we can enhance public-private cooperation – working together and making ASEAN as the epicentrum of growth.





ASEAN Matters: Epicentrum of Growth ASEAN Centrality: Innovating Towards Greater Inclusivity







FIVE POLICY PRIORITIES AND EIGHT LEGACY PROJECTS

The ASEAN-BAC 2023 Chairmanship aims to address the economic challenges in ASEAN across different key sectors in ASEAN. Therefore, we have centered our work on five policy priorities and eight legacy projects. We have provided more details below for each priority and projects – alongside indepth information of our efforts to promote the priorities and projects across ASEAN and its dialogue partner countries.







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DIGITAL TRANSFORMATION

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ASEAN QR CODE

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WORKING GROUP: DIGITAL TRANSFORMATION

Title: Building a fully interoperable QR code payment ecosystem in ASEAN

I. Executive Overview

Quick response (QR) code payments have become an increasingly common part of the modern Southeast Asian payment landscape, providing simple, digital payment opportunities that benefit customers and merchants across member states.

To further unlock the benefits of QR code payment within ASEAN nations, they must be scaled out to improve not only domestic payments but also cross-border payments. Linking each ASEAN member country's respective Real-time payment (RTP) systems and creating an ASEAN interoperable QR code payment ecosystem promises substantial value for citizens, businesses, and economies across the region and will support ASEAN centrality.

Today, ASEAN has already made important steps to link RTP ecosystems, with most linkages being QR-code-enabled. These are undertaken mainly through bilateral initiatives. Based on the successes delivered through these bilateral efforts, it is imperative for all ASEAN member countries to align on next steps. This will enable all collective sources to be fully utilised, with a coordinated effort to eventually realise a fully interoperable ASEAN interoperable QR code payment ecosystem.

ASEAN Business Advisory Council's (ASEAN-BAC) ASEAN interoperable QR code payment ecosystem Legacy Project is aligned with ASEAN Finance Ministers and Central Bank Governors (AFMGM)'s focus on realising QR payment linkage across ASEAN member states as part of ASEAN's Regional Payment Connectivity Initiative.

ASEAN has already made major progress with cross-border payment arrangements, and we believe that the private sector can play a significant role in driving awareness and increasing adoption at scale.

This paper presents the benefits of cross-border QR payment linkages in ASEAN and the important role of private sector as an accelerator for adoption. It also looks at the opportunities and how ASEAN-BAC can promote and partner to deliver a fully interoperable cross-border QR code payment system across the region.

Through this paper, ASEAN-BAC demonstrates its support for the ASEAN leadership in their efforts to link cross-border payment systems throughout the member states using QR functionality. This paper intends to provide support to AMFGM and relevant working groups in accelerating ASEAN-







wide cross-border QR code payment linkages and to be a reference document for the private sector stakeholder ecosystem.

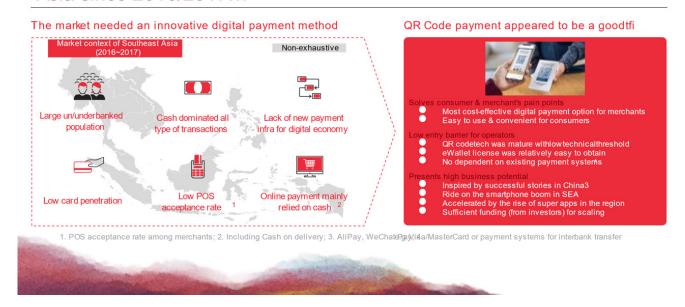
II. Context Setting and Policy Agenda

QR codes are an important innovation in the evolution of payment solutions and have taken a significant place in the regional payment landscape in recent years. This is driven by the vision of the ASEAN member states, with a range of strategies to proceed towards becoming cashless or less cash-dependent societies.

[Exhibit 1.]



QR code payment started to emerge in Southeast Asia since 2016/2017...



The adoption of QR codes in ASEAN's payment ecosystem emerged in 2016/2017, and quickly began to scale across the region.

Rapid uptake was driven by a number of key characteristics of regional payments landscape at that time—large unbanked or underbanked populations, a cash-dominated payment ecosystem with low credit card penetration, and limited point-of-sale card acceptance. Lack of new payment infrastructure for the digital economy and online payments reliant on cash also created fertile ground for QR code payment and the wider e-wallet ecosystem.







[Exhibit 2.]

... since then, Five key factors pushed eWallets and QR code payments adoption and popularity across the SEA region



Source: Statista, World findex, press search, BCG analysis

- Rising smart phone usage: Consumers are the foundation of the modern regional ecosystem, with rising smartphone penetration driving adoption of QR payments. Smartphone penetration reached 82% of the population of ASEAN's six largest economies by 2022, with significant growth up from just 67% in 2017 (Omdia, 2023)
- 2) Regulatory push: Policymakers and regulators are also an important part of the ecosystem, providing the frameworks for success. Policymakers are already supporting digital payment visions through policies and proactive engagement. Common regulatory reforms include applying the "same activity, same risk, and same regulation" principle has allowed more non-financial institution players to participate, initiatives to improve interoperability and create an inclusive ecosystem, and education and incentive schemes and distributed government subsidies driven through e-wallets.
- 3) Driving role of fintechs: Funding raised by financial technology (fintech) players has seen steady growth during this period of expansion, enabling them to drive digital payment innovation in the region. Funding value for large tech and e-wallet operators across ASEAN rose from over US\$1.3 billion in 2016, to almost US\$11 billion in 2021. (BCG FinTech Control Tower database).
- 4) Growing digital economy: Southeast Asia's digital economy has seen rapid expansion in recent years, driving the growth of digital payments. The gross merchandise value (GMV) of the digital economy grew from US\$102 billion in 2019 to US\$194 million in 2022, and is projected to reach US\$330 billion by 2025. E-commerce is a major share of that growth, and is estimated to account for 64% of the total digital economy by 2025 (e-Conomy 2022 report).







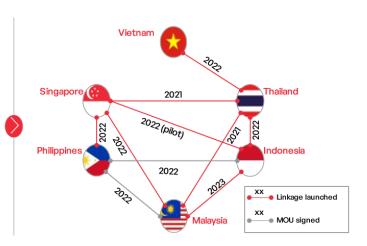
5) Impact of Covid-19: COVID-19 has further accelerated adoption of digital financial technologies and capabilities, driving participation in digital economies. More than half (56%) of Southeast Asian consumers use cash lass frequently than pre-COVID, and more than a quarter (26%) used QR payments for the first time during COVID-19 (IDC consumer payment survey). This creates fertile ground to facilitate a conducive QR code ecosystem that empowers customers and merchants across ASEAN.

An interoperable QR code payment ecosystem involves the linkage of RTPs as well as the interconnection of national QR code schemes between counties. It allows people to buy goods and services easily, including during intra-ASEAN travel, simply through scanning QR codes. This also comes with the benefit of bypassing the need for a non-ASEAN currency such as US dollars acting as an intermediary—significantly reducing exchange-rate risk to the consumer.

The latest developments in the space have seen many ASEAN countries launching bilateral RTP linkages, helping facilitate cross-border e-wallet payments. Malaysia, Indonesia, and Thailand are connected through QR code functionality, while Singapore enjoys links to Thailand and launched pilot with Indonesia. On top of this, central banks from five ASEAN members—Indonesia, Malaysia, Philippines, Singapore, Thailand—have signed an MoU to integrate payments between countries. Indonesia has also recently signed bilateral MOUs with Lao and beyond ASEAN, with METI Japan, India, and South Korea. This cross-border payment initiatives are in-line with the ASEAN's Regional Payment Connectivity Initiative.

[Exhibit 3.]

Latest development
- 6 major SEA
countries started to
launch bilateral QR
payment linkages to
facilitate crossborder E-wallet
payments



Despite these early bilateral agreements, there is, as of now, no truly holistic regional interconnected ecosystem.

This paper reflects the ASEAN-BAC Digital Transformation Working Group's commitment to the development and socialisation of building and promoting a fully interoperable QR code payment ecosystem within ASEAN to facilitate regional commerce and payments.







III. Stakeholder Ecosystem

There are three key stakeholders to consider in building out an interoperable QR payment ecosystem across ASEAN—e-wallet providers, regulators, and private sector operators.

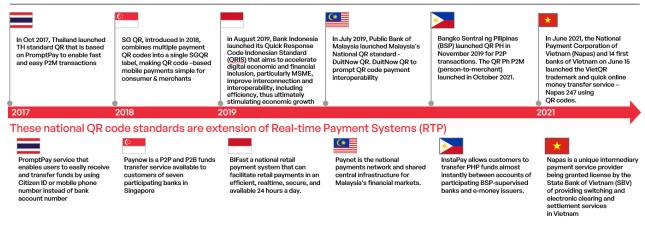
Southeast Asia has more than 80 e-wallet providers, connecting over 205 million users and over 25 million merchants across the region. Indonesia alone is home to more than 15 industry players, with a user base of over 90 million, and 15 million merchants. User bases are significant across regional markets, including Philippines (>33 million), Vietnam (>23 million), Thailand (>22 million), Cambodia (>17 million), Malaysia (>15 million), and Singapore (>1.7 million).

There are currently four key archetypes of QR code e-wallets emerging within this landscape:

- **Fintech/Big tech.** Fintech startups and big technology players launching pure-play e-wallets or wallet features based on their primary digital services, such as e-wallets. Players include GrabPay, FavePay, Dana, and GoPay.
- Incumbent banks. Traditional banks launching standalone wallet apps or added QR payment features to existing mobile banking apps. Players include CIMB, K+, DBS, LinkAja, BDO Pay, and Jenius.
- **E-commerce.** E-commerce platforms launching their own wallets to facilitate online shopping transactions. Players include AirPay, ShopeePay, and Lazada Wallet.
- Large corporations. Telecom companies and large conglomerates launching e-wallets to primarily target their existing customer base. Players include Singtel Dash, Boost, Maya, and OVO.

[Exhibit 4.]

As eWallet/QR code payment sector became crowded and fragmented, regulators launched national QR standards to improve interoperability



Source: Regulator website, company announcement, BCG/Expand FinTech Control Tower, BCG analysis







Regulators are key stakeholders in building an enabling landscape. As e-wallet and the QR code payment sectors became crowded and fragmented, regulators launched national QR standards to improve interoperability.

Private sector organisations will also play a pivotal role in promoting and enabling adoption of QR payments in ASEAN. They can help to promote usage of QR payments at major customer touchpoints such as airports, hotels, department stores, and merchants and micro-, small- and medium-sized enterprises (MSMEs). Rolling out QR payment acceptance functionality at the point-of-sale (PoS) will also facilitate adoption and encourage customers to use QR payments, providing a smooth, cash-free solution to customer payment needs, and one which enhances and enables seamless payments for intra-ASEAN travel.

IV. Policy Priority Agenda

Given the diversity in ASEAN member countries, there is not a one-size-fits-all formula to grow the sector.

There are already a number of important ongoing initiatives to expand this ecosystem. National policymakers have delivered progress in areas highlighted above, with markets delivering national QR standards to improve interoperability. The launch of multiple bilateral RTP initiatives is also a welcome progression of the landscape.

This paper presents the next phase of this ecosystem integration, framing the positive impact of the ASEAN interoperable QR code payment ecosystem, important role of the private sector, and recommendations for government to further engage the private sector in driving awareness, adoption, innovation, and implementation in the cross-border QR payment area.

Policy Action 1.1: The benefits of ASEAN interoperable QR code payment ecosystem

ASEAN interoperable QR code payment ecosystem brings a range of benefits to stakeholders across ASEAN, including consumers, merchants, fintechs and financial institutions, and the region as a whole.

Consumers benefit from increased convenience, security, and reduced payment costs during intra-ASEAN travel, supporting the growth of the tourism industry. Cross-border QR payment linkages are enabled with Local Currency Transaction (LCT). LCT can improve external resiliency by reducing dependence on hard currencies. LCT also uses direct quotation to provide more competitive exchange rates and faster, cheaper, and more efficient transactions. Transactions using cross-border QR patment linkages will be less exposed to fluctuating exchange rates while also reducing the risk of carrying large cash amounts. This helps promote financial inclusion and allows unbanked and underbanked groups to use a simple form of digital payment overseas







Merchants benefit from a wider customer base, with a focused opportunity in engaging the 18 million tourists participating in intra-ASEAN travel in 2022. These customers are attracted to utilise cost-effective, convenient digital payment systems. Full implementation of ASEAN interoperable QR code payment ecosystem could unlock intra-ASEAN tourist transaction value of US\$4 billion annually (BCG analysis).

Increased adoption of QR codes will encourage spending and ultimately drive a deeper sales pool for businesses, while also enjoying lower interchange fees than alternative payment solutions such as credit cards. QR code payments are easy to install, and offer the chance to implement other value-adding services.

Financial providers can leverage QR payments to build out the already booming digital payment ecosystem, expanding beyond e-wallets and banking apps, and entering new market spaces across ASEAN. This helps drive app usage and 'stickiness', building more loyal customer bases. Successful implementation could also unlock further innovation and business opportunities for financial service players, particularly through leveraging increased transactional data to target and inform future products and services.

The ASEAN region as a whole will benefit from the combination of these opportunities, creating a unified ecosystem that strengthens intra-regional cooperation and collaboration, and providing a pillar of regional financial interconnection that will enhance ASEAN integration while unlocking regional economic opportunities. ASEAN interoperable QR code payment ecosystem would represent an important initiative with clear, everyday impacts for citizens, showing tangible benefits of regional integration. It would also align with the Payment and Settlement pillar of the ASEAN Financial Integration strategy.

Policy Action 1.2: Critical role of the private sector in driving awareness and increasing adoption

The private sector can help create a seamless operating environment, allowing tourists across the region to confidently leverage interoperable and seamless payment infrastructure. Private sector implementations of cross-border QR payment schemes will enable superior customer journeys, and solve major consumer pain points, helping ensure that the government-built payment infrastructure will benefit from suitable transaction volumes. Potential transformative use cases are plentiful. ASEAN cross-border QR payment linkages can be utilised pre-trip to book hospitality and airline tickets. At the point of travel it can be used as a communication system to send geo-located updates to users, as well as allowing airport operators to promote and utilise QR through airport displays and shopping destinations.

During a trip, cross-border QR payment system could be promoted to users through push notifications, as well as offering a smooth payment system for essential travel such as public transport or taxis.





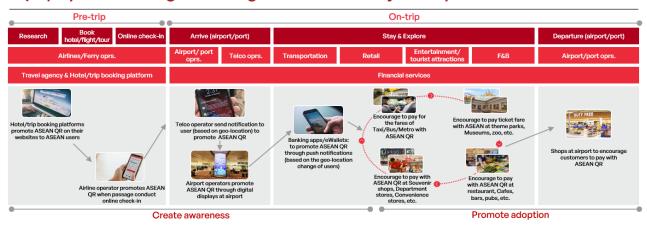


Payment infrastructure can enable transactions in retail shops particularly those focused on tourists such as department stores or souvenir shops, and payments in restaurants, cafes, and at cultural venues could further enhance adoption.

On return journeys, airports could once again act as platforms to promote ASEAN cross-border QR payment linkages, while benefiting users through smooth, interoperable payment options.

[Exhibit 5.]

Private sector can promote awareness and increase adoption of ASEAN QR payment linkages throughout the users' journey



Source: BCG analysis

The customer journey above highlights how private sector participation is vital in implementation of ASEAN cross-border QR payment linkages in both short-term and long-term.

Short-term

- **Create awareness.** Send contextual adverts to user base across ASEAN, explaining what ASEAN interoperable QR code payment ecosystem is and how customers can use it. Can be sent in advance or during travel with assistance of geolocation.
- **Promote adoption.** Promote ASEAN cross-border QR payment linkages when customers pay at the counter, reminding them of acceptance and highlighting benefits. Also provide simple instructions on use of QR.

Long-term

• **Drive innovation.** Drive data-driven innovation use cases across payment landscape and beyond, benefit merchants and MSMEs with data-driven insight, payment technology improvement, etc.







On the other hand, private sector organisations will also benefit from inclusion and promotion of ASEAN interoperable QR code payment ecosystem, with a range of benefits to be unlocked.

- Increased market visibility and brand image. Being a champion promoting and driving ASEAN interoperable QR code payment ecosystem will be publicised, driving brand exposure and recognition among consumers and partners.
- **Potential collaboration and innovation opportunities.** Participation provides early access to specialised resources, such as data and expertise, allowing companies to gain a head start on innovation, improved product development, and increased competitiveness.
- Influence policy makers on future plans and strategies. Championing ASEAN interoperable QR code payment ecosystem offers private sector the chance to engage and influence future policy direction through feedback and collaboration, helping build an informed ecosystem and providing insight into effective future strategies.
- **Enhance credibility and trust.** Participating in innovative regional payment initiatives enhances industry leadership credibility and builds confidence in consumers and investors.

The digital transformation of ASEAN is a complex and multi-faceted process that requires the coordinated efforts of governments, businesses, and civil society. While access to digital technology is essential, it is not enough to guarantee the success of the digital transformation. Other complementary factors, such as analog logistics, last-mile delivery for e-commerce, e-government, e-signatures, and virtual delivery of professional services, are also important.

The private sector will play a critical role in the digital transformation of ASEAN. Businesses can invest in digital technologies, develop digital skills, and promote the adoption of digital payments. They can also work with governments to improve digital infrastructure and create a regulatory environment that is conducive to innovation.

The importance of cybersecurity, payment system resiliency, and fraud prevention and detection in ASEAN

The increasing reliance on digital technologies creates a potential vulnerability for cyberattacks and financial fraud. In order to protect the region's critical infrastructure, businesses, and consumers, ASEAN needs to strengthen its cybersecurity, payment system resiliency, and fraud prevention and detection capabilities.

The Bandar Seri Begawan Digital Roadmap, which was adopted by ASEAN leaders in 2021, recognizes the importance of these issues. The roadmap calls on ASEAN to:

- Develop and implement cybersecurity and payment system resilience standards
- Promote awareness of cybersecurity and fraud threats and best practices







• Strengthen cooperation on cybersecurity and fraud prevention and detection among ASEAN member states

The ASEAN Cybersecurity Cooperation Strategy 2021-2025 also provides guidance on the development and implementation of these measures. The strategy calls for ASEAN to:

- Develop a regional framework for cybersecurity and payment system resilience standards
- Promote the adoption of international cybersecurity and payment system resilience standards
- Support the development of cybersecurity and fraud prevention and detection capabilities in ASEAN member states

The strengthening of cybersecurity, payment system resiliency, and fraud prevention and detection capabilities is essential for protecting ASEAN's digital economy. By working together, ASEAN member states, hand in hand with the private sector, can create a more secure and resilient digital infrastructure.

Here are some specific examples of how ASEAN can strengthen its cybersecurity, payment system resiliency, and fraud prevention and detection capabilities:

- Develop a regional framework for cybersecurity and payment system resilience standards that considers the specific risks faced by ASEAN member states.
- Promote the adoption of international cybersecurity and payment system resilience standards, such as the ISO/IEC 27001 standard and the Payment Card Industry Data Security Standard (PCI DSS).
- Support the development of cybersecurity and fraud prevention and detection capabilities in ASEAN member states, such as through training and capacity building programs.
- Strengthen cooperation on cybersecurity and fraud prevention and detection among ASEAN member states, such as through information sharing and joint exercises.

In addition to the measures mentioned above, private sector actors can also play a collaborative role with ASEAN in alerting and educating the public on potential fraud scenarios involving QR code-based payment schemes. This can be done through a variety of channels, such as:

- Websites and social media: Private sector actors can create or maintain websites and social media
 pages that provide information on QR code based payment fraud prevention and detection. These
 pages can be used to share tips on how to spot and avoid QR code based payment fraud, as well
 as to report suspected fraud.
- Email and messaging/in-app alerts: Private sector actors can send email and SMS alerts to their customers about potential QR code based payment fraud threats. These alerts can be used to warn customers about new scams or to remind them of best practices for protecting themselves from QR code based payment fraud.







• Customer education programs: Private sector actors can offer customer education programs on QR code based payment fraud prevention and detection. These programs can be delivered in person, online, or through other channels.

By taking these steps, private sector actors can help to raise awareness of QR code based payment fraud and to empower consumers to protect themselves. This can help to reduce the incidence of QR code based payment fraud and to create a more secure digital environment for everyone.

Here are some specific examples of how private sector actors have alerted and educated the public on potential QR code based payment fraud scenarios:

- Banks: Banks often send email and messaging alerts to their customers about potential QR code based payment fraud threats. They may also have websites or social media pages that provide information on QR code based payment fraud prevention and detection.
- Payment providers: Payment providers often have fraud prevention programs in place for QR code based payments. These programs may include things like monitoring transactions for suspicious activity and providing customers with alerts if their card is used in a fraudulent way.
- Merchants: Merchants often have policies in place to protect customers from QR code based payment fraud. These policies may include things like requiring customers to enter a security code when making a purchase or using encryption to protect customer data.

By taking these steps in consultation with ASEAN Member State governments and relevant working groups, private sector actors can help to create a more secure digital environment for everyone.

Policy Action 1.3: Recommendations to enhance public-private synergy

ASEAN BAC recommends the next steps of promoting and scaling up ASEAN interoperable QR code payment ecosystem to include three key steps:

- Identify and appoint industry champions. Start by identifying leading players from relevant industries that can promote ASEAN interoperable QR code payment ecosystem at each step of the user journey.
- **Engage private sector early.** Collaborate with private sector players as early as possible, and leverage their knowledge and insights to optimise launch plans and ensure they are practical and feasible.
- **Explore further innovation.** Continue to innovate by focusing on data-driven, innovative use cases that can benefit private sector participants, particularly merchants and MSMEs, consumers, and enhance overall financial integration and inclusion across the region.







These next phase of ASEAN interoperable QR code payment ecosystem will benefit greatly from synergising with private sectors and government policymakers. Private sector consultation and engagement will ensure crucial buy-in from market practitioners and adoption by private sector players, as well as accelerate implementation across nations of ASEAN. ASEAN-BAC put forward recommendations to enhance B2G synergy in building a fully interoperable QR code payment ecosystem in ASEAN:

- 1. Private sector stakeholders should be updated on regulatory implementation timelines/agenda for synergy and support
- 2. Develop and implement strategies in partnership with relevant agencies (e.g., Tourism Board) to promote key use cases
- 3. Offer B2G and G2G support to countries who have yet to implement nation QR or bilateral RTP linkages
- 4. Industry consultation on the financial impact, scalability and evolutionary pathway of ASEAN interoperable QR code payment ecosystem regularly through formal engagement between ABAC and relevant ASEAN working groups
- 5. Offer B2G and G2G support to countries who have yet to implement nation QR or bilateral RTP linkages

To make this effort tangible, ASEAN BAC invites the council members to nominate companies to be the ASEAN BAC QR code payment champion. ASEAN BAC targets one company per value chain segment/industry sector, per country to become the champion to help accelerate the implementation of cross-border QR payment by driving awareness and adoption.

V. Synergies with Regional and Global Regulations

Each ASEAN member state has their own unique context, existing interest in QR payments, and level of maturity. The ASEAN interoperable QR code payment ecosystem Legacy Project offers four principles for AMS to adopt in achieving an interoperable ASEAN QR payment ecosystem:

• Inclusive: Mutual commitment, flexible implementation

- Common agreement to develop ASEAN interoperable QR code payment ecosystem for more streamlined, faster, cheaper, transparent, and inclusive cross-border payments.
- Implementation should respect the circumstances, interests, and readiness of each member state while ensuring no country is left behind.







Scalable: Tech- and vendor-agnostic

• Standard development should adopt a tech-neutral approach to ensure flexibility, interoperability, and encourage innovation.

• Citizen-centric: Direct benefits to citizens

 ASEAN interoperable QR code payment ecosystem provides direct benefits to citizens of member states, especially consumers, MSMEs, and the tourism industry that was heavily impacted by the COVID-19 pandemic.

· Regional identity building

• Direct impact of ASEAN interoperable QR code payment ecosystem on the day-to-day lives of citizens to increase awareness and meaningfulness of the ASEAN region.

VI. Roadmap and Timeline

QR code payment linkage between member states is based on mutual agreement and the respective readiness of each country. There are already important bilateral relationships in place, providing early templates for cooperation. Indonesia, Malaysia, Philippines, Singapore, and Thailand have also announced an intention further to integrate QR code payment systems in the region.

It is expected that government stakeholders from member states, including central banks, relevant finance ministries, and others will share further details on plans for future payment connections.

VII. Alliance Building

Public and private sector collaboration will be essential to building a QR ecosystem that is attractive to consumers, providing a foundation to scale awareness and adoption.

Private sector operators can play a major role in driving awareness through their massive media reach and customer bases, pushing for adoption, and innovating effective applications and use cases for ASEAN interoperable QR code payment ecosystem that encourage consumer adoption.

There are two specific levers which the ASEAN-BAC Digital Transformation Working Group is seeking to utilise to engage the ecosystem. The first is working with industry champions to drive adoption. The second is to be the vocal point to communicate consolidated private sector input to the government.

ASEAN-BAC is the top private sector body for ASEAN and point of access for private companies to offer feedback, provide their views and concerns, and inform industry evolution. ASEAN-BAC operates joint business councils to engage external organisations and develop input on legacy projects such as ASEAN interoperable QR code payment ecosystem, as well as other key topics requiring private sector feedback.







ASEAN-BAC is supportive and eager to contribute to the Working Committee on Payment System (PSS) and Financial Inclusion (FINC), as suggested by Perry Warjiyo, Bank Indonesia Governor, at the 2023 AFM General Meeting in Bali.

VIII. Conclusion

QR codes offer an important avenue to enhance the payment landscape across ASEAN, providing a user-friendly solution that is widely adopted by consumers and businesses alike.

In order to support this landscape, private sector organisations need to consolidate and align on QR standards and implementation and collaborate with public bodies to ensure effective implementation as part of a conducive payment ecosystem.

Chambers of commerce in respective ASEAN countries have an important role to play in this, as guides for nation-specific measures that can enhance implementation.

Stronger collaboration is also required between government and the private sector, helping unlock the mutual benefits highlighted in this paper. Engaging private sector organisations more in the effort is essential, given the importance of this initiative and the potential value it could unlock. Equally, private sector operators should consider the benefits to their own business strategies in championing ASEAN interoperable QR code payment ecosystem.

On a regional level, ASEAN-BAC provides an important platform for partnership, helping guide the evolving ecosystem based on feedback from private businesses. This can help inform the conversation with public bodies and decision makers, ensuring that measures help to effectively scale up and ensure an interoperable and conducive ecosystem across the region. Working with established champions across economic sectors will further help accelerate this journey, leveraging existing expertise and understanding on effective adoption of QR payments.







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MARKETPLACE LENDING PLATFORM

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WORKING GROUP: DIGITAL TRANSFORMATION

Title: Broadening MSME Access to Financing Through Digital Lending Solutions

I. Executive Overview

Micro, small, and medium enterprises (MSMEs) are the backbone of the Association of Southeast Asian Nations (ASEAN) economy, providing a significant share of employment and economic opportunity in communities across the region.

Despite their essential role in ASEAN, MSMEs face significant challenges in accessing appropriate business financing. Barriers such as low financial literacy, lack of access to banking services, high collateral requirements, and cautious attitudes by traditional financial institutions create significant hurdles for access.

Innovative digital lending solutions provide an opportunity to bridge this gap, providing vital access to financing for MSMEs that traditional lenders are not yet able to provide. Digital lending offers benefits across the customer journey and already demonstrates adoption benefits across ASEAN member nations and beyond. The right policy and ecosystem support will be critical in ensuring these opportunities can be scaled to improve access to financing for MSMEs and unlock the greatest value of these important businesses.

This paper offers ASEAN Business Advisory Council's (ASEAN-BAC) insight on the digital lending landscape, exploring the challenges and opportunities, and identifying how stakeholders across ASEAN can help deliver on this potential.

Digital Transformation Working Group aims for the MSME Digital Lending white paper to be considered and discussed by, and between the members of the ASEAN Finance Ministers and Central Bank Governors (AFMGM), relevant ASEAN working groups, and private sector stakeholders.

II. Context Setting and Policy Agenda

1. The importance of MSMEs in the ASEAN economy and their financing gap

MSMEs are an essential foundation of the ASEAN economy. They represent up to 99% of businesses across ASEAN, contribute 85% of total employment, and account for 45% of ASEAN GDP (ASEAN. org).





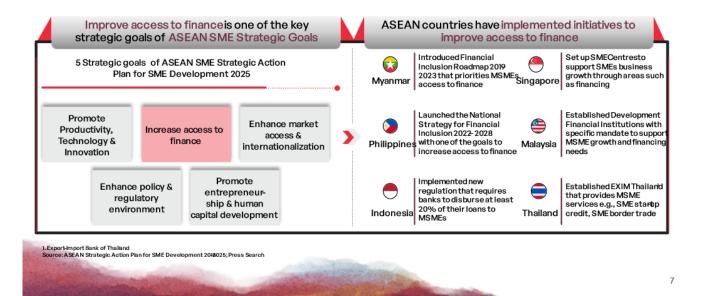


Improving financial access for MSMEs is a key strategic goal under ASEAN's SME Strategic Action Plan for SME Development 2025. Countries across ASEAN are already implementing important initiatives to promote financing access for MSME.

[Exhibit 1.]

Improving MSME access to finance is a key priority of ASEAN





However, access to financing remains a major challenge for MSMEs. The SEA-6 O2O Platforms MSME Survey by Bain & Company highlighted that 60% of MSMEs surveyed needed financing but could not obtain loans from banks or formal lenders. According to the World Bank Enterprise survey in 2021, banks currently play a less prominent role in financing these smaller enterprises, with just 16% of MSMEs leveraging banks for investment needs, and less than a quarter (23%) using banks for working capital needs.

Stakeholders offering financing options for MSMEs are facing challenges across the consumer lending journey. Below are the top three challenges identified through the survey conducted by ASEAN-BAC Digital Transformation Working Group:

Low financial and digital literacy impacts MSME customer acquisition and loan applications.
 Many MSME customers are unaware of financing options or may be unable to navigate financial or digital ecosystems. Even where awareness is raised, the lack of distribution infrastructure hinders access, particularly in rural areas.







- Information asymmetry is a barrier to credit assessment, often due to poor credit data availability, quality, and reliability. Banks lack data such as credit history, and proper financial statements, to systematically and thoroughly assess the creditworthiness of MSMEs. Due to lack of data, many credit risk assessments require heavy and long manual processes, resulting in high loan processing costs.
- **Inability to meet collateral requirements**. Incomplete credit assessment also leads to fear of potential nonperforming loans (NPLs) by traditional lenders, negatively impacting willingness to lend. Therefore, banks seek high collateral that MSMEs are struggling to fulfill.

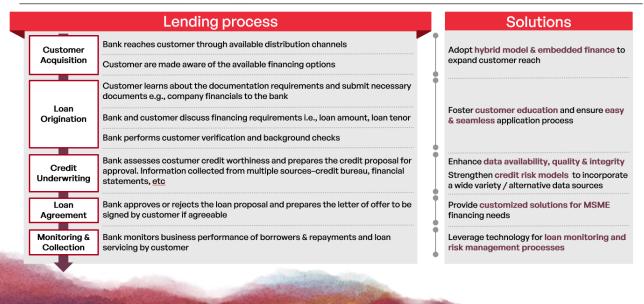
2. Emergence of digital lending solutions

The emergence of digital and alternative lending solutions has lowered the barriers to financing for MSMEs, providing a solution to overcome prominent challenges in accessing finance. This study has identified sixthematic solutions digital lenders provide to overcome challenges across the lending journey.

[Exhibit 2.]

Six key thematic solutions to improve the overall customer lending journey





A wide array of players has already entered markets across the region, adopting innovative business models to improve financial access for MSMEs. This paper provides case studies to illustrate solutions offered by selected players in the market, in overcoming specific challenges they face in serving their MSME customers.







[Exhibit 3.]

A wide array of digital solutions has lowered barriers to financing for MSMEs



Selected case studies

Adopt hybrid model & embedded finance

Foster customer easy application process

Enhance data availability, quality & integrity

Strengthen credit risk models

Provide customized solutions

Leverage technology for loan monitoring process

Case study 1

Leveraging village centres' presence & familiarity with rural MSMEs to

Dase study 2 WeBank

Tech-based digital banking products ensure secure, faster and exceptional customer experience for MSMEs

Case study 3

Leveraging fintech's capabilities to enhance traditional FI's credit scoring model

Credit risk model that utilizes non-traditional FI parameters (e.g. call logs) to assess MSME credit-worthiness

Players in the ecosystem partner to create integrated solutions for MSMEs

Case study 6

Expanding funding opportunities for MSMEs with more offerings from

Case Study 7

Online lending platform connecting MSMEs which require financing with investors

Case Study 8

Provides commercial banks with a granular, forward-looking view of risk for each borrower, enabling them to identify potential headwinds earlier, as well as opportunities to support them in their growth

Case studies

Case study	How Does It Work?	What Is the Impact?
Case study 1	A China-based digital bank provides unsecured loans for MSMEs and is working with community managers to expand rural financing. It combines offline data and online data for its credit assessment, while utilising digital technologies and big data to ensure accurate risk management and loan monitoring.	Served more than 20 million MSMEs, with more than US\$250 billion lent to MSMEs, and a NPL less than half the average for Chinese SME loans.
Case study 2: WeBank	WeBank, first digital-only bank in China offers online and unsecured loans to micro, small and medium-sized enterprises (MSMEs) via digital products. Weiyedai ('small-business loan') debuted in 2017 intended to boost entrepreneurship in China. Designed to meet the short-term, small-amount, frequent, and urgent financing needs of MSMEs.	Operates in 30 provinces, 4.1 million MSME applied for loans, with total loans issued valued at almost US\$140 billion.







Case study	How Does It Work?	What Is the Impact?
Case study 3	A digital lending platform based in India commercialises its proprietary credit scoring tool, as an Application Programming Interface (API) to lenders. Its lending-as-a-service model enables cash-flow-based credit worthiness assessments to address the underserved MSME segment.	Engaged more than 20 partners across enterprises to lenders, serving over 350,000 microretailers and generating over 600,000 credit scoring reports generated.
Case study 4	An East African fintech uses alternative data such as telecoms data, social network data etc., for its credit risk assessment. It typically offers customers smaller loan volumes and enables customers to "move up the ladder" for higher loan volumes as they build credit history with more transaction and repayment records.	Provided financing to over four million customers with assessments as short as 10 seconds, disbursing over US\$500 million of loans.
Case study 5	An East African Bank established a micro-credit program, in partnership with a credit card and a Fast-Moving Consumer Goods (FMCG) company, which enables small retailers to gain financing from the bank through transactional data collected by the FMCG and analysed by the credit card company. Furthermore, training programs are also held for MSMEs to build know-how and enhance their business capabilities.	More than 18,000 retail entrepreneurs have joined the programme, seeing ~20% increase in sales within the first six months.
Case study 6	Three Indonesia State-Owned Enterprises in the financial sector have partnered to build a one-stop service initiative to serve MSMEs. Through co-located service centers and Mobile services acting as integrated sales platform, MSMEs gain access to products and services across all three entities.	Integrated data from over 30 million customers, with over 1,000 co-located service centres. More than 900,000 customers reached through cross-selling approach.
Case study 7:	Net zero integrated across the whole supply chain to build a well-connected, smart, efficient and low carbon supply chain ecosystem. Includes adapting supply chain strategy, aligning with existing transformation efforts, and supporting the supply chain to decarbonize	







Case study	How Does It Work?	What Is the Impact?
Investree	Investree provides a one-stop platform solution for MSMEs that spans across lending to business solutions, going beyond lending to incorporate solutions such as procurement. It leverages data from the wider ecosystem to build transaction histories and credit rating for MSMEs.	More than 25,000 unique borrowers across the Investree ecosystem, with over 60,000 lenders, delivering over US\$18 billion of loans to date.
Case study 8: OakNorth	OakNorth, a European bank's credit intelligence platform provides a granular and forward-looking view of risk per borrowers and enables lenders to identify potential headwinds early on and opportunities to support their growth.	Established successful partnerships with lenders that are using the bank's credit platform to perform credit analysis and monitoring, with an overall low loan default rate of 0.07%.

There remains much more work to be done to further support the growth of the digital lending landscape and to unlock opportunity for stakeholders across the ecosystem. The ASEAN-BAC survey highlight challenges digital lenders are facing around regulations, data quality and availability, and level of digital and financial literacy.

Regulations: "Fintech players are supportive of government agenda to support MSME growth. We are trying to lend more to MSMEs, but on the other hand, regulators also have strong concerns on high NPL. Regulators need to strike a balance between managing the risk and promote financing for MSME." Senior Vice President & Head of Business Development, Platform Business, Indonesia.

Data quality and availability: "As a NBFI, there is no central or one-stop platform to obtain SME information (e.g. credit bureau, company registry certificate). Information is also usually not updated or lack accuracy." Fintech player, Singapore.

Digital and financial literacy: "Most MSMEs lack education on financial and debt management and lack understanding on interest rates and repayment plans." Head of SME Banking, Myanmar.

III. Stakeholder Ecosystem

The digital lending ecosystem involves a network of stakeholders, incorporating governments and regulators, lenders, investors, industry partners, and MSMEs. Each stakeholder group plays their own unique role in driving the growth of digital lending.







[Exhibit 4.]

ASEAN INDONESIA 2023 All stakeholders in the digital lending ecosystem contribute to industry growth Government / Regulators Government / Regulators Oversees and establishes policies & regulations to accelerate digital lending Lenders while protecting stakeholders Lenders Addresses MSMEs' financing gap and Provide **Investors** Fintech players provides the major portion of capital for capital lendina MSMEs Partnerships: Banks can provide fintech players with capital, while fintech players can provide tech capabilities to banks Requires financing for business growth but presently face challenges in Provide assessing finance **MSMEs** funding Provide **Industry partners** Supports the supply of capital for fintech data & players in hopes of higher investment tech Data providers services **Industry Partners Banks** Collates and provides data to lenders in a Third party tech providers systematic manner for their credit assessment (e.g., credit bureau)

IV. Policy Priority Agenda

Given the inherent diversity of ASEAN member countries, there is no one-size-fits-all formula to grow the digital lending sector.

This paper presents best practices and offers guidelines for member states looking to spur growth in the sector. There are some valuable best practices which can be followed to build a robust and effective digital lending ecosystem, with key examples from nations in ASEAN and beyond.

Policy Action 1.1: Key success factors to accelerate MSME lending

There are four key success factors that can contribute to scaling out digital lending for MSMEs, helping enhance financial inclusion.

The study has also identified best practice recommendations from across the ASEAN region and beyond. These examples are not exhaustive, and instead, offer a view of actual market-participant-led efforts being implemented to enhance MSME financial access through digital lending.







[Exhibit 5.]

Four key success factors to accelerate MSME lending to push for higher financial inclusion



Build a robust, consistent & enabling regulatory and oversight framework



Develop a reliable, inclusive & interoperable infrastructure



Champion adoption of inclusive digital lendina



Create an enabling environment for innovation

Build a robust, consistent and enabling regulatory and oversight framework

Establish regulatory framework that enable fintech/digital banks to operate

Various ASEAN countries have launched regulatory frameworks for licensing and operations of fintech/digital banks.

- Indonesia established digital bank regulation in 2021, outlining requirements for digital banks to be licensed and operated.
- Malaysia created a regulatory framework for peer-to-peer (P2P) lending in May 2016, for businesses to borrow, and investors to lend capital, through online platforms registered with Securities Commission Malaysia.
- Singapore established a digital banking framework in 2019, setting out eligibility criteria and safeguards applicable to full digital banks and digital wholesale banks.

Implement frameworks that promote responsible use of technology & financial consumer protection

Singapore. The Monetary Authority of Singapore (MAS) introduced the Principles to Promote Fairness, Ethics, Accountability and Transparency (FEAT) in the use of Artificial Intelligence and Data Analytics (AIDA) in Singapore's financial sector in November 2018.

This serves as a guideline to ensure that consumer interests are safeguarded while companies pursue their innovative ventures. These principles were informed by convening more than 25 banks, insurers, and artificial intelligence (AI) firms to establish and refine the practical implementation of principles.

Establish frameworks to support partnerships between fintech and FIs

Singapore. Singapore Fintech Association (SFA) launched a digital self-assessment framework which acts as a guideline, rather than mandatory requirement, to facilitate and accelerate partnerships between fintech and financial institutions.







It aims to **improve compliance** by enabling fintech firms to understand the minimum compliance requirements for operations with financial institutions, **increase efficiency** by highlighting satisfactory compliance levels while maintaining baseline governance, rigour, and consistency, while **enhancing confidence** and trust between financial institutions and fintech.

Introduce initiatives that support access to capital for fintech players

2. Develop a reliable, inclusive, and interoperable infrastructure

Establish credit bureau/centralised database to collate information

Singapore. The Experian Singapore Non-Bank Bureau collects and aggregates credit data from a wide range of sources. It also developed a proprietary SME Network Score that assesses credit risk of MSMEs, considering factors such as transaction data, search and enquiry data.

Facilitate MSMEs' disclosure of financial/credit information

Indonesia. Bank of Indonesia launched the Financial Information Recording Application (SI-APIK) system in 2018, enabling MSMEs to record and generate financial data according to accounting standards in a timely manner. This eases financial administration for MSMEs while building relevant documentation for financial access.

Establish data sharing infrastructure

India. Reserve Bank of India launched its Account Aggregator Network in 2021, offering a system to share financial data. With consumers' consent, data is shared via open APIs from financial information providers such as banks, insurers, fintech lenders and others to financial information users. This led to a shift from asset-backed lending to cashflow-backed lending, informed by data such as invoices, receipts, tax returns, for credit assessment.

Malaysia. Government-owned investment firm, provides grants, investments, and tax incentives to fintech startups.

Indonesia. Venture capital firm of Indonesian state-owned bank invests in startups to empower the startup ecosystem and accelerate financial inclusion.

3. Champion adoption of inclusive digital lending

Improve MSME digital lending literacy

Singapore. The SME Financial Empowerment Program enables MSMEs to build foundational digital literacy and learn crucial skills such as navigating alternative financing options and personal financial management.

Vietnam. SME Support Centre offers services such as training and consultancy, backed by the Vietnam Chamber of Commerce and Industry.

Accelerate digital transformation of lenders

Indonesia. Indonesia's Financial Services Authority (OJK) issued a blueprint for digital transformation in banking in 2021, outlining a roadmap to accelerate digital transformation.







It focuses on five elements of data governance, technology, risk management, collaboration, and institutional arrangements to encourage banks to develop innovative and customer-oriented products. It also introduces a Digital Maturity Assessment for Banks (DMAB) to help identify areas of improvement to deliver digital plans.

Create opportunities for connection between players and partners

Singapore. Singapore Fintech Festival (SFF) has become the premier platform for the global fintech community. It offers opportunities for networking, knowledge sharing, and partnership with a range of activities, exhibitions, and talks. It also matchmakes fintech firms with suitable investors that are interested in their business models and solutions.

4. Create an enabling environment for innovation

Introduce regulatory sandboxes as a safe environment to test innovation

Indonesia. Indonesia has introduced two regulatory sandbox schemes for fintech companies, facilitated by OJK and Bank of Indonesia. These provide live environments for experimentation and innovation, backed by appropriate safeguards to preserve financial stability and integrity.

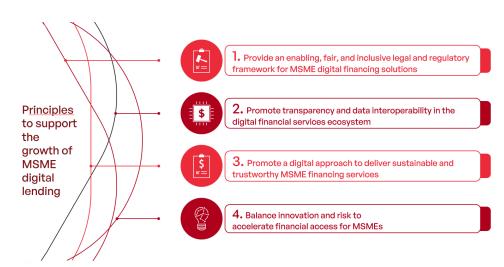
Introduce grants to support and encourage innovation in lending

Singapore. Monetary Authority of Singapore has introduced multiple rounds of fundingunder the Financial Sector Technology and Innovation (FSTI) and Proof of Concept (PoC) schemes since 2015. Funding is used for the financial sector's experimentation, development, and dissemination of nascent innovative technologies.

Policy Action 1.2: High-level principles to support the growth of MSME digital lending

This report has identified four high-level principles member states should focus on to accelerate financial inclusion. These principles take into consideration the challenges digital players face in enhancing financial access, as well as best practices identified across ASEAN member states.

[Exhibit 6.]



Note: Aligned with G20 High-Level Principles for Digital Financial Inclusion







Principle 1: Provide an enabling, fair and inclusive legal and regulatory framework for MSME digital financing solutions.

Ensure an enabling and level playing field for market participants (both traditional and fintech lenders) with transparent and well-defined market participation rules, which promotes healthy competition and collaboration. This could be achieved through coordinated dialogues with critical stakeholders, complemented by routinely monitored and evaluated sector-specific action plans.

Principle 2: Promote transparency and data interoperability in the digital financial services ecosystem.

Facilitate ease of data interoperability through appropriate technologies (e.g trust and consent-based data exchanges, federated learning) which guard data ownership and governance while enabling valid use cases.

In addition, domestic data regimes and standards should be respected while encouraging crossborder data sharing supported by consent-based sharing mechanisms with appropriate regulated mechanisms.

Principle 3: Promote a digital approach to deliver sustainable and trustworthy MSME financing services.

Promote digital financing solutions to meet MSME financing needs while safeguarding the interests and safety of MSMEs. For example, this could be supported by establishing a comprehensive approach to consumer data protection.

Principle 4: Balance innovation and risk to accelerate financial access for MSMEs.

Balance promoting the use of innovative digital technologies to expand access to finance for MSMEs while proactively managing and addressing new risks.

V. How These Efforts Will Benefit ASEAN MSMEs

Improving access to financing for MSMEs has a powerful amplifying effect. It helps improve productivity, enables investment in innovative projects that unlock further value, and improves liquidity and cash flow management to improve business fundamentals. It provides a platform to ensure sustainable growth and development, while at the same time empowers MSMEs to explore opportunities and expand into new or wider markets. This provides demonstrable value for broader economic opportunities.

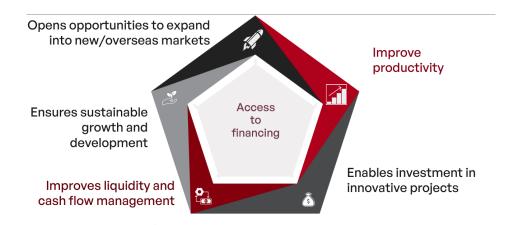






[Exhibit 7.]

Access to financing can unlock the potential of MSMEs



Supporting the growth of MSMEs has a ripple effect that uplifts the wider ASEAN economy, catalysing job creation, improving productivity, and spurring economic growth.

- Job creation. According to the International Finance Corporation 2021 Small Business, Big Growth: How Investing in SMEs Creates Jobs Report, every million dollars invested into financing MSMEs in developing countries is associated with the creation of an additional 16.3 additional direct jobs per business over a two-year period.
- Productivity gain. Giving MSMEs access to formal financing leads to labour productivity growth improvements of up to 2.5% according to the International Monetary Fund (IMF), 2019 Financial Inclusion of Small and Medium-Sized Enterprises in the Middle East and Central Asia Report.
- Economic growth. Closing the gap on SME financial inclusion between emerging markets and developed economies could increase real GDP growth by an average 0.3% annually, and up to 1%, according to the IMF report.

VI. Synergies with Regional and Global Regulations

ASEAN member states have diverse and differentiated contexts to their digital lending landscape and varying maturity levels.

Sharing and learning best practices between countries could help accelerate respective digital lending sector(s). Focus should be given to sharing best practices, rather than seeking regional synergies, which may not reflect the local nuance within a given market.







Cross-border data sharing can help expedite the growth of sectors and spur further innovation, supported by data interoperability with implemented consent-based mechanisms.

VII. Roadmap and Timeline

ASEAN-BAC Digital Working Group aims to align and present the whitepaper to the working committee of financial inclusion, to be considered as point of discussion in the next ASEAN Finance Ministers and Central Bank Governors Meeting (AFMGM).

ASEAN-BAC and Indonesia will continue to advocate the importance of digital solutions during and after the Indonesian chairmanship.

Should Bank Indonesia endorse the digital lending topic, and be considered favourably by AFMGM, a relevant timeline, roadmap, and details should be directed by Bank Indonesia in collaboration with ABAC Indonesia.

VIII. Alliance Building

This paper is produced through consultation with various private sector players, engaged through working group sessions, interviews, surveys, and desktop research. Surveys were distributed to ASEAN-related associations, including chambers of commerce, fintech associations, fintech payment associations, digital associations, and other relevant ecosystem stakeholders.

The recommendations put forward by ASEAN-BAC Digital Transformation endorse existing recommendations by B20 Indonesia in 2022. Namely:

Digitalisation Task Force

High-level alignment with all recommendations put forward by the Digital Task Force, specifically on enhancing the role of digital as a key driver of MSME growth.

Recommendation 3 – Ensure a digital-ready mindset for individuals and MSMEs, and enabling MSMEs through access to digital platforms; Fostering tech-enabled workforce and companies.

Trade and Investment Task Force

Policy Actions 3.1 - Increase access to finance and create a regulatory environment that enables investors and lending institutions to support female entrepreneurs and MSMEs to trade and scale up business.







Finance and Infrastructure Task Force

Policy Action 4.1: Reduce investment barriers for infrastructure by improving the financial services regulatory environment.

Policy Action 4.2: Ensure financial services regulatory frameworks strike the right balance between promoting economic growth, improving productivity, and maintaining financial stability.

For details, see https://b20indonesia2022.org/document

Our recommendations are also aligned with G20 High-Level Principles for Digital Financial Inclusion, developed by the Global Partnership for Financial Inclusion (GPFI), endorsed by G20 Finance Ministers and Central Bank Governors Meeting in 2016 Chengdu, China.

ASEAN-BAC Digital Working Group also played an important role in building partnership across the ecosystem.

ASEAN-BAC is the top private sector body for ASEAN and point of access for private companies to offer feedback, provide their views and concerns, and inform industry evolution. ASEAN-BAC operates joint business councils to engage external organisations and develop input on legacy programmes such as ASEAN QR and other key topics requiring private sector feedback.

IX. Conclusion

MSMEs face a significant financing gap that must be addressed to unlock greater value for these enterprises and the regional economy. Poor access to finance can hinder business growth, and reduce enterprise opportunities.

Digital lending provides an alternative solution to bridge this gap. It can enable adaptive, flexible financing solutions that meet the needs of MSMEs, by leveraging non-standard data and carefully targeted approaches to enhance financial access.

Delivering on this opportunity will require collaboration across all stakeholders in the ecosystem, including government, fintech, traditional financial institutions, and MSMEs. ASEAN-BAC is committed to helping inform this conversation and working in partnership to help unlock accessible financing for MSMEs.







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WIKI ENTREPRENEUR

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WORKING GROUP: DIGITAL TRANSFORMATION

Title: Wiki Entrepreneur, a One-Stop MSME Solutions on a Digital Platform

I. Executive Overview

Growing micro, small, and medium enterprises (MSMEs) is critical to uplift and drive inclusive growth in ASEAN. ASEAN has over 70 million MSMEs, accounting for 97% to 99% of total enterprises and employing 85% of the regional workforce. However, MSMEs face critical challenges impeding their growth.

Access to capital and ease of doing business remain hurdles for these important enterprises, with additional pressures amplified by the impacts of the COVID-19 pandemic.

Support measures have been implemented across the region, but the current private-sector approach to MSMEs remains highly fragmented, creating a substantial barrier to adoption. This often results in a disconnect between the needs of MSMEs, and the details and/or accessibility of support offered by large corporations in the proximity of their operations.

The Indonesia Chamber of Commerce and Industry (Kadin Indonesia) launched the Wiki Entrepreneur (Wiki Wirausaha) initiative in October 2022 as a partnership-based platform to bridge the gap between corporate offerings and MSME needs. Wiki Entrepreneur aimed to integrate existing national platforms, reducing fragmentation and confusion. The Wiki platform provides a simple, centralised hub for large corporates to promote their MSME support programme and empower MSMEs to access the resources they need to grow.

As a legacy initiative of the ASEAN Business Advisory Council (ASEAN-BAC) 2023, the Digital Transformation Task Force (Digital TF) sought to expand the reach of Wiki Entrepreneur by linking existing similar ASEAN-wide platforms and onboarding new corporate partners into the Wiki Entrepreneur platform. The platform's new 'Wiki ASEAN' section acts as a comprehensive one-stop solution for MSMEs across the region, incorporating a range of partnership programmes for MSMEs across multiple ASEAN member states.

II. Legacy programme deliverables and next steps

Wiki Entrepreneur is hosted at https://wikiwirausaha.id. The platform provides a simple, user-friendly online offering of more than 80 programmes from 60 partners in across ASEAN. Wiki Entrepreneur is







a directory of partnership programmes by companies and institutions for MSMEs and does not act as marketplace for MSMEs to sell products. It is envisioned as a one-stop support platform for MSMEs in the region.

The Wiki Entrepreneur platform includes a simple news section for the latest updates and insight for MSMEs, as well as links to other, similar platforms across ASEAN, and includes directories for MSMEs, large corporations, and partnership programmes. The Wiki also offers a platform for businesses to communicate. The Business Discussion room allows engagement and knowledge sharing easily and quickly between participants, helping disseminate information and share stories for like-minded enterprises.

Wiki Entrepreneur has been upgraded and expanded across a three-stage journey.

Policy Action 1.1: Wiki Entrepreneur website revamp

Context: Wiki Entrepreneur website has a solid foundation but required some improvements to support expansion plans and enhance user experience.

Approach: ASEAN-BAC Digital TF employed a web developer to undertake an assessment and refresh of the Wiki Entrepreneur website. The initial assessment identified additional features to include, and technical issues which needed to be addressed. A new WordPress theme was identified, and the framework for the website created. Pages were developed, and any technical issues resolved. New features were then incorporated, including Statistics Counter and Gallery. The refresh was deployed within 30 days of the initial assessment process.

Deliverables: The revamped version of Wiki Entrepreneur included new functionalities to enhance user experience, and the addition of two new sections.

New functionalities were added to enable each member state's key persons in charge (PICs) to make direct edits to their profiles. Registered companies could also directly edit their own pages to update on the latest corporate social responsibility (CSR) initiatives, while registered MSMEs could edit their profiles to maintain the latest information, search for partnership programmes, join live discussions, and directly connect with sponsoring companies.

Two new sections were added to the navigation menu as a key deliverable. These include Wiki ASEAN, which provide linkages to similar platforms across ASEAN, and Wiki Social Entrepreneur, to enable discussion of social entrepreneurship topics and partnerships.

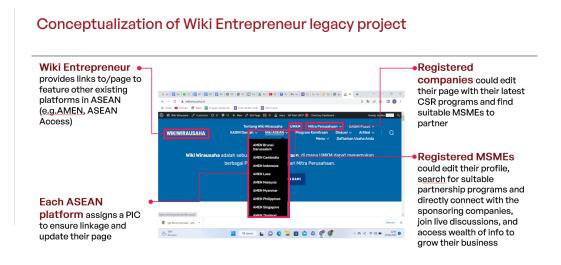
Chatbot functionality was also integrated into development. Chat interactions on the website are now linked to @wikiwirausaha Instagram account via direct messaging.





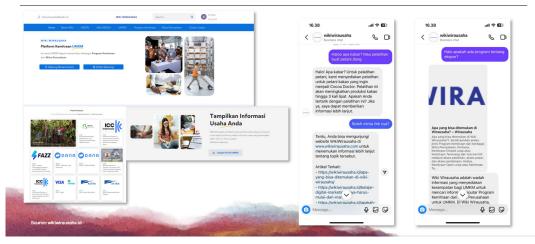


[Exhibit 1.] Conceptualization of Wiki Entrepreneur legacy project



[Exhibit 2.]





Next steps: A key next step will be to further develop the Wiki chatbot to improve the website interface, providing more in-depth and timely information for users.

Policy Action 1.2: Connect Wiki Entrepreneur with existing platforms in ASEAN

Context: The Digital TF identified similar platforms which offered resources for MSME and/or connected MSMEs with large corporates. Some identified platforms already acted as a one-stop-shop, but were usually limited to a national, not regional, level.







Approach: The Digital TF worked with chambers of commerce in ASEAN member states to identify platforms, and gain endorsements to connect with these platforms.

The Digital TF proactively connected with PICs of relevant platforms and discussed synergistic ways to integrate the offerings. Digital TF then worked closely with the web development team to establish links between the platforms.

The PIC of Wiki Entrepreneur developed a draft page based on existing resources or content recommendations provided by the PIC of partner companies or platforms. The relevant PIC of the partner then assessed and verified this page, as well as being provided ownership rights to the page by enabling them with direct editing capabilities. Partners were then encouraged to maintain their page in Wiki Entrepreneur, in line with its ethos of a crowd-sourced platform.

Deliverables: Today, partners onboarded with live pages include (1) ASEAN BAC Food Security Task Force, (2) ASEAN Mentorship Entrepreneurs Network (AMEN), (3) ASEAN Innovation Business Platform (AIBP), (4) ASEAN SME Academy, (5), ASEAN Access, (6) ASEAN-Japan Centre.

Discussions are ongoing to have more partnership programs onboard. Pages will be added for further collaborators, including (7) Brunei Economic Development Board (BEDP), (8) Enterprise SG, (9) ASEAN Young Entrepreneurs Council (AYEC), (10) Singapore Economic Development Board (EDB).

Partner platforms are featured and linked under the Wiki ASEAN tab, with clear ownership for updates provided to PICs of relevant parties to ensure the crowdsourced nature of resources.

[Exhibit 3.]

Partner platforms are featured and linked under the Wiki ASEAN tab WIKI WIRAUSAHA Hone Berita Wiki × KADIN Wiki ASEAN * Wiki Wirausaha Sosial WIKI WIRAUSAHA Platform Ken UMKM di mana UMKM dapat menen Kemitraan dari Mitra Perusah ASEAN Access ASEAN - Access AS







Next steps: Discussions are planned to connect more relevant platforms and to add more MSME programmes to the Wiki Entrepreneur platform. ASEAN BAC is currently in discussion with Brunei Economic Development Board (BEDP), Enterprise SG, ASEAN Young Entrepreneurs Council (AYEC), Singapore Economic Development Board (EDB).

Policy Action 1.3: Enrich Wiki Entrepreneur by featuring more ASEAN MSME programmes

Context: The Wiki Entrepreneur has a strong base of Indonesian corporates and programmes targeting Indonesian MSMEs. To expand its reach to other countries in the region, the team is constantly engaging and communicating with potential corporate partners to showcase their programmes designed to cater to the diverse needs of MSMEs.

Approach: ASEAN-BAC Digital TF held in-depth discussions and socialisation sessions with potential partner agencies, including the US ASEAN Business Council, Brunei Economic Development Board, and ASEAN Innovation Business Platform.

These discussions aimed to drive local socialisation with companies and MSMEs in an informed manner that fit the local context. A programme owner was assigned from each MSME and partner companies to register and actively manage the relevant profile on the Wiki. The Wiki team provided ongoing technical support through the process.

Deliverables: Wiki Entrepreneur now host more than 60 partners across ASEAN.

Next steps: Discussion is ongoing to recruit more corporate partners across ASEAN in developing partners' pages and access to the upcoming Wiki chatbot.

[Exhibit 4.]

In-depth discussions and socialisation with potential partner agencies







Discussions & socialization with US ASEAN Business Council, Brunei Economic Development Board, and ASEAN Innovation Business Platform







Advocacy support

On top of the three key deliverables relating to the Wiki, the Digital Taskforce, and Boston Consulting Group (BCG) as the knowledge partner, developed a study titled Boosting ASEAN MSMEs' Role in Global Value Chain.

This study explored the significant potential of ASEAN trade, challenges faced by MSMEs in participating in the global value chain (GVC), and key MSME sectors with the most significant potential to enter GVCs. It also incorporated case studies and learnings on MSMEs that had successfully been integrated to GVCs.

The study identified three key insights to inform the journey of MSMEs into GCVs.

ASEAN trade will outpace the global average, with the highest growth in intra-regional trade. ASEAN will see significantly greater trade as companies continue to diversify their supply chain risks. Geopolitical tensions are shifting supply chain dynamics, restructuring manufacturing and trade in a way that benefits the region.

MSME's have GVC growth potential. MSMEs are a major share of total regional enterprises, but have a disproportionately small share of exports. MSMEs often face more significant barriers to export than larger companies, which must be addressed to unlock value. Food and beverages, followed by textiles, wood, and metals are priority sectors to integrate ASEAN MSMEs into GVCs.

Private sector can play a major role in supporting MSME integration into GVCs. Government and private sector support could enhance MSME integration, with three pillars of market access, information and knowledge, and funding. Uplifting this support could create a valuable inclusive closed loop ecosystem. Private companies supporting MSMEs could unlock significant value for businesses and society, with successful example cases across ASEAN.

Digital TF and BCG are working on publishing a media article to amplify the study, aiming to advocate further MSME support by both government and large corporates, targeting priority sectors.

III. Stakeholder Ecosystem and the Benefit of the Inclusive Closed Loop Approach

The inclusive closed loop ecosystem approach envisions an integrated ecosystem where government and private sectors work in partnership with MSMEs to enable opportunity. This brings together key decision makers in government, large corporations and the business community, as well as MSMEs themselves.

Support is delivered across three major pillars, as part of a synergised, holistic partnership from upstream opportunity to downstream delivery.

• Market. Access to market to engage economic opportunities for MSMEs.







- **Mentorship.** Access to information and knowledge to upskill and empower MSMEs.
- Money. Access to funding so MSMEs can invest in growth and export opportunities.

[Exhibit 5.]

Government and private sectors could enable MSMEs through 3 types of supports



IV. How These Efforts Will Benefit ASEAN MSMEs

The Wiki provides a centralised resource for MSMEs and large corporations, bringing together ambitious small businesses with corporates looking to support the wider economic community. It offers a user-friendly platform to enable matchmaking and information sharing between MSMEs and partners, and provides a unified environment across ASEAN to engage and communicate.

Ultimately, the Wiki will help MSMEs grow and contribute to a stronger ASEAN economy, creating a collaborative and supportive business ecosystem that unlocks value for the region.

V. Synergies with Regional and Global Actors

Wiki Entrepreneur is working collaboratively with agencies and platforms across ASEAN, including the chambers of commerce of member states, to build an end-to-end support platform with integrated partners from throughout the region.

This includes integration with (1) ASEAN BAC Food Security Task Force, (2) ASEAN Mentorship Entrepreneurs Network (AMEN), (3) ASEAN Innovation Business Platform (AIBP), (4) ASEAN SME Academy, (5), ASEAN Access, (6). ASEAN-Japan Centre.

Future partnerships will incorporate (7) Brunei Economic Development Board (BEDP), (8) Enterprise SG, (9) ASEAN Young Entrepreneurs Council (AYEC), (10) Singapore Economic Development Board.







VI. Roadmap and Timeline

Preparation: Preparation to develop the Wiki resource took place in February 2023, with key data collection undertaken in March and April 2023.

Explore: Partner engagement took place in parallel with data collection in March and April 2023, identifying relevant platforms and partners to incorporate in the Wiki.

Develop: Revamp of the Wiki Entrepreneur website was undertaken between February and April 2023, designing, developing, and implementing new functionality and features. The updated website was showcased to relevant parties in late-April and May 2023.

Site maintenance and updates based on feedback were done between June 2023 and the end of August 2023.

Deploy: Wiki Entrepreneur will be officially launched at the ASEAN Business and Investment Summit between the 3rd and 4th of September 2023.

VII. Alliance Building

The partnership between member nation's chambers of commerce, large corporations, supporting platforms, and MSMEs is the foundation of the Wiki project.

Further support is provided by 16 event sponsors from the 3rd of October 2022 event, including BCA, Sinarmas, SRC (HM Sampoerna), Telkom, Triputa.

VIII. Conclusion

Wiki Entrepeneur is a legacy programme which acts as a central, one-stop-shop for MSMEs to access support from large corporates, bringing together platforms from across the ASEAN region.

It is designed to offer a holistic, end-to-end solution for MSME support, with a simple user-friendly platform. It brings together MSMEs, large corporates, chambers of commerce, social entrepreneurs, boasting over 80 programmes from more than 60 partners in across ASEAN.

Wiki Entrepreneur offers a platform to empower MSMEs with knowledge and support to enable their growth, unlocking economic value for nations across the region. The integrated approach forms part of the value-creating inclusive loop ecosystem and acts as a steppingstone to further uplift MSMEs and inclusive opportunity in ASEAN.

The Wiki is a live, ongoing programme that will continue to engage and integrate partners and MSMEs from throughout the region. The crowd-sourced nature of the platform means that opportunities will continue to grow as more partners are brought on board, providing a catalyst for engagement, discussion, and support across ASEAN's business ecosystem.







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- ASEAN SME Academy
- ASEAN Access
- ASEAN-Japan Centre









SUSTAINABLE DEVELOPMENT

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SUSTAINABLE DEVELOPMENT

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WORKING GROUP: SUSTAINABLE DEVELOPMENT

I. Executive Summary

The Association of Southeast Asian Nations (ASEAN) is fully committed to promoting regional development through its Comprehensive Recovery Framework and Implementation Plan. This plan covers aspects of progress with a focus on gender equality, cultural preservation, responsiveness to climate change, reduction of plastic waste and marine debris, promotion of green employment transition toward clean energy sources, and ensuring sustainable agricultural practices. ASEAN's dedication to achieving growth is evident in its policies and initiatives that aim to position the region as a global leader in taking climate action and assuming environmental responsibility.

A comprehensive sustainable development agenda can enable the ASEAN region to achieve fair and inclusive growth, providing economic opportunities to all segments of society and leaving no one behind. It can prioritize the protection of resources and biodiversity, ensuring that the region's unique ecosystems are preserved for generations. Moreover, sustainable development improves citizens' well-being and quality of life by facilitating access to education, healthcare, and essential services. By promoting and implementing such principles and practices, the region can attract more investment and establish itself as a responsible global player. Therefore, it is critical for the region to align its policies and practices with international standards and frameworks that will signal to the rest of the world that ASEAN goods and services are in line with the highest standards and quality. As ASEAN strives to become a leader on the stage, embracing development is not merely an option but a necessity to secure a thriving and resilient future for the region and its people.

This policy paper highlights three policy actions as recommendations for ASEAN to further strengthen its commitment to sustainability by providing a coherent net zero framework, promoting and enhancing green and sustainable finance, and highlighting the importance of a just, orderly, and affordable energy transition that will not leave anyone behind. In addition to these recommendations, there are two initiatives that supplement and accelerate the achievement of net zero in ASEAN. These are the ASEAN Net Zero Hub (NZH) and the Carbon Center of Excellence (CCoE).

Policy Action 1.1: Strategy for Achieving Net Zero Emissions

This policy initiative presents a strategy that outlines how ASEAN will work toward achieving zero emissions across critical industries. Recognizing the vulnerabilities of climate change and responding to investor demands for sustainability, this framework seeks to align efforts across sectors to accelerate the shift toward decarbonization and encourage resource sharing. It emphasizes collaboration







between governments and industries with an emphasis on governance structures and incentives for promoting green sector development and raising climate awareness among all stakeholders.

Policy Action 2.1: Enhancing Green and Sustainable Finance

This policy highlights the significance of strengthening frameworks to expedite the adoption of sustainable finance practices across ASEAN. Through approaches using national taxonomies, green activities are categorized to ensure transparency in sustainable finance. By building capacity-reinforcing policies and fostering collaboration, ASEAN Member States (AMS) can align with environmental, social, and governance (ESG) principles to attract investments and drive innovation.

Policy Action 3.1: Transitioning to Renewable Energy

To address challenges effectively, ASEAN places priority on decarbonization. We are transitioning toward the widespread use of renewable energy sources. This policy underscores the importance of cooperation among AMS countries intending to phase out fossil fuel-fired power by 2050. Short-term roadmaps, allocation of carbon pricing revenues, and programs facilitating employment transitions promote the shift toward energy sources while building resilient and inclusive economies.

In conclusion, ASEAN's comprehensive policies and initiatives demonstrate its commitment to sustainability goals while emphasizing regional responsibility. By adopting these approaches, ASEAN promotes development, climate action, and economic growth, ensuring an environmentally friendly future for the region.

II. Context Setting and Policy Agenda

ASEAN has demonstrated consistent commitment toward further ASEAN-regional sustainable development, as evidenced by its previous declarations. ASEAN has developed the Comprehensive Recovery Framework and Implementation Plan to promote sustainable development in critical dimensions. This plan encompasses various key areas of focus, including achieving an inclusive, gender-, culture-, and climate-responsive approach, addressing plastic waste and marine plastic debris issues, and maximizing the role of the ASEAN Committee on Sustainable Development and the ASEAN Centre for Biodiversity.

Furthermore, ASEAN is fully dedicated to achieving an energy transition, focusing on decarbonizing energy infrastructure, promoting clean electricity, modernizing power grids, improving energy efficiency, and fostering environmentally friendly job opportunities. ASEAN aims to advance eco-friendly transportation methods while prioritizing sustainability and productivity in agriculture. This involves strengthening the food value chain, implementing climate-smart practices, and enhancing food safety and quality. Additionally, ASEAN is committed to sustainable investments that adhere to







environmental regulations. This includes supporting industries and initiatives funded through social and sustainability bonds with the aim of generating positive social outcomes.

Building upon these efforts, ASEAN has outlined its policy focus for the current year. This includes developing a common understanding and framework for achieving Net Zero in line with Nationally Determined Contributions (NDCs) and the 1.5° target. ASEAN also leverages sustainable finance to mobilize investments in environmentally and socially responsible projects while ensuring a just and affordable transition to sustainable energy use across member countries. If the governments of countries fail to implement more ambitious policies, provide more robust financial support, enforce stricter measures to reduce the use of fossil fuels, and attract significantly higher levels of investment, it appears improbable that the goal of achieving net zero emissions in the region by 2050 will be realized.

To support the formulation of effective policies, ASEAN will leverage the recommendations provided by the relevant B20 Indonesia task forces to ensure continued focus on widely agreed recommendations and actions to ensure an accelerated transition to sustainable energy use. These recommendations will be tailored to ASEAN's economic conditions and geopolitics, considering the feedback and activities conducted by member states and the ASEAN Secretariat.

Furthermore, ASEAN has made significant progress in policy implementation. The region is enhancing regional cooperation by establishing a common framework and understanding for net zero, creating a regional knowledge-sharing and advocacy platform, and establishing a regional knowledge hub and practice-sharing platform for carbon trading. These actions aim to accelerate the transition to a low-carbon economy and increase sustainable financing opportunities within ASEAN.

In order to leave a lasting impact, ASEAN has initiated two Legacy Programs. The ASEAN Net Zero Hub (ANZH) serves as a platform for stakeholders to share knowledge and best practices for achieving net zero. It involves active participation from governments, corporations, and civil society in developing transformative policies, innovating or adapting existing solutions, and prioritizing decarbonization for sustained growth. The ASEAN Carbon Center of Excellence (CCoE) promotes knowledge and best practices in the carbon market and carbon trading. Through its knowledge hub and practice-sharing center, it aims to educate market players and foster the exchange of success stories, ultimately facilitating ASEAN businesses' transition to net zero.

With this set of policy recommendations, ASEAN aims to further extend these sustainable development efforts by providing alignment and guidance on areas of critical importance to realizing a sustainable ASEAN future. By implementing these policies and initiatives, ASEAN is poised to advance sustainable development, promote green investments, and pave the way for a prosperous and resilient future for the region and its people.







III. Stakeholders Ecosystem

Achieving net zero emissions is not just a responsibility but a shared commitment that transcends borders and industries. The path is complex, and no single collaboration among stakeholders becomes the foundation for achieving the net zero commitment and realizing an affordable transition to sustainable energy. Governments, businesses, civil society, and academia must converge their expertise, resources, and insights to pave the way for transformative change. Collaboration will amplify our impact, allowing us to pool knowledge, share best practices, and collectively navigate the challenges that lie ahead.

Governments have a role to play in achieving zero emissions. It is important for them to demonstrate their commitment through action plans and policies that support businesses in their zero-emission strategies. Collaboration and coordination among ASEAN Member States (AMS) is vital because each country is at different stages of implementing zero-emission initiatives. By sharing practices and resources to govern the initiatives, we can propel Southeast Asia toward a sustainable future.

The active participation of business players will also help accelerate the attainment of zero emissions. This collaboration will foster the sharing of knowledge, promote conversations, and encourage actions to tackle the climate emergency. Business players can also engage with educational institutions, NGOs, and other stakeholders to form partnerships aimed at developing high-quality climate education programs. These programs will raise awareness among stakeholders and foster collaborative research and development projects related to climate change.

IV. Policy Priority Agenda

Policy Action I.I: Develop a policy framework to support the achievement of net zero across key industries in ASEAN

A. Policy Portrait

This document proposes the adoption of an ASEAN policy framework aligned with the Science-Based Targets Initiative (SBTi) and supports industries to achieve zero emissions. The ASEAN region is experiencing the impacts of climate change, such as rising sea levels, extreme weather events, and ecological disruptions. It is crucial for long-term prosperity to mitigate these effects. Additionally, global investors prioritize sustainability and actively seek climate risk information, as well as commitments to reduce emissions. Establishing a policy framework is essential to meet these expectations and align with investor interests. ASEAN nations are embracing carbon markets and pricing mechanisms to incentivize emissions reductions and promote collaboration for knowledge sharing and capacity building. By aligning with climate targets, ASEAN can contribute significantly to sustainability goals. The implementation of a zero-emissions policy framework will facilitate coordination among







ASEAN countries' regional efforts and demonstrate their dedication to a sustainable future through collaborative actions.

B. Rationale and ASEAN Implications

The global decarbonization rate in 2021 stood at 0.5%, raising concerns about our climate objectives. To limit warming to 1.5°, it is crucial to expedite decarbonization efforts. ASEAN has a role to play in this regard by collaborating and intensifying its endeavors. Given the economic landscape, there is an urgent need for an annual decarbonization rate of 15.2%. ASEAN's strategy can facilitate the exchange of practices, technology transfer, financing opportunities, and joint research and development initiatives—all of which will contribute to expediting the decarbonization process.

A coordinated approach to emissions in ASEAN benefits both AMS and enterprises, speeding up net zero goals. The nations of ASEAN can work together to synchronize policies, streamline procedures, and minimize expenses for corporations. This collaboration spans the supply chain, enhancing efficiency and fostering cooperation. Moreover, aligning policies helps prevent carbon leakage and discourages companies from relocating to evade policy impacts. It ensures that our policies remain consistent, bolsters our stance against climate challenges, and supports our goals of sustainability and achieving zero emissions.

C. Blueprint for Action

To achieve their net zero goals, companies need to transform their business operations. This involves understanding how net zero impacts their growth strategy and operational framework and incorporating zero principles across all areas of their business, including governance, supply chains, finance, and innovation. Corporations could consider the following building blocks (see Figure 1.1), which is defined by PwC, to accelerate the achievement of net zero goals.

Figure 1.1: Building Blocks for Corporate Net Zero Transformation (see Appendix I for the details)













Over the years, ASEAN has demonstrated a commitment to addressing climate change in these key sectors. However, the successful net-zero transformation by corporations requires a conducive and coordinated policy framework across key industries in ASEAN. The policy framework can include the following elements:

a. Clear Ambition and Strategy to Net Zero

The government should establish coordinated net zero emissions objectives and provide businesses with greater clarity on the direction of the transition pathways to decarbonize key sectors, which could be defined in either qualitative or quantitative terms. These pathways will also benefit investors as a basis for providing "sustainable finance" to aligned corporations. Internationally, jurisdictions have started to develop such pathways; for example, the European Commission and the EU's Industrial Forum have developed a blueprint for the transition pathways of industrial ecosystems to emphasize the rapid green and digital transition of the EU industry and its ecosystems. Additionally, governments should also consider critical supply chains of the ASEAN economy and adopt collaborative approaches with stakeholders across the value chain to identify and evaluate ongoing efforts, as well as build consensus on new greenhouse gas (GHG) reduction strategies.

b. Corporate Governance

Governments should encourage or mandate accountability so that businesses address climate risks or define their contribution toward carbon reduction. Ensuring senior management accountability for the net zero strategy and transformation is crucial for successful implementation. It is imperative to designate responsible senior managers to oversee and drive the organization's efforts toward achieving net zero goals. Governments should promote the engagement of top-level leadership, embed oversight of the net zero transformation in senior committee structures, and incorporate compensation practices that align with net zero objectives.

c. Transparency and Disclosure

Governments should mandate the transparency and disclosure of environmental and climate-related risks, metrics, and targets in line with IFRS S2, aligning with global disclosure efforts. Creating a public registry or database for companies to report standardized emissions and energy consumption data would enable easy stakeholder access to information and promote accountability. Moreover, implementing mechanisms for independent verification and assurance of reported data would enhance trust and confidence in the disclosed information. These measures collectively facilitate informed decision-making by stakeholders and encourage companies to take meaningful steps toward sustainability across ASEAN.







d. Incentives or Penalties

A program of subsidies or incentives is needed to catalyze green sectors, and carbon pricing should be considered to manage emissions. Green incentives and taxes could support sustained outcomes on climate and net zero goals performed by corporations in an effective and cost-efficient way. Green incentives refer to rewards designed to encourage projects and investments that contribute to protecting the environment. These incentives can come in the form of cash grants provided by the government to support eco-initiatives as well as tax incentives that lessen tax obligations, motivating investments in activities that help minimize negative environmental impacts. Additionally, the implementation of carbon pricing could support those who are most disadvantaged by distributing the generated revenue to lower-income households and help deliver a just transition.

e. Education and Awareness

Government should consider developing a platform to promote awareness in citizens, consumers, employees, SMEs, etc., about net zero initiatives and strategies to achieve the net zero goals. This platform could also support the capacity building of critical skill sets needed to manage the net-zero targets.

Legacy Program 1.1: Establish a regional knowledge-sharing and advocacy platform for encouraging the corporate transition to net zero

A. Policy Portrait

After recognizing the significance of collaboration in the fight against climate change, net zero hubs have emerged as platforms for sharing practices and promoting a sustainable, low-carbon future. These hubs play a role in shaping policies and putting them into action at all levels, attracting investments, driving innovation, and speeding up the transition toward sustainability. Creating the ANZH has potential as it encourages decarbonization and sustainable finance through partnerships between the public and private sectors.

Furthermore, the ASEAN Hub can act as a central point in a "hub-and-spoke" system, amplifying the combined impact of the region. This approach ensures inclusivity and promotes balanced development across diverse ASEAN nations by offering guidance, expertise, and technical support for customized net zero strategies and policies.

B. Rationale and ASEAN Implications

The ANZH can learn from Indonesia's KADIN (Indonesian Chamber of Commerce and Industry) strategy,







which connects businesses to global net zero efforts. The KNZH (KADIN Net Zero Hub) partners with international organizations, development agencies, and business enablers to offer resources. It promotes engagement between regulators and businesses related to net zero commitments. It uses online platforms and webinars to foster knowledge sharing among local enterprises.

In the ASEAN region, climate action requires collaboration among various stakeholders. The ANZH serves as a forum for networking, capacity building, and sharing best practices to accelerate the transition to a zero-emissions economy. It harmonizes perspectives, supports member states' climate goals, and attracts investments, fostering innovation and collaboration to achieve net zero emissions.

C. Blueprint for Action

The ANZH has three objectives: increasing stakeholder awareness, promoting participation, and engaging with stakeholders and multinational corporations. Its goal is to emphasize the importance and advantages of a net zero economy, encouraging involvement and fostering collaboration to expedite the implementation of the net zero agenda across ASEAN countries, ultimately creating a sustainable, resilient, and prosperous future.

Raise Awareness Among Key Stakeholders

The ANZH aims to promote and encourage people's involvement in addressing climate change. It serves as a platform for fostering understanding, innovation, and collaboration in this area. It facilitates the exchange of information and ideas through initiatives such as workshops, training sessions, and educational campaigns.

Establishing partnerships with educational institutions, NGOs, and stakeholders is vital to ensure high-quality climate education programs. Collaborating with experts and practitioners will also ensure content accuracy. The government could allocate resources for accessibility to diverse populations. The hub should conduct regular monitoring and evaluation to assess the capacity-building program's effectiveness, improvements, and impact. The government should also promote research and innovation in climate education methodologies, leveraging technological advancements to enhance the delivery and reach of these programs.

By prioritizing climate education and capacity building in this way, ASEAN would foster a society that is knowledgeable, empowered, and actively engaged in climate action. This policy will contribute to a more resilient and sustainable future by equipping individuals, communities, and organizations with the tools and understanding needed to address the challenges of climate change.

Incentivize Participation of Key Stakeholders

To incentivize businesses to join the ANZH, governments should provide incentives for their participation. Businesses that publicly commit to acceptable decarbonization strategies should be







granted priority access to networking and partnership opportunities. Additionally, governments can consider providing financial support through capital or grants to incentivize businesses to take net zero actions and initiatives. These incentives can enhance access to resources that are crucial for implementing sustainable practices and technologies.

Governments should also recognize the participation of businesses and countries in the ANZH as leverage to advocate for policy changes. By actively engaging in the hub and showcasing their commitment to decarbonization, stakeholders can influence policy decisions and encourage the implementation of supportive frameworks at the national and regional levels. Governments should prioritize responding to the demands and concerns raised by participants in the hub to ensure the implementation of effective policy changes.

In addition, by implementing these measures, the ANZH can create a vibrant ecosystem that fosters collaboration, knowledge exchange, and innovation. It will empower businesses and other stakeholders to drive the transition toward a sustainable, net zero future, while also positioning ASEAN as a leader in net zero technologies and practices.

Engage with International Stakeholders and Multinational Companies to Promote Partnership

The ANZH can serve as a platform for promoting international cooperation and collaboration on climate action, leveraging the collective expertise and resources of participating countries in supporting ambitious climate actions across the region. To achieve this, governments should actively engage with other regional and global actors, fostering partnerships and exchanging best practices. The hub's role is to facilitate the transfer of knowledge, technology, and financial resources to address climate challenges effectively.

To promote collaboration, the hub engages international stakeholders and multinational companies through outreach, forums, and knowledge-sharing mechanisms. Collaborative research projects and policy alignment create a conducive environment for sustainable practices and net zero goals. This accelerates the adoption of low-carbon technologies within ASEAN.

Legacy Program 1.2: Establish a regional knowledge hub and practice-sharing platform to promote best practices in the carbon market and increase carbon trading within ASEAN and with the rest of the world as a net supplier

A. Policy Portrait

The program aims to promote best practices in the carbon market, stimulate higher levels of carbon trading activity, and establish a regional knowledge hub and platform for sharing carbon market-related practices within ASEAN. Furthermore, it aims to function as a catalyst for forming regional alliances as a pivotal point for international partnerships focusing on expanding carbon markets.







Promoting interoperability of carbon markets in ASEAN is crucial for achieving harmonization, maximizing efficiency, and driving regional collaboration in climate action. ASEAN can facilitate regular information exchange and collaboration among member states on carbon market policies, practices, and experiences. This can be done through platforms such as a center of excellence, where countries can share knowledge, lessons learned, and best practices. Collaborative efforts can build trust, enhance understanding, and foster a conducive environment for market interoperability.

B. Rationale and ASEAN Implications

Considering the diverse economies and plentiful natural resources within its member states, ASEAN holds substantial potential for carbon trading. By effectively utilizing this inherent potential and actively promoting carbon trading within the ASEAN region, the carbon market would not only enhance ASEAN's economic growth but also attract more significant investments.

By developing a regional knowledge hub, ASEAN would further establish itself as a leading and credible provider of carbon credits. To stimulate regional economic growth, promote environmental sustainability, and encourage global collaboration in tackling climate change, the ASEAN Business Advisory Council has taken measures to establish the ASEAN CCoE. This pioneering initiative aims to promote climate solutions and encourage collaboration on the carbon market within the region. As a platform, the CCoE plays a role in facilitating the exchange of knowledge, capacity building, and policy discussions among essential stakeholders, such as policymakers, industry leaders, experts, and various actors across AMS.

C. Blueprint for Action

Promoting Mutual Learning and Knowledge Exchange on the Carbon Market Through the ASEAN Carbon Center of Excellence.

In today's world, the urgent need to address climate change has become more apparent than ever. As governments, organizations, and individuals seek effective ways to reduce greenhouse gas emissions, the carbon market has emerged as a powerful tool for mitigating climate impacts and transitioning to a low-carbon economy. Recognizing the significance of the carbon market and its potential to drive sustainable development is crucial to raising awareness among key stakeholders about the importance of exchanging experiences and engaging in mutual learning in this field.

One important step toward raising awareness is to establish a comprehensive center of excellence website that acts as a centralized platform for carbon trading-related articles, media resources, and case studies. Another crucial step is to organize a high-profile launching event, which introduces the Center of Excellence website to stakeholders and highlights its role in facilitating knowledge exchange. Additionally, to enable businesses to actively engage in sharing their experiences and best practices on the carbon market, CCoE should create a practice-sharing center with various online and offline







events. Moreover, CCoE can host an annual summit designed for business leaders to emphasize the significance of exchanging experiences and mutual learning on carbon trading. During this summit, successful case studies can be showcased, and industry experts can be invited to share insights, promoting knowledge exchange among participants. Developing a comprehensive white paper that underscores the importance of exchanging experiences and mutual learning on the carbon market in the ASEAN region is also essential. By implementing these initiatives, the ASEAN CCoE can be established and promoted as a vital platform for knowledge exchange and mutual learning in the region.

Empowering Climate Action through Partnership with Bloomberg NEF and the B20 CCOE

Partnerships and collaboration are crucial in the fight against climate change as they could contribute to effective and impactful climate action. An example of collaboration is the partnership between Bloomberg NEF and the B20 Climate Change, Circular Economy, and Clean Energy Taskforce (B20 CCOE). Their joint efforts aim to empower climate action by utilizing their strengths and resources, including developing the CCOE website. This comprehensive online platform facilitates knowledge sharing, collaboration, and information exchange regarding climate change, circular economy practices, and clean energy.

The collaboration between B20 CCOE and Bloomberg NEF has resulted in a website that promotes circular economy practices and supports the transition to a low-carbon economy. This platform provides businesses, policymakers, researchers, and the general public with access to information, resources, and opportunities for collaboration. Leveraging Bloomberg NEF's expertise in energy and sustainability, the website offers detailed insights backed by data-driven analysis of industry trends. In addition, governments can further contribute by providing funding support and financial incentives to advance research to encourage private sector engagement and investment in sustainable projects, especially relating to the carbon markets development.

Orchestrating Annual Carbon Market and Trading Summits

The annual carbon market and carbon trading summits is an esteemed initiative dedicated to fostering sustainable practices and combating climate change. This annual event brings together industry leaders, policymakers, researchers, and advocates from around the world to engage in critical discussions and collaborative efforts to reduce carbon emissions and create a more sustainable future.

Annual carbon market and carbon trading summits play a crucial role in bringing together stakeholders from various sectors to discuss and explore opportunities in carbon trading and markets. These summits serve as platforms for knowledge sharing, collaboration, and developing strategies to address climate change. One notable example is the Carbon Expo, an annual event organized by the International Emissions Trading Association (IETA) in collaboration with other organizations and governments.







The Carbon Expo attracts government representatives, policymakers, business leaders, project developers, financiers, and other stakeholders involved in carbon trading. Through panel discussions, workshops, and networking sessions, the event highlights innovative projects and technologies in carbon mitigation and adaptation, fostering dialogue and advancing the field of carbon trading.

Developing Policy Papers on Latest Trends and Best Practices across ASEAN Countries

In the pursuit of a low-carbon future, carbon trading has emerged as a critical tool for mitigating greenhouse gas emissions and driving sustainable development. As countries within the ASEAN region strive to implement effective carbon trading mechanisms, staying abreast of the latest trends and key issues in this field becomes essential. To address this need, the ASEAN Business Advisory Council (ABAC) Carbon Pricing and Carbon Market Development Working Group, in collaboration with the ASEAN CCoE, has developed a series of policy papers focused on carbon trading.

Developing policy papers focusing on carbon trading in ASEAN countries is crucial to facilitate informed decision-making and effective policy development. These papers should cover topics including emissions reduction targets, market mechanisms, regulatory frameworks, monitoring and reporting systems, and carbon pricing strategies. These policy papers should be evidence-based, offer actionable recommendations, target decision-makers, and actively encourage decision-makers' participation in dialogue to ensure effective policy implementation.

Forming the ASEAN Alliance on Carbon Markets to Foster Regional Collaboration and Acceleration of Carbon Market Development in the Region.

The ABAC takes a proactive stance by establishing the ASEAN Alliance on Carbon Markets (AACM). This alliance aims to combat climate change through robust carbon markets, promoting sustainable climate solutions, and fostering collaboration among AMS. To achieve carbon neutrality and sustainable development, the AACM must set ambitious objectives aligned with international commitments, regularly assessing and updating these goals. Effective collaboration and communication are vital, engaging stakeholders from various sectors and ensuring inclusive decision-making processes.

The ASEAN Alliance on Carbon Market must set ambitious objectives aligning with international climate commitments. By establishing targets, the alliance can drive efforts toward achieving carbon neutrality, reducing emissions, and promoting sustainable development. Assessing and updating these goals is crucial to ensure progress and stay on track in meeting ASEAN climate objectives. Moreover, effective collaboration and communication are vital for the alliance to achieve success. The AACM should establish forums, workshops, and virtual meetings to facilitate knowledge sharing, policy coordination, and updates on progress among member states. Additionally, engaging stakeholders from the sector, academia, and civil society will ensure inclusive decision-making processes while benefiting from diverse expertise.







The alliance should promote the harmonization of policies, methodologies, and reporting requirements to create a carbon market ecosystem that operates seamlessly across AMS. Standardizing these aspects will enhance transparency and comparability of carbon credits credibility and attract investments while encouraging participation in the market. Monitoring and evaluating the effectiveness of the alliance's initiatives is critical in assessing the impact of carbon markets within ASEAN. Furthermore, establishing a monitoring framework will help track progress toward our set goals while measuring emission reductions achieved. This framework will also help identify areas where CCoE can make improvements.

Policy Action 2.1: Strengthen and enhance the regulatory regime to accelerate the development and adoption of sustainable finance, including through the implementation of ASEAN and national taxonomies across the region

A. Policy Portrait

As governments, businesses, and financial institutions look to accelerate ESG-related actions, there is a growing demand for mobilizing capital for activities that are aligned with internationally accepted ESG principles and frameworks. The increasing value of ESG assets globally, projected to exceed US\$ 50 trillion by 2025, representing more than a third of the US\$ 140.5 trillion in projected total assets under management, has raised concerns among capital providers regarding the practice of "greenwashing". To mitigate the greenwashing risks, the EU officially issued a robust, sustainable finance taxonomy in July 2020 to provide a credible and standardized approach to categorizing green activities.

Similarly, the ASEAN Taxonomy Board (ATB) published the ASEAN Sustainable Finance Taxonomy (ASEAN Taxonomy) Version 1 in November 2021. In addition, ASEAN Taxonomy Version 2, published in March 2023 and further updated in June 2023, expands upon the conceptual groundwork established in Version 1 on how these frameworks could be used in practice, particularly for the power generation sector for Plus Standard. The two frameworks aim to facilitate the unique nuances for each AMS, considering variance in economic development, financial sector, and infrastructure maturity across the region.

The ASEAN Taxonomy is expected to develop further in the next two years, enhancing its credibility and transparency. This development will be crucial in supporting the adoption and implementation of national taxonomies. By establishing a green taxonomy that AMS could apply, the region can facilitate and strengthen the implementation of green finance and investment practices and minimize the risk of greenwashing. This approach will not only enhance the industry's credibility but also promote environmentally responsible investments, fostering a greener and more sustainable financial landscape in ASEAN.







B. Rationale and ASEAN Implications

Sustainable financing plays a crucial role in mitigating climate change and promoting inclusive development. These investments support the adoption of technologies, the development of infrastructure, and the implementation of eco-friendly practices. This transition opens up opportunities, encourages innovation, fosters growth, and enhances competitiveness. Sustainable investments also attract funding for research, eco-products, and principles of a circular economy. This approach helps reduce waste and ultimately boosts long-term profitability.

On the other hand, upscaling sustainable finance in the ASEAN region presents considerable challenges that must be tackled to promote environmentally and socially responsible investments. A key challenge is the need for regulatory and policy harmonization among the AMS. Given the diverse economic landscapes and varying levels of development within ASEAN, collaborative efforts are essential to establish common guidelines and frameworks that facilitate cross-border investment flows and ensure a level playing field for sustainable finance initiatives throughout the region. Overcoming these challenges will be crucial for promoting sustainable investment practices and driving positive environmental and social impact across ASEAN.

As the focus on sustainability grows, so does the concern over greenwashing, which involves falsely portraying an investment or company as environmentally friendly or socially responsible despite contradictory practices and impacts. A comprehensive framework that defines environmentally sustainable investment is needed to preserve the integrity of sustainable finance.

In this case, the ASEAN Taxonomy and national taxonomies have been published, offering a unified framework to assess environmental performance and establish consistency and comparability throughout the region. By ensuring interoperability among taxonomies, AMS can develop a standardized policy regime that promotes sustainable finance and effectively tackles the risks of greenwashing. This approach will help accelerate sustainable finance growth and bolster the region's efforts toward environmental sustainability and responsible investment practices. The ASEAN Taxonomy provides a common framework for evaluating economic activities' performance, ensuring consistency and comparability across the region and allowing for alignment. Leveraging this combined framework will benefit AMS members, as it will expedite the growth of sustainable finance and address the risk of greenwashing.

C. Blueprint for Action

Enhancing Capacity Building to Support ASEAN Member States in Adopting National Taxonomies Aligned With the ASEAN Taxonomy and Promoting Sustainable Finance

The ASEAN region increasingly emphasizes sustainable financing to drive environmentally and socially responsible investments. Central to this transition is adopting national taxonomies in line







with the ASEAN Taxonomy, a classification system that defines environmental sustainability criteria for economic activities. Robust capacity-building efforts are imperative to implement the ASEAN Taxonomy and promote sustainable financing effectively. This policy paper highlights the significance of capacity building and outlines strategies for governments and institutions to support AMS in adopting the ASEAN and national taxonomies and advancing sustainable finance.

Capacity Building for Awareness and Understanding: Governments and financial institutions are crucial in raising awareness and fostering a comprehensive understanding of the ASEAN Taxonomy and sustainable financing among stakeholders. They can facilitate training programs, workshops, and awareness campaigns to educate financial institutions, investors, businesses, and regulatory bodies about the principles and benefits of the ASEAN Taxonomy. These activities should also be tailored to address the specific needs and challenges the region faces. By enhancing awareness and understanding, capacity-building initiatives lay the foundation for the effective adoption and integration of the ASEAN Taxonomy into investment practices.

Promoting Collaboration and Knowledge Sharing: While ATB has covered the ASEAN Taxonomy, capacity building, collaboration, and knowledge sharing remain crucial for AMS. They need to stay well-informed about taxonomy and incorporate it effectively into their national taxonomies. AMS can collaborate with regional governments, financial institutions, and specific industry experts to share knowledge, experiences, and solutions. This collaboration helps identify shared challenges and adopt standardized taxonomy methodologies across the region, contributing to ASEAN Taxonomy development. By promoting collaboration and knowledge sharing, AMS fosters a cohesive and informed approach to taxonomy.

Strengthening the Sustainable Policies Through Institutional Coherence, Stakeholder Engagement, and Collaboration

In the face of escalating environmental challenges and growing social concerns, it is crucial to advocate for sustainable policies to create an enabling ecosystem. Governments and financial institutions play pivotal roles in driving the adoption and implementation of sustainable policies. This policy paper explores the diverse avenues through which these entities can actively advocate for sustainable policies, emphasizing the importance of collaboration and collective action in addressing pressing sustainability issues.

Institutional Coherence: To improve the coherence among state members, analyzing the network of interactions between policies and weighing their pros and cons while considering economic, social, and environmental factors is crucial. By understanding these interconnected relationships, governments and decision-makers can make informed choices that not only optimize immediate results but also consider broader implications that extend beyond national boundaries. Moreover, adopting a long-term perspective that considers the impact on generations ensures that policies are developed







with their interests in mind. This comprehensive approach promotes a sustainable framework by aligning various policy objectives and enhancing the overall effectiveness of governance systems.

Stakeholder Engagement: Stakeholders, encompassing governments, communities, NGOs, and individuals, play a pivotal role in championing sustainable policies. However, it is essential to note that governments are key drivers of sustainable policy enactment and promotion. They possess the authority to establish legal frameworks, regulations, and incentives that encourage sustainable practices across various sectors. Through transparent and inclusive policy development processes involving stakeholder consultations, scientific research, and data-driven decision-making, governments ensure policies are comprehensive, just, and reflective of society's diverse needs and perspectives.

Furthermore, governments can utilize international agreements and partnerships to harmonize their policies with global sustainability objectives, fostering a collective global response to pressing sustainability challenges. By empowering stakeholders and affording them a platform, the advocacy for sustainable policies gains enhanced democratic inclusivity and effectiveness.

Partnerships and Collaboration: Effective sustainable policy advocacy thrives on collaboration among governments, institutions, and stakeholders. Institutions like businesses, academic entities, and civil society organizations hold the potential to spearhead sustainable policy advocacy through their expertise, influence, and networks. Academic institutions could contribute research and education, while civil society organizations engage in awareness campaigns and policymaker interactions, collectively promoting comprehensive sustainability strategies. Furthermore, businesses can adopt sustainable practices, advocate for supportive regulations, and embed sustainability within supply chains.

Multi-stakeholder platforms facilitate dialogue and coordinated action, integrating diverse perspectives for integrated solutions. These stakeholders can address complex sustainability challenges by forming partnerships, pooling resources, and leveraging networks, fostering more significant impact and transformative change.

Strengthening Collaboration for Sustainable Financing in ASEAN by Adopting and Aligning to the ASEAN Taxonomy into Respective National Taxonomy

The ASEAN Taxonomy functions as a guideline for AMS to direct capital toward endeavors that encourage the shift of real economic activities onto a more sustainable path. While each AMS may create its regional taxonomy, the ASEAN Taxonomy can serve as a shared framework and guide applicable across industries, particularly beneficial for nations lacking their taxonomy. Collaboration with other governments and institutions is vital to ensure ASEAN Taxonomy's successful integration and alignment within AMS. This segment of the policy document will delve into strategies for AMS to enhance collaboration, aiming to accelerate sustainable financing in the ASEAN region.







Coordinating Policy and Regulatory Frameworks: Collaboration among governments is crucial for harmonizing policies and regulatory frameworks related to sustainable financing and the implementation of the ASEAN Taxonomy into the respective national taxonomy. Governments and ATB should work together to ensure the national taxonomy policy covers sustainable economic activities. Frequent consultations and sharing of information are necessary for achieving collaboration between the AMS government and ATB.

Engaging Financial Institutions and Industry Associations: Financial institutions and industry associations is essential for aligning national taxonomies with the ASEAN Taxonomy. These stakeholders hold significant influence and expertise in their sectors, which is crucial for effective implementation. Financial Institutions can guide investments in line with the ASEAN Taxonomy through collaboration with industry groups. This joint effort enhances the credibility of the ASEAN Taxonomy and promotes sustainable investments, driving the region toward a greener economy.

Empowering Civil Society and Non-Governmental Organizations: Civil society organizations and non-governmental organizations (NGOs) are pivotal in advocating sustainable finance and ensuring stakeholder responsibility. Empowering these entities strengthens the alignment of AMS' national taxonomy with social and environmental priorities, harmonizing with the goals of the ASEAN Taxonomy. Moreover, civil society and NGOs should engage proactively with governments and financial institutions during the formulation and oversight of sustainable finance policies. This engagement fosters transparency, accountability, and inclusivity in the process.

Policy Action 3.1: Enhance regional cooperation on ensuring a just, orderly, and affordable transition to sustainable energy use across ASEAN countries

A. Policy Portrait

Given the issues of air pollution, deforestation, and carbon emissions, AMS must prioritize carbon reduction. High reliance on fossil fuels, particularly coal, worsens air quality and emissions. The International Energy Agency (IEA) predicts a 78% rise in energy demand in Southeast Asia by 2050, hampered by fossil fuel dependence. AMS actively aims to align with the Paris Agreement by striving to transition toward a sustainable energy source. By 2050, ASEAN countries seek to phase out fossil fuel-fired power, including oil, coal, and gas. ASEAN's energy target of 23% by 2025, rising from 14.2% in 2020, resulting in a nearly 10% gap to close in less than five years. Investments and strategic measures are vital for expanding energy sources. Post-2025 milestones should harness abundant renewable resources in member states. The ASEAN Centre for Energy's 30-year, seven-phase roadmap targets Paris Agreement goals by 2050, focusing on energy deployment, job creation, rural access, and growth. Recognizing member states' goals, strategic planning, and collaboration are crucial for a smooth transition to sustainable energy. Aligning policies via roadmaps and fostering solidarity navigates challenges, achieving shared energy goals effectively.







B. Rationale and ASEAN Implications

An effective transition to the sustainable energy sector within ASEAN depends on member countries' collaboration to overcome policy barriers and promote innovative sustainability solutions. To achieve this long-term transition goal, it is important to develop a short-term roadmap based on the existing ASEAN implementation plan. The transition will also require investment in sourcing, efficiency improvements, research and development, and industry decarbonization. Revenue generated from carbon pricing, taxes, and permit reforms can fund these transitions while allocating resources to support policy initiatives. Additionally, investing in sustainable energy can boost the ASEAN economy, as well as promote growth, job creation, and prosperity, attract investment, and facilitate technology transfer for innovation. However, phasing out coal as one of the transitional forms requires careful management to ensure the well-being of workers and communities is maintained.

C. Blueprint for Action

Developing a Short-Term Roadmap and Detailed Actions

Creating a roadmap with short-term goals and specific actions is essential for driving the transformation of the energy landscape in ASEAN toward sustainability. AMS can successfully navigate its shift to renewable energy by developing a plan and outlining measures. This roadmap consists of a range of initiatives, each playing a role in building toward a greener and more resilient energy future:

- 1. Improving policy and regulatory frameworks—Establish supportive policies and regulations that encourage investment in renewable energy. This involves setting renewable energy targets, implementing feed-in tariffs or other incentives, and streamlining the permitting process for renewable energy projects. Additionally, providing incentives such as tax breaks and subsidies is essential.
- 2. Facilitating investment—Governments can actively facilitate opportunities for renewable energy investment, both for domestic and foreign investors. This can be achieved through targeted marketing campaigns, investment forums, and other outreach activities.
- 3. Promoting technology transfer and innovation—This strategy focuses on promoting the transfer of renewable energy technologies and fostering innovation in the ASEAN region. It includes facilitating technology partnerships, supporting research and development activities, and promoting knowledge sharing among AMS.
- 4. Cross-border Grid Integration: Cross-border grid integration can help to increase the utilization of renewable energy resources in the region. AMS can work together to develop interconnection infrastructure and harmonize regulations to facilitate cross-border electricity trade.







- 5. Green hydrogen development—Governments can support the establishment of green hydrogen infrastructure and technologies, including research and development, pilot projects, and incentives for private sector investment.
- 6. Improving energy efficiency—This strategy emphasizes the significance of energy efficiency in achieving a sustainable energy future. It includes implementing energy efficiency measures in buildings, industries, and transportation sectors, as well as promoting energy management systems and energy conservation practices.

Earmark Carbon Pricing Revenue from Inefficient Fossil Fuel Subsidy Reform, Carbon Tax and Permits Auction for Energy Transition Investments

Redirecting the revenue generated from carbon pricing inefficient fossil fuel subsidy reform, carbon taxes, and permit auctions can drive the shift toward energy sources in ASEAN. By allocating these funds toward investments in energy transition, AMS can accelerate its progress toward sustainability. Effectively tackle the urgent issues posed by climate change. To fully leverage this approach, several key strategies can be implemented:

- Development of carbon pricing mechanisms—The primary focus should be on expediting the development of carbon pricing instruments, which can take the form of carbon taxes or cap-andtrade systems. These instruments increase fossil fuel costs, encouraging businesses to shift toward cleaner energy sources.
- 2. Establishment of clear guidelines—Establish transparent guidelines and regulations stipulating that revenue generated from carbon pricing must be exclusively allocated to renewable energy investments. These guidelines should specify the percentage or revenue designated for such projects.
- 3. Collaborative approach and coordination—Collaboration and coordination of efforts among AMS to ensure consistency in implementing carbon pricing and directing revenue toward renewable energy initiatives. Regular meetings, sharing best practices, and adopting a common framework for revenue allocation can facilitate this collaboration.
- 4. Public awareness and stakeholder engagement—Raising public awareness about the benefits of renewable energy and the importance of using carbon pricing revenue for renewable energy investments is essential. Engaging stakeholders, including government agencies, businesses, and civil society organizations, in decision-making will garner their support and active participation.
- 5. Capacity building and technical support—AMS may require capacity building and technical assistance to implement carbon pricing and manage the generated revenue effectively. Training programs, workshops, and knowledge-sharing initiatives can enhance the understanding and skills of policymakers and relevant stakeholders.







- 6. Monitoring and evaluation—A robust monitoring and evaluation system should be established to track the allocation and utilization of carbon pricing revenue for renewable energy investments. This will ensure transparency, accountability, and the effectiveness of the earmarking process. Regular reports and assessments should gauge the impact of revenue allocation on renewable energy development.
- 7. International cooperation and support—Seeking international cooperation and support from organizations such as the IEA and the Asian Development Bank (ADB) can benefit ASEAN. These organizations can provide technical expertise, funding, and policy recommendations to aid in successfully implementing and optimizing carbon pricing revenue earmarking for renewable energy investments.

Structure Employment Transition and Reskilling Programs to Ensure Socio-Economic Achievements of Workers and Communities

To ensure an energy future in ASEAN, focusing on the well-being and livelihoods of workers and communities during their transition into employment opportunities is crucial. AMS should prioritize the socio-achievements of those impacted by these changes. It requires a strategy that includes planning before layoffs, assisting during and after layoffs, and implementing labor market policies. AMS should empower workers to facilitate a seamless transition process and promote thriving communities during this energy transformation. The following key points elaborate on this effort:

Pre-layoff planning

- 1. Conducting research and surveys to identify the social and labor implications of divestiture decisions, including identifying the affected workers and assessing their need for social services and assistance.
- 2. Reviewing labor regulations and the social protection system in ASEAN countries to understand the relevant legal frameworks and support mechanisms.
- 3. Establishing partnerships and institutions to support workers during their transitions and initiating a communications campaign to disseminate information.
- 4. Ensuring workers from fossil fuel industries have access to new job opportunities in the clean energy sector by implementing policies prioritizing hiring for clean energy projects.

Pre-layoff assistance aims to prepare workers for impending layoffs

- 1. Notifying affected workers in advance about their dismissal.
- 2. Providing information regarding available assistance options.
- 3. Implementing services such as worker profiling, skill audits, job counseling, and placement services.







Post-layoff assistance

- 1. Providing temporary income support to unemployed workers during their job search and transition to new sectors to alleviate the financial impact of the layoff.
- 2. Implementing active labor market policies in ASEAN countries to support individual displaced workers and potentially a wider group of beneficiaries.
- 3. When necessary, deploying social programs to ensure continued access to healthcare, education, and pension benefits.

Active labor market policies consist of various services, programs, and incentives that facilitate the re-employment of laid-off workers

- 1. Providing employment services, such as labor exchanges, vocational counseling, and mobility assistance.
- 2. Providing opportunities for workers to acquire new skills and retrain for jobs in the clean energy sector through education and institutional or on-the-job training
- 3. Supporting small business support with microcredits, grants, technical assistance for start-ups, and subsidies for employment in the private or the public sector to promote job creation.

V. How these efforts will benefit ASEAN MSMEs

These efforts not only benefit the government and large corporations in achieving their zero goals but also support small and medium-sized enterprises (MSMEs) by equipping them with the necessary tools, resources, and regulatory assistance to understand and transition toward sustainable practices.

A defined policy framework guides MSMEs and provides incentives for aligning with net zero objectives. This fosters innovation, enhances efficiency, and creates business opportunities across key industries, ultimately benefiting both MSMEs and the environment. Furthermore, MSMEs may encounter difficulties in obtaining financing for initiatives. By strengthening frameworks, easier access to finance options can be provided to MSMEs, enabling them to invest in technologies and practices. The implementation of taxonomies across ASEAN countries can bring clarity and guidance to this area.

Lastly, MSMEs often face resource limitations when navigating energy transitions. Regional cooperation ensures access to shared knowledge, practices, and resources. This facilitates the adoption of sustainable energy practices by SMEs while minimizing disruptions and costs and also promotes competitiveness in the long run.







VI. Conclusion

A comprehensive development agenda is crucial for the ASEAN region to achieve inclusive growth, offering economic opportunities to all segments of society and ensuring that no one is left behind. This agenda prioritizes conserving resources and biodiversity and protecting ecosystems for future generations. Additionally, it aims to improve the well-being and quality of life of citizens by providing access to education, healthcare, and essential services. By embracing these principles, ASEAN will attract increased investment and also establish itself as a responsible global participant. Aligning policies and practices with standards and frameworks demonstrates ASEAN's commitment to quality and sustainability.

ASEAN aims to take a leading role by showing that adopting sustainable development is not just an option but a necessity to secure a prosperous future for the region and its people. The policy paper outlines recommendations and initiatives that further strengthen ASEAN's dedication to sustainability. By implementing a net zero framework, enhancing financing, and ensuring a fair energy transition, ASEAN reinforces its commitment to sustainability. The establishment of the ANZH and CCoE complements these efforts by accelerating progress toward achieving zero emissions.







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Appendix

Framework to support net zero transformation

In order to assist businesses in their pursuit of achieving net zero emissions, PwC has outlined nine essential components for the transformation towards corporate net zero. This 'framework' aims to guide companies in transitioning from aspiration to execution.

Embarking on the net zero journey

1 Ambition:

Alignment of company ambitions to achieve global net zero by no later than 2050, underpinned by a science-based targets approach to limiting warming to 1.5° of warming. Define what good practice on this ambition looks like.

• To create a sustainable future, businesses and organizations must embrace a zero-vision based on scientific principles. By comprehending the impact of emissions, companies should prioritize actions that align with our zero commitments throughout the value chain. It involves implementing strategies to prevent and reduce emissions while establishing a method for offsetting any remaining emissions. Adopting a well-organized approach to pave the way toward an environmentally friendly future is crucial.

2 Governance:

Oversight and accountability for net zero driven through the entire organization, including at the highest levels of the company and Enterprise Risk Management.

Ensuring senior management accountability for the net zero strategy and transformation
is crucial for successful implementation. It is imperative to designate responsible senior
managers to oversee and drive the organization's efforts toward achieving net zero goals.
It includes evaluating the existing incentives structure, particularly at the highest levels
of the company, to ensure it aligns with and supports the long-term objectives of the net
zero transition.

3 Strategy:

Net zero is embedded into company strategy, including the growth strategy and functional strategies, to maximize value and build resilience in a changing climate.

• Companies need to grasp the implications and evaluate the skills to thrive in a future focused on achieving zero emissions. Recognizing the options for a zero strategy and building a compelling business rationale is crucial. By aligning the framework with the chosen strategy, companies can effectively carry out sustainability initiatives and position themselves for triumph in a world that calls for accountability.







Implementing your strategy

4 Enterprise:

Companies are structured to achieve net zero with operating models designed to deliver net zero targets. A holistic change management program is designed and executed where required.

To effectively meet the net zero transformation, companies must define roles and
responsibilities, cultivate a sustainable culture, and actively involve customers. Having
defined policies, streamlined processes, and a robust measurement system is crucial to
monitor progress and ensure alignment with the zero strategy. By leveraging technology
and embracing initiatives, companies can optimize their efforts to reduce emissions,
make an environmental impact, and promote long-term sustainability.

5 Supply chains:

Net zero integrated across the whole supply chain to build a well-connected, smart, efficient, and low-carbon supply chain ecosystem. This includes adapting supply chain strategy, aligning with existing transformation efforts, and supporting the supply chain to decarbonize.

 Engagement with stakeholders across the organization's operations and value chain is crucial for identifying and evaluating ongoing efforts and building consensus on new GHG reduction levers. This collaborative approach allows for a comprehensive assessment of current initiatives and exploring innovative solutions. Companies can tap into a wide range of expertise and perspectives by involving business and functional heads from different departments, enabling a more holistic approach to achieving their net zero goals.

6 Innovation:

Companies invest in research and development (R&D) and build innovation into ways of working to harness emerging technologies and develop new solutions to deliver net zero at pace. Net zero is embedded into innovation/R&D strategy, into product and service development, and corporate ventures.

• In transitioning into net zero, it is crucial to integrate zero principles into corporate R&D and innovation efforts. Additionally, essential steps include supporting net zero solutions and ensuring that products and services align with net zero objectives. It is also crucial to leverage innovation to overcome obstacles. By promoting collaboration and partnerships, we can establish an ecosystem of innovation that drives sustainability forward. These strategies enable businesses to progress toward their zero goals and foster innovation and sustainability at the core of their operations.







7 Finance:

Substantial commitment and willingness to finance net zero transformation through existing and new finance functions and modalities.

• Creating an investment plan ensures that financial choices align with sustainability objectives, combining economic principles for a unified approach. Companies demonstrate their dedication by prioritizing funding options and carrying out investments based on this plan. Make strides toward achieving sustainable goals.

8 Transparency:

Provides transparent and balanced information on progress against net-zero ambition, including business transformation.

• It is crucial to communicate companies' zero strategy. Make sure to share updates on the progress toward net zero goals. This will demonstrate transparency and accountability, which is important, for building trust and showcasing your commitment to a future.

Communicating Impact

9 Engagement:

Engages and influences stakeholders across ecosystems to enable change at pace and scale.

• It is crucial to develop a plan for engaging with others. Lead by setting an example. Drive transformation throughout all aspects of operations by fostering influence. Behaviors that promote and accelerate progress could contribute to a sustainable future.









HEALTH RESILIENCE

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HEALTH RESILIENCE

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WORKING GROUP: HEALTH RESILIENCE

I. Executive Overview

The COVID-19 pandemic was one of the greatest challenges faced by healthcare systems across the globe. It revealed the public health system's current weaknesses, especially in the Vaccines, Therapeutics, and Diagnostics (VTD) capabilities. While the pharmaceutical innovation response to COVID-19 turned out to be an unprecedented success in terms of speedy solution discovery and development at the global level, the ASEAN region faced major challenges in developing relevant research expertise on new technologies (e.g. mRNA), scaling manufacturing capacity, and distributing vaccine and drugs efficiently. For instance, the region relies heavily on vaccine and API imports without sufficient regional manufacturing. The biotech industry in ASEAN is still in its infancy compared to other regions due to a shortage of funding, essential infrastructure, and skilled personnel, which hinders the region's responsiveness to disease situations as well as innovation in pharmaceutical/biotech development.

To enhance ASEAN's regional preparedness for public health emergencies and effectively combat ongoing communicable (e.g. neglected tropical diseases and zoonotic diseases) and non-communicable diseases as well as, ASEAN's collaboration to achieve health resiliency will be critical. For example, during the COVID-19 crisis, multiple collaboration taskforces were established under ASEAN which successfully improved the region's response to pandemics - the ASEAN Coordinating Council Working Group on Public Health Emergencies (ACCWG-PHE) was established in March 2020 to develop a regional plan of action, share information, and best practices, and facilitate the procurement of medical. It demonstrated the importance of regional collaboration in addressing public health priorities and accelerating ASEAN's healthcare development.

The policy paper aims to 1) identify and recommend feasible and high-impact areas across the pharmaceutical value chain where ASEAN collaboration is urgently needed to improve the region's VTD capabilities and 2) identify feasible mechanisms and blueprints for ASEAN countries and stakeholders to collaborate. By conducting surveys, and interviews with industry experts and public sector advisors as well as drawing learnings from past and ongoing initiatives across the globe, we identified seven collaboration areas in the Research & Development and Clinical Trial value chain steps, where ASEAN countries could strengthen collaboration to improve the region's resilience and competitiveness of VTD development.







Table 1.1:

#	Value chain step	Collaboration opportunities
1	R&D	Regional alignment on R&D priorities and pipeline for critical VTDs
2		Expedited regional access to new technologies via a global partnership
3		Collective VTD funding support advocacy at the regional and global level
4	Clinical trials	Facilitate regional regulatory access and harmonization in clinical trials
5		Simplify and fast-track regulatory process for priority VTD candidates
6		Coordinated clinical research network (institutes and CROs) with pooled capacity and resources in multi-country clinical studies
7		Information and knowledge sharing

II. Context Setting and Policy Agenda

1. ASEAN Health Status and Disease Burden

Rapid economic growth and health expenditure leading to improved health status

ASEAN region has undergone rapid economic growth fuelling household consumption, which has heightened health awareness and increased demand for better healthcare services. Southeast Asia had higher GDP growth (3.9% CAGR) over the past 10 years compared to the world's average growth (2.9% CAGR). This growth has translated into increased healthcare expenditure, as reflected in the 6% annual growth of healthcare expenditure per capita in Southeast Asia from 2010 to 2020. Boosted by economic growth and health expenditure, the ASEAN region has made notable progress in improving its health status, as evidenced across several key indicators. Life expectancy in ASEAN has steadily increased at 0.3% CAGR in the past 10 years, which has now reached 76 years for females and 71 years for males on average as of 2021. Infant Mortality Rate (IMR) has also been decreasing gradually at 2% CAGR in the past 10 years. Basic immunization coverage remained stable in the region even though it experienced a decrease in 2020-2021 due to the Covid-19 pandemic as people were less likely to visit hospitals and supply chain resources were concentrated on Covid-19 vaccines.

Communicable and non-communicable disease burden still exists

Despite the considerable improvements in enhancing health status, the region has a high prevalence of communicable diseases such as Tuberculosis (TB), malaria, and dengue due to its unique climate environment the population density. For instance, in 2021, there are 2.3 million incident cases of Tuberculosis, 1.9 million incident cases of HIV, and 1 million incident cases of Malaria in the region.



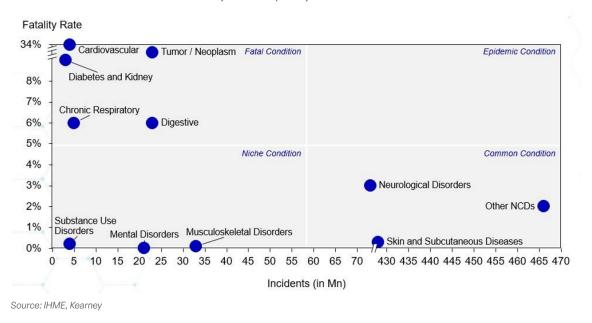




Communicable diseases cause significant disease burdens, especially in low-to-middle-income countries. On average, communicable diseases have caused around 0.1 DALY loss per capita in ASEAN. Laos, Cambodia, and Myanmar have higher communicable disease burdens than the world average. Communicable diseases also have resulted in a significant economic burden. Southeast Asia has the highest number of TB incident cases at 2,271,000 cases in 2021 compared with other geographical regions, resulting in a significant economic burden with a total annual economic loss of around USD 16 Bn.

Apart from communicable diseases, non-communicable diseases (NCDs) also remain the leading cause of death in ASEAN with 0.2 DALY loss per capita in Southeast Asia. NCDs accounted for 69% of all deaths in the region, where 52% of these deaths occurred prematurely or before 70 years old. NCDs with the highest death rate in the Southeast Asia region are cardiovascular diseases (34%), neoplasms (15%), diabetes, and kidney diseases (9%) as of 2019. For example, Indonesia, Vietnam, the Philippines, and Thailand are ranked among the top 30 countries worldwide in terms of the number of cardiovascular disease incidents.

Figure 1.1: Non-Communicable Disease by Cause (2019)



Significant and far-reaching effects of Covid-19 also highlighted the importance of health resilience

During the Covid-19 crisis, ASEAN suffered significant life loss of more than 360,000 lives, economic damage of around USD 260 billion, and a high healthcare cost of USD 12,700 average cost spent per







patient. These adverse consequences were caused mainly by poor healthcare infrastructure and public health capabilities, limited economic resources for emergency preparedness and relief, and challenges posed by the region's mistrust towards vaccines initially. The Covid-19 pandemic also disrupted routine healthcare services, including regular check-ups, screenings, immunization, and elective surgeries. This has resulted in a backlog of cases and delays in accessing care, as well as vaccine, and therapeutic product roll-out for other diseases.

2. Vaccines, therapeutics, and diagnostics (VTDs) value chain

ASEAN's high dependency on vaccine and API imports

ASEAN has high dependencies on vaccine and API imports. Even before the Covid-19 crisis, ASEAN was unable to meet total vaccine demand with only 60% of the overall market needs being fulfilled by regional manufacturers. Consequently, the region had to import the rest 40% of the vaccine demand, estimated to be 4,600 tons of vaccines.

Aside from that, ASEAN countries also have a high level of dependency on pharmaceutical Active Pharmaceutical Ingredients (API) imports, with local manufacturers only producing less than 10% of the total demand in the region. During the Covid-19 pandemic, ASEAN relied even more heavily on vaccine imports – with around 78% of Covid-19 vaccines in ASEAN countries imported from outside the region. This is largely due to key constraints of regional vaccine manufacturers' capabilities including limitations in technology, rigid and product-specific manufacturing capabilities, and inflexible scalability. Among ASEAN Member States (AMS), only Indonesia, Thailand, and Vietnam managed to kick off local Covid-19 vaccine production, more than one year after the pandemic started.

To identify the root causes of ASEAN's reliance on imports and determine opportunities for regional collaboration, we examined the region's capabilities across the VTD value chain, focusing on R&D, clinical trial, and manufacturing as key steps.

Insufficient R&D funding, talent, and Intellectual Property protection

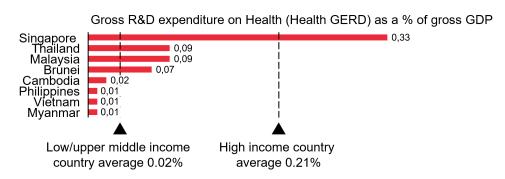
ASEAN has limited R&D capabilities and resources compared to the advanced economy and the neighboring large countries such as India and China, especially in access to new technologies (e.g., mRNA). Most countries in the region have lower Gross R&D expenditure on Health (Health GERD) as a percentage of GDP than the average of high-income countries, except for Singapore, as shown in Figure 5.2. The average number of researchers in the region is lower than the global average, except for the case of Singapore. Moreover, R&D in ASEAN is mainly focused on traditional technology, especially before Covid-19 (e.g., inactive virus, protein subunit). Apart from lack of investment, talent, and technology access, inadequate protection of Intellectual Property (IP) is another reason that also hinders the R&D in ASEAN.







Figure 1.2: Gross R&D Expenditure on Health as a Percentage of Gross GDP



As a result, Thailand, Indonesia, and Vietnam exhibit low attractiveness in biopharmaceutical competitiveness, ranking in Tier 4 with Malaysia ranked in Tier 3, compared with other emerging pharmaceutical countries.

Table 1.2: Biopharmaceutical Competitiveness and Investment (BCI) Survey Result (2019)

Result of the 2019 Emerging Markets BCI Survey	Country	
Tier 1 (Above 70%)	Singapore, Taiwan, Israel	
Tier 2 (60-70%)	South Korea, Costa Rica, Chile, Mexico, UAE	
Tier 3 (50-60%)	Malaysia, Colombia, Kuwait, Argentina, Peru, Brazil	
Tier 4 (Below 50%)	Thailand, Indonesia, Vietnam	

Source: Biopharmaceutical Competitiveness and Investment Survey 2019

Ineffective clinical trials regulatory system, research framework, market access, and financing

Clinical trials are the foundation for the development of a resilient health system as it accelerates access to innovative technologies and builds experiences among clinicians and researchers with new modalities. Overall, ASEAN has under-developed clinical trial capabilities and we evaluated from three aspects – regulatory systems, clinical research framework, and market access.

Firstly, the regulatory systems in ASEAN countries are not perceived to be conducive for global players to conduct multi-country clinical trials, due to complicated regulatory processes, lack of regional single point of contact, and stringent rules of specimen transportation. For example, multiple approvals are needed for clinical trials at different sites within a country due to decentralized ethics bodies, prolonging the overall timeline for researchers and sponsors. Meanwhile, there is a lack of streamlined efforts, such as a single point-of-contact mechanism for global manufacturers to access ASEAN as one market. This incohesive approach creates considerable difficulty and complexity for







global manufacturers to navigate the different regulatory systems, rendering the ASEAN market less attractive. Meanwhile, countries with stringent rules for test material to cross borders add to the operational burden for researchers to conduct multi-country clinical trials. For example, Indonesia's Decree No. 657 on Materials Transfer Agreements (MTA) limits the exportation and usage of biological specimens and the information contained from leaving Indonesia.

Moreover, the clinical trial standards are not yet uniformly established within each country and across nations. For instance, even though Indonesia already has Badan Pengawas Obat dan Makanan (BPOM) to oversee clinical trials, there are still variations in the standards being implemented at the local level, leading to duplicated efforts to obtain approval at each clinical trial site. Among ASEAN states, there is currently no single standardized clinical trial framework that is adopted and implemented by all. The harmonizing of the clinical trial framework at the ASEAN level is challenging due to several factors, including each Member state's sovereignty innational regulations, significant economic diversity, national interest in supporting local enterprises, and technical gaps in the technical standards across countries.

Manufacturing capability constraints

ASEAN region faces constraints in its manufacturing capabilities, as demonstrated by the limited number of local manufacturers of vaccines and APIs and the lack of expertise and access to new technologies such as mRNA vaccine technologies and biosimilar products. ASEAN has made efforts in enhancing its manufacturing capabilities as demonstrated by the presence of 14 local vaccine manufacturers which are located across Indonesia, Singapore, Thailand, Vietnam, and Myanmar as of early 2023. Biofarma, the largest local vaccine manufacturer in the region, which is based in Indonesia, supplies its products to other countries and serves over 150 countries worldwide. However, these existing manufacturing capabilities have several key constraints, including limitations in technology, rigid and product-specific production, and inflexible scalability. Less advanced vaccine manufacturing technology leads to low vaccine efficacy whereas rigid facilities led to the inability to meet new vaccine requirements rapidly. Moreover, inflexible scalability made the region prone to delayed adjustment to sudden increases in demand during pandemic shocks.

On the manufacturing of Active Pharmaceutical Ingredients (APIs), ASEAN only has a few regional manufacturers, which results in a high dependency on imported APIs to fulfill local demand. Local APIs in the region can only provide less than 10% of the total demand in the ASEAN region. China plays a critical role in supplying APIs to ASEAN, especially in medicines for critical diseases. Local manufacturers in ASEAN face obstacles in expanding their portfolios due to expensive R&D and access to technology. For instance, Malaysia's local API manufacturing capabilities are primarily limited to antibiotics and steroid therapeutic areas. Similarly, the Philippines has minimal local API productions and Vietnam is still nascent due to the long investment horizon, high capital requirement, and a lack of R&D capabilities.





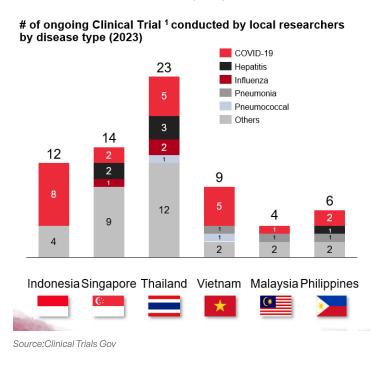


ASEAN collaboration has made major first steps but more needs to be done

The ASEAN region has explored multiple ways to collaborate to facilitate VTD development in the past. One notable collaboration achievement was the harmonization of technical standards as part of the ASEAN Agreement on Regulatory Framework for Health Supplements (the Agreement), led by ASEAN Consultative Committee on Standards and Quality (ACCSQ) and ASEAN Traditional Medicines and Health Supplements Product Working Group (TMHS PWG). The details and standards of the Agreement were completed in 2015 with details being finalized among the 10 member states in 2020. The Agreement covers technical document guidelines for the submission of manufacturing process validation data for drug registration.

Apart from regulatory harmonization, further efforts in planning are required to fully harness the benefit of collaborations. For instance, VTD priorities are mostly managed individually by each country without centralized regional planning, resulting in potentially duplicated efforts and resources. There are multiple R&D pursuits conducted for the same type of disease by multiple ASEAN researchers at the same time. As evidenced in Figure 5.3, clinical trial studies are overlapping across countries in the ASEAN on many diseases (e.g., Covid-19, Hepatitis, Pneumonia). Regional collaboration on the same topic could accelerate the development and joint coordination in clinical trials would benefit the region with pooled resources and expertise.

Figure 1.3: Number of Clinical Trial Studies in ASEAN (2021) 1



Only includes clinical trial conducted by local organizations/companies







3. ASEAN Health Resiliency goals

To identify the specific areas where regional collaboration creates the most impact for ASEAN, we first need to establish a set of common visions and goals that ASEAN aims to achieve toward its health resiliency.

ASEAN's Health Resiliency encompasses three objectives for the VTD development

- **Security:** Sustained, uninterrupted and timely supply of affordable VTDs of assured quality, in collaboration with global manufacturers and health organizations
- **Self-reliance:** Sufficient VTD supplies for use in routine immunization and health emergency, based on the region's capacities and resources and without needing much help from outside
- Innovation: Enhanced capabilities and inducing ecosystem to foster innovations in the VTD development, harnessing advanced technologies (e.g. mRNA)

Achieving the three objectives are essential in building a robust and sustainable health system that withstands health crisis and ensure the well-functioning of the regional VTD value chain.

III. Stakeholder Ecosystem

To enhance the health collaboration across ASEAN countries, the active involvement of below key stakeholders will be paramount.

Table 1.3:

Stakeholder	Role description
ASEAN BAC Healthcare Working Group (HWG)	Orchestrating and spearheading collaborations across ASEAN countries on health priorities and initiatives (with the support of key points of contact from AMS)
ASEAN Secretariat	Coordination and provides administrative and logistical support among different working groups
Ministry of Health of ASEAN Member States	Driving and leading healthcare collaboration initiatives through policies formulation, regulations, and strategy implementation
Other public sector ministries (inc. Trade, Finance)	Identifying and developing supporting policies and actions to achieve health priority and initiatives e.g. trade agreement, funding support etc.







Stakeholder	Role description
Institutional partners from the private pharmaceutical sectors	Contributing knowledge, funding, industrial expertise, and implementation resources for collaboration initiatives
Affiliated global alliance and business council e.g. ASEAN-India, ASEAN-Japan, US-ASEAN, China- ASEAN, EU-ASEAN	Jointly identify collaboration opportunities and develop strategic initiatives to promote health priorities
International health organizations e.g. WHO, GAVI	Providing advice, framework, and funding/technology supports on key healthcare / VTD development issues

IV. Policy Priority Agenda

Among the fourteen collaboration priority areas (refer to Appendix XI.1), we have identified seven high-impact areas

Policy Action 1.1: Jointly define R&D priorities and pipeline for critical VTDs

A. Policy Portrait:

Establish a centralized regional R&D body to 1) identify regional priorities, and 2) coordinate R&D efforts with a pool of resources from the region such as expertise, funding, and partnership e.g. joint project on R&D of VTD priorities

For example, in 2015, the Southeast Asian Ministers of Education Organization (SEAMEO) Tropical Medicine Network jointly identified dengue, HPV, HIV, malaria, Japanese encephalitis, leptospirosis, and influenza as the regional R&D priorities

B. Rationale and ASEAN Implications:

ASEAN member states with research capabilities currently define their VTD priorities with respective Ministry of Health, leading to duplicated efforts and resources. For common disease burdens such as TB, HPV, and Dengue, a joint effort can identify regional demand, and integrate resources and expertise to accelerate product development with an improved success rate. It will also serve as an important first step to lead further collaborations on clinical trials, market access, and launch.







C. Blueprint for Action:

ASEAN Health Working Group (HWG) together with R&D Center and knowledge partners can help drive the identification of priority disease burdens (communicable and non-communicable diseases) together with AMS's Health Ministries to ensure regional coverage. For example, the working group / R&D center can conduct a yearly review of disease incident cases and trends, together with an estimate of the economic impact with the inputs of national /global health status data. The priority can be jointly consulted in the ASEAN Health Ministers Meetings.

Policy Action 1.2: Expedite new technology access via global partnerships

A. Policy Portrait:

For identified critical VTD priorities, a joint task force is to be established to develop a global partnership as one ASEAN region with other countries, global organizations such as WHO, and leading pharmaceutical MNCs.

For example, WHO appointed pharmaceutical SOE Biofarma in Indonesia as the beneficiary of mRNA vaccine technology transfer, to develop into Southeast Asia's regional vaccine production hub and fight against Covid-19 more effectively.

B. Rationale and ASEAN Implications:

ASEAN technology and research landscape is imbalanced with Singapore and Thailand being more mature while the rest of the region is still in their initial development phase. Through global partnership on technology transfer in exchange for access to ASEAN as one market, it provides more incentives and leverage for advanced players to share technology and expedite the progress in new technology in the region.

C. Blueprint for Action:

ASEAN secretariat, HWG, and its affiliated foundations can collectively move this issue during roadshows and global/regional policy forums with strategic alliances incl. US, Japan, China, and the EU on collaborations and partnerships on the new technology access. A one-market proposition should be established to encourage the partnership together with leading global MNCs.







Policy Action 1.3: Collaborate efforts in funding support at both regional and global levels

A. Policy Portrait:

- Collectively advocate as one region for financing options with global partners and forums such as IMF / World Bank / WHO
- Jointly develop innovative financing options such as vaccine bonds, tax reduction incentives, and regional advanced purchase agreements

For example, as part of the Japan-ASEAN Integration Fund (JAIF) project, ASEAN as a region benefits from the funding support from the Government of Japan of around USD 50 million in 2020. The initiative aims to support the operation of the ASEAN Center for Public Health Emergencies and Emerging Diseases (ACPHEED).

B. Rationale and ASEAN Implications:

The region has limited R&D spending as illustrated in section 3.2.1. Collectively moving this issue to global/regional policy platforms (on behalf of AMSs) or sharing the nation's position on this issue at global/regional forums will facilitate funding support due to its wider reach and higher impact.

C. Blueprint for Action:

At the regional level, there can be a potential collaboration between the ASEAN HWG and the Finance ministers to help identify innovative financing models and support developing countries /support R&D on VTDs neglected diseases. The justification of funding can be linked to regional VTD priorities after they are identified as mentioned in Policy 1. Examples of innovative financing models include public-private partnerships, vaccine bonds, vaccine revolving funds, and advanced purchase agreements with MNCs. In terms of funding support at the global level, ASEAN can either collectively move the issue to global health policy forums (e.g. WHO, GAVI) or share a national/regional position on this issue respectively at the global forum.

Policy Action 1.4: Facilitate regional regulatory access and harmonization in clinical trials

A. Policy Portrait:

- Advocate harmonization of regulatory standards among the ASEAN states to adopt the common framework as listed by WHO, including Good Clinical Practices (GCP)
- Facilitate global researchers and MNCs with a single point of contact or advisory for easier access to regional regulators







B. Rationale and ASEAN Implications:

There is a lack of harmonization of clinical trial standards at both national and regional levels, which increases the operational challenges for researchers and pharmaceutical companies to conduct clinical trials in the region and further hinders the development of innovative ecosystems. Facilitating regional regulatory access and harmonization in clinical trials will enable regional clinical trials to be easier with the accelerated process, positioning ASEAN as a competitive market for global pharmaceutical players and enabling regional researchers' access to new technology.

C. Blueprint for Action:

ASEAN Health Institute (the Institute) is to be set up as part of the ASEAN BAC 2023 chairmanship legacy project, whose mission is to strengthen ASEAN's VTD capabilities through regional collaborations. One of the strategic pillars of the Institute is to handle health project deliveries by facilitating regulatory access for private sector manufacturers to connect easily to various regulators in ASEAN.

Policy Action 1.5: Simplify and fast-track regulatory process for priority VTD candidates

A. Policy Portrait:

For priority VTDs or VTDs that have already obtained approval in other ASEAN country(s), a fast-track process or protocol should be followed to expedite the approval process for the clinical trial or registration process.

For example, the One Shot campaign of ASEAN BAC HWG 2023 is led by Indonesia to pilot regulatory approval and clinical trial acceleration for Takeda's Phase 4 TB vaccine as one of the legacy projects. The approval is based on Phase 3 clinical trials conducted in dengue-endemic areas in Latin America and Asia (such as Thailand, the Philippines, and Sri Lanka). The Pilot plans to have 95,000 test subjects by September 2023 including Indonesia.

B. Rationale and ASEAN Implications:

The current regulatory process in ASEAN member states can be inefficient with complicated processes (e.g. multiple site approval required) leading to unpredictable timelines. Simplifying and fast-track regulatory process for priority VTD candidates provides higher incentives for regional and global pharmaceutical players to prioritize development and commercialization efforts to ensure VTD market supply in the ASEAN countries.

C. Blueprint for Action:

Define a fast-track process for those VTDs candidates that are R&D priorities jointly defined by AMS, e.g. pre-approval / qualification process for priority candidates, standard regulatory submissions across the AMS, and access to dedicated support within the regulators.







Policy Action 1.6: Coordinate clinical research network (research institutes and CROs) to pool capacity and resources in multi-country CTs

A. Policy Portrait:

- Develop a community of researchers, institutes, and CROs with regular forums to promote information and knowledge sharing
- Coordinate CT efforts by pooling resources and experts and leveraging the diverse genetic pool
 of the region

For example, European Clinical Research Infrastructure Network (ECRIN) is a not-for-profit organization that supports the conduct of multinational clinical trials in Europe with advice and services. More than 120 clinical trial units are in the network of ECRIN. The network provides access to tools, capability-building programs, and trial support services such as patient engagement.

B. Rationale and ASEAN Implications:

The region's overall capacity for clinical trials is limited even though the region has highly capable research centers and facilities in Singapore, Thailand, and Malaysia. A coordinated clinical research network will enable more equitable access to resources and expertise among ASEAN countries to improve the overall competitiveness of the ecosystem.

C. Blueprint for Action:

One of the strategic pillars of the ASEAN Health Institute is ecosystem engagement, which is to maintain a network of researchers and institutions to promote knowledge sharing and to develop tools and resources.

Policy Action 1.7: Information sharing & knowledge transfer

A. Policy Portrait:

- Establish an ecosystem of researchers, institutions, pharmaceutical companies, CROs, and regulators
- Promote information exchange such as a patient pool of shared disease burden
- Promote knowledge exchange on best practices to strengthen R&D capabilities
- Foster G2G and private-public dialogues to identify collaboration areas to improve as a region

For example, with the support of WHO, ASEAN Network for Drugs, Diagnostics, Vaccines and Traditional Medicines Innovation (ASEAN-NDI) 2014 mapped the overall research capacity of ASEAN countries in vaccines, drugs, traditional medicines, and diagnostic tools. It aimed at strengthening R&D collaboration through information sharing, knowledge/technology transfer, and joint initiatives.







B. Rationale and ASEAN Implications:

The region has several highly capable clinical trial experts and high-capacity laboratories with strong capabilities (e.g. in Singapore and Thailand). However, the capabilities across the ASEAN states are imbalanced, further widening the regional gap in health innovation capabilities and equitable access. The process of sharing information and transferring knowledge among ASEAN countries will serve to enhance their capabilities and promote equitable access for all.

C. Blueprint for action:

The clinical research network (research institutes and CROs) could serve as a collaborative community that promotes information sharing on knowledge, technology, and best practices e.g. regulation and implementations. Technical and digital platforms will further facilitate information sharing with robust and secure infrastructure. For example, secure data-sharing platforms allow the exchange of sensitive information, from which countries could encrypt and protect patient information while allowing third parties to perform data analytics based on clinical trial results that will benefit regional researchers. Adopting a common data standard will be critical to ensure effective data sharing and analysis in this situation. Common data standards include SNOMED CT (Systematized Nomenclature of Medicine - Clinical Terms) and MedDRA (Medical Dictionary for Regulatory Activities).

V. Synergies with Regional and Global Regulations

As the ASEAN region as well as international bodies explored multiple ways to collaborate on VTD development, there are four main regulation areas, which the proposed policies align with.

1. Harmonization of regulation and technical standards

ASEAN has made great efforts towards harmonization of technical standards. ASEAN Agreement on Regulatory Framework for Health Supplements (the Agreement), led by ASEAN Consultative Committee on Standards and Quality (ACCSQ) and ASEAN Traditional Medicines and Health Supplements Product Working Group (TMHS PWG) was completed in 2015 with details and standards of the Agreement being finalized among the 10 member states in 2020. The Agreement covers technical document guidelines for the submission of manufacturing process validation data for drug registration. Similarly, in 2016, the ASEAN secretariat published ASEAN Common Technical Dossier (ACTD) and ASEAN Common Technical Requirements (ACTR). It provided a guideline for the agreed-upon common format for the preparation of registration of pharmaceutical products when submitted to ASEAN regulatory authorities. This is also in line with various international organizations including World Health Organization (WHO) which launched Global Regulatory Harmonization Initiatives to set the basis for successful collaboration in medicines regulation and development. Pharmaceutical Inspection Co-operation Scheme (PICS) is another example initiative that leads the international







development, implementation, and maintenance of harmonized GMP standards and inspection quality systems in the field of medicinal products.

2. Joint assessment initiatives

The National Medicines Regulatory Authorities (NRA) of ASEAN Member States have developed the ASEAN Joint Assessment Procedure by the end of 2022, in which the same marketing authorization application is simultaneously submitted to all participating NRAs. Assessment work is then carried out together by all participating NRAs and a joint assessment report is prepared. At the end of the process, the final decision on the application is taken by each NRA through their normal decision-making process based on the joint report. This is similar to the EU Joint Clinical Assessment (JCA), where a single harmonized assessment of the clinical data is conducted by multiple countries' regulatory bodies.

3. Accelerated approval program

Within the ASEAN region, there are examples of fast-tracked approval program that simplifies the regulatory process for medical products meeting certain criteria. For example, Thailand fast-tracks Class D medical device registration that has Singapore approval status. This is a part of the Regulatory Reliance Program to expedite registration for essential devices. Food and Drug Administration (FDA) in the United States also has initiatives in place to expedite the development and approval of certain pharmaceutical products. These initiatives include Fast Track, Breakthrough Therapy, Accelerated Approval, and Priority Review to accelerate innovation.

4. Regional collaboration mechanism for joint VTD development

There are several examples of collaboration for priority VTD products at both the regional and global levels, especially during the COVID-19 pandemic crisis. Philippines and Singapore co-lead the first multi-country regional study to investigate immunity against COVID-19 in the ASEAN population by tapping into the regional research network. Various ASEAN member states confirmed their participation which includes the participation of research institutes across the region e.g. Indonesia's Eijkman Institute of Molecular Biology, Malaysia's University of Malaya, Faculty of Medicine, Thailand's King Chulalongkorn Memorial Hospital Bangkok and Vietnam's Oxford University Clinical Research Unit. Similarly, the Pan American Health Organization (PAHO) as the regional office for the Americas of the World Health Organization (WHO) collaborates with countries in the Americas to improve health outcomes and strengthen health systems, including through the development and implementation of vaccination programs. PAHO has set up a Revolving Fund that provides access to safe and quality vaccines at affordable prices for all member states by consolidating regional demand and leveraging the economies of scale to negotiate with suppliers.

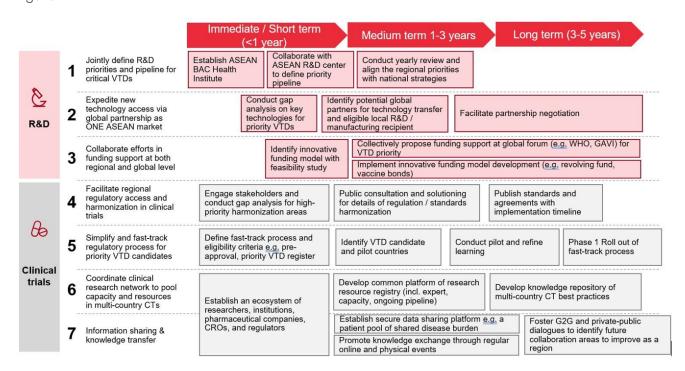






VI. Roadmap and Timeline

Figure 1.4:



VII. Alliance Building

To facilitate the policy implementation, it is vital to build the alliance with a network of regional and global institutional backers, including R&D Research Centers, Contract Research Organizations (CROs), pharmaceutical companies, investors, and industry advisors/knowledge partners.

Table 1.4:

Alliance organizations	Role and significance to the health resilience policy implementation	Example alliance during HWG implementation
R&D research centers	 Align research priorities with public health needs and policy objectives Share research findings, data, and insights to inform evidence-based policy decisions Facilitate technology transfer and knowledge exchange between academia and the public sector 	Oxford University Clinical Research Unit, Oxford Nanopore Technologies, Clinical Research Malaysia, Congenica







Alliance organizations	Role and significance to the health resilience policy implementation	Example alliance during HWG implementation
CROs	 Ensure compliance and share feedback on regulatory requirements and ethical guidelines in the conduct of clinical trials Ensure compliance with regulatory requirements and ethical guidelines in the conduct of clinical trials 	Kalbe
Pharmaceutical companies	 Collaborate with HWG/ health ministries to develop local manufacturing capabilities, reduce dependency on imports, and ensure the availability of essential medicines. Invest in infrastructure, facilities, and technology to support the production of high-quality pharmaceuticals Collaborate with health ministries to ensure affordable pricing, accessibility, and availability of essential medicines. 	Takeda, Kalbe, BioNTech, Aspen Pharmacare, CP Pharma, Amwell,
Investors	 Provide capital and financial resources to support the establishment of healthcare infrastructure, research facilities, and manufacturing capabilities Offering business expertise, market insights, and networking opportunities to foster growth and sustainability 	Xeraya Capital
Industry advisors/ knowledge partners	 Develop evidence-based guidelines, standards, policy analysis and best practices Facilitate knowledge exchange, capacity building, and training programs for policymakers, healthcare professionals, and stakeholders. 	Kearney

Their collaboration with the health ministry helps ensure the successful implementation of policies, fostering innovation, research, clinical trials, manufacturing, and knowledge exchange. This collaboration ultimately contributes to improving patient outcomes, accessibility to healthcare, and the overall well-being of populations.







VIII. Conclusion

The COVID-19 pandemic has exposed the weaknesses in the healthcare systems of ASEAN countries, particularly in the vaccines, therapeutics, and diagnostics capabilities. While ASEAN has experienced significant disease burdens from both communicable and non-communicable diseases, it lags other regions in its pharmaceutical capabilities. To improve the region's VTD and health resilience on security, self-reliance, and innovation, there is a need for close collaboration among ASEAN countries.

We identified seven areas of collaboration opportunities with detailed policy portraits, significance, and the blueprint of actions for ASEAN regulators and private sectors to focus their collective efforts on. Promoting R&D of innovative technologies and building regional capacity for clinical trials will establish the foundation for strengthening ASEAN's capabilities and competitiveness along the VTD value chain. The policy aligns with the past harmonization efforts ASEAN countries have carried out to promote health collaboration. We further developed the overall roadmap, and timeline and highlighted the importance of alliance-building in this journey.

The success of ASEAN's past collaborations on healthcare, such as the ASEAN Coordinating Council Working Group on Public Health Emergencies, highlights the importance of regional collaboration in addressing health resiliency. This policy paper would serve as one of the many key first steps towards realizing the vision of a more resilient and sustainable healthcare ecosystem in ASEAN through collaboration.

However, the work does not stop here. The success of these recommendations will depend on continued joint initiatives and sustained efforts by all stakeholders, including the legacy projects proposed by the ASEAN BAC chairmanship. For example, the HWG is working on establishing the ASEAN Health Foundation to orchestrate and drive many of the policies proposed to solidify and materialize.

We believe that with strong commitment and collective efforts, we can build an ASEAN VTD ecosystem that is better equipped to meet the evolving healthcare needs of the region, and ultimately, improve the health and well-being of our people.







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Appendix

Table 1.5: Collaboration Opportunities Prioritization across Value Chain

#	Value chain step	Collaboration opportunities	Impact	Feasibility
1	R&D	Regional alignment on R&D priorities and pipeline for critical VTDs	High	High
2		Expedited regional access to new technologies via a global partnership	High	High
3		Collective VTD funding support advocacy at the regional and global level	High	Medium
4	Clinical trials	Facilitate regional regulatory access and harmonization in clinical trials	High	Medium
5		Simplify and fast-track regulatory process for priority VTD candidates	High	High
6		Coordinated clinical research network (institutes and CROs) with pooled capacity and resources in multi-country clinical studies	High	High
7		Information and knowledge sharing	High	High
8	Manufacturing	Collaborative manufacturing platform to support regional VTD capacity	High	Low
9		Private-public partnership in capacity expansion to de-risk investment	High	Medium
10	Distribution	Mobility of healthcare products across the region with regulatory support and tariff reductions	Medium	Medium
11		Distribution logistics and facilities support (e.g. cold chain equipment subsidies)	Low	Medium
12	Administration	Pooled procurement with centralized negotiation	High	Low
13		Coordinated stockpiling for crisis response and expiry prevention	Medium	High
14		Ensure migration/border health through collaborated vaccine security among NIPs	Medium	Low







FOOD SECURITY

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FOOD SECURITY

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WORKING GROUP: FOOD SECURITY

I. Executive Overview

- Food Insecurity is a critical issue in Southeast Asia with 21% of the Southeast Asian population still live at risk of moderate/severe food insecurity despite growing investment to the region.
- Food Insecurity in Southeast Asia is driven by low agricultural productivity due to insufficient infrastructure & technology, limited access to knowledge, financing, and lack of knowledge on agriculture best practices.
- The Food Security Working Group aims to address those challenges by formulating policy recommendations, defining key outcome metrics, and designing legacy projects.
- Twelve policy recommendations cut across four main pillars: Intra-ASEAN and External Trades, Infrastructure and Agriculture Technology, Inclusive Market Access, and Farmers Capability Building.
- Six key outcome metrics prioritized to measure progress in food security initiatives: Food Production per Capita, Value Addition per Capita, Poverty Headcount, Agri Water-use Efficiency, Crop Production Emissions/Tonne, and Prevalence of Undernourishment.
- Legacy projects consist of the Unified Narrative Approach and the Inclusive Closed Loop Model.
 Both projects will scale up impact of the ongoing food security initiatives across the region
- Effective implementation will require strong collaboration across stakeholders such as government, private companies, non-profit and international organizations in the region.

II. Context Setting and Policy Agenda

Context Setting

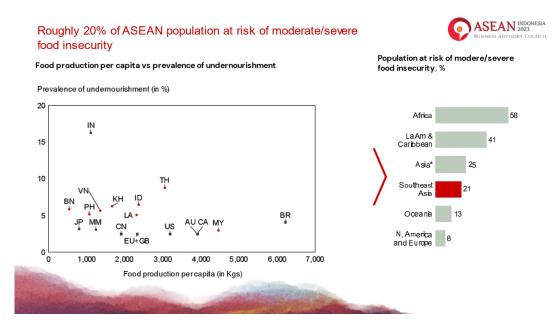
Food insecurity is a critical issue globally, as well as for Southeast Asia. While ASEAN has significantly improved its food security and has attracted significant amounts of investment (\$48 billion into agriculture as of 2021), approximately 20% of the Southeast Asian population still live at risk of moderate/severe food insecurity. Productivity of staple foods production like rice, corn and soybean are lagging comparable economies. In addition, costs to maintain a healthy diet in ASEAN are higher than in many other regions, including the USA and Europe.





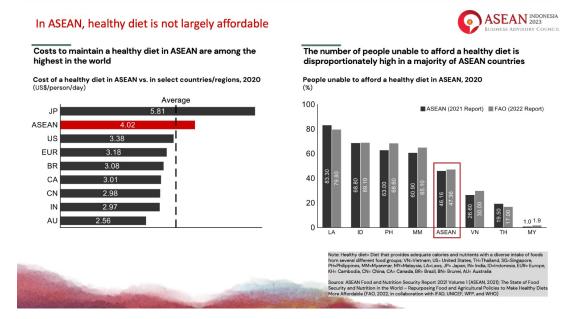


Figure 1.1: Food production per capita vs prevalence of undernourishment across countries globally



Source: FAOSTAT

Figure 1.2: Cost of healthy diet in ASEAN and comparable economies



Source: ASEAN Food and Nutrition Security Report 2021 Vol. 1 (ASEAN, 2021); The State of Food Security and Nutrition in the World – Repurposing Food and Agricultural Policies to Make Healthy Diets More Affordable (FAO, 2022)







Four key challenges to achieve Food Security in ASEAN today:

- **Insufficient infrastructure and technology** hinder farmers' ability to transport goods, store crops, and increase productivity.
- **Limited access to financing and larger markets for small farmers,** limiting their ability to invest in their farms and earn a fair price for their products.
- Lack of knowledge and access to information on modern farming practices leads to lower productivity.
- Limited access to high-quality seeds and fertilizers leads to suboptimal use of these resources.

By addressing these challenges, we strive to contribute to the attainment of the Strategic Thrusts for 2021-2025 of the ASEAN Integrated Food Security Framework (AIFS) focusing on the five thrusts:

Table 1.1:

No.	AIFS Strategic Priorities addressed by Policy Recommendations			
1	Strengthen Food Security, including Emergency/Shortage Relieve Arrangement			
2	Promote conducive food market and trade			
4	Promote sustainable food production			
5	Encourage greater investments in food and Agri-based industries			
9	Develop and strengthen nutrition-enhancing food, agriculture and forestry policies/programs and build capacity for their implementation, monitoring and evaluation			

Policy Agenda

As part of our efforts to achieve our strategic priorities, Food security working group's output will comprise of the following:

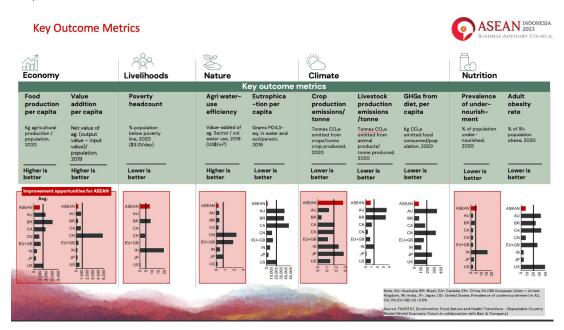
- Consensus for key measurements and alignment with other multilateral platforms, with a comprehensive dashboard to measure the success of our proposed priority policies across five key outcome metrics (Figure 4.3)
- Recommendations for key policies and incentives, with a Unified Narrative approach that enables each ASEAN member state to create tailored policies and strategies that support food security priorities and objectives (Figure 4.4)
- Articulation on the Inclusive Closed-Loop Model, including a step-by-step module for scaling up best practices identified from across ASEAN and a Food Security Wiki for knowledge dissemination purposes





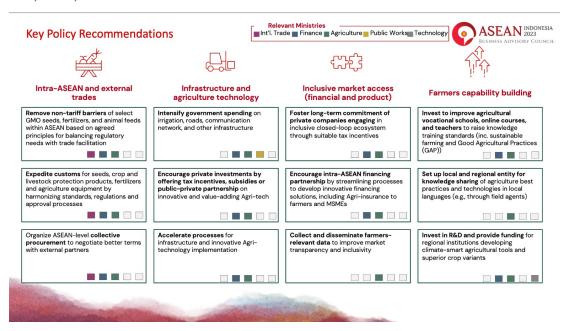


Figure 1.3: Key Outcome Metrics



Source: FAOSTAT; Euromonitor; World Economy Forum

Figure 1.4: Key Policy Recommendations



The policy recommendation will complement legacy projects: The Unified Narrative and The Inclusive Closed Loop Model.







The Unified Narrative enables each ASEAN member state to create tailored policies and strategies to reach food security objectives. Combined with our policy recommendations, a member state will be able to path the next steps for growing the agricultural sector and achieve food security.

The Inclusive Closed-Loop Model is a multi-stakeholder partnership that provides farmers with access to inputs, finance, market, and knowledge. This model has been implemented successfully across ASEAN, resulting in key learnings to be circulated via the Food Security Wiki.

III. Stakeholder Ecosystem

Table 1.2:

No.	Focal Points	Alliance Building (non-exhaustive)		
1.	ASEAN Business Advisory Council (ASEAN-BAC)	AFTA Council		
2.	Grow Asia	Coordination Committee for the Implementation of the ATIGA		
3.	PDS Abattoir	ASEAN Taskforce on Genetically Modified Food Testing Network (GMFNet)		
4.	ASEAN Insurance Council	Indonesian Research Organization for Agriculture and Food		
5.	Indonesian Chamber of Commerce and Industry (KADIN Indonesia)	ASEAN Sectoral Working Group: - Agriculture Cooperative - Agriculture Research & Development - Livestock - Crops		
6.	PISAgro	International Rice Research Institute		
7.	Board of Trade of Thailand	ASEAN Single Window Steering Committee		
8.	Indonesian Ministry of Agriculture	Asian Development Bank		
9.	Singapore Business Federation			
10.	Canada-ASEAN Business Council			
11.	Go Negosyo			
12.	Myanmar Chamber of Commerce and Industry			
13.	US-ASEAN Business Council			







IV. Policy Priority Agenda

1. Intra-ASEAN and External Trades

A. Policy Portrait

Three policy recommendations:

- 1. Remove non-tariff barriers of select GMO seeds, fertilizers, and animal feeds within ASEAN based on agreed principles for balancing regulatory needs with trade facilitation
- 2. Expedite customs for seeds, feeds, crop and animal protection products, fertilizers and agriculture equipment by harmonizing standards, regulations, and approval processes
- 3. Organize ASEAN-level collective procurement to negotiate better terms with external partners

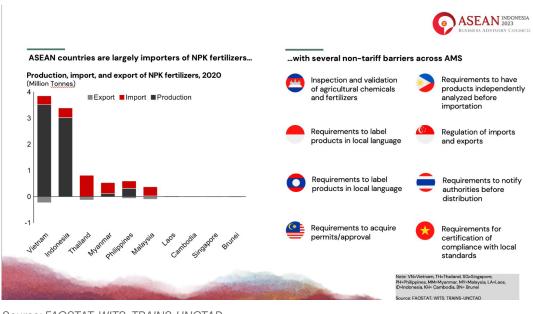
B. Rationale and ASEAN Implications

Rationale

Existing AMS tariffs and non-tariff barriers (NTBs) for agricultural inputs such as testing, varied legal requirements, and complex customs resulted in longer import lead time and higher cost. As a result, smallholder farmers are faced with reduced input availability and affordability.

For international trades, ASEAN can be leveraged as a platform to negotiate and trade with other countries. This initiative is in conjunction with the blueprints of the ASEAN Economic Community (AEC).

Figure 1.5: Challenges on ASEAN internal and external agriculture trade



Source: FAOSTAT, WITS, TRAINS-UNCTAD







ASEAN Implication

Removing NTBs and expediting customs for agricultural inputs allow for seamless and efficient trade, enhancing ASEAN's attractiveness for FDIs. In addition, regional collective procurements would improve trade terms for all AMS. All these efforts will impact the key outcome metrics: Food Production per Capita, Value Addition per Capita, Poverty Headcount.

The Intra-ASEAN and External Trades recommendation pillar contributes to the following strategic thrusts of the ASEAN Integrated Food Security Framework (AIFS)

Table 1.3:

No.	AIFS Strategic Priority addressed by Pillar 1
1	Strengthen Food Security, including Emergency/Shortage Relieve Arrangement
2	Promote conducive food market and trade
5	Encourage greater investments in food and Agri-based industries

C. Blueprint for Action

Policy Action I.I: Remove non-tariff barriers of critical inputs based on agreed principles for balancing regulatory needs with trade facilitation

While the ASEAN Trade in Goods Agreement has streamlined most of import tariffs in ASEAN, many existing non-tariff barriers still impede seamless intra-ASEAN and international trades of critical agricultural inputs such as GMO seeds, fertilizers, and animal feeds. As of 2022, Indonesia, The Philippines, and Vietnam are the three countries that approved domestic cultivation of GMO seeds for certain food and feed crops like corn. As GMO seeds offer superior resilience and nutritional value, loosening the restriction is essential to address climate and food security challenges.

ASEAN can reduce regulatory requirements and similar barriers such as testing requirements for agricultural pesticides, fertilizers, and other inputs. AMS should work together with The ASEAN Genetically Modified Food Testing Network (GMFNet) to consider streamlining regulations or accepting common certifications approved by all member states. For instance, Common testing procedures across ASEAN would be attractive for potential investors as it reduces the administrative processes and lead time required to deliver products to ASEAN.

An example of best practices for this deregulation can be found in the Philippines, the regional biotechnology leader and pioneer in approving cultivation of golden rice and other GMO crops. The Philippines's supportive regulatory framework and continuous reforms, such as through the establishment of a Joint Assessment Group, streamline processes required from field trial to







commercial propagation. These reforms have successfully shortened application time from 85 to 40 working days, and reduced compliance costs and barriers to commercializing biotech crops locally.

Efficient multi-ministerial collaboration is necessary to remove NTBs. ASEAN agriculture ministries should monitor NTBs of export markets, gather private sector inputs, and closely liaise with the trade ministry to prioritize barriers to eliminate. Trade ministries should consider implementing the policies to reduce NTBs and consult Finance ministries on the policies' macroeconomic implications.

Policy Action 1.2: Expedite customs for seeds, crop protection products, fertilizers and agriculture equipment by harmonizing standards, regulations, and approval processes

AMS face delays in the imports and distribution process of essential agricultural inputs. AMS can address this issue by harmonizing standards, regulations, and approval processes for prioritized seeds, crop protection products, fertilizers, and agriculture equipment. Establishing online portals can also increase visibility on import approval process and reduce delays.

Improving the customs experience can be done by leveraging existing initiatives, such as the ASEAN Single Window (ASW) and the ASEAN-wide Self Certification (AWSC). ASW is an electronic trade facilitation tool to exchange standardized information and regulatory procedures, facilitating customs formalities. AWSC is a platform for certified exporters to self-declare the origin of their goods and be eligible for the ASEAN Trade in Goods Agreement (ATIGA) tariff preferences without applying for a government certificate.

An example of the region's best practices can be found in Singapore's national single window TradeNet. Launched in 1989, TradeNet is the world's first nationwide electronic data interchange system clearance and trade documentation. TradeNet streamlines the customs experience in Singapore by introducing a single form and seamless interface that connects multiple agencies in real time. Through digitalization, applications are processed faster and with less manpower. It also allows document submission outside of office hours and payments with direct debit. This innovation enabled TradeNet to process on average 10 million permits annually, approve 90 percent of trade declaration in less than 10 minutes and reduce permit application fees by ~55%.

Within each AMS, the Trade ministry and Agriculture ministry should work closely in harmonizing trade regulations and approval processes towards the food security agenda.

Policy Action 1.3: Organize ASEAN-level collective procurement to negotiate better terms with external partners

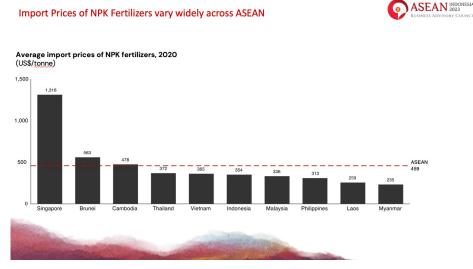
Many AMS are unable to fulfill essential agricultural products demand from domestic production, rendering them dependent on imports. However, uneven distribution of agricultural inputs and outputs creates a large variation of price in the region (Figure 4.6).







Figure 1.6: Average import prices of NPK fertilizers in ASEAN



Source: World Bank - World Integrated Trade Solution

To address geographic mismatch of supply and demand, AMS can leverage the ASEAN platform to organize a region-wide collective procurement of agricultural inputs and outputs. This platform can be used to facilitate agricultural trade on a case-by-case basis to minimize disruption for agricultural prioritized products. Consolidating the purchasing power of AMS improves affordability driven by bulk purchases, economies of scale, and reduced transaction costs.

An example for such procurement scheme is the collective purchase of COVID-19 vaccines through the COVAX initiative. The initiative enabled access to vaccines for 92 middle- and lower-income countries. It pools demand and funds from participating countries to support research, development, and manufacturing of a diverse portfolio of vaccines, negotiate pricings, and distributes these vaccines to participating countries. A similar scheme can be considered as a potential solution to shortages of critical agricultural input and outputs across ASEAN.

Another example of intra-ASEAN collaboration is the collaboration between Indonesia and Malaysia concerning the implementation of the EU's new deforestation regulation – a measure that could have resulted in palm oil restrictions and a requirement to phase out their usage by 2030. The two countries escalated this issue to Council of Palm Oil Producing Countries (CPOPC) and established a joint task force with European Union to address this issue at strategic and technical level.

Leveraging the ASEAN platform for a collective procurement system requires a multi-ministerial collaboration across AMS. For example, The Ministry of Agriculture starts the initiative based on current domestic needs, the Ministry of Finance assesses the feasibility of the initiative and gives







approval of purchase, and the Ministry of Trade facilitates procurement activities.

2. Infrastructure and Agriculture Technology

A. Policy Portrait

Three key policies:

- 1. Intensify government spending on irrigation, roads, communication network, and other infrastructure
- 2. Encourage private investments by offering tax incentives, subsidies, or public-private partnership on innovative Agri-Technology
- 3. Accelerate processes for infrastructure and innovative Agri-Technology implementation

B. Rationale and ASEAN Implications

Rationale:

The quality of infrastructure in most AMS is behind other comparable economies as demonstrated by the LPI infrastructure score (1-5). Moreover, the region's LPI infrastructure score further indicates a large variance between ASEAN countries.

Table 1.4:

Member State	Infrastructure Score	World Rank
Singapore	4.6	1
Thailand	3.7	25
Malaysia	3.6	30
Philippines	3.2	47
Vietnam	3.2	47
Indonesia	2.9	59
Brunei*	2.5	89
Cambodia	2.1	125
Laos	2.3	108
Myanmar*	2.0	143

Source: 2023 Logistics Performance Index by the World Bank infrastructure score with world rank.





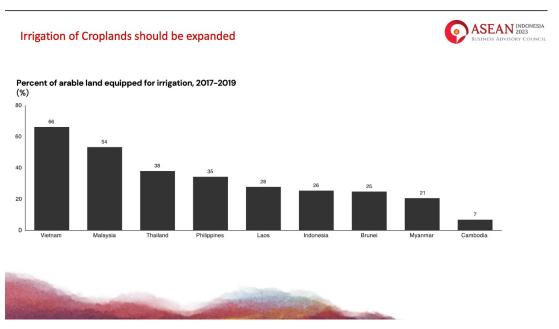


(*) Brunei and Myanmar scores are from 2018 Logistics Performance Index report.

Note: LPI infrastructure value calculated based on the quality of overall trade-and-transport related infrastructure. Includes but is not limited to agricultural infrastructure.

One example of such inadequate infrastructure in the region are the insufficient irrigation systems in each member state. Currently, AMS have a low percentage of arable land equipped with irrigation systems (Figure 4.7). There is also a significant discrepancy amongst these states. The absence of agriculture infrastructure, such as irrigation, further creates barriers for farmers and MSMEs to improve efficiency and productivity. Government and private companies should play role in investing, enabling infrastructure in their commercial area and providing expertise on technology and innovation.

Figure 1.7: Percent of Arable Land Equipped for Irrigation



Note: Percent of arable land is defined as a ratio between arable land equipped for irrigation and total arable land

Source: FAOSTAT

Note: Percent of arable land is defined as a ratio between arable land equipped for irrigation and total arable land

Source: FAOSTAT

In addition to insufficient investments in infrastructure, AMS also face barriers to substantial

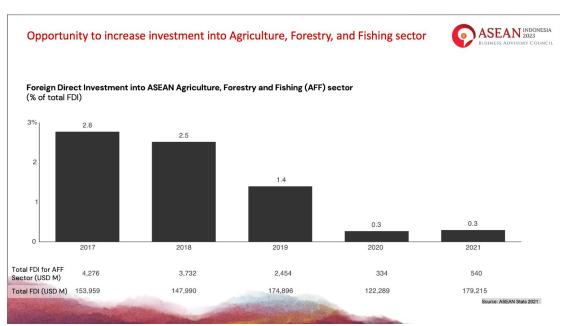






investments in innovative and universal Agri-tech. Figure 4.8 displays how Foreign Direct Investment into agriculture, forestry and fishing is incredibly low across the ASEAN region. The general lack of investment in agriculture displays how there is even less investment in Agri-tech.

Figure 1.8: Percent of Foreign Direct Investment contributing to ASEAN Agriculture, Forestry, and Fishing sector



Source: ASEAN Statistics 2021

ASEAN Implication:

Promoting ASEAN as an attractive investment destination requires the provision of adequate infrastructure that enables better connectivity and accessibility. Interconnectedness would reduce logistic costs and improve the overall livelihoods of stakeholders across the region. By incentivizing private companies through government policies like tax incentives and subsidies, intra-ASEAN and foreign direct investments in innovative Agri-Tech solutions will grow. This recommendation pillar contributes to the achievement of the following strategic thrusts of the ASEAN Integrated Food Security Framework (AIFS)

Table 1.5:

N	о.	AIFS Strategic Priority addressed by Pillar 2
1	l	Strengthen Food Security, including Emergency/Shortage Relieve Arrangement







2	Promote conducive food market and trade
4	Promote sustainable food production
5	Encourage greater investments in food and Agri-based industries

C. Blueprint for Action

Policy Action 2.1: Intensify government spending on irrigation, roads, communication network, and other infrastructure

Rural areas - where most farmers are located - are often at a disadvantage given the unavailability of irrigation systems, roads, communication networks and other supporting infrastructure. We propose the ASEAN initiative to intensify government infrastructure investments be led by the ASEAN Infrastructure Fund (AIF) whereby governments can collaborate with the Asian Development Bank to finance infrastructure projects through loans. This includes development of communication infrastructure such as broadband networks and satellite-based internet.

An example of the beneficial impacts of increased government infrastructure spending is illustrated by the Vietnamese government. From 2016-2020, the Vietnamese government invested \$11.3 billion on improving transport, agriculture and fisheries infrastructure in the Mekong Delta, a high-yielding fisheries region. Also, in 2017, the Ho Chi Minh City government committed to subsidize 80% of interest payments for 12 months on bank loans for investment in aquaculture project. These government initiatives, along with private funding, contributed to Vietnam's emergence as the world's 3rd largest shrimp exporter, 13% share of the global market and contribution to 9% annual growth in value addition in food manufacturing.

Such initiative requires a close collaboration between ministries, in which ASEAN agriculture and public works ministries monitor and assess the needs and potentials of building infrastructure in a certain rural area, while the finance ministry allocates the budget for such projects. In the long run, this initiative will positively impact the following key metrics: food production per capita, value addition per capita, poverty headcount, and Agri-water use efficiency.

Policy Action 2.2: Encourage private investments by offering tax incentives, subsidies, or public-private partnership on innovative Agri-Tech

Funding towards innovative Agri-Tech can be optimized by involving private enterprises. We propose ASEAN countries incentivize private companies through tax reductions, subsidies, and public-private partnerships to drive agricultural innovation in the region.







Providing tax incentives, subsidies, and public-partnership can attract more private companies to participate in developing innovative Agri-Tech. An example of this successful initiatives is the income tax exemptions in Malaysia. Under the Pioneer Status (PS), companies in the agricultural sector that are high-tech and emerging technologies can be exempted from 100% of statutory income for 5 years. Alternatively, the Investment Tax Allowance (ITA) can be granted on 60% qualifying capital expenditure for 5 years against the statutory income. This tax incentive allows private enterprises to continuously play their roles in stimulating innovation in the region.

Policy Action 2.3: Accelerate processes for infrastructure and innovative Agri-Technology implementation

We encourage AMS to accelerate implementation processes for infrastructure and innovative Agri-Tech to increase agricultural productivity in the long run. These policy initiatives improve the key metrics food production per capita, value addition per capita, poverty headcount and Agri-water use-efficiency.

The ASEAN Sectoral Working Group on Agriculture Cooperative (ASWGAC) and ASEAN Economic Ministerial Meetings (AEM) should collaborate to review end-to-end process for agriculture-related infrastructure procurement across the regions and identify main challenges. The working team should further prioritize procurement of supporting infrastructure that minimizes yield loss in agriculture processes such as cold storage, warehouses, and application of drones for farming activities.

An initiative by PT. Daya Santosa Rekayasa in Indonesia has displayed how Agri-Tech implementation can improve agriculture output. This project complements ongoing government and private enterprises' projects by helping farmers implement a closed irrigation system. Their products include smart sensors to measure temperature, weather and soil moisture that are applicable in remote areas. This innovation lowers agriculture water usage without compromising crop yield and output quality.

A collaboration between the ministries of agriculture and the ministries of finance of AMS is encouraged. The ministries of agriculture will be responsible for monitoring the implementation of infrastructure and Agri-Tech, whilst the ministries of finance collaborate during the AEM meetings to allocate and approve budgets.

3. Inclusive Market Access (Financial and Product)

A. Policy Portrait

Three key policies:

1. Foster long-term commitment of private companies engaging in inclusive closed-loop ecosystem







through suitable tax incentives

- 2. Encourage intra-ASEAN financing partnership by streamlining processes to develop innovative financing solutions, including Agri-Insurance, to farmers and MSMEs
- 3. Collect and disseminate farmers-relevant data to improve market transparency and inclusivity

B. Rationale and ASEAN Implications

Rationale:

Smallholder farmers and MSMEs require significant capital investments to purchase modern farming tools and quality inputs for their farms. However, they face barriers in obtaining financing from financial institutions. Due to farmers' irregular income streams and limited collateral, banks often consider them as high-risk borrowers.

Smallholder farmers often do not have sufficient access to market information (e.g., market price, production trend, and crop yields) due to the multiple layers between them, the middlemen, and the end market. This often results in unfair pricing and limited offtake assurance for their products.

ASEAN Implication:

The Inclusive Market Access policies would increase agriculture productivity, fulfil national and regional agriculture needs, and provide equitable incomes for farmers and MSMEs. Involvement of private companies is required to broaden the coverage and scale of these policies. ASEAN should also continue to act as a centre of excellence in promoting inclusive and sustainable agriculture practice in the region. These policy recommendations will contribute to the achievement of the following strategic thrusts of the ASEAN Integrated Food Security Framework (AIFS)

Table 1.6:

No.	AIFS Strategic Priorities addressed by Pillar 3
2	Promote conducive food market and trade
4	Promote sustainable food production
5	Encourage greater investments in food and Agri-based industries
9	Develop and strengthen nutrition-enhancing food, agriculture and forestry policies/programs and build capacity for their implementation, monitoring and evaluation







C. Blueprint for Action

Policy Action 3.1: Foster long-term commitment of private companies engaging in inclusive closed-loop ecosystem through suitable tax incentives

The inclusive closed loop model places smallholder farmers at the center of an ecosystem with access to finance, knowledge, technology, and offtake markets. Involvement of farming communities and private companies are critical to maximize results of the inclusive closed loop projects. To foster long-term commitment of private companies, ASEAN countries could explore introducing tax incentives program.

An initiative from 2014 in Indonesia, for example, showed great success where private companies invested into the implementation of an Inclusive Closed Loop Model for coffee farming communities. Nestlé spearheaded this initiative as off-taker with the assistance of Indonesian Coffee and Cocoa Research Institute (ICCRI), and Rabobank Foundation. Nestlé and partners provided training programs on quality and best practices (4C standard) for 18,000 farmers, provision of low-interest loans, daily announcement of market pricing to farmers, as well as off-take guarantees. The project yields favourable results such as increase production by 1.2 tons/ha, 80% increase in net income, and ~10% increase in product quality.

We encourage cross-ministerial efforts between the Ministries of Finance and the Ministries of Agriculture in each AMS to design, monitor implementation, and review results from this proposed tax incentives initiative.

Policy Action 3.2: Encourage intra-ASEAN financing partnership by streamlining processes to develop innovative financing solutions, including Agri-Insurance, to farmers and MSMEs

Access to financing remains a challenge for many smallholder farmers and MSMEs in ASEAN. In 2019, only average of ~1% outstanding loans are allocated to Agriculture, Forestry, and Fisheries MSMEs across ASEAN countries. Streamlining process for financing solutions is critical to achieve progress on the following key metrics: food production per capita, value addition per capita, and poverty headcount.

Multiple sectoral working group in ASEAN such as ASEAN Sectoral Working Group on Livestock (ASWGL), ASEAN Sectoral Working Group on Crops (ASWGC), and ASEAN Sectoral Working Group on Agriculture Cooperative (ASWGAC) should elevate their focus in facilitating intra-ASEAN financing partnership. These groups could connect farmer cooperatives with potential financiers (e.g., banks, insurances, and investors) through events and forums.







The CJ group financing partnership with farmer cooperatives in Vietnam is one example. The program established micro-financing options for Ninh Thuan farmer cooperatives. With secured financial access, farmers invested in agricultural tools and input quality, leading to new streams of potential off-takers and increase household income from US\$ 500 to US\$ 1,700.

Example of providing access to agri-insurance can be found in Indonesia where Syngenta Foundation developed a weather index-based insurance (WII) program for smallholder rice farmers from 2017 to 2021. Unlike traditional indemnity-based insurance, WII leverages satellite technology and enables faster processing of claims, encouraging farmers to utilize the pay-out to protect their crops proactively. Farmers reported 24% increase in revenue and a 26% increase in profits throughout the insurance program.

Encouraging the intra-ASEAN financing partnerships will require multi-ministerial concerted efforts within each member state, specifically the Ministries of Agriculture and Ministries of Finance, tasked with the creation and maintenance of the joint initiative.

Policy Action 3.3: Collect and disseminate farmers-relevant data to improve market transparency and inclusivity

Access to accurate and timely market information is crucial for farmers to make informed decisions and negotiate pricing. To help farmers get price transparency and access to broader markets, ASEAN countries need to increase the availability of market information and farmer-relevant data, such as production yield and market price. However, currently agricultural data availability is varied across countries led to suboptimal usages of data in supporting farmers activity.

To address the low penetration and variety of farmer-relevant data, we propose the establishment of guidelines for data collection to ensure standardization of consolidate farmer-relevant information. Agri cultural ministries should collaborate with local farmer cooperatives to close the gap in farmers data. Private companies should also be involved in aligning data requirements and mobilizing data capture across nations. Moreover, it is key to digitalize the dissemination, which can potentially be done in collaboration with local Agri-Tech companies. Governments can also work with Agri-Tech companies to further enrich the market database.

An example of this initiative was implemented in Myanmar by Htwet Toe, a digital platform that provides market information and farming guides on harvesting and selling over 35 domestic crops. Htwet Toe provides farmers with localized crop prices to use as a benchmark to negotiate with middlemen and access to different supply chain players in the digital forum. Lastly, Htwet Toe leverages satellite technology to provide crops and geodata. As of early 2022, Htwet Toe has aided more than 400,000 Myanmar and is planning to further expand its coverage across Myanmar.







The Ministries of Agriculture in AMS should establish and maintain a centralized data collection system, leveraging their aggregate resources to standardize innovative data collection techniques. They can also collaborate with agricultural research institutions in respective country, such as the National Research and Innovation Agency (BRIN) in Indonesia, to collect country specific data.

4. Farmers capability building

A. Policy Portrait

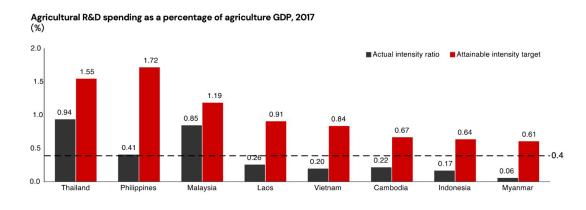
Three key policies:

- 1. Invest to improve agricultural vocational schools, online courses, and teachers to raise knowledge training standards (inc. sustainable farming and Good Agricultural Practices (GAP))
- 2. Set up local and regional entity for knowledge sharing of agriculture best practices and technologies in local languages (e.g., through field agents)
- 3. Invest in R&D and provide funding for regional institutions developing climate-smart agricultural tools and superior crop variants

B. Rationale and ASEAN Implications

Smallholder farmers often rely on traditional and familiar techniques despite lower productivity. Providing accessible knowledge on agricultural best practice is key to help farmers boost their farm productivity. To ensure this, it is key to improve curriculum and invest in training knowledgeable educators in agricultural vocational schools.

Figure 1.9: Agricultural R&D spending as a percentage of agriculture GDP



Note: Attainable intensity target relativizes a country's agriculture R&D spending to its size of agricultural sector, size of economy, income level, and potential spill-ins

Source: Agricultural Research in Southeast Asia (ASTI, 2020)







In addition, research and development (R&D) activities are also important. R&D focusing on development of climate-smart agricultural tools and crop variants should be a priority to mitigate yield loss caused by climate change. Currently, AMS only invest 0.4% of total agriculture GDP into R&D activities (Figure 4.9).

ASEAN Implication:

Increased investment in vocational schools, a knowledge-sharing hub and climate-smart R&D will accelerate progress towards region-wide food security. Promoting the implementation of good agricultural practices (GAP), which emphasizes environmental sustainability, will indirectly contribute to the following key measurement metrics: crop production emissions/tonne, agri water-use efficiency, and value-addition per capita.

Farmers capability building recommendation pillar would contribute to the achievement of the following ASEAN Integrated Food Security Framework (AIFS) strategic thrusts:

Table 1.7:

No.	AIFS Strategic Priorities addressed by Pillar 4			
4	Promote sustainable food production			
5	Encourage greater investments in food and Agri-based industries			
9	Develop and strengthen nutrition-enhancing food, agriculture and forestry policies/programs and build capacity for their implementation, monitoring and evaluation			

C. Blueprint for Action

Policy Action 4.1: Invest to improve agricultural vocational schools, online courses, and teachers to raise knowledge training standards (inc. sustainable farming and Good Agricultural Practices (GAP))

Investing in the improvement of agricultural vocational schools across ASEAN is essential. It will increase awareness and training quality on sustainable farming and good agricultural practices (GAP). As a result, smallholder farmers will be equipped with critical knowledge to modernize agricultural techniques.

We encourage AMS to increase funding allocation towards vocational schools, teachers and online courses that promote effective agriculture training and learning. Funding should be allocated to incorporate the latest agricultural best practices, including sustainable farming knowledge, agroecology, and good agricultural practices. Effective training upgrade will also require additional training and workshops for the educators. It will be beneficial to emphasize on in-person training seminars







for farmers to ensure that GAP can implemented at the lowest level. In collaboration with respective country's Ministry of Agriculture and Farmer Field School (FFS), the ASEAN Sectoral Working Group on Agriculture Cooperative (ASWGAC) should oversee this initiative.

An example of this initiative is Olam that developed a training program for coffee bean farmers cooperatives in West Java, Indonesia. The program provided farmers with in-field training on seedling care, pruning techniques, compost usage, record-keeping, and finance. As a result, agricultural productivity increased by 1250+ metric tons and over 50,000 kg of compost was produced following this initiative.

The Ministries of Agriculture are encouraged to collaborate and develop a comprehensive curriculum by conducting local research to tailor curriculum to farmers' needs. They should also collaborate with Ministries of Finance to allocate more funding towards the development of agricultural capability building activities.

Policy Action 4.2: Set up local and regional entity for knowledge sharing of agriculture best practices and technologies in local languages (e.g., through field agents)

Many smallholder farmers have difficulties in optimizing production output and implementing effective agricultural techniques as they have insufficient access to best practices. To address this issue, AMS should setup knowledge sharing hub to exchange.

To create the knowledge sharing hub, ASEAN should leverage the ASEAN Sectoral Working Group on Agricultural Research and Development (ASWGARD). ASWGARD first conducts a need assessment, identify a gap in the existing knowledge database, and perform further research to close the gap. In collaboration with ASWGARD, Ministries of Agriculture should develop a repository of agricultural best practices and technologies in local languages including knowledge on crop cultivation techniques, pest and disease management, irrigation systems, soil fertility management, and sustainable farming practices. Individual AMS can then leverage field agent network to run on-site demonstrations with local cooperatives in remote areas. At a later stage, online consultation platform for farmers to interact with trained professionals on queries on agriculture techniques can also be explored.

An example of this initiative is FarmerLink, a digital platform in the Philippines that provides smallholder farmers with improved access to information on GAP, knowledge support for organic certification and training in financial management. FarmerLink established a network of field agents to deliver knowledge directly to farmer cooperatives. In 2017, FarmerLink launched a pilot that reached 26,732 smallholder coconut farmers. 67% of these farmers adopted GAP practices and reported 93% satisfaction rate on overall productivity.

This initiative would benefit from the collaboration of Ministries of Agriculture in each AMS to build on existing knowledge repository and collaboration with ASWGARD. Additionally, we encourage these







ministries to assign personnel in charge of appointing, screening, and training a network of field agents to reach local cooperatives or farmers.

Policy Action 4.3: Invest in R&D and provide funding for regional institutions developing climate-smart agricultural tools and superior crop variants

Climate variability poses a serious threat to farm productivity. Development of climate-smart tools and crop variants is essential, but ASEAN countries lack of sufficient funding to conduct transformative research on this field. This prevents ASEAN to address climate change challenges and ensure resilient & sustainable agriculture output.

We encourage AMS to invest in R&D and develop innovations like drought-resistant crops, heat-tolerant varieties, precision farming tools, and techniques to improve Agri-ecology. These tools are necessary to adapt to changing climate conditions. We propose increased funding support for regional entities such as ASWGARD to expand innovative data-collecting tools and research deeper on prioritized innovations.

A notable example of similar sustainable R&D initiatives is the International Rice Research Institute (IRRI). While the IRRI has implemented programs globally, they have made notable progress in Southeast Asia. Their tailored action plan for SEA includes building climate resilient rice systems, strengthening breeding programs for abiotic stress tolerance, and developing biofortified rice varieties. In collaboration with national research parties, the IRRI has successfully deployed drought-tolerant rice varieties, such as Sahod Ulan in the Philippines, which has an average yield advantage of 0.8-1.2 tons per hectare under drought conditions.

We encourage the Ministries of Finance and Agriculture of AMS to collaborate to increase funding support towards regional institutions. We also call upon Ministries of Technology to best support this initiative through research on innovative climate-smart agricultural tools.

V. How These Efforts Will Benefit ASEAN MSMEs

Each pillar of the policy recommendation aims to benefit ASEAN smallholder farmers and MSMEs by creating a favorable business environment that fosters entrepreneurial success, innovation, and sustainability. The policy recommendations emphasized on the following:

- Removal of trade barriers and streamlining of processes lowers smallholders' and MSMEs' costs and barriers to agricultural entrepreneurship.
- Supporting the development of infrastructure and technology leads reduce costs and yield loss through more efficient logistics and food production activities.
- Provision of access to financing and market enables smallholders and MSMEs to accelerate growth of their business.







• Investment in capability building initiatives increase agricultural best practices knowledge and productivity for farmers and MSMEs in the region, which eventually improve livelihoods in the community.

VI. Synergies with Regional and Global Regulations

Table 1.8:

Overall

- ASEAN Regional Guidelines on Food Security and Nutrition Policy
- ASEAN Integrated Food Security Framework

No.	Intra-ASEAN and External Trade	Infrastructure and Agriculture Technology	Inclusive Market Access (Financial and Product)	Farmers Capability Building
1.	ASEAN Trade in Goods Agreement	PPP Regional Framework For Technology Development in Food, Agriculture, and Forestry	ASEAN Guidelines on Promoting Responsible Investment in Food, Agriculture, and Forestry	ASEAN Guidelines on Promoting Responsible Investment in Food, Agriculture, and Forestry
2.	Protocol on the Legal Framework to Implement the ASEAN Single Window	Framework for Improving ASEAN Infrastructure Productivity		ASEAN Framework to Support Food, Agriculture, and Forestry Small Producers, Cooperatives, and MSMEs to Improve Product Quality to Meet Regional/International Standards and Ensure Competitiveness
3.	World Trade Organization: Ministerial Declaration on the emergency response to food insecurity (17 June 2022)			FAO Corporate Strategy on Capacity Development







VII. Roadmap and Timeline

Table 1.9:

Legend					
Economy	Livelihoods Nature		Climate	Nutrition	
Food Production per Capita Value Addition per Capita	Poverty Headcount	Agri Eater-use Efficiency	Crop Production Emissions/Tonne	Prevalence of Undernourishment	

	Policies and Key Initiatives		2024	2025	2026	2027
Intr	Intra-ASEAN and External Trades					
1.1	Remove non-tariff barriers of critical inputs based on agreed principles for balancing regulatory needs with trade facilitation					
1.2	Expedite customs for seeds, crop protection products, fertilizers and agriculture equipment by harmonizing standards, regulations, and approval processes					
1.3	Organize ASEAN-level collective procurement to negotiate better terms with external partners					
Infr	astructure and Agriculture Technology					
2.1	Intensify government spending on irrigation, roads, communication network, and other infrastructure					
2.2	Encourage private investments by offering tax incentives, subsidies, or public-private partnership on innovative Agri-tech					
2.3	Accelerate processes for infrastructure and innovative Agri-technology implementation ■ ■ ■					
Incl	usive Market Access (Financial and Product)					
3.1	Foster long-term commitment of private companies engaging in inclusive closed-loop ecosystem through suitable tax incentives					
3.2	Encourage intra-ASEAN financing partnership by streamlining processes to develop innovative financing solutions, including Agri-insurance, to farmers and MSMEs					
3.3	Collect and disseminate farmers-relevant data to improve market transparency and inclusivity ■ ■ ■					







Policies and Key Initiatives	2023	2024	2025	2026	2027
Farmers Capability Building					
4.1 Invest to improve agricultural vocational schools, online courses, and teachers to raise knowledge training standards (inc. sustainable farming and Good Agricultural Practices (GAP))					
4.2 Set up local and regional entity for knowledge sharing of agriculture best practices and technologies in local languages (e.g., through field agents)					
4.3 Invest in R&D and provide funding for regional institutions developing climate-smart agricultural tools and superior crop variants ■					

Table 1.10:

No.	Potential Alliance	Roles & Responsibilities
1.	AFTA Council	Collaborate with Ministry of Trade from each AMS to facilitate removal of the prioritized non-trade barriers
2.	ASEAN Sectoral Working Group: Livestock (ASWGL) Crops (ASWGC)	Encourage collaboration between farmers, farmers cooperatives, and potential finances to facilitate intra-ASEAN financing
3.	ASEAN Sectoral Working Group Agricultural Cooperatives (ASWGAC)	 Oversee implementation of capability building initiatives for farmers; supported by Ministry of Agriculture from respective AMS and Farmer Field School Review end-to-end process for agriculture-related infrastructure procurement process & suggest potential improvement opportunities
4.	ASEAN Sectoral Working Group Agricultural R&D (ASWGARD)	 Conduct need assessment for the knowledge database, identify current gap in the existing database and perform further research as needed Collaborate with Ministries of Agriculture from respective AMS to develop repository of best agricultural practices in local language
5.	ASEAN Infrastructure Fund	Collaborate with Ministry of Agriculture or/and Finance from respective AMS as well as Financier (e.g., Asian Development Bank) to ensure sufficient government investments are channeled towards agriculture related infrastructure







No.	Potential Alliance	Roles & Responsibilities
6.	Asian Development Bank	Collaborate with ASEAN Infrastructure Fund and Ministry of Finance from respective AMS on the potential funding for agriculture strategic projects
7.	Coordination Committee for the Implementation of the ATIGA	 Monitor the implementation of ASEAN Trade in Goods Agreement (ATIGA) tariff preferences to improve overall customs intra-ASEAN trade process Collaborate with ASEAN Single Window Committee to expedite intra-ASEAN trade process for the prioritized seeds, crop protection products, fertilizers and agriculture equipment
8.	ASEAN Taskforce on Genetically Modified Food Testing Network (GMFNet)	Collaborate with ASEAN Ministries of Agriculture to streamline regulations or certification for Genetically Modified Food
9.	International Rice Research Institute	 Share key learnings from research and development initiative in other region Collaborate with local and regional R&D organization to deepen their research on climate-smart agricultural tools and superior crop variants
10.	Indonesian Research Organization for Agriculture and Food	Collaborate with other ASEAN research institutions to expand research & development activities related to food security topic across the region

VIII. Conclusions

The policy recommendation would address the key challenges facing the agricultural sector and complement progress towards achieving ASEAN Integrated Food Security Framework (AIFS) objectives.

Table 1.11:

	Pillar	Summarized Policy Actions	Key challenges address
1.	Intra-ASEAN and External Trades	Remove non-tariff barriers of critical inputs based on agreed principles for balancing regulatory needs with trade facilitation	Limited access to high- quality seeds and fertilizers leads to suboptimal use of
		 Expedite customs for seeds, feeds, crop and animal protection products, fertilizers and agriculture equipment by harmonizing standards, regulations, and approval processes 	these resources.







Pillar	Summarized Policy Actions	Key challenges address
	Organize ASEAN-level collective procurement to negotiate better terms with external partners	
2. Infrastructure and Agriculture Technology	 Intensify government spending on irrigation, roads, communication network, and other infrastructure Encourage private investments by offering tax incentives, subsidies, or public-private partnerships on innovative Agri-Technology Accelerate processes for infrastructure and innovative Agri-Technology implementation 	Insufficient infrastructure and technology hinder farmers' ability to transport goods, store crops, and increase productivity.
3. Inclusive Market Access	 Foster long-term commitment of private companies engaging in inclusive closed-loop ecosystem through suitable tax incentives Encourage intra-ASEAN financing partnership by streamlining processes to develop innovative financing solutions, including Agrilnsurance, to farmers and MSMEs Collect and disseminate farmers-relevant data to improve market transparency and inclusivity 	Limited access to financing and larger markets for small farmers, limiting their ability to invest in their farms and earn a fair price for their products.
4. Farmers Capability Building	 Invest to improve agricultural vocational schools, online courses, and teachers to raise knowledge training standards (inc. sustainable farming and Good Agricultural Practices (GAP)) Set up local and regional entity for knowledge sharing of agriculture best practices and technologies in local languages (e.g. through field agents) Invest in R&D and provide funding for regional institutions developing climate-smart agricultural tools and superior crop variants 	Lack of knowledge and access to information on modern farming practices leads to lower productivity.

Suggested next steps, including but not limited to:

1. AMS representatives to collaborate with relevant stakeholders - such as farmers cooperatives, NGOs, and international organizations - to align on the definition of success, specify implementation plan and timeline for each of the policy recommendation







- 2. AMS representatives, appointed committees, and relevant stakeholders to establish monitoring measure to evaluate the implementation of recommended policies and work together to address roadblocks
- 3. AMS representatives to setup regular cadence to facilitate communication across key stakeholders and discuss food security topic in the related ASEAN ministries meeting







IX. References / Works Cited

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TRADE FACILITATION

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WORKING GROUP: TRADE AND INVESTMENT FACILITATION

Title: Facilitating a seamless trade flow in ASEAN

I. Executive Overview

With tariffs on intra-ASEAN trade mostly eliminated, the costs of complying with the trade policies and procedures of each AMS, called "trade transactions cost," now form the majority of the remaining trade costs within ASEAN. These include compliance and procedural costs at the border and various regulatory measures applied to products.

At the border, unnecessary and continued delays and inefficiencies in the cargo clearance process not only add monetary cost but also creates uncertainty for traders. Trade facilitation is, therefore, necessary to reduce the trade transaction costs arising from regulatory compliance and customs procedure. Trade facilitation entails a set of domestic reforms to complement tariff liberalization, touching upon improvements in customs administration and the transparency of trade-related regulations by applying global good practices. Many of these eventually require reforming the domestic laws and regulations, and above all, the mindset and political will of the bureaucracy. One study by Duval and Utoktham (2022) found that implementing trade facilitation can reduce trade cost by 2 to 4%.

In addition, behind the border regulations on product attributes/quality and the associated conformity assessment can also affect trade. This is the case of non-tariff measures, defined as policy measures, other than ordinary tariffs, that can have an impact on international trade by changing price or quantity traded. Compliance with NTMs can incur significant trade costs, as firms may have to adjust their production processes, their use of intermediate inputs, and to conform with a plethora of associated administrative procedures.

Even though NTMs are, in principle, legal policy instruments to ensure the quality of products, poorly designed and implemented NTMs are particularly burdensome for the private sector. Ing and Cadot (2019), estimated that the ad valorem equivalent of NTMs in ASEAN is up to 5.7% in manufacturing and 16.6% in agriculture. This cost is magnified and accumulated along the supply chain, as increasing costs on intermediate inputs are transmitted to production costs in the downstream sectors. Shepherd (2020) found that the ASEAN average effective rate of protection, i.e. the ad valorem equivalent rate taking into account both costs on inputs and final goods, doubles when NTMs are included, compared with the estimate with the tariff per se. In certain cases, NTMs are imposed in lieu of tariffs as a disguised trade barrier, thus effectively impeding trade.







II. Context Setting and Policy Agenda

ASEAN has taken up trade facilitation and NTMs as a priority issue by enshrining them in the ASEAN Economic Community (AEC) Blueprint 2025. The Blueprint is structured to create a fully integrated ASEAN economic community and consists of 5 (five) pillars, including (1) Integrated and Integrated Economy, (2) Competitive, Innovative and Dynamic ASEAN, (3) Enhanced Connectivity and Sectoral Cooperation, (4) Resilient ASEAN, Oriented and Centered on HR, and (5) Global ASEAN.

The ASEAN Trade Facilitation Joint Consultative Committee (ATFJCC) has been implementing the trade facilitation agenda since 2016 and has helped achieve progress through three channels: knowledge sharing, joint implementation, and regional initiatives. The body, comprising of senior-level representatives from each member countries' trade-related agencies, meets at least twice a year to discuss progress in the implementation of trade facilitation measures. In 2017, the ASEAN Economic Ministers (AEM) set a goal of lowering trade costs in ASEAN by 10% by 2020, mostly through rapid implementation of trade facilitation measures, and mandated the ATFJCC to measure the reduction in trade transactions cost in the region.

In line with this approach, ASEAN has also introduced various initiatives to streamline and simplify NTMs in order to enhance trade. The most recent one is the NTM tool kit. The NTM tool kit, jointly developed by UNCTAD and ERIA, was endorsed by the ATFJCC in 2019. The tool kit aims at providing a balanced assessment of the cost and effectiveness of NTMs based on three pillars: design, implementation and compliance. Through a comprehensive set of surveys for the issuing agency, the implementing agencies and the private sector, the toolkit helps identify not only the bottlenecks in the imposition of the NTMs but also address the benefits, if any, of such regulations. However, the NTM tool kit has so far been adopted for use by AMS on a voluntary basis, as opposed to the mandatory implementation as recommended by the private sector.

Existing data provides information on the status of trade facilitation and NTMs in the region. The United Nations Trade Facilitation (UNTF) survey which has been keeping track of the progress made in fulfilling the WTO-TFA commitments. The measures are categorized into five groups: transparency, formalities, institutional arrangement, paperless trade, and cross-border paperless trade. The table shows that ASEAN has been making steady progress in implementing trade facilitation elements.

By 2023, there were still gaps in institutional arrangement and cross-border paperless trade. We also see that there still exist gaps among AMS, with some lagging behind others in implementation. One important point to note is that the UNTF survey only tracks the existence of these measures in each country but does not track the quality of implementation. Proper implementation is necessary for these measures to show tangible benefits in the form of seamless trade flows.







Table 1.1: Progress in implementation of WTO-TFA measures in ASEAN

Years	Transparency	Institutional Arrangement and Cooperation		Paperless Trade	Cross Border Paperless Trade
2015	78%	69%	57%	59%	26%
2019	91%	88%	67%	73%	48%
2023	95%	90%	71%	81%	60%

Source: Authors' compilation from UNTF survey.

Note: In creating the table, we take an average of all AMS' scores within each category.

Table 1.2: Status of trade facilitation implementation in each AMS

AMS	Year	Transparency	Formalities	Institutional Arrangement and Cooperation	Paperless Trade	Cross Border Paperless Trade
Brunei	2023	93.33%	100%	66.67%	77.78%	44.44%
Cambodia	2023	100%	91.67%	88.89%	74.07%	55.56%
Indonesia	2023	93.33%	95.83%	77.78%	96.30%	61.11%
Lao PDR	2023	100%	70.83%	77.78%	62.96%	38.89%
Malaysia	2023	100%	100%	77.78%	85.19%	66.67%
Myanmar	2023	73.33%	62.50%	33.33%	66.67%	55.56%
Philippines	2023	100%	100%	77.78%	85.19%	66.67%
Singapore	2023	100%	100%	100%	100%	83.33%
Thailand	2023	93.33%	100%	44.44%	88.89%	72.22%
Viet Nam	2023	93.33%	75%	66.67%	77.78%	55.56%

Source: Authors' compilation from UNTF Survey.

Contrary to the common perception that the number of NTMs should decline following trade liberalisation, the number of NTMs in ASEAN keeps rising. Over a 3-year period there was an observed 15% increase in the NTM count across AMS. (For the Plus Six countries, we only have cross-sectional data for 2017. Therefore, we cannot capture changes across time). ASEAN-wide, about 9,500 measures were in place in 2018. In sectors with strong value chain participation (e.g. food products, machinery, and electrical), 80%–90% of trade is subject to NTMs (Doan, Rosenow, and Buban, 2019).

Traded products are also heavily regulated in the Plus Six countries, where the total number of NTMs is twice that of ASEAN. China alone accounted for more than 7,000 measures. Overall, for 16 countries in the region, we find about 6,700 regulations containing NTMs, with the corresponding number of measures totalling 28,000 – affecting virtually all products traded at the national tariff line.





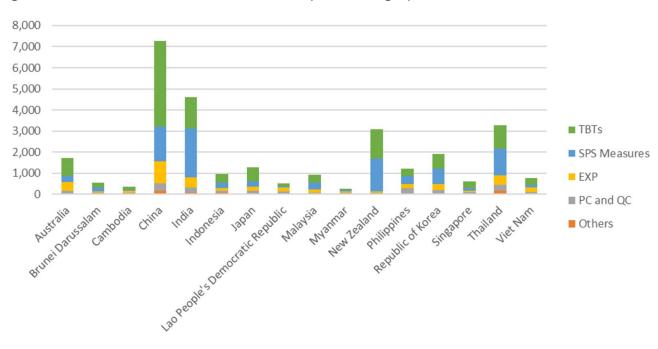


Figure 1.1: NTMs count in ASEAN+6 countries, by NTM category

ASEAN = Association of Southeast Asian Nations, NTM = non-tariff measure, SPS = sanitary and phytosanitary, TBT = technical barrier to trade. Note: Numbers are not comparable across countries. Data years vary.

Source: Author's calculation from UNCTAD's TRAINS database. Accessed from https://trains.unctad.org on June 12 2020 (Doan, Rosenow, and Buban, 2019; UNCTAD, n.d., 2020).

Notwithstanding the comprehensive initiatives, progress is uneven and limited. For example, in terms of transparency, the NTM sections of the National Trade Repositories (NTRs) are missing for some countries, whereas for others, a centralized trade repository with NTM information is fully operational. Similarly, notification obligations are not well-observed by AMS when it comes to new measures that are established that would affect exports of other AMS.

Even for the most progressive initiative – the harmonization of standards and conformance – implementation is uneven across AMS. Some countries have yet to establish an accreditation body, relying instead on accredited testing facilities in other AMS. This lack of facilities prevents countries from fully benefiting from mutual recognition agreements. In addition, the lack of a coherent framework to address NTMs leads to overlapping initiatives, thus discouraging AMS from implementing new initiatives.

Remaining challenges include enhancing the technical infrastructure capability of AMS to support the adoption of harmonization standards; the ability to support local industry by making available accredited testing and certification of products in some AMS; and continuous training of personnel to support and sustain the work on standards, technical regulations, and conformity assessments.







On top of that, the establishment and effective operation of an inter-ministerial coordinating agency in charge of NTMs ensure smooth implementation of policy. The absence of a coherent mechanism and institution could create difficulty not only for collecting and classifying data but also for drafting effective regulations. The lack of coordination could create inconsistency in the regulations issued by government agencies across ministries.

In general, elimination of NTMs is not a practical option due to their legitimacy. Nonetheless, efforts should be spent on minimizing the trade-barrier effects of non-tariff measures through better design and effective implementation. Given the diversity of non-tariff measures, there is no one-size-fit-all approach to address all NTMs. Depending on the nature/objectives of the measures, careful cost-benefit analysis needs to be considered for individual requirements to identify the source of obstacles. Inputs from key stakeholders, in particular the private sector, are vital in the process.

Recent events have increased the urgency for AMS to make rapid progress in trade facilitation and NTMs. Economic integration of the members of the Association of Southeast Asian Nations (ASEAN) has expanded, most notably through the signing of the Regional Comprehensive Economic Partnership (RCEP). These new initiatives demand greater focus on trade facilitation since they have specific agreements and commitments on improving trade procedures. Although some of the earlier ASEAN Plus One agreements (or their amendments) contained chapters on customs procedures and trade facilitation, these were to be implemented on a "best endeavor" basis.

In contrast, the RCEP agreement binds the parties to specific timelines of agreement, albeit with some flexibility for less developed members. Likewise, RCEP, being a comprehensive "deep integration" agreement, dedicates two chapters on SPS and TBT, together with one NTM section in the Trade in Goods chapter, and a related chapter on Customs Procedure and Trade Facilitation. Aside from elimination of non-tariff barriers such as quantitative restrictions (which have indeed been abolished for the majority of traded products), the parties recognize the rights to use NTMs for good purposes. At both the national and regional levels, the emphasis is on transparency and compliance with WTO's rules, as well as technical cooperation and assistance.

Another major event since 2018 that has impacted the trade facilitation agenda is the COVID-19 pandemic. The upheaval of the COVID-19 pandemic has – among its many ramifications –highlighted the central importance of a smooth flow of goods and people for the proper functioning of the global economy.







III. Stakeholder System

- ASEAN bodies, e.g., ATFJCC, ASEAN Coordinating Committee on Standards and Quality (ACCSQ)
- Intergovernmental bodies, e.g., World Trade Organization, World Customs Organization)
- National trade facilitation committees of each AMS
- Private sector ASEAN-BAC and individual AMS chamber of commerce, Joint Business Councils and Sector Champions and Associations (e.g., ASEAN Federation of Textile Industries, ASEAN Furniture Industries Council).
- Knowledge partners such as ERIA, UNCTAD, academia, think tanks, etc.

IV. Policy Priority Agenda

To further enhance trade within the region, it has become imperative that each AMS will need to set trade facilitation as a national agenda and elevated as a top priority of the government. The established interagency body such as the National Trade Facilitation Committee and the National Trade Facilitation Focal Points should be made operational, functional and empowered to oversee the implementation and foster cooperation among all trade-related government agencies. Likewise, to implement the agenda, all relevant stakeholders of the trade community, including the private sector and government officials, would need relevant training and capacity building and regular engagement to give credence to the highly proclaimed Public-Private-Partnership collaboration. Furthermore, trade facilitation involves adoption and application of advanced principles and mechanisms covering risk management as well as digital capacity, among others.

Specific key elements of trade facilitation can be classified into three broad categories:

- (1) streamlining of procedures;
- (2) application of digital technology; and
- (3) transparency of information.

First, customs rules and regulations must allow for general facilitative provisions as well as additional facilitation for specific types of goods or traders. Second, all trade related procedures should be administered digitally. Third, all trade-related information should be disseminated widely and in a timely manner. Countries should also continuously monitor the trade transactions cost through examination release times and time to permit approval. Given the two-way nature of trade, international cooperation and coordination can enhance trade facilitation. This includes cooperation between border agencies of trade partners, exchange of trade-related documents necessary for the import-export process.

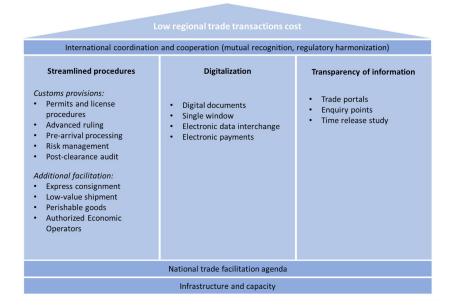






Below is a possible framework by which countries can assess existing gaps and identify priority policy reforms.

Figure 1.2: Framework for developing the policy priorities for trade facilitation



Source: Authors

Among the policy areas listed above, the following are identified as immediate priority actions:

Policy Action 1.1: Strengthening the National Trade Facilitation Committees (NTFCs) to implement trade facilitation and manage NTMs

- A. **Policy Portrait:** The NTFC is a national body, comprising of representatives of trade-related government agencies and the private sector, mandated to manage and implement the trade facilitation and NTMs agenda. As of 2023, all AMS have established an NTFC, but their structure and activities vary across AMS. In order for trade facilitation to move forward smoothly, this body needs to be sufficiently empowered. Furthermore, an ASEAN-level coordinating body of each AMS's NTFCs would support implementation of regional initiatives and addressing cross-border trade facilitation issues.
- B. **Rationale and ASEAN Implications:** Implementing effective trade facilitation requires interagency coordination among all trade-related government agencies. Thus, a national inter-government agency empowered to oversee the trade facilitation agenda will help move the process along in a coordinated way.







C. **Blueprint for Action:** Each country will need to examine the policies and procedures of their respective NTFCs to ensure that there is active private sector participation. Capacity building is also necessary for NTFCs to identify the barrier effects of NTMs. A high-level decision from ASEAN to create an ASEAN-level confederation of NTFCs will be necessary.

Policy Action 1.2: A common framework on Advance Rulings (AR)

- A. **Policy Portrait:** Transparency of rules enhances certainty and ensure predictability for traders. Securing an advance ruling which may be on rules of origin (ROO), tariff classification and customs valuation, facilitates faster cargo clearance, as well as lowers transaction cost.
- B. Rationale and ASEAN Implications: Under the current ATIGA, issuance of advance rulings is not mandatory and subject to domestic laws and regulations. Recent FTAs negotiated by ASEAN with its FTA partners, such as the Regional Comprehensive Partnership Agreement (RCEP), makes advance rulings a mandatory for 3 types, i.e. ROO, customs valuation and tariff classification (although certain transition period is given to certain parties). RCEP and other upgrade of the ASEAN Plus FTAs have considered advance rulings as a mandatory provision. A transparent and clear advance rulings provisions in ASEAN, including the requirements and procedures will help ensure that certainty and predictability.
- C. **Blueprint for Action:** Amendment of FTAs by inserting or adding provisions will ensure a robust advance rulings provisions, such as the following: (1) Amendment of customs rules and regulations, making advance rulings for ROO, valuation and tariff classification mandatory; (2) publication of rules on AR; (3) publication of AR results to guide future requests; (4) establishing portal for AR requests, to allow traders who don't have offices in the country the opportunity request the issuance of advance rulings.

In addition, providing capacity building to customs officials and government involved in the issuance and managing advance rulings is also key to AR implementation.

Policy Action 1.3: Institutionalization of Time Release Study (TRS)

A. **Policy Portrait:** Continuous progress in reducing trade transactions cost requires regular monitoring and evaluation. Each AMS should commit to conducting a regular TRS (preferably at least once every 2 years) and publicly disseminate the results of such study. The goal of the TRS is to identify bottlenecks in the documentary compliance and cargo clearance process and take actions to improve the efficiency of these procedures. To conduct the study, each AMS should form a study team comprising of customs, trade-related government agencies, and the private sector representatives. Furthermore, AMS should work together to coordinate on the study so as to gain a comprehensive view of the trade process.







- B. Rationale and ASEAN Implications: A coordinated effort by all ASEAN countries is likely to produce greater reductions in trade transactions cost. In order for the coordination to be effective, measures of TTC will have to be comparable not only over time, but also across countries. Comparable information is important so that member states can learn best practices from each other. In order to produce comparable information, agreement on concepts and methodology for data collection will be necessary. This would involve (a) agreeing on a common set of concepts and methodologies such as pre-customs clearance, customs clearance and post-customs clearance checkpoints, (b) coordinating on questionnaire design and other survey instruments to collect similar information, and (c) forming a common protocol for choosing samples.
- C. **Blueprint for Action:** AMS, through the ATF-JCC, could agree to continue to the conduct of TRS on a regular basis, drawing on the experience of undertaking two such studies for the ASEAN Seamless Trade Facilitation Indicators (ASTFI-TTC) project carried out by ERIA. The first step is to further institutionalize regular data collection by adopting a national policy on TRS. The policy should include the frequency of conducting TRS, the methodology to be followed, and composition of the study team. While each country can conduct the TRS according to methodology recommended by the World Customs Organization, the countries could agree at the ASEAN level to a minimum scope of the TRS so that consistent information could be produced across ASEAN.

Policy Action 1.4: Implementation of ASEAN NTM Tool Kit

- A. **Policy Portrait:** The tool kit provides a balanced approach to assess the cost and effectiveness of NTMs through three pillars: design (what are the objectives of the NTMs? Are the objectives justified?), implementation (how are they implemented by government agencies?), and compliance (how easy is it for the private sector to comply with). Through a comprehensive set of questionnaires addressing key stakeholders' issues, the tool kit can provide meaningful insights into the usefulness as well as the bottlenecks associated with the imposition of certain NTMs.
- B. **Rationale and ASEAN Implications:** The elimination approach is, in most cases, not applicable due to the legitimacy of NTMs. A pragmatic approach in addressing NTMs needs to take into account both their cost and effectiveness. It can be difficult to determine the overall impact of an NTM positive or negative, as that would require a counterfactual on what would have happened if the NTM did not exist. Yet, it is possible to assess its effectiveness by understanding how the NTM was designed, is being implemented as well as challenges that the private sector faces when complying with them.
- C. **Blueprint for Action:** Mandate the use of the NTM Toolkit and develop a realistic and detailed work plan on the immediate implementation of the tool kit, including identification of a coordinating agency with the mandate to monitor the task.







Policy Action 1.5: Improving Transparency through enhancement of NTRs/ATR

- A. **Policy Portrait:** Constant updating of trade-related information, including NTMs, through NTRs and ASEAN Trade Repository (ATR), ensuring the smooth operation of these platforms.
- B. Rationale and ASEAN Implications: ATR and NTRs are in place. However, information related to NTMs is either lacking or outdated. The NTM section of the ATR does not provide the information about products affected by NTMs, rendering limited usage for the private sector. Lack of access to updated information prevents the private sector from conducting timely adjustments and incurring larger monetary and time costs. The burden disproportionately falls on MSMEs due to larger resource constraints.
- C. **Blueprint for Action:** Technical assistance and capacity building to sustain and update the information in the ATR and NTR. A modern NTR should undergo search engine optimization in order to appear on the top when a trader uses a search engine like Google® to gain information about rules and regulations. AMS should also examine the feasibility of utilizing artificial intelligence tools like ChatGPT to make the rules and regulations easily understandable to traders.

V. How These Efforts Will Benefit ASEAN MSMEs

Micro, Small, and Medium Enterprises (MSMEs) face more difficulties in international trade due to the presence of trade transaction costs. Because at-the-border and behind-the-border trade costs apply at the same level regardless of the volume of transaction, small firms are disproportionately impacted. For example, the cost of understanding importing requirements for a key intermediate input (for example by hiring relevant legal experts) is the same regardless of whether the goods are being imported by an SME or a large firm. Thus, small firms are more likely to benefit from trade facilitation and proper management of NTMs. Several studies have highlighted the particular benefits of trade facilitation to SMEs. For example, Gonzeles and Sorescu (2019, pg. 5) conclude that "measures such as streamlining of procedures, automation of the border process, simplification of fees, or consultations with traders appear to have the largest differentiated impacts on SMEs relative to larger firms."

VI. Synergies with Regional and Global Regulations

AMS need to fulfill the commitments in the WTO-TFA agreement as well as RCEP, participating CPTPP AMS, and other regional and bilateral trade agreements.

The World Trade Organization (WTO) officially added a Trade Facilitation Agreement (TFA) into its founding document in 2013 to bind member countries to carry out trade facilitation. It entered into force in 2017, and as of September 2022, 156 WTO members have ratified the agreement. The WTO-TFA comprises twelve broad measures/provisions for "expediting the movement, release and clearance







of goods, including goods in transit, plus customs cooperation." The measures include: (1) Publication and Availability of Information; (2) Opportunity to comment, information before entry into force and consultations; (3) Advance Rulings; (4) Procedures for appeal or review; (5) Other measures to enhance impartiality, non-discrimination and transparency; (6) Disciplines on fees and charges imposed on or in connection with importation and exportation and penalties; (7) Release and Clearance of Goods; (8) Border Agency Cooperation; (9) Movement of goods intended for import under customs control; (10) Formalities connected with importation, exportation and transit; (11) Freedom of transit; and (12) Customs Cooperation.

Regionally, the ASEAN Economic Community (AEC) Blueprint 2015 envisions a seamless trade in the region with active facilitation of international trade by its ten member countries.

VII. Roadmap and Timeline

The ASEAN Economic Ministers (AEM) meeting mandates the appropriate ASEAN sectoral bodies (e.g. ATF-JCC, ACCSQ) to develop a trade facilitation and NTMs management work plan for ASEAN-level priority sectors by December 2024. The workplan should be developed at the national level in consultation between individual ASEAN-BAC and NTFCs and should include a specific commitments and timeline. The progress of the workplan development should be coordinated and reported during the appropriate sectoral body meetings.

VIII. Alliance Building

Establishment of additional sectoral associations within ASEAN countries is crucial to provide support and inputs to ASEAN-BAC in advocating policies for trade facilitation and NTMs management. AMS should recognize these private sector bodies and include them in relevant discussion and consultations in policy making.

IX. Conclusion

Among the key tasks/work needed to facilitate a seamless flow of trade in ASEAN are the following:

- Institutionalizing regular discussions among the National Trade Facilitation Committees (NTFCs)
 to further facilitate trade within ASEAN, including increased participation of the private sector in
 the NTFCs. Consider the establishment of an ASEAN-level federation of NTFCs to identify and
 solve region-wide trade facilitation issues.
- Work toward a common framework for issuance of advance rulings on origin and valuation, so that ASEAN traders have greater certainty and predictability when trading intra-regionally. Mandatory provisions on advance rulings, including publication of relevant advance rulings.







- Institutionalize regular conduct and publication of Time Release Study (TRS) to continually solve bottlenecks in the cargo clearance process.
- Assessing barrier-effect of NTMs:
 - Urge AMS to implement the ASEAN NTM Cost-Effectiveness Tool Kit. AMS to collaborate with the private sector to identify products to be covered by the tool kit implementation.
 - Stock take and compare existing national mechanisms with the tool kit.
 - Stronger collaboration with the private sector support/facilitation to conduct the firm survey and validate the findings from the implementation of the tool kit.
- Improving transparency: Continues updating and enhancement of the NTR/ATR, particularly the NTMs section to make it user friendly (use of AHTN Code to search for the NTMs of specific products)
 - Current ATR covers only chapter A and B (SPS and TBT) which account for 70% of the total number of NTMs in ASEAN. However, non-automatic licensing and export-related measures also account for a non-trivial portion of NTMs as well.







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INVESTMENT FACILITATION

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WORKING GROUP: TRADE AND INVESTMENT FACILITATION

Title: ASEAN Business Entity (ABE) to Increase Intra-ASEAN Investments and Promote Collaboration

I. Executive Overview

ASEAN has emerged as the 5th largest economy, with Nominal GDP of USD 4 Trillion, 650 million populations, 70+ million MSME, and USD 200 billion of potential digital economy. Booming population expansion, increasing liberal trade policies, and peaceful geopolitical stance, have resulted in faster than average GDP growth in the region.

ASEAN economies have been attractive destinations for FDI in recent years. Multinational corporations are increasingly looking to Southeast Asia as an alternative production hub, attracted by its competitive wages, improving business regulations and infrastructure, and increasing domestic demand. These nations in general also provide attractive alternatives for companies looking to reduce their exposure to geopolitical tension in light of increasing trade barriers and the desire to simply find cheaper production sites. As such, ASEAN economies will likely to continue its strong growth for the next decades and is destined to be the future epicenter of global economic growth.

Figure 1.1:

Rank	Country	Population in million	GDP Nominal millions of USD	GDP Nominal per capita USD	GDP (PPP) millions of USD	GDP (PPP) per capita USD
_	ASEAN	683.29	3,942,791	5,812	11,203,023	16,516
1	Indonesia	277.432	1,391,778	5,016	4,398,729	15,855
2	T hailand	70.171	574,231	8,181	1,591,402	22,675
3	Singapore	5.659	515,550	91,100	757,726	133,894
4	▼ Vietnam	100.345	449,094	4,475	1,450,281	14,458
5	Malaysia	33.410	447,026	13,382	1,230,823	36,846
6	Philipines	112.890	440,990	3,905	1,301,281	11,420
7	™ Myanmar	54.205	63,988	1,180	278,156	5,131
8	Cambodia	16.944	32,602	1,896	98,405	6,092
9	Brunei	0.442	15,506	35,103	35,103	75,583
10	Laos	7.582	14,091	1,858	74,309	9,800







The past two years (2019 and 2020) were exceptional for ASEAN in terms of foreign direct investment (FDI): 2019 saw the region's highest-ever inflows, at \$182 billion – making ASEAN the largest recipient of FDI in the developing world – and 2020 saw the unprecedented impact of the COVID-19 pandemic, with a 25 per cent fall in FDI, to \$137 billion. Despite the decline, investment within ASEAN was resilient, rising by 5 per cent to \$23 billion, pushing up the intra-ASEAN share of FDI in the region from 12 to 17 % (Source: UNCTAD 2021-2022 Investment report).

ASEAN also remained an attractive investment destination as seen in the region's share of global FDI rose from 11.9 per cent in 2019 to 13.7 per cent.

Through ASEAN Business Entity, ASEAN-BAC 2023 will promote intra-ASEAN investment by offering advantages to ASEAN originated businesses (corporations) in operating in the region such as simplified regulations and streamlined procedures. The first step is to identify and acknowledge such qualified ASEAN originated business corporations to be awarded status as an ASEAN Business Entity (ABE) and then formulate policies to support them. By fostering the ABE to do increased participation in various ASEAN countries will enhance collaborations amongst ASEAN members to create a strong and resilient economic cooperation.

ASEAN holds immense potential for intra-ASEAN investments that can drive economic growth, innovation, and sustainability. To promote intra-ASEAN investments, collaboration and incentives play a pivotal role in encouraging ASEAN originated companies to invest and expand within the region.

II. Context Setting and Policy Agenda

Governments across ASEAN have been unveiling an array of incentive packages to entice businesses affected by the US-China trade war and rising geopolitical tension and increasing protectionism.

Countries such as Thailand, the Philippines, Malaysia, and Indonesia have introduced tax breaks and initiatives to improve the ease of doing business whereas Vietnam, Singapore, and Cambodia have accelerated business reforms, such as executing free trade agreements (FTAs), and double taxation agreements (DTAs).

These incentives are targeted to attract investors affected by the US-China trade war (Trade War Incentive Schemes in ASEAN). The developments showcase how ASEAN members are distinguishing themselves from the fellow competition and what opportunities are available for investors looking elsewhere in Asia.

These top the list of vast multiple incentives by ASEAN countries given to mostly large multinational players originating from USA, Europe, Japan, China.

However, there is a lack of ASEAN incentives for companies originated from ASEAN itself, in particular, ASEAN corporations, with the objective to empower and incentivize them to invest and increase participation in ASEAN countries.







1. FDI and Corporate Investment Trends

The past two years (2019 and 2020) were exceptional for ASEAN in terms of foreign direct investment (FDI): 2019 saw the region's highest-ever inflows, at \$182 billion – making ASEAN the largest recipient of FDI in the developing world – and 2020 saw the unprecedented impact of the COVID-19 pandemic, with a 25 per cent fall in FDI, to \$137 billion (Figure 1.4) (Source: UNCTAD 2021-2022 Investment report). The decline followed lockdown measures, supply chain disruptions, falling corporate earnings, successive waves of the pandemic, economic uncertainty and postponement of investment by multinational enterprises (MNEs).

Despite the decline, ASEAN remained an attractive investment destination; the region's share of global FDI rose from 11.9 per cent in 2019 to 13.7 per cent. FDI inflows remained more than twice the amount seen during the 2007–2008 global financial crisis and nearly five times more than the annual average during the 2002–2004 outbreak of SARS (severe acute respiratory syndrome).

Compared to FDI, Intra-ASEAN investment inflow is only at \$23 Billion, but saw greater growth from 12% in 2019, to 17% in 2020 during the pandemic period.

Figure 1.2:

Source: UNCTAD and ASEAN Secretariat

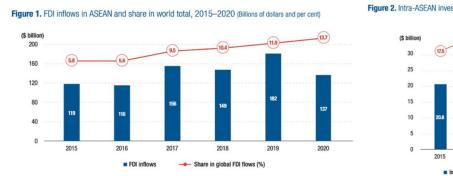


Figure 2. Intra-ASEAN investment flows and shares, 2015–2020 (Billions of dollars and per cent)



Source: ASEAN Secretariat, ASEAN FDI database.

The past two years (2019 and 2020) were exceptional for ASEAN in terms of foreign direct investment (FDI): 2019 saw the region's highest-ever inflows, at \$182 billion – making ASEAN the largest recipient of FDI in the developing world – and 2020 saw the unprecedented impact of the COVID-19 pandemic, with a 25 per cent fall in FDI, to \$137 billion. Despite the decline, investment within ASEAN was resilient, rising by 5 per cent to \$23 billion, pushing up the intra-ASEAN share of FDI in the region from 12 to 17 % (Source: UNCTAD 2021-2022 Investment report).

Most industries other than those in infrastructure and digital economy sectors saw FDI fall. Strong investment in the digital economy, the roll-out of 5G licences and active investment in data centres







and cloud computing, including relocation of factories to some Member States, helped to cushion the fall to some extent. ASEAN MNEs continued to internationalize during the pandemic but with lower levels of investment.

Firms from Singapore remained the region's largest investor in 2020, followed by those from Thailand. A significant amount of investment from these two and other ASEAN Member States is made within the region. Outward FDI (OFDI) from Thailand rose by 78 per cent, from \$10 billion in 2019 to an all-time high of \$18 billion. This underscores the growing appetite of Thai companies to internationalize to expand their market, particularly in ASEAN.

Thai MNEs have also been active in acquiring assets abroad, with their cross-border M&A purchases more than doubling to \$17 billion in 2020. About 70 per cent of OFDI from that country was in financial services, manufacturing, and wholesale and retail trade. More than 37 per cent of Thai OFDI and nearly 45 per cent of Singapore OFDI in 2020 was in ASEAN. OFDI from Indonesia and from the Philippines to the world each rose to \$4 billion, from \$3 billion in 2019. (Source: UNCTAD 2021-2022 Investment report).

2. Intra-ASEAN investment

While most major sources of FDI in ASEAN fell, intra-ASEAN investment was resilient. It rose by 5 per cent to \$23 billion, pushing up the intra-ASEAN share of FDI in the region from 12 per cent to 17 per cent (Figure 1.5). (Source: ASEAN Investment Report 2021). Three aspects of continuing regional dynamics play a role in supporting investment in intra-regional investment.

- 1. Regional integration and emerging investment opportunities encourage ASEAN companies to internationalize in the region to expand markets and to increase efficiency. Geographical and cultural proximity and affinity favour early stages of internationalization to neighbouring countries.
- 2. The support of Member States for corporate regionalization is an important factor. Many investment promotion agencies (IPAs) in the region promote awareness of ASEAN agreements, regional integration and their implications for business and investment opportunities to home-country investors.
- 3. The continuation of regional division of labour by ASEAN MNEs relocating from higher-cost or labour-constrained markets to lower-cost or labour-abundant locations (e.g. the CLMV countries and Indonesia).

A. Intra-ASEAN investment sources

Intra-ASEAN investment is typically highly concentrated, coming from a few source countries. Companies from two Member States (Singapore and Thailand) provided 84 per cent of all intra-ASEAN



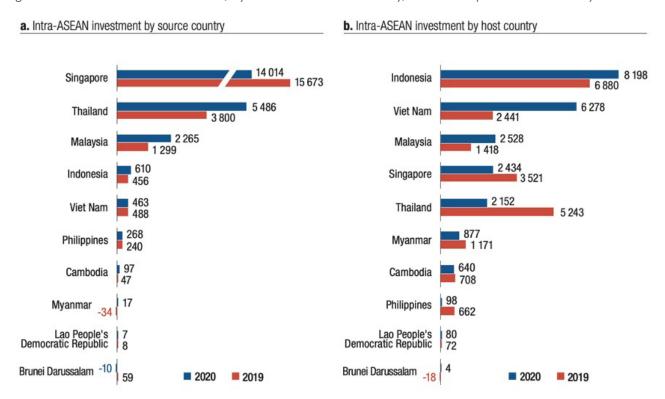




investment in 2020 (Figure 1.5); four Member States (Indonesia, Viet Nam, Malaysia and Singapore in that order) received 83 per cent of all such investment. Thai companies are increasingly active regional investors, overtaking the historical second position of Malaysian companies. Thai investment within ASEAN in 2020 was the highest recorded. (Source: ASEAN Investment Report 2021)

Investment in ASEAN from Singapore fell 11 per cent in 2020 to \$14 billion but was cushioned by a rise in intraregional investment, mainly from four Member States (Thailand, Malaysia, Indonesia and the Philippines). Despite the fall, Singapore remained a significant source of investment for many Member States, as companies from that country accounted for more than 25 per cent of FDI in Indonesia and 32 per cent in Viet Nam. Companies from Singapore were the largest investor group in Member States such as Indonesia, Thailand and Viet Nam. (Source: ASEAN Investment Report 2021)

Figure 1.3: Intra-ASEAN investment, by source and host country, 2019-2020 (Millions of dollars)



Source: ASEAN Secretariat, ASEAN FDI database.

B. Intra-ASEAN investment recipients

Firms from three Member States (Indonesia, Viet Nam and Malaysia) accounted for 73 per cent of intraregional investment in 2020, and all three countries received more intra- ASEAN investment than in 2019 (Figure 1.6). In Indonesia, the largest recipient, intra-ASEAN investment rose by 19 per cent to

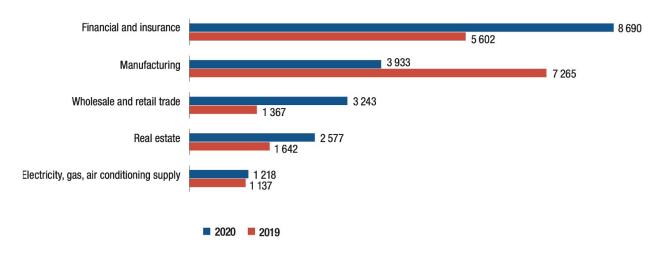






\$8.2 billion. Intraregional investment in Viet Nam rose 2.6 times to a record \$6.3 billion. Singapore, traditionally a major recipient of intra-ASEAN investment, saw such investment fall by 31 per cent to just \$2.4 billion – the second lowest level recorded since 2010. (Source: ASEAN Investment Report 2021)

Figure 1.4: Intra-ASEAN investment by industry, 2019 and 2020 (Millions of dollars)



Source: ASEAN Secretariat, ASEAN FDI database.

Intra-ASEAN investment to the top five industries, other than manufacturing, rose from \$17 billion to \$18.5 billion, pushing up the share of these industries in intraregional investment from 77 per cent to 80 per cent (Figure 1.6). Strong intraregional investment in finance and in wholesale and retail trade were the key drivers sustaining the rise. The significant decline in intraregional manufacturing investment – from \$7.3 billion in 2019 to \$3.9 billion, primarily by companies headquartered in Singapore – was a key reason for intraregional manufacturing investment to falter. Companies from Singapore accounted for 88 per cent of intraregional manufacturing investment in 2019–2020. (Source: ASEAN Investment Report 2021)

While all of the FDI from non-ASEAN regions remains to be important and we would like to see it continue to increase its role in ASEAN regions, we would also like to see more intra-ASEAN investments, which will strengthen ASEAN and promote collaborations across different ecosystems between ASEAN countries.

Through ASEAN Business Entity, ASEAN-BAC 2023 will promote intra-ASEAN investment by offering advantages to businesses operating in the region such as simplified regulations and streamlined procedures. The first step is to identify and acknowledge such qualified ASEAN originated business corporations to be awarded status as an ASEAN Business Entity (ABE) and then formulate policies







to support them. By fostering the ABE to do increased participation in various ASEAN countries will enhance collaborations amongst ASEAN members to create a strong and resilient economic cooperation.

III. The Benefits of Intra-ASEAN Investments

Investing within the ASEAN region presents numerous advantages for both businesses and the ASEAN as a whole. Here are some key benefits:

Figure 1.5:



Market Access and Growth Opportunities



Reduce Trade Barriers



Enhanced Value Chains



Technology and Knowledge Transfer



Job Skill and Creation Development

1. Market Access and Growth Opportunities

Investing within the ASEAN region allows companies to tap into a fast-growing and dynamic market of more than 650 million people. This vast consumer base offers significant growth potential for businesses across industries.

2. Reduced Trade Barriers

Intra-ASEAN investments benefit from the ASEAN Economic Community (AEC) initiative, which aims to create a single market with a freer flow of goods, services, investment, and skilled labor. This initiative reduces trade barriers and facilitates cross-border investments within ASEAN.

3. Enhanced Value Chains

Intra-ASEAN investments contribute to strengthening value chains within the region. With increased investments, companies can benefit from closer integration and collaboration among ASEAN countries, resulting in improved production capabilities and stronger regional competitiveness.

4. Technology and Knowledge Transfer

Investing within the ASEAN region enables companies to share technology and knowledge, leading to increased innovation and productivity. This exchange enhances the region's capabilities to develop competitive industries and encourages the growth of local businesses.







5. Job Creation and Skill Development

Increased investments within the ASEAN region generate employment opportunities and facilitate skill development for local populations. This, in turn, leads to improved living standards and contributes to poverty reduction.

IV. ASEAN-Level Collaboration to promote Intra-ASEAN Investments

To actively promote and facilitate intra-ASEAN investments, collaboration among ASEAN member states is crucial. Here are some strategies to foster collaboration:

1. Regulatory Alignment

Harmonizing regulatory frameworks and policies among ASEAN countries can simplify investment processes and reduce barriers for businesses operating across borders. Efforts should be made to streamline procedures, ensure consistency, and enhance transparency.

2. Investment Promotion and Networking

ASEAN member states should collaborate to collectively promote investment opportunities within the region. This can be achieved through targeted investment forums, trade fairs, and business matchmaking events, which effectively connect investors with potential projects and partners.

3. Information Sharing

Establishing a robust information-sharing mechanism among ASEAN countries can aid in identifying potential investment opportunities. Sharing market intelligence, sector-specific data, and investment projects can unlock investment potential and facilitate informed decision-making for businesses.

4. Capacity Building

Enhancing the capacity of ASEAN countries to attract and absorb investments is essential. This can be achieved through training programs, capacity-building initiatives, and knowledge-sharing platforms that focus on investment facilitation and promotion.

V. Stakeholder Ecosystem

A descriptive 'map' of key stakeholders – from working groups to institutional partners – involved in the ASEAN investments. Emphasis on the role of public actors, ASEAN corporations, and ASEAN (and Global) tech players.







Figure 1.6:



1. ASEAN Member States (AMS)

The ten ASEAN member states—Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam—are important stakeholders in ASEAN investments. They collaborate to develop regional policies, regulations, and frameworks that facilitate cross-border investments within ASEAN.

2. ASEAN Secretariat

The ASEAN Secretariat, based in Jakarta, Indonesia, serves as the main administrative organization of ASEAN. It provides support to ASEAN bodies, facilitates communication among member states, and monitors the implementation of ASEAN agreements related to investments.

3. ASEAN Economic Ministers (AEM)

The AEM consists of the economic ministers from each ASEAN member state. They play a crucial role in formulating economic policies, strategies, and initiatives to promote investment and economic integration within ASEAN.

4. ASEAN Business Advisory Council (ASEAN-BAC)

ASEAN-BAC represents the private sector's interests and serves as an adviser to ASEAN leaders. Composed of leading ASEAN business personalities, ASEAN-BAC provides recommendations and inputs to foster a conducive investment climate and promote public-private partnerships.







5. ASEAN Coordinating Committees

These committees, such as the ASEAN Coordinating Committee on Investment (CCI) and the ASEAN Coordinating Committee on Services (CCS), focus on specific sectors or areas crucial for trade and investments within ASEAN. They work towards reducing barriers, promoting harmonization, and facilitating investments.

6. ASEAN Promotion Agencies

National promotion agencies of each ASEAN member state, such as the Malaysia External Trade Development Corporation (MATRADE) and the Thailand Board of Investment (BOI), are responsible for promoting investments in their respective countries. They provide information, incentives, and support to attract investors.

7. ASEAN Infrastructure Fund (AIF)

AIF, managed by the ASEAN Infrastructure Fund Pty. Ltd., supports infrastructure development in ASEAN member states. It provides financing for strategic infrastructure projects that contribute to regional connectivity and enhance the investment climate.

8. ASEAN Investment Promotion and Protection Agreements (AIPAs)

AIPAs are agreements among ASEAN member states that provide support and protection to investors. These agreements aim to create a more predictable and secure investment framework, ensuring fair treatment, dispute resolution mechanisms, and safeguards against expropriation.

9. ASEAN corporations

Local corporations within ASEAN play a significant role in intra-ASEAN investments. These include large conglomerates, small and medium-sized enterprises (SMEs), and state-owned enterprises (SOEs). Many ASEAN corporations actively invest in various sectors, contributing to economic growth and employment generation.

10. Global Tech Players

Multinational technology companies, such as Google, Microsoft, and Amazon, are important stakeholders in ASEAN's investment landscape, particularly in the tech sector. These companies bring expertise, technology transfer, and investments that contribute to developing ASEAN's digital economy and innovation ecosystem.

11. Public-Private Partnerships (PPPs)

Governments within ASEAN collaborate with private entities through PPPs to promote investments in infrastructure, healthcare, education, and other sectors. These partnerships leverage private sector efficiency and resources to drive economic development and address societal needs.







12. Venture Capital (VC) Firms and Investors

ASEAN and global VC firms and investors play a crucial role in supporting the growth of ASEAN startups and tech companies. They provide funding, mentorship, and networks that fuel innovation and entrepreneurship within ASEAN.

In summary, a wide range of stakeholders, including public actors, ASEAN corporations, and ASEAN and global tech players, collaborate within the ASEAN investments ecosystem. Their collective efforts drive economic integration, facilitate investments, and support the development of a vibrant and competitive ASEAN region.

VI. Policy Priority Agenda

Figure 1.7:



Policy Action 1.1: Identify and Acknowledge ASEAN Business Entity (ABE)

Currently, there is no definition of what should be an ASEAN Business Entity (ABE) whilst there should be many corporations (large, medium, or even small) that can be acknowledged as ABE, which is essentially, a corporation that has been operating business in multiple countries within ASEAN.

In order to identify such ABE, we need to come up with certain qualifications or characteristic. We need to define ABE and map the qualification criteria, indicators, and then provide incentives scheme to make it more appealing in order to encourage them to do more or increase business participation within ASEAN region.

Below is a proposed initial qualifications of ABE to be agreed multilateraly between ASEAN countries.







Table 1.3:

No.	Qualifications of Asian Business Entity (ABE)			
a)	Operate in 2 out of 11 ASEAN Countries (phase 1)			
b)	Operate in 6 out of 11 ASEAN Countries (phase 2)			
c)	Operate in 11 out of 11 ASEAN Countries (phase 3 - Ultimate)			
d)	Compliance with regulation and standards in each of ASEAN member states that they operate			
e)	Operate in digital transformation, food security, healthcare, sustainability			
f)	Strong and stable financial standing			
g)	Well organized and adherence to Good Corporate Governance (GCG) principles			
h)	Competitive products or services in line with Inclusive Business			
i)	Commitment to innovation and technology that can be measured with positive track record			
j)	Commitment to Sustainable Development Goals (SDGs)			

Policy Action 1.2: Incentives for ASEAN Business Entity (ABE)

Incentives play a pivotal role in encouraging ASEAN companies to invest and expand their operations within the ASEAN region. Some key incentives that can be provided include:

Figure 1.8:



Ease of Travel (ASEAN CARD)



Tax Incentives



Financial Support



Regulatory System



Priority Strategic Supports

A. Ease of travel (ASEAN CARD)

Governments can offer tax incentives such as reduced corporate tax rates, accelerated depreciation, or tax holidays for ASEAN-originated companies that invest within the region. These incentives provide a competitive advantage and attract companies to consider intra-ASEAN investments.





B. Tax Incentives

Governments can offer tax incentives such as reduced corporate tax rates, accelerated depreciation, or tax holidays for ASEAN-originated companies that invest within the region. These incentives provide a competitive advantage and attract companies to consider intra-ASEAN investments.

C. Financial Support

Governments and regional financial institutions can provide financial support in the form of grants, loans, or preferential interest rates to ASEAN-originated companies looking to invest within the region. This support can help businesses navigate initial capital costs and mitigate potential risks associated with intra-ASEAN investments.

D. Regulatory Support

Governments can provide regulatory support by simplifying investment procedures, reducing bureaucratic hurdles, and implementing investor-friendly policies. This streamlines the investment process and encourages ASEAN companies to invest within the region.

E. Priority Strategic Sectors Support

Governments can prioritize key strategic sectors requiring investment, such as Digital Transformation, Food Security, Healthcare Resilience, and Sustainability.

Policy Action 1.3: Promote Collaborative Strategy Setting

VI.3. (a) Transform mindset towards ASEAN-level collaboration by avoiding competition in all front but rather utilizing respective unique core strength and specializations and join hands for greater good in order to strengthening the whole business and economic integration in the ASEAN region.

VI.3. (b) Promote networking of ASEAN companies across different ecosystems through Joint events, business development initiatives, and Other collaborative strategy settings

VII. How These Efforts Will Benefit ASEAN MSMEs

Intra-ASEAN investments and collaboration present significant benefits for ASEAN's Mid to Small Medium Enterprises (MSMEs). Here are some key advantages:

1. Expanded Market Access

Intra-ASEAN investments allow MSMEs to access a larger regional market of over 650 million consumers. By expanding their reach beyond domestic borders, MSMEs can tap into new customer bases, increasing their sales potential and market share.







2. Supply Chain Integration

Collaboration between ASEAN nations facilitates supply chain integration, allowing MSMEs to be part of regional value chains. MSMEs can become suppliers or subcontractors to larger ASEAN corporations, gaining access to larger markets and business opportunities. This integration can enhance their competitiveness and provide avenues for growth.

3. Access to Resources and Technologies

Intra-ASEAN investments enable MSMEs to access a broader range of resources and technologies available within the region. Through partnerships, MSMEs can leverage expertise, knowledge, and innovations from other ASEAN countries, leading to improved product quality, productivity, and efficiency.

4. Business Networks and Linkages

Collaboration with businesses from other ASEAN countries opens up networking opportunities for MSMEs. They can establish connections with distributors, suppliers, investors, and potential business partners. These networks enable knowledge sharing, joint ventures, and access to new markets, enhancing MSMEs' capabilities and market reach.

5. Capacity Development

Intra-ASEAN investments provide avenues for MSMEs to enhance their capabilities and competitiveness. Collaboration with ASEAN partners can involve technology transfer, training programs, and mentoring from larger corporations. This helps MSMEs upgrade their skills, adopt best practices, and strengthen their operations, contributing to sustainable growth.

6. Financial Support and Incentives

ASEAN member states and regional financial institutions offer various financial support programs and incentives to promote intra-ASEAN investments and collaborations. These include access to financing, grants, incentives for technology adoption, and investment promotion schemes. Such support can enable MSMEs to overcome financial barriers and scale up their operations.

7. Enhanced Resilience and Risk Mitigation

By expanding their customer base beyond their home market, MSMEs become less dependent on a single market's economic conditions. Intra-ASEAN investments diversify their revenue sources, reducing the risks associated with operating in a single country. This increased resilience strengthens the MSMEs' ability to navigate economic challenges effectively.







8. Policy Harmonization and Simplification

ASEAN's efforts towards policy harmonization and simplification facilitate intra-ASEAN investments for MSMEs. Streamlined regulations, customs procedures, and trade facilitation measures reduce barriers and administrative burdens. This enables MSMEs to engage in cross-border activities more easily and cost-effectively.

9. Knowledge Sharing and Learning Opportunities

Collaboration with ASEAN partners allows MSMEs to learn from their experiences and share knowledge. Platforms such as ASEAN SME Academy and ASEAN Business Advisory Council provide training programs, workshops, and forums for MSMEs to exchange insights, learn from successful ASEAN businesses, and gain exposure to emerging trends and markets.

10. Brand and Image Enhancement

Intra-ASEAN investments can contribute to enhancing the brand and image of MSMEs. Collaborating with reputable ASEAN partners can build trust and credibility in the regional market. Being part of a network of ASEAN businesses can positively impact their reputation, attracting more customers and investors.

In summary, intra-ASEAN investments and collaboration offer a range of benefits to ASEAN MSMEs. They provide access to larger markets, resources, technologies, networks, and capacity-building opportunities. MSMEs can leverage these advantages to enhance their competitiveness, scale up their operations, and foster sustainable growth within the ASEAN region.

VIII. Roadmap and Timeline

- Identification of ABE definition: End 2023
- Launch of Intra-ASEAN Investment Desk in each of ASEAN countries: July 2024
- Formulating Incentives for Intra ASEAN-Investment: End 2024
- Announcing 20 ASEAN Companies to be labeled ABE: End 2024

IX. Conclusion

Promoting intra-ASEAN investments through collaboration and incentives is vital for unlocking the region's economic potential. By facilitating investments, enhancing value chains, and fostering innovation, ASEAN can achieve sustainable economic growth, create employment opportunities, and improve the standard of living for its people.







By increasing regulatory alignment, information sharing, capacity building, and the provision of incentives, ASEAN can create a favorable environment for businesses to invest and thrive within the region. Emphasizing intra-ASEAN investments will help ASEAN member states capitalize on the region's vast potential and strengthen its position in the global economy.

Through ASEAN Business Entity, ASEAN-BAC 2023 will promote intra-ASEAN investment by offering advantages to businesses operating in the region such as simplified regulations and streamlined procedures. The first step is to identify and acknowledge such qualified ASEAN originated business corporations to be awarded status as an ASEAN Business Entity (ABE) and then formulate policies to support them. By fostering the ABE to do increased participation in various ASEAN countries will enhance collaborations amongst ASEAN members to create a strong and resilient economic cooperation.

ASEAN holds immense potential for intra-ASEAN investments that can drive economic growth, innovation, and sustainability. To promote intra-ASEAN investments, collaboration and incentives play a pivotal role in encouraging ASEAN originated companies to invest and expand within the region.







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ASEAN-BAC 2023 KNOWLEDGE PARTNERS















McKinsey & Company







ASEAN-BAC 2023 POLICY ADVOCACY EFFORTS

Since the inception of Indonesia's Chairmanship in January, ASEAN-BAC has continued to advocate its five policy priorities which spans across five different sectors: digital transformation, sustainable development, health resilience, food security, and trade & investment facilitation. The 2023 ASEAN-BAC Chairmanship works to achieve the theme of ASEAN Centrality: Innovating Towards Greater Inclusivity while implementing the fundamental values of the 5Ps – people, planet, prosperity, peace, and partnership.

January



ASEAN-BAC Introduction at World Economic Forum (WEF)



Indonesia's ASEAN-BAC Chairmanship Inception



21st ASEAN-BAC Joint Business Council Meeting



95th ASEAN-BAC Council Meeting



Powered by







Courtesy Meeting with the Secretary-General of ASEAN Dr. Kao Kim Hourn

February



ASEAN-BAC Business Forum in Singapore



Meeting with Singapore Business Federation (SBF)

March



1st ASEAN Economic Ministers' Meeting in Magelang



ASEAN Finance Minister and Central Bank Governor Meeting









ASEAN Finance Minister and Central Bank Governor Meeting



ASEAN-BAC Meeting with GCash

April



Courtesy Call meeting with Deputy capital Meeting National Bank of Cambodia Chea Serey



Courtesy Call meeting with Secretary of State of Commerce of Cambodia Rath Saravuth

May



ASEAN-BAC Presentation in the Organisation of Economic Co-operation and Development (OECD)



ASEAN-BAC in the Brunei Business Conference









APEC BAC Gala Dinner



ASEAN-BAC Interface with ASEAN Leaders 2023

June



ASEAN-BAC Meeting with East Asia Business Council (EABC)



Courtesy Call with Minister of Trade of the Republic of Indonesia Zulkifli Hasan

July



ASEAN-BAC Meeting with Thai Board of Investment



ASEAN-BAC Meeting with Center for China and Globalization



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August



ASEAN-BAC Panel Discussion on ASEAN Day 2023



98th ASEAN-BAC Council Meeting



22nd ASEAN-BAC Joint Business Council Meeting



2nd ASEAN Economic Ministers' Meeting in Semarang



Courtesy Call with Secretary of Trade and Industry of the Philippines Alfredo E. Pascual



Courtesy Call with Minister of Industry and Trade of Vietnam Nguyen Hong Dien









Courtesy Call with Minister of State at the Department for Business and Trade of the United Kingdom Nigel Huddleston



Courtesy Call with Minister for Trade and Industry of Singapore Gan Kim Yong







ASEAN-BAC 2023 ROADSHOWS

Throughout Indonesia's ASEAN-BAC 2023 Chairmanship, we have conducted several roadshows to ASEAN Member States and ASEAN Dialogue Partner countries. It was important for us to conduct these roadshows to take in the regional and global perspectives and put it at the forefront of our work this year. During the roadshows, we listened to the aspirations of businesses across ASEAN countries and its partners – incorporating it to our activities through the Chairmanship.

Singapore



Meeting with Singapore Minister for Sustainability and Environment – February



Meeting at the ISEAS Yusof Ishak Institute
- February

Philippines



Meeting with the Philippines Chamber of Commerce and Industry (PCCI) - February



Meeting with the Indonesian Embassy in the Philippines – February







Malaysia



Meeting with Malaysia Minister of International Trade and Investment – February

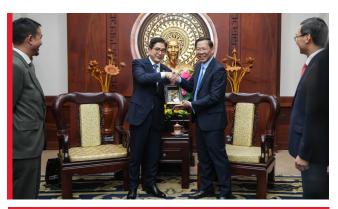


Meeting with ASEAN-BAC Malaysia - March

Vietnam



Meeting with VCC - March



Courtesy Call to Chairman of People's Committee HCMC - March

Cambodia



Courtesy Call to the Secretary-General of the Council for the Development of Cambodia – April



Meeting with the President of Cambodia Chamber of Commerce (CCC) - April







Brunei Darussalam



Meeting with APEC BAC ASEAN Caucus - April



Hi-tea with ASEAN-BAC Brunei - April

Myanmar



Business Forum with the Union of Myanmar Federation of Chambers of Commerce and Industry (UMFCCI) – May



Breakfast Meeting with Myanmar - Chinese Chamber of Commerce - May

The United Kingdom



BloombergNEF ASEAN Executive Roundtable – May



Meeting with the UK Minister for Indo-Pacific at The Foreign, Commonwealth, & Development Office – May







Lao PDR



Meeting with Lao National Chamber of Commerce and Industry (LNCCI) - May



Visit to Vientiane Logistics Park - June

Japan

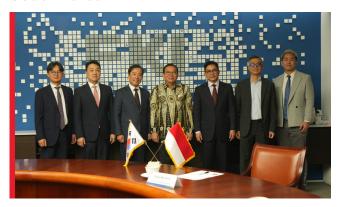


Meeting with Minister of Economy, Trade, and Industry – June



Meeting with the President of Cambodia Chamber of Commerce (CCC) – April

South Korea



Meeting with Chairman of Federation of Korean Industries – June



Hi-tea with ASEAN-BAC Brunei - April







Australia



Meeting with Australia Special Envoy to ASEAN – June



Meeting with Premier of New South Wales - June

Thailand



Meeting with Pheu Thai Party - July



Meeting with Thai Chamber of Commerce, Board of Trade of Thailand, Federation of Thai Industries, and Thai Bankers' of Association – July

China



Meeting with China Council for the Promotion of International Trade (CCPIT) – July



Visit to Commercial Aircraft Corporation of China (COMAC) – July



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