



ASEAN-CGIAR
Innovate for Food
and Nutrition Security

ASEAN'S AGRICULTURAL COOPERATION: SITUATION, CHALLENGES, AND LOOKING FORWARD

Ke Kou, Kevin Chen, Rui Mao

February 2024



Contents

List of Acronyms and Abbreviations.....	1
Summary.....	4
1. Introduction	7
2. ASEAN’s Agricultural Cooperation Strategies.....	8
2.1 ASEAN’s Intra-regional Agricultural Cooperation.....	8
2.1.1 Intra-ASEAN Agricultural Trade	8
2.1.2 Strategic Plans of Intra-ASEAN Agricultural Cooperation.....	10
2.2 ASEAN’s Supra-regional Agricultural Cooperation	11
2.2.1 Supra-ASEAN Agricultural Trade	11
2.2.2 Supra-ASEAN Agricultural Cooperation.....	14
3. ASEAN’s Agricultural Cooperation with China.....	17
3.1 Bilateral and Multilateral Mechanisms.....	17
3.2 ASEAN-China Agricultural Trade	18
3.3 China’s Agricultural Investment to ASEAN	19
3.4 Dialogue Platform through Expo, Cooperation Forums, and Assistance	21
4. ASEAN’s Agricultural Cooperation with Japan	22
4.1 Bilateral and Multilateral Mechanisms.....	22
4.2 ASEAN-Japan Agricultural Trade.....	23
4.3 Japan’s Agricultural Investment in ASEAN.....	24
4.4 Dialogue Platform through Expos, Cooperation Forums, and Assistance	24
5. ASEAN’s Agricultural Cooperation with India	26
5.1 Bilateral and Multilateral Mechanisms.....	26
5.2 ASEAN-India Agricultural Trade.....	27
5.3 India’s Agricultural Investment to ASEAN.....	27
5.4 Dialogue Platform through Expos, Cooperation Forums, and Assistance	27
6. ASEAN’s Agricultural Cooperation with the US.....	28
6.1 Bilateral and Multilateral Mechanisms.....	28
6.2 ASEAN-US Agricultural Trade.....	29
6.3 US’s Agricultural Investment to ASEAN.....	29
6.4 Dialogue Platform through Expo, Cooperation Forums, and Assistance	30

7. ASEAN’s Agricultural Cooperation with the EU	31
7.1 Bilateral and Multilateral Mechanisms.....	31
7.2 ASEAN-EU Agricultural Trade.....	32
7.3 EU’s Agricultural Investment in ASEAN	32
7.4 Dialogue Platform through Expo, Cooperation Forums, and Assistance	32
8. Conclusions on Deepening Agricultural Cooperation for Future.....	33
8.1 Deepening Agricultural Cooperation with Important Partners.....	33
8.2 Towards Effective Planning, Coordination, and Integration	34
References	36



List of Acronyms and Abbreviations

ACFTA	ASEAN-China Free Trade Agreement
AEC	ASEAN Economic Community
AEM	ASEAN Economic Ministers Meeting
AFSIS	ASEAN Food Security Information System
AFTA	ASEAN Free Trade Area
AIFS	ASEAN Integrated Food Security Framework
AIFTA	ASEAN-India Free Trade Agreement
AIIB	Asian Infrastructure Investment Bank
AIMMAF	ASEAN-India Ministerial Meeting on Agriculture and Forestry
AITIGA	ASEAN-India Trade in Goods Agreement
AJCEP	ASEAN–Japan Comprehensive Economic Partnership
AJMAF	ASEAN-Japan Ministers on Agriculture and Forestry
AMAF	ASEAN Ministers of Agriculture and Forestry
AMAF	ASEAN Ministerial Meeting on Agriculture and Forestry
AMS	ASEAN Member States
APEC	Asia-Pacific Economic Cooperation
APTCS	ASEAN Plus Three Cooperation Strategy
APTERR	ASEAN Plus Three Emergency Rice Reserve
ARF	ASEAN Regional Forum
ASEAN	Association of Southeast Asian Nations

ATIGA	ASEAN Trade in Goods Agreement
BRI	Belt and Road Initiative
CIDCA	China International Development Cooperation Administration
CLMV	Cambodia, Laos, Myanmar, and Vietnam (CLMV)
DPs	Dialogue Partner
EAS	East Asia Summit
EBA	Everything but Arms
FAF	Food, Agriculture and Forestry
FDI	Foreign Direct Investment
FTAs	Free Trade Agreements
FVC	Food Value Chains
GAP	Good Agriculture Practices
JAIF	Japan-ASEAN Integration Fund
LMC	Lancang-Mekong Cooperation
MARKET	Maximizing Agricultural Revenue Through Knowledge, Enterprise Development and Trade
MSMEs	Micro, Small & Medium Enterprises
NTBs	Non-Tariff Barriers
NTMs	Non-Tariff Measures
ODA	Official Development Assistance
PMC	Post Ministerial Conference

PPPs	Public Private Partnership
RCEP	Regional Comprehensive Economic Partnership
SDPs	Sectoral Dialogue Partners
SMEs	Small and Medium Enterprises
SOM	Senior Officials Meeting
SOM-AMAF	Senior Officials Meeting–ASEAN Ministers of Agriculture and Forestry
TATF	Technical Assistance and Training Facility
TIFA	Trade and Investment Facilitation Agreement
USAID	United States Agency for International Development

Summary

This report extensively examines intra-regional and supra-regional agricultural cooperation of the ASEAN region, focusing on major agricultural trade partners with China, Japan, India, the EU, and the US. The analysis spans from the evolution of intra-ASEAN agricultural trade and cooperation to overall cross-regional agricultural trade and agricultural cooperation. Five important ASEAN agricultural trade partners were selected, specifically focused on agricultural trade, bilateral and cross-regional cooperation mechanisms, agricultural investment, as well as assistance and other dialogue platforms. This report gives a big picture for current overall situation of ASEAN agricultural cooperation, providing insights for fostering sustainable development, trade resilience, and strategic partnerships in the ever-evolving global agricultural landscape.

Framework

The structure of the report is organized as follows: Section one introduces the context and background of research; the second section describes the overall ASEAN's agricultural cooperation from both intra-regional and supra-regional perspectives. From the third to seventh section, we separately analyze the close agricultural cooperation between ASEAN and the big five partner countries, namely China, Japan, India, the EU, and the US, as well we discuss the bilateral and cross-regional cooperation mechanisms, agricultural trade, investment, and dialogue platforms. In the eighth section, we discuss how to deepen ASEAN agricultural cooperation amid various challenges.

Data and Methodologies

The trade data used for analysis are from BACI database, ASEAN Statistic Yearbooks and annual agricultural trade reports from target countries in order to demonstrate the ASEAN's agricultural trade as well as investment cooperation. We also examined the political, policy documents and press releases from official sites to analyze the cooperation mechanisms and dialogue platforms.

Key Findings

- The agricultural landscape in the ASEAN region has witnessed significant developments in trade, cooperation mechanisms, investment, and dialogue platforms over the past two decades.
- Intra-ASEAN agricultural trade has expanded. However, the share of agricultural trade within the region remains modest, emphasizing the simultaneous rise of supra-regional trade in agricultural products. Remarkably, the ASEAN region has become a net agricultural exporter, with key markets and sources spanning over China, the USA, the EU, Japan, and India. This result shows that the gains from trade expansion strategy from trading with the supra-regional big five partners

bring more and broader benefits to ASEAN than the moderate benefits from intra-regional trade within ASEAN alone. Therefore, ASEAN will continue to be better off by pursuing simultaneously its regional free trade as a pack and freer trade with external major trading partners.

- Agricultural cooperation mechanisms within ASEAN showcase a comprehensive framework for the sector's vision and objectives. Both intra-regional and supra-regional initiatives, such as the Strategic Plan for ASEAN Cooperation in Food, Agriculture, and Forestry and the ASEAN+1 Free Trade Agreements, underscore the commitment to fostering collaboration on a global scale.
- From the investment perspective, the ASEAN region has experienced fluctuations in total agricultural Foreign Direct Investment (FDI). Notably, China stands out as a consistent contributor, while Japan, India, the US, and the EU exhibit varying degrees of engagement, reflecting the dynamic nature of foreign investments in the ASEAN agricultural sector.
- In terms of dialogue platforms, ASEAN has diverse opportunities to deepen agricultural cooperation with key partners. China's multifaceted approach, spanning expos, Agricultural Cooperation Forums, and multiple technical assistance programs, stands out as a comprehensive model. Other partners, such as India, Japan, the US, and the EU, engage in essential forums and assistance, suggesting potential for further expansion.

Recommendations

As the region navigates between various challenges and opportunities, continuing to enhance the collaborative efforts will be pivotal for sustaining agricultural development and ensuring food security in the ASEAN community.

To enhance the cooperation with important agricultural partners, we recommend:

- First, ASEAN strategically positions itself to attract more agricultural investment, recognizing China's increasing role and exploring collaboration with Chinese investors. Apart from China, efforts could be made to engage with other agricultural cooperation partners. Understanding the reasons behind the decline in FDI from the EU and Japan can inform targeted initiatives to reinvigorate partnerships.
- Second, ASEAN further develops cooperation mechanisms by diversifying free trade agreements with its cross-regional major partners. Intensify efforts in negotiating FTAs with partners, especially the EU and the US, to create a foundation for a comprehensive inter-regional trade agreement. Extend efforts beyond East Asia to foster agricultural partnerships with India, the US, and the EU to enhance the resilience and inclusivity of agricultural collaboration.
- Third, in addition to ASEAN's diversified agricultural cooperation with its partners, ASEAN could learn from China's multifaceted approach, including expos, forums, and comprehensive assistance programs, to enhance collaboration with other partners. Encourage other partners (India, Japan, the US, and the EU)

to expand the range of cooperation mechanisms, such as expos, forums, and assistance programs, to match China's comprehensive model.

To enhance the agricultural cooperation within ASEAN, ASEAN could continue to develop on the path of integration. Develop a communication and coordination mechanism to actively integrate resources from different countries, promoting sustainable agricultural development cooperation. Furthermore, ASEAN may consider recognizing the varying levels of development and agricultural potential among ASEAN member states to deepen agricultural collaboration by implementing a mutually beneficial strategy.

1. Introduction

Agriculture stands as a fundamental pillar for most economies within the Association of Southeast Asian Nations (ASEAN) region, playing a pivotal role in both economic growth and poverty alleviation. Various member countries of ASEAN have strategically oriented their development policies towards "export-oriented" where they have comparative agricultural strength. These are exemplified by the emphasis on palm oil and rubber in Indonesia and Malaysia, as well as high-value beverages like cacao and coffee in Vietnam. Countries like Thailand and Vietnam recognize the dual significance of addressing both export and food security needs. Under the policy guidance of focusing on developing exports, ASEAN has evolved into a net agricultural exporter. ASEAN's agricultural exports in 2021 were approximately 176 billion USD, while agricultural imports were 130 billion USD. The ASEAN Member States (AMS) have broadened their engagement in the global trade of agricultural and food products in past decades. The increasing effectiveness of agricultural value chains and trade holds paramount importance in mitigating rural poverty, fostering economic transformation, and contributing to overall growth within the developing economies. For the producers and consumers in the region, intra/inter-regional and supra-regional agri-food markets have emerged as a significant source of income and food (Greenville & Kawasaki, 2018). Due to greater market integration, Southeast Asia has made significant achievements in recent years in the creation of value chains and the facilitation of agricultural commerce.

The ASEAN developed a series of agricultural cooperation frameworks that represent a concerted effort among member states to enhance collaborative and sustainable development within the agricultural sector. The ASEAN Ministerial Meeting on Agriculture and Forestry (AMAF) serves as a key dialogue avenue, bringing together ministers responsible for agriculture to deliberate on regional initiatives and strategies. The ASEAN+3 framework, involving ASEAN member states, China, Japan, and South Korea, has been pivotal in promoting agricultural research, technology transfer, and capacity building. The ASEAN Integrated Food Security Framework (AIFS) is another significant initiative that underscores the commitment to ensuring food security by encouraging cooperation in the production, trade, and distribution of agricultural products.

However, despite a series of developments identified, agricultural development in ASEAN Member States (AMS) faces many challenges amid climate change, a rapidly changing investment environment, globalization of value chains, and greater volatility in commodity markets. First, regional and international supply chains for staple crops are proliferating as a result of participation in transformation into a globalized value chains, with primary producing countries fearing a loss of sovereignty and missing out on opportunities for domestic industrialization and value addition (Roy et al., 2023). Furthermore, as urban populations continue to grow, food price shocks are considered a major threat by all countries in the region. These tendencies are

anticipated to worsen the problems of hunger and malnutrition, obstructing market expansion, and depriving smallholder farmers.

To address the challenges above and further promote agricultural transformation fueled by trade, it is crucial to comprehensively understand intra-regional agricultural cooperation (cooperation within the ten ASEAN member states) and supra-regional (cooperation between ASEAN and other regions or countries) agricultural cooperation. This report aims at reviewing the agricultural cooperation of the ASEAN region, clarifying the challenges and potential opportunities. The second section analyzes ASEAN's agricultural cooperation from both intra-regional and supra-regional perspectives. From the third to seventh sections, we separately analyze the close agricultural cooperation between ASEAN and the big five countries, namely China, Japan, India, the EU, and the US by examining bilateral and cross-regional cooperation mechanisms, agricultural trade, investment, and dialogue platforms. In the eighth section, we discuss how to deepen ASEAN agricultural cooperation amid various challenges.

2. ASEAN's Agricultural Cooperation Strategies

2.1 ASEAN's Intra-regional Agricultural Cooperation

2.1.1 Intra-ASEAN Agricultural Trade

ASEAN was established in 1967 by Indonesia, Malaysia, Philippines, Singapore and Thailand. Subsequently, Brunei Darussalam, Vietnam, Lao People's Democratic Republic, Myanmar and Cambodia successively joined ASEAN, forming the ten member states of ASEAN today. The inception of ASEAN's intra-regional collaboration within the realm of agriculture and food dated back as early as 1968, primarily focusing on the domains of food production and provisioning. Later, as the demand grew, the scope of cooperative efforts was expanded in 1977 to include the bigger field of agriculture and forestry (FAO, 2004).

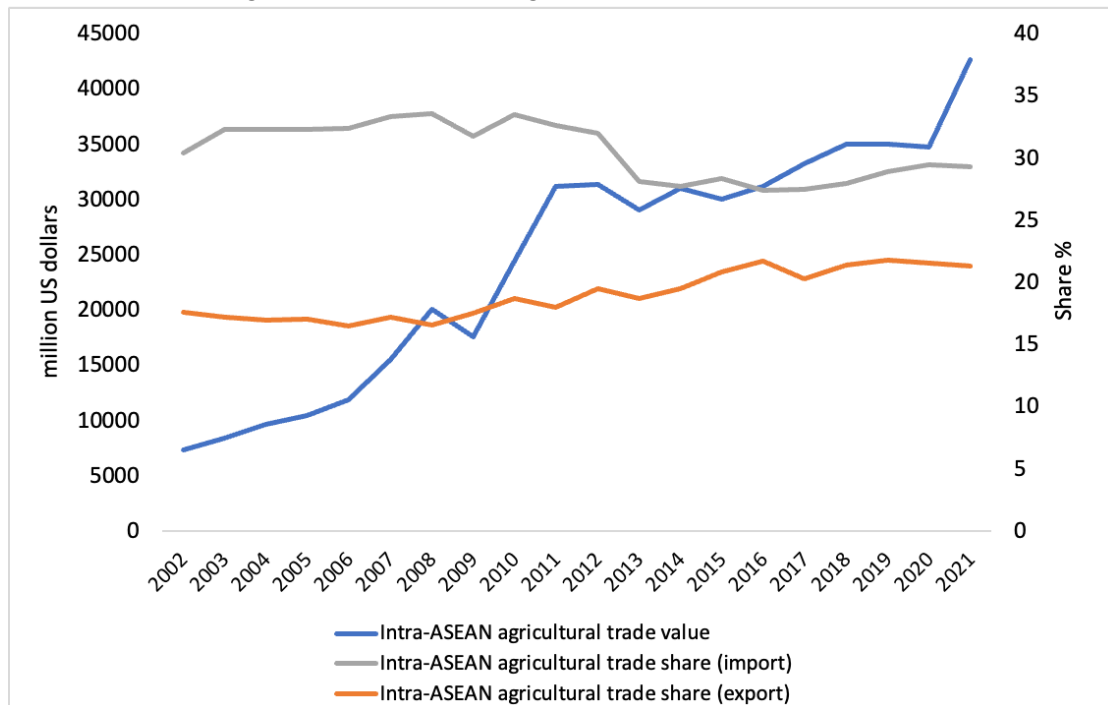
In 1993, the ASEAN took the initiative to establish the ASEAN Free Trade Area (AFTA). The reduction in tariffs initially applied to all manufactured goods, including capital commodities and processed agricultural and aquatic products. This tariff reduction did not apply to certain agricultural and aquatic products falling under HS codes 01–24. At the 26th ASEAN Economic Ministers Meeting (AEM) in 1995, ASEAN reached a consensus on the inclusion of agricultural products in the AFTA. In the same year, Vietnam joined ASEAN, followed by Laos and Myanmar in 1997, and Cambodia in 1999 (Sukegawa, 2021).

In response to the financial crisis in 1997, ASEAN decided to establish closer regional cooperation. In 2003, ASEAN leaders decided to expand and deepen regional cooperation based on the AFTA. Through the Bali Agreement II, ASEAN leaders

committed to seizing opportunities for regional integration that would benefit all parties involved and declared the ASEAN Economic Community (AEC) as a means of advancing ASEAN economic integration. The decision set 2035 as the completion date and sped up the program's implementation, which was initially expected to be finished between 1993 and 2008, over 15 years (Soesastro, 2005). According to Roy et al. (2023), the liberalization of intra-ASEAN agricultural trade was made possible by the accelerated implementation of AFTA in 2003. The first six members, known as the ASEAN-6, abolished tariffs in 2010, and the new ASEAN members, Cambodia, Laos, Myanmar, and Vietnam (CLMV), followed suit in 2015 by partially abolishing tariffs. When CLMV removed tariffs on the final 7% of tariff-residual items, AFTA was finished in January 2018. The liberalization rate of AFTA was 99.3% for ASEAN-6, 97.7% for CLMV, and 98.6% for ASEAN as a whole at the September 2019 ASEAN Economic Ministers Meeting (Sukegawa, 2021).

ASEAN has made major advances in improving living standards and incomes of citizens, and significantly decreased extreme poverty. It has strengthened food security, substantially reduced the prevalence of undernourishment, and dealt with food insecurity concerns in 2007 and 2008 when there was a spike in food prices (ASEAN Secretariat, 2015). The development of an integrated ASEAN market has been advanced by the elimination of tariffs on intra-ASEAN trade in most goods. Nevertheless, much remains to be done to establish the ASEAN Economic Community (AEC) goal of a single market and production base in food, agriculture, and forestry, to transform them into modern, competitive, sustainable industries, and to ensure that gains from deeper regional, global market integration, as well as the benefits of the modernization are equitably distributed and shared with the millions of small Food, Agricultural, and Forestry (FAF) producers and among small and medium enterprises (SMEs) – who dominate the sector. Though most tariffs have been eliminated, there remain many non-tariff measures (NTMs) that impede intra-ASEAN trade and undermine the region's international competitiveness. The relatively higher tariffs, that remain on the negative list of products in the ASEAN Trade in Goods Agreement (ATIGA) are another impediment. Land, water, and aquatic ecosystem degradation, deforestation, and depletion of the natural resource base continue contributing to climate change, lowering productivity, and threatening the food security, employment, and income stability of the people in the region (ASEAN Secretariat, 2015). According to Figure 1, the proportion of agricultural imports within the ASEAN region relative to the total ASEAN agricultural imports is approximately 30%, while the ratio of agricultural exports within the ASEAN region to the overall ASEAN agricultural exports stands at around 22%. However, with a sustained increase in intra-regional agricultural trade within the region, the intra-regional trade value increased from 7324.15 million USD in 2002 to 42722.3 million USD in 2021. Intra-ASEAN agricultural trade expanded in the past two decades, and Indonesia, Malaysia, Singapore, and Thailand comprise the major shares of total agricultural exports and imports in the region (Roy et al., 2023).

Figure 1: Intra-ASEAN Agricultural trade share and value



Notes: Trade share denotes the proportion of agricultural imports (exports) within the ASEAN region relative to the total ASEAN agricultural imports (exports).

Source: BACI database

2.1.2 Strategic Plans of Intra-ASEAN Agricultural Cooperation

Apart from the AFTA, ASEAN has formulated a vision for intra-regional agricultural cooperation. In 2013, the 23rd ASEAN Summit adopted the “Bandar Seri Begawan Declaration on the ASEAN Community’s Post-2015 Vision” and guided the development of a post-2015 vision. In the same year, the special Senior Officials Meeting of the 34th ASEAN Ministers on Agriculture and Forestry (SOM-34th AMAF) reached a consensus to formulate a vision, objectives, and goals of the ASEAN Cooperation in FAF sector towards 2020. Subsequently, during the Special SOM-35th AMAF, convened in 2014, a revised timeframe timeline 2016-2025 was adopted for the new vision of ASEAN Cooperation in Food, Agriculture, and Forestry. This adjustment aimed to align with the ten-year timeframe established by the 26th Meeting of the High-Level Task Force on Economic Integration (HLTF-EI) for work plans under the ASEAN Economic Community (AEC) Pillar (ASEAN Secretariat, 2015).

The Strategic Plan for ASEAN Cooperation in Food, Agriculture, and Forestry for the period 2016-2025 serves as a comprehensive framework that outlines the vision and objectives for the food, agriculture, and forestry sector. Within this plan, key areas of collaboration are identified and prioritized, accompanied by the proposal of Strategic Thrusts and Action Programmes. This strategic framework is developed with consideration of both global and regional contexts and takes into account the profound

socio-economic and demographic shifts stemming from three primary catalysts: rapid economic expansion, regional integration coupled with globalization, and the mounting pressures on the natural resource base, exacerbated by climate change. Under the Strategic Plan for ASEAN Cooperation in Food, Agriculture, and Forestry for the period 2016-2025, ASEAN developed a series of frameworks and guidelines. Table 1 reports the agriculture trade-related strategies, policies, and financing supports at the ASEAN level.

Table 1: ASEAN agricultural trade-related strategies, agricultural policies, and the related financing supports

Strategies	Agricultural policies (for example)	Financing support (for example)
Strategic Thrust 2 of Strategic Plan of Action for ASEAN Cooperation in Food, Agriculture and Forestry, 2016-2025: Enhance trade facilitation, economic integration and market access (2015)	<ul style="list-style-type: none"> • Reducing NTMs and eliminating non-tariff barriers (NTBs) • The development of agricultural standards and guidelines (Good Agriculture Practices (GAP) and Good Animal Husbandry Practices) • Promote direct investment and strategic partnership with ASEAN Agricultural cooperatives and farmers organization, producers, consumer and traders. 	Roadmap for Enhancing the Role of ASEAN Agricultural Cooperatives in Agricultural Global Value Chains 2018-2025 (2018)
Strategic Thrust 5 of Strategic Plan of Action for ASEAN Cooperation in Food, Agriculture and Forestry, 2016-2025: Assist resource constrained small producers and SMEs to improve productivity, technology and product quality, to meet global market standards and increase competitiveness in line with the ASEAN Policy Blueprint on SME Development (2015)	<ul style="list-style-type: none"> • ASEAN Strategic Action Plan for SME Development 2016-2025 (2019) • The establishment of Grow Asia, an initiative between ASEAN and World Economic Forum to assist MSMEs to enhance their capacity in accessing new science and technology. • The ASEAN Public-Private Partnership (PPP) Regional Framework for Technology Development in FAF (2017) 	Roadmap for Enhancing the Role of ASEAN Agricultural Cooperatives in Agricultural Global Value Chains 2018-2025 (2018)
Promotion of Sustainable Agricultural Value Chains in ASEAN (ASEAN AgriTrade) (2023)	<ul style="list-style-type: none"> • ASEAN Regional Guidelines for Sustainable Agriculture in ASEAN (2023) • The development of agricultural standards and guidelines (Good Agriculture Practices (GAP)) 	ASEAN Guidelines on Promoting Responsible Investment in Food, Agriculture and Forestry (2018) The Agrinnovation Fund in ASEAN (AIF)

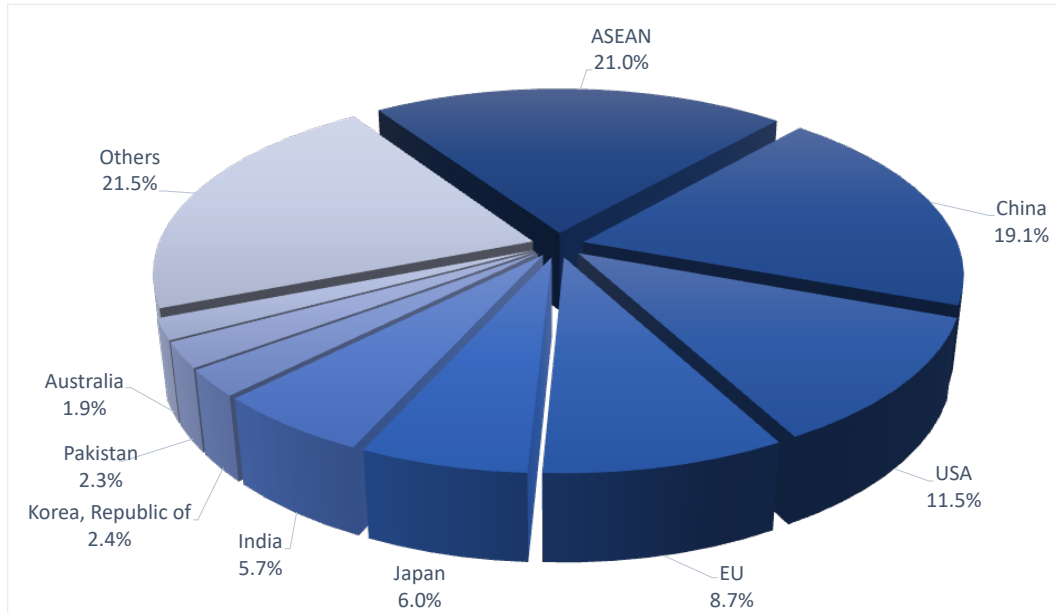
2.2 ASEAN’s Supra-regional Agricultural Cooperation

2.2.1 Supra-ASEAN Agricultural Trade

It can be seen from Figure 1 that the value of intra-regional agricultural trade value is increasing, while the share of agricultural trade within the region remains at a moderate level. This shows that in recent years, supra-regional trade in agricultural products has been expanding rapidly. The region has become a net agricultural exporter, with a record of 176 billion USD in agricultural exports in 2021, compared with 130 billion USD worth of agricultural imports. While ASEAN’s intra-regional trade experienced positive but moderate gains, its supra-regional trade value in the last 20 years shows ASEAN responded even more positively to the broader markets, with ASEAN’s collective comparative advantages by the bigger increase in agricultural trade values. The broader market access resulted in gains from trade

expansion by engaging supra-regional trade in agricultural products with the big five external trading partners demonstrating the bigger benefits to ASEAN as a whole. Therefore, we observe the fact that the bigger the markets will bring the bigger gains from trade for ASEAN, based on Figures 1 and 2.

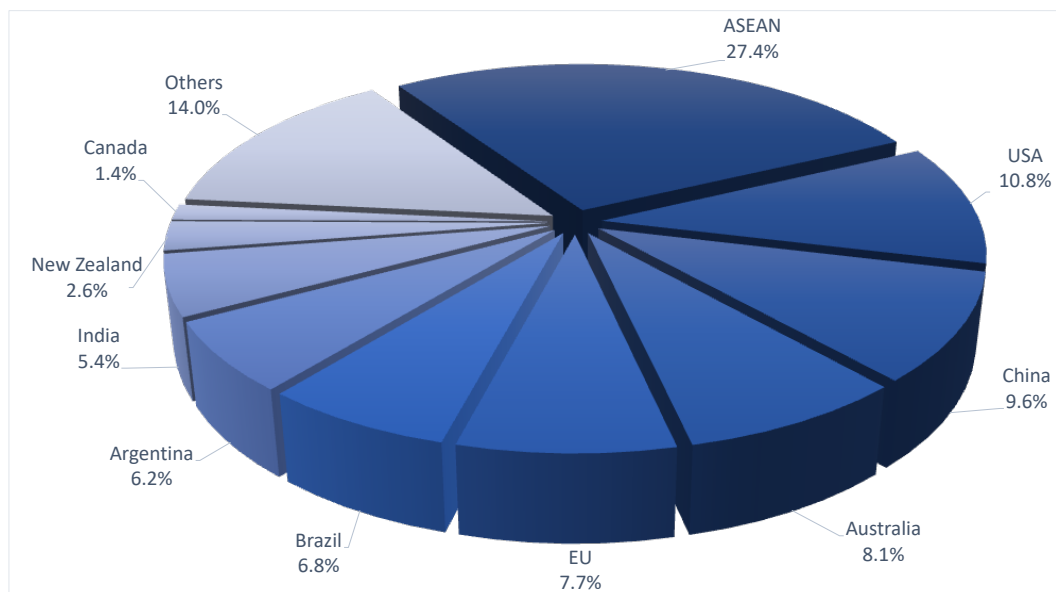
Figure 2: Share of ASEAN’s Major Markets of Agricultural Export Commodities, 2021



Note: ASEAN share refers to the proportion of intra-ASEAN member states agricultural trade to total ASEAN agricultural trade exports

Source: ASEAN Statistic Yearbook 2022

Figure 3: Share of ASEAN’s Major Origin of Agricultural Import Commodities, 2021



Note: ASEAN share refers to the proportion of intra-ASEAN member states agricultural trade to total ASEAN agricultural trade imports

Source: ASEAN Statistic Yearbook 2022

Figure 2 demonstrates the share of ASEAN’s major markets of agricultural export commodities. It is clear that China, which accounts for 19.1% of ASEAN’s agricultural product exports, is a significant agriculture trade partner for ASEAN. With an 11.5% share of ASEAN agricultural exports, the US came in second account for 11.5%. The EU, Japan, and India all contribute more than 5% of ASEAN’s export.

According to Figure 3, the US has become the largest ASEAN’s major origin of agricultural import among other countries, which occupies 10.8% of ASEAN’s total agricultural import market. China remains ASEAN’s second most important source of agricultural product imports, with a market share of 9.6%, very close to the US. Australia, the EU and Brazil are the following.

Table 2 presents a detailed overview of the agricultural export landscape across various regions over a five-year period. The top five markets after ASEAN itself are: China, the US, the EU, Japan, and India. The values in millions of USD highlight the economic significance of these markets, while the corresponding percentage shares provide insights into the relative importance of each market within the overall agricultural export scenario. Notably, the ASEAN region consistently maintains a substantial market share, fluctuating between 21.0% and 23.4% throughout the period. China emerges as a standout player, showcasing consistent growth and securing the leading market position with a 19.1% share in 2021. The US also demonstrates steady growth, maintaining a prominent position in agricultural exports with a share at 11.5%. In contrast, the EU experienced a decline in both value and share, dropping from 12.3% in 2017 to 8.7% in 2021. This decrease is partially attributed to the Brexit, transforming from EU28 to EU27 starting in 2020. Japan’s share decreases slightly from 7.1% to 6%, From 2017 to 2021 Japan’s share decreases slightly from 7.1% to 6%, while India remains the same of 5.7%.

Table 2: ASEAN’s Major Markets of Agricultural Export Commodities, 2017-2021

Markets	2017		2018		2019		2020		2021	
	Value (Mn US \$)	Share (%)	Value (Mn US \$)	Share (%)	Value (Mn US \$)	Share (%)	Value (Mn US \$)	Share (%)	Value (Mn US \$)	Share (%)
ASEAN	30,865.7	21.9	32,891.0	23.1	33,015.9	23.4	32,580.3	22.4	36,872.7	21.0
China	21,182.5	15.0	22,110.7	15.6	23,967.9	17.0	25,773.3	17.7	33,454.9	19.1
USA	13,662.7	9.7	16,148.7	11.4	15,634.2	11.1	17,309.0	11.9	20,122.3	11.5
EU	17,390.1	12.3	15,613.0	11.0	14,511.6	10.3	12,453.7	8.6	15,258.6	8.7
Japan	10,013.2	7.1	10,053.1	7.1	10,632.4	7.5	10,340.8	7.1	10,615.6	6.0
India	8,068.7	5.7	6,696.8	4.7	6,222.2	4.4	6,679.0	4.6	9,960.0	5.7
Others	39603.9	28.3	38586.4	27.1	37107.6	26.3	40286.0	27.7	49269.8	28.0

Note: Data for 2017-2019 covers EU28 while for 2020-2021 covers EU27

Source: ASEAN Statistic Yearbook 2018-2022

Table 3 provides a comprehensive perspective on the agricultural import landscape of the ASEAN region over the same five-year period. The top five markets, including ASEAN itself, the US, China, the EU, Australia, and Brazil, reveal distinctive trends. Notably, ASEAN consistently stands out as a substantial importer, maintaining the highest share between 26.9% and 27.9%. The US and China emerge as key

contributors, displaying steady growth and maintaining shares ranging from 10.8% to 12.1% and 9.6% to 10.6%, respectively. Although the EU's share fell from 10.0% in 2019 to 7.7% in 2021 due to Brexit, it remains an important source of ASEAN agricultural imports. Australia experiences significant growth, becoming a more substantial contributor to ASEAN's agricultural imports, with its share rising from 6.1% in 2017 to 8.1% in 2021. Similarly, Brazil plays a role in supplying agricultural products, with a share ranging from 5.0% to 6.8%.

Table 3: ASEAN's Major Origins of Agricultural Import Commodities, 2017-2021

Markets	2017		2018		2019		2020		2021	
	Value (Mn US \$)	Share (%)	Value (Mn US \$)	Share (%)	Value (Mn US \$)	Share (%)	Value (Mn US \$)	Share (%)	Value (Mn US \$)	Share (%)
ASEAN	25,287.1	27.3	28,245.8	27.9	27,561.5	26.9	28,106.1	27.0	35,680.6	27.4
USA	10,214.4	11.0	12,261.3	12.1	12,163.5	11.9	12,244.4	11.8	14,098.1	10.8
China	8,997.9	9.7	9,829.1	9.7	10,863.1	10.6	11,055.0	10.6	12,446.1	9.6
EU	8,248.6	8.9	9,528.9	9.4	10,221.8	10.0	8,078.9	7.7	10,023.2	7.7
Australia	7,005.1	7.6	6,715.3	6.6	6,252.7	6.1	6,223.2	5.9	10,543.5	8.1
Brazil	5,682.3	6.1	5,088.8	5.0	5,246.1	5.1	6,863.6	6.6	8,794.0	6.8
Other	27232.9	29.4	29663.2	29.3	30123.0	29.4	31645.4	30.4	38545.5	29.6

Note: Data for 2017-2019 covers EU28 while for 2020-2021 covers EU27

Source: ASEAN Statistic Yearbook 2018-2022

In the realm of agricultural trade, ASEAN has established robust partnerships with key nations, shaping a dynamic landscape for exports. While China, the US, and EU consistently emerge as primary contributors, Japan, and India also play pivotal roles, considering the overall trade value and share. Although Japan and India may not rank in the top five origins of agricultural import commodities for ASEAN individually, their collective significance underscores their position as major agricultural trade partners alongside China, the US, and the EU. This comprehensive collaboration is paramount for the region's agricultural sector, fostering intricate trade mechanisms, investments, aid, and dialogue platforms. The ensuing analysis will delve into the nuanced dynamics of ASEAN's agricultural trade with these top five partners, shedding light on the multifaceted relationships that contribute to the vibrancy and resilience of the region's agricultural economy. In other words, the observations from Tables 2 and 3 and Figures 1 and 2 support that engaging open and freer intra-regional trade within ASEAN and engaging open and freer supra-regional trade with the big five external trading partners help the growth of agricultural economies and bring the benefits to ASEAN Economic States.

2.2.2 Supra-ASEAN Agricultural Cooperation

Table 4 documents the Supra-regional Cooperation Mechanisms of ASEAN. In the aspect of trade, ASEAN has engaged in the signing of Free Trade Agreements (FTAs) with a number of trading partners, capitalizing on the bloc's long-term potential. These ASEAN+1 FTAs bring forth various advantages, including tax incentives, enhanced customs clearance procedures, and reduced import costs (ASEAN Secretariat, 2021). They have played a pivotal role in promoting free trade, particularly in the agricultural sector. Between 2004 and 2010, ASEAN established

FTAs with China, South Korea, Japan, Australia, New Zealand, and India. In order to further deepen supra-regional cooperation, ASEAN initiated the Regional Comprehensive Economic Partnership (RCEP), based on the existing ASEAN+1 FTAs. RCEP negotiations were launched in November 2012 and it was signed with Australia, China, Japan, New Zealand, and South Korea in 2020. RCEP became the largest free trade agreement in history, covering approximately 30 percent of the global GDP (26 trillion USD) and 30 percent of the world's population (ASEAN Secretariat, 2021). In terms of trade in goods, the 15 member states will gradually achieve zero import tariffs for more than 90% of their commodities within 20 years, and most of these commodities will gradually eliminate import tariffs in the year when RCEP takes effect and within the following 10 years (CAITEC, 2021). The threshold for benefits is significantly lower than it was under the original ASEAN+1 FTAs, which encourages all parties to fully exploit their comparative advantages and engage in regional industrial chain cooperation.

Table 4: ASEAN's Supra-regional Cooperation Mechanisms

Mechanism	Partner countries	Year
<i>ASEAN's Free Trade Agreements</i>		
<i>ASEAN+1 Free Trade Agreements</i>		
ASEAN-China Free Trade Area	China	2004
ASEAN-Republic of Korea Free Trade Area	Republic of Korea	2007
ASEAN-Japan Comprehensive Economic Partnership	Japan	2008
ASEAN-Australia-New Zealand Free Trade Area	Australia, New Zealand	2010
ASEAN-India Free Trade Area	India	2010
Regional Comprehensive Economic Partnership	Australia, China, Japan, New Zealand, and Republic of Korea	2020
<i>Dialogue Partner Framework</i>		
Dialogue Partner (DPs)	Australia, Canada, China, European Union, India, Japan, New Zealand, Republic of Korea, Russian Federation, United Kingdom, United States	1974-2021
Comprehensive Strategic Partnership	Australia, China, India, United States	2021-2023
Sectoral Dialogue Partner (SDPs)	Brazil, Morocco, Norway, Pakistan, South Africa, Switzerland, Türkiye, United Arab Emirates	1993-2022
Development Partner	Chile, France, Germany, Italy, Netherlands	2016-2023
<i>Regional Cooperation Mechanisms</i>		
<i>ASEAN+3 Cooperation</i>		
ASEAN-China-Japan-Korea Rice Emergency Reserve	China, Japan, Republic of Korea	1997
ASEAN Food Security Information System	China, Japan, Republic of Korea	2011
East Asia Summit Cooperation	China, Japan, Republic of Korea	2003
	Australia, China, India, Japan, New Zealand, the Republic of Korea, Russian Federation, United States	2005

ASEAN sets out the framework for ASEAN to widen and deepen its relations with external parties through the conferment of the formal status of Dialogue Partner (DPs), Sectoral Dialogue Partners (SDPs), and Development Partners. ASEAN continues to be the primary driving force in fostering regional collaboration and maintaining its central role in regional cooperation mechanisms. ASEAN emphasizes the imperative for ASEAN to intensify cooperation with Dialogue Partners, enhance engagement with external economies and states, explore potential partnerships for

mutual benefit, including in the agricultural sector, and collectively and constructively respond to global developments.

When promoting supra-regional cooperation outside the region, ASEAN has established a series of regional cooperation frameworks centered on ASEAN. The ASEAN+3 comprises ten ASEAN Member States along with the People's Republic of China (PRC), Japan, and the Republic of Korea. Since its launch in December 1997, the ASEAN+3 cooperation process has developed into a major mechanism for promoting East Asian cooperation. ASEAN+3 has expanded cooperation in many fields. In the agriculture sector, ASEAN undertook the ASEAN Plus Three Cooperation Strategy (APTCS) on Food, Agriculture and Forestry 2011-2015. Based on the successful implementation of the APTCS 2011-2015, AMAF+3 decided to continue implementing the APTCS for the period 2016-2025. The APTCS (2016-2025) seeks to establish a framework and collaborative measures for ASEAN+3 cooperation in the realms of food, agriculture, and forestry, with the overarching objectives of ensuring food security and livelihoods, advancing the sustainable development of agriculture and forestry and reinforcing trade within these sectors (ASEAN Secretariat, 2017). Furthermore, the ASEAN-China-Japan-Korea Rice Emergency Reserve (APTERR) was signed on October 7, 2011, at the 11th ASEAN and China, Japan, and South Korea Ministers of Agriculture and Forestry Meeting. Since then, the rice emergency reserve mechanism has been used as a long-term mechanism to help the region respond to emergency needs and achieve humanitarian-related purposes. In addition, the ASEAN Food Security Information System (AFSIS) was also signed within ASEAN, China, Japan and Korea to build the capacity of food security assessments among the ASEAN member states.

In addition to ASEAN+3, the East Asia Summit (EAS) is also an important mechanism for ASEAN supra-regional cooperation. The East Asia Summit was launched in 2005 and consists of 16 member states including ASEAN, Australia, China, India, Japan, New Zealand, and South Korea. The US and the Russian Federation joined in 2011. The East Asia Summit is an annual meeting of heads of state/government of the East Asia Summit member states to conduct dialogue and cooperation on a wide range of strategic, political and economic issues of common interest, aiming to promote peace, stability, and economic prosperity in East Asia. The East Asia Summit identified six priority areas for cooperation: environment and energy, education, finance, global health issues and epidemics, natural disaster management, and ASEAN connectivity. Cooperation and emerging issues in other areas such as food security, economy and trade, maritime security and cooperation, traditional and non-traditional security issues, etc. were also discussed.

The total agricultural FDI in ASEAN saw a significant decrease from 2454.2 million USD in 2019 to 334.4 million USD in 2020. Despite a slight recovery to 539.9 million USD in 2021, this overall trend underscores the dynamic nature and fluctuations in foreign investments in the ASEAN agricultural sector. Table 5

provides an overview of the Inward FDI Flows into the agricultural sector of the Association of Southeast Asian Nations (ASEAN) from various partners, including China, Japan, India, the US, the EU, spanning from 2012 to 2021. China consistently stands out with fluctuating FDI values, reaching a peak in 2019 and contributing significantly to the total FDI share, which reached an impressive 85.74% in 2020. Japan's FDI values vary, maintaining a modest but relatively lower share. India's FDI values remain modest, positively impacting the share. The US exhibits fluctuations, with a notable negative FDI value in 2018 and a subsequent share decline. The EU demonstrates significant volatility, with both positive and negative FDI values influencing the overall share

Table 5: Agricultural FDI Inwards Flows to ASEAN from Five Important Partners

Partners	FDI	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
China	Value (Mn US \$)	58.7	88.0	51.5	62.2	75.2	238.6	322.9	341.2	286.7	251.8
	Share (%)	3.36	3.77	1.09	1.15	2.80	5.58	8.65	13.90	85.74	46.63
Japan	Value (Mn US \$)	77.6	50.0	73.0	50.0	11.5	21.3	22.5	-18.0	9.1	8.3
	Share (%)	4.44	2.15	1.55	0.93	0.43	0.50	0.60	-0.73	2.72	1.54
India	Value (Mn US \$)	8.7	4.6	4.7	3.5	4.8	4.7	2.4	5.3	-1.1	1.2
	Share (%)	0.50	0.20	0.10	0.06	0.18	0.11	0.06	0.22	-0.33	0.22
USA	Value (Mn US \$)	2.6	54.0	-20.9	9.3	6.0	5.6	27.8	8.6	5.8	3.8
	Share (%)	0.15	2.32	-0.44	0.17	0.22	0.13	0.74	0.35	1.73	0.70
EU	Value (Mn US \$)	228.3	471.2	332.8	61.5	42.2	84.0	-465.6	269.7	18.7	15.9
	Share (%)	13.07	20.22	7.06	1.14	1.57	1.96	-12.48	10.99	5.59	2.94
Total	Value (Mn Us \$)	1,746.9	2330.2	4716.7	5389.0	2683.3	4275.5	3731.9	2454.2	334.4	539.9
	Share (%)	100	100	100	100	100	100	100	100	100	100

Note: Negative values of FDI net inflows for a particular year show that the value of disinvestment by foreign investors was more than the value of capital newly invested in the reporting economy.

Source: ASEAN Statistic Yearbook 2022

3. ASEAN's Agricultural Cooperation with China

3.1 Bilateral and Multilateral Mechanisms

China works with ASEAN member states in the region through the multilateral Food and Agriculture Organization of the United Nations, the Asia-Pacific Economic Cooperation (APEC), China-ASEAN Agricultural Cooperation Mechanism ASEAN+1, ASEAN and China-Japan-Korea Agricultural Cooperation Mechanism ASEAN+3, and the Greater Mekong Sub-region Economic Cooperation Mechanism. China also led the creation of dialog platforms such as the Lancang-Mekong Cooperation (LMC) Mechanism, the ASEAN-China-Japan-Korea Food Security Cooperation Strategy Roundtable and actively participated in the ASEAN-China-Japan-Korea Rice Emergency Reserve (APTERR) and ASEAN Food Security Information System (AFSIS). In addition, China has established numerous bilateral agricultural cooperation committees or working groups, such as the China-Philippines Agricultural Cooperation Joint Committee, which holds regular meetings. China has also inked numerous bilateral agricultural cooperation memoranda with the majority of ASEAN nations (Li et al., 2020).

RCEP brings new opportunities for agricultural cooperation. In terms of trade in goods, after RCEP comes into effect, China's tariffs on agricultural products of RCEP member countries will drop from an average of 14% to 2.78%-4.24%, coming down with various non-tariff measure concessions, which broadens its prospects for agricultural trade. In terms of trade in services, RCEP will deepen bilateral service trade and provide greater opportunities for the development of agricultural cross-border e-commerce. In terms of investment, after RCEP comes into effect, the member states will open up agricultural investment, which will further remove restrictions on foreign investment in the agricultural sector and promote agricultural investment cooperation. In terms of technical cooperation, under the framework of RCEP, the two sides will carry out more cooperation on cross-border pest control, animal and plant epidemic prevention and other fields to enhance the sustainable development of agriculture (ASEAN-China Center, 2023).

3.2 ASEAN-China Agricultural Trade

The agricultural cooperation between China and ASEAN is strong. ASEAN is China's largest agricultural export market and the third largest source of imports (Agricultural Trade Promotion Center, Ministry of Agricultural and Rural Affairs, PRC, 2023). On the one hand, China's rapidly growing purchasing power and huge market size are of great significance to the region's agricultural exporters. On the other hand, China's export of agricultural products such as vegetables, fruits, processed foods and fish (mainly labor-intensive products) to ASEAN will contribute to the food security of ASEAN countries and their transition to different agricultural activities, or help farmers to non-agricultural transfers (Li et al., 2020).

The ASEAN-China Free Trade Agreement (ACFTA) was signed in 2002 to draw the country and region closer together and to support an important phase of Chinese investment in and trade with ASEAN. In 2004, leaders of China and ASEAN agreed to strengthen cooperation in the field of food inspection and quarantine to support the establishment of the ASEAN-China Free Trade Zone. In 2005, China became ASEAN's third largest export market, after the US and Japan. In 2007, China and ASEAN issued the Nanning Joint Statement on strengthening China-ASEAN food safety cooperation, promoting food trade and protecting consumers' rights. On August 15, 2009, the Agreement on Investment of the Framework Agreement on Comprehensive Economic Cooperation between China and the Association of Southeast Asian Nations was signed in Bangkok, Thailand. In November 2018, the two sides upgraded the protocol of their free trade agreement to build the largest free trade zone among developing countries. Free trade zone aims to further elevate the trade partnership between China and ASEAN members and send a clear signal of safeguarding multilateralism and free trade.

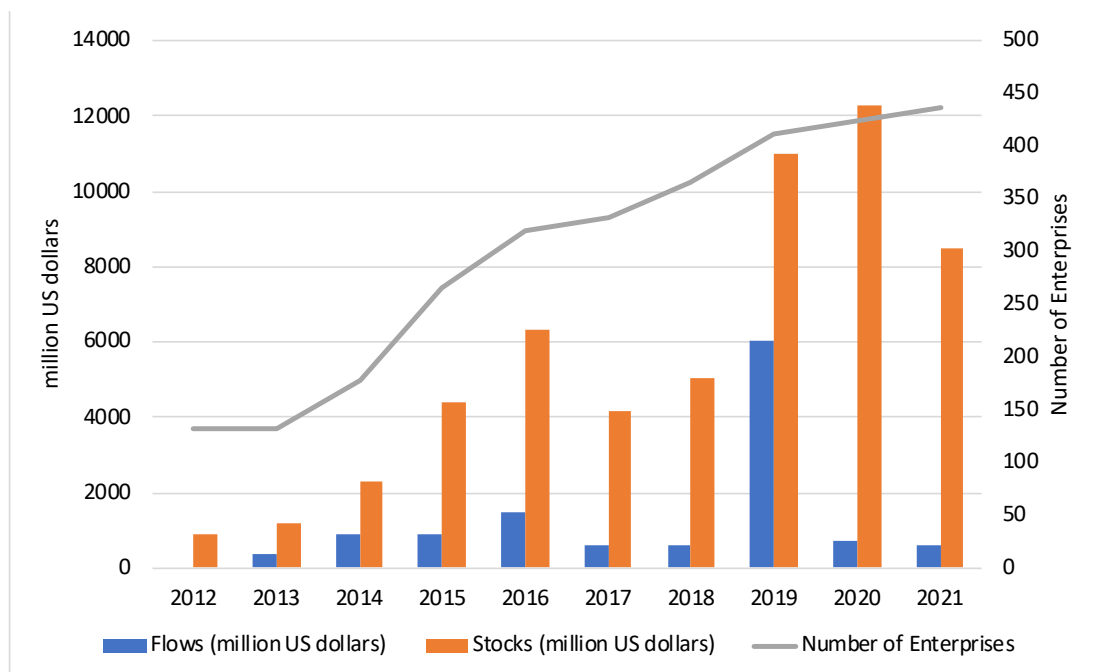
In 2022, China has become the most important agricultural trade partner for ASEAN. The total trade in agricultural products between China and ASEAN amounted to 60.72 billion USD, representing a year-on-year growth of 14.5%. ASEAN remained

China's largest market for agricultural product exports, with exports reaching 23.74 billion USD, marking a growth of 10.3%. The main categories of exported products included aquatic products, vegetables, fruits, beverages, sugar, and confectionery, with a combined export value of 15.84 billion USD, accounting for 66.7% of China's total agricultural product exports to ASEAN. ASEAN also stood as China's third-largest source of agricultural product imports, following Brazil and the US. China imported agricultural products worth 36.98 billion USD from ASEAN in 2022, marking a year-on-year increase of 17.4%. The main categories of imports included fruits, plant oils, aquatic products, grain products, and potatoes, with a combined import value of 25.79 billion USD, representing 69.7% of China's total agricultural product imports from ASEAN (Agricultural Trade Promotion Center, Ministry of Agricultural and Rural Affairs, PRC, 2023).

3.3 China's Agricultural Investment to ASEAN

Most ASEAN countries have an agriculture-based economy that is complementary to China, providing opportunities to the extension of production technologies. According to Figure 4, China's agricultural foreign investment in ASEAN has shown an overall increasing trend in the past decade. Among them, the number of companies investing abroad has increased year by year, the investment stock has shown an overall upward trend, reaching its highest point in 2020, and investment flow has reached its highest point in 2019.

Figure 4: Chinese Agricultural Investment in ASEAN (2012-2021)



Source: Report of China's Agricultural Foreign Investment Cooperation 2022

In 2021, China's agricultural investment in ASEAN countries saw a slight decrease. China's agricultural investment flow in ASEAN countries in 2021 amounted to 585

million USD, representing a year-on-year decrease of 17.61%, accounting for 35.20% of China's total agricultural foreign investment flow. As of the end of 2021, China's agricultural investment stock in ASEAN countries totaled 8.469 billion USD, accounting for 31.23% of China's total agricultural foreign investment stock. China had established a total of 437 agricultural enterprises in ASEAN countries, accounting for 39.03% of the total number of overseas agricultural enterprises, with an increase of 14 companies compared to 2020 (Foreign Economic Cooperation Center, Ministry of Agricultural and Rural Affairs, PRC, 2022).

Chinese enterprises typically consider four factors in addition to proximity when deciding where to invest in agriculture: 1) The region has an abundance of the land, water, and other natural resources required for food processing and agricultural production; 2) There are production, processing, and logistical assets targeted by Chinese enterprises in “whole industry chain” strategies; 3) Countries targeted for technical assistance in agriculture, especially for “South-South” cooperation between China and less-developed countries; and 4) Countries where agricultural ventures may be tied to diplomatic overtures or initiatives like Belt and Road Initiative (BRI) (Ye, 2014).

Chinese companies began to build industrial parks in ASEAN in 2005. Guangxi province built a modern agricultural industrial park with Brunei in 2014 and Hunan province has worked together with Laos to build parks principally focusing on the rubber industry and has also built industrial parks with Thailand. Agricultural industrial zones, such as the China-Indonesia Julong Agricultural Industry Cooperation Zone with five parks on the Kalimantan island, were promoted to a state-level overseas economic and cooperation zone in August 2016 (China Daily, 2016). According to the Minister of Planning and Investment, Mr Khamjane Vongphosy, China's investment in Laos' agricultural sector has grown significantly in the past decade, with a cumulative investment of approximately 16.4 billion USD and 833 projects (Vientiane Times, 2022). In September 2023, the 26th China-ASEAN Leaders' Meeting approved several outcome documents, one of which is the "China-ASEAN Joint Statement on Enhancing Agricultural Collaboration." Two-way investment in agriculture has been steadily advancing, and more than 50 Guangxi enterprises have gone to ASEAN countries to invest and develop, covering planting, agricultural product processing, warehousing and logistics and other links. Companies from ASEAN countries such as Thailand's Charoen Pokphand Group are actively investing in and constructing agricultural projects in Guangxi. Agricultural technology exchanges continue to be carried out in depth. China and ASEAN have jointly built 26 scientific and technological cooperation platforms such as agricultural cooperation demonstration zones. Guangxi has exported more than 750 priority varieties such as rice and vegetables. There are more than 190 varieties of crops, and more than 10,000 agricultural technicians have been trained for ASEAN countries (Renmin Net, 2023).

The agricultural investment cooperation between China and ASEAN has also been promoted by the Belt and Road Initiative (BRI). Under the BRI, China views ASEAN as part of the land bridge connecting China to Southeast Asia, South Asia, the Indian Ocean, and the China-Indochina Peninsula Corridor sea route (Jusoh, 2018). The Asian Infrastructure Investment Bank (AIIB) established by China, with ASEAN countries as founding members, has officially opened its doors to carry out production capacity and product cooperation, establish various industrial parks, and build the China-Thailand railway. Another example of BRI were the China and Laos partnership. With the support of aid projects, China sends experts and technicians to provide training in growing crops, raising animals, processing food products using Chinese agricultural technology (Li et al., 2020). Furthermore, China also holds the “Belt and Road” Agricultural Investment Cooperation Forum yearly to maintain the agricultural investment cooperation relationship between China and ASEAN.

3.4 Dialogue Platform through Expo, Cooperation Forums, and Assistance

In November 2018, China held the first China-International Import Expo (CIIE) in Shanghai, attracting more than 3,600 companies from 172 countries, regions, and international organizations to showcase their achievements and look for more chances for international cooperation. China has also been holding an annual China-ASEAN Expo in Nanning, the capital of southwest China's Guangxi Zhuang Autonomous Region, since 2004.

Apart from Expos, China and ASEAN member states also have dialogue platforms like the annual China-ASEAN Agricultural Cooperation Forum. Since President Xi Jinping's 2013 proposal to forge a closer China-ASEAN community with a shared future, the partnership has deepened. At the 7th Forum in 2023, China's Minister of Agriculture and Rural Affairs, Renjian Tang, presented a set of key initiatives. These include promoting smart farming pilot projects utilizing information technology across ASEAN countries, expanding agricultural trade and investment, facilitating people-to-people exchanges fostering collaboration among agricultural experts at all levels, and implementing poverty alleviation projects. These measures aim to solidify a more comprehensive agricultural partnership, emphasizing technological advancement, economic growth, and poverty reduction, ultimately ensuring safer, greener, and more sustainable agricultural development in the region (MOA, 2023).

China also provides agricultural assistance in various forms such as training, financial aid, demonstration centers, and technical assistance, which targets new ways to plant and grow crops more efficiently and with greener methods in pest and disease prevention and control. In 2007, China's Ministry of Agriculture and ASEAN signed a five-year MOU on agricultural cooperation, including a commitment from China to provide training on hybrid rice, cultivation methods, fertilizer use, water management, and training for specialists from ASEAN as well as sending experts from China to provide short-term services. China and Cambodia signed an agreement on

establishing an agriculture promotion center in 2014, expecting to train 4,000 technical personnel and professional farmers, and with agricultural technologies extending over 10,000 hectares by 2018 (Zhang, 2019). In 2014, China and Myanmar announced a joint statement on deepening bilateral cooperation, including providing agricultural concessional loans and constructing an agricultural demonstration center in Myanmar. In 2015, a Chinese-invested agricultural park was commenced between the Chinese city Zhangzhou in Fujian province and Cambodia, to facilitate investment from Zhangzhou and enhance agricultural techniques and reduce poverty. This is a case that illustrates the link between Chinese agricultural aid and investment is closely connected (Li et al., 2020).

In March 2018, China formally established its first stand-alone foreign aid agency, the China International Development Cooperation Administration (CIDCA). CIDCA aims to elevate the political importance of foreign aid and to better align the country's aid agenda with its overall foreign policy. The establishment of CIDCA addresses a long debate in China about its foreign aid reform and the creation of an independent aid agency that is geared more toward the strategic design and interagency coordination of China's foreign aid administration. Under the instructions of CIDCA, China has held more than 800 agricultural technology training courses for ASEAN countries and has carried out practical cooperation in fields such as crop variety selection and cultivation technology, animal and plant disease prevention and control, rural biogas, climate change, and digital agriculture.

In 2023, designated as the ASEAN-China Year of Agricultural Development and Food Security Cooperation, concrete strides have been made in agricultural collaboration. Fueled by the China-ASEAN Food Security Cooperation Declaration, successful initiatives in digital agriculture, poverty reduction, and rural development have been implemented. Thirteen agricultural technology projects, covering areas like tropical fruit processing and aquaculture, showcase comprehensive technological cooperation. People-to-people exchanges have flourished, with over 300 visits, fostering technology exchange and relationship building. Notably, China's agricultural imports from ASEAN grew by 7.5%, outpacing the overall import growth rate.

4. ASEAN's Agricultural Cooperation with Japan

4.1 Bilateral and Multilateral Mechanisms

Japan has a long history of cooperation in food, agriculture, and forestry with ASEAN, both bilateral and multilateral. Japan's formal relationship with ASEAN was first established in 1977 as among the first ASEAN Dialogue Partners. The ASEAN-Japan Comprehensive Economic Partnership (AJCEP) came into force in December 2008, covering trade in services, goods, investments, and economic cooperation. Tariff eliminations for the ASEAN-6 and Vietnam were completed some 10 years from the entry into force of the agreement, and the rest of ASEAN three years or so

after. The FTA provides for the elimination of duties on 87 percent of all tariff lines and includes a dispute settlement mechanism (ASEAN Secretariat, 2021). As a part of ASEAN and China-Japan-Korea Agricultural Cooperation Mechanism ASEAN+3, Japan actively participates in agricultural cooperation with ASEAN. Japan plays an important role in the ASEAN Plus Three Emergency Rice Reserve (APTERR). Since its pilot project has started in 2004, Japan has contributed around 9 million USD, which was around eighty percent of the total financial expenses. In addition, Japan is a major contributor of rice for acute emergency release (Tier 3), accounting for around 40% of the total quantity of rice released by APTERR (Mission of Japan to ASEAN, 2016). Under the framework of AMAF+3 (ASEAN+3 Ministers' Meeting on Agriculture and Forestry), Japan has worked to strengthen food security through productivity improvement and production enhancement in the FAF sector. Furthermore, Japan has also joined RCEP to strengthen reciprocal trade in agricultural products with ASEAN countries.

In addition, the agricultural collaboration between Japan and ASEAN was also deepened by Joint Press Statement of the ASEAN-Japan Ministers on Agriculture and Forestry (AJMAF) to deepen the collaboration (Association of Southeast Asian Nations, 2023), as well as Japan's Proposal for Strengthening Cooperation with ASEAN towards Enhancing Resilient and Sustainable Agriculture and Food Systems for Ensuring Regional Food Security (Midori Cooperation Plan).

4.2 ASEAN-Japan Agricultural Trade

Japan has a substantial trade deficit in agricultural goods due to its limited arable land and high population density, with imports of USD 74.8 billion and exports of USD 9.2 billion in 2021. Japan has consistently held a significant role as an agricultural importer within ASEAN. In 2003, Japan constituted 13.3% of ASEAN's agricultural product export market and stood as the largest agricultural importer in the ASEAN region. However, by 2021, partly due to the Covid-19 pandemic, Japan's share had decreased to 6% of ASEAN's agricultural product export market. Despite this decline over the past two decades, Japan still maintains its position as the fourth-largest agricultural importer within ASEAN. The agricultural trade relationship between Japan and ASEAN continues to be of paramount importance.

The main policy developments in Japan included the revision of the Food, Agriculture, and Rural Basic Plan in 2020; the adoption of the Strategy to Realize Export Expansion of Agricultural, Forestry, Fishery, and Food Products in 2020, followed by a revision in 2022; and the entry into force of the Act on Facilitating the Export of Agricultural, Forestry, Fishery, and Food Products in 2020. According to the OECD, Japan significantly lowered its agricultural support during the last decade; however, the level of support has remained the same level since (WTO Secretariat, 2023).

4.3 Japan's Agricultural Investment in ASEAN

According to data compiled by the Ministry of Agriculture, Forestry, and Fisheries, Japan's food self-sufficiency rate on a calorie basis in 2022 is 38%, decreasing sharply compared with 73% in 1965 (MAFF, 2023). However, in the 2022 Global Food Security Index Report, Japan's food security ranked 6th among 113 countries in the world (Economist Impact, 2023). This is due to Japan's early emphasis on food security issues, government support, active participation of enterprises, banks and investment institutions, and linkage with Official Development Assistance (ODA) to focus on overseas agricultural investment.

In April 2009, the Ministry of Agriculture, Forestry and Fisheries and the Ministry of Foreign Affairs took the lead in creating the Council for the Promotion of Foreign Investment, and in August of the same year, the Guidelines for the Promotion of Foreign Investment for Food Security were formulated. Based on these guidelines, Japan is working to improve the investment environment, collaborate with ODA, utilize public finance, and collect and provide information on overseas agricultural investment. According to the "Overseas Agricultural Investment Status Report" released by the Ministry of Agriculture, Forestry and Fisheries in 2016, the main methods of Japan's overseas agricultural investment include: establishing subsidiaries or joint ventures overseas to directly or indirectly produce food; through agricultural technical support, logistics and other integrated supply chains, it not only ensures the country's food security, but also provides local food and Catering industry; large trading companies basically have some overseas grain business. (MAFF, 2016).

Japan was ASEAN's second-largest source of FDI, with total FDI inflows from Japan, amounting to USD 26.7 billion in 2022. However, agriculture is not the main part of Japan's FDI in ASEAN. In 2021, Japan's FDI inward flows to ASEAN is 11876.4 million USD, while only 8.3 million USD was used towards agriculture, forestry and fishing. Besides, Japan's agricultural investment in ASEAN is overall decreasing since 2014. Compared with ASEAN's dominant agricultural products such as palm oil, crude rubber, rice, bananas and other fruits, Japan pays more attention to investments such as soybeans and corn, etc. (MAFF, 2016).

4.4 Dialogue Platform through Expos, Cooperation Forums, and Assistance

Since its inception in 1977, the ASEAN-Japan Forum has been held once a year in principle among Senior Officials Meeting (SOM) Leaders of ASEAN and Japan to discuss cooperation between ASEAN and Japan. The forum in 2023, which marked a historic milestone of the 50th commemorative year of ASEAN-Japan Friendship and Cooperation, featured a lively exchange of views to further strengthen ASEAN-Japan relations in preparation for the ASEAN-Japan Commemorative Summit to be held in

December. The participants also exchanged views on regional and international affairs.

Japan has already launched a bilateral policy dialogue for establishing Food Value Chains (FVC) with several ASEAN countries. For example, the Agricultural Ministers of Vietnam and Japan exchanged their views and agreed to the Japan-Viet Nam Medium to Long Term Vision on Agriculture Cooperation for strengthening FVC in August 2015. As a result of such bilateral policy dialogue, the food-related infrastructure such as cold chains and business environment for investment was planned to be developed in the region. Japan planned to extend such efforts to other ASEAN countries. In addition, Japan has been taking initiatives for the ASEAN Food Security Information System (AFSIS), which is aimed to strengthen food security in the region through the systematic collection, analysis and dissemination of food security-related information. Japan has contributed a total of about 5 million USD as the sole donor of financial resources since the start of the project in 2003. Japan has also dispatched experts from 2011 onwards and supported the operation of the AFSIS secretariat (Mission of Japan to ASEAN, 2016).

Most of Japan's aid to ASEAN passes through the Japan-ASEAN Integration Fund (JAIF), which was officially established in March 2006, based on the pledge from then Japanese Prime Minister H.E. Mr. Junichiro Koizumi at the 9th ASEAN-Japan Summit held in December 2005 in Kuala Lumpur, Malaysia. Under the ASEAN-Japan Comprehensive Economic Partnership (AJCEP) Agreement, ASEAN and Japan initiated several economic cooperation projects including capacity building and technical assistance in areas of mutual interests. Through JAIF, Japan supported six projects to enhance agricultural productivities. Various JAIF projects have also been implemented in support of the current key strategies of ASEAN for food, agriculture, and forestry. The following are the key achievements of the JAIF projects under the Vision and Strategic Plan of ASEAN Cooperation in Food, Agriculture and Forestry 2016-2025. JAIF continues to extend its support to food, agriculture, and forestry sector through these projects which are currently ongoing: 1) Taxonomic Capacity Building to Support Market Access for Agricultural Trade in the ASEAN Region – Phase 2; 2) Development of Stock Assessment Methods and Strengthening of Resources Management Measures for Tropical Anguillid Eel in Southeast Asia; 3) Efficiency Enhancement of Regional Irrigation Water Management in Gravity Irrigation System; 4) Creation and Testing of Learning and Accreditation Programme to Implement ASEAN-RAI Guidelines; 5) Improved Coordination and Strengthened Capacity to Deal with the Invasive Insect Pest *Tuta Absoluta* in Mainland Southeast Asia; 6) Japan-ASEAN Integration Fund Capacity Development Program for ASEAN Rice Net; and 7) Regional Collaborative Research and Capacity Building for Monitoring and Reduction of Marine Debris from Fisheries in Southeast Asia (JAIF, 2023).

5. ASEAN's Agricultural Cooperation with India

5.1 Bilateral and Multilateral Mechanisms

India's engagement with ASEAN began with its recognition as a sectoral dialogue partner in 1992 and later as a full dialogue partner at the Fifth ASEAN summit in Bangkok in 1995 (Kundu, 2022). The Asian Financial Crisis in 1997 temporarily affected the exchange of dialogues between these two parties. However, diplomatic discussions between India and ASEAN resumed in November 2002, ultimately leading to India's participation as a founding member of the East Asia regional framework under ASEAN's leadership in December 2005. This development paved the way for the signing of the ASEAN-India Free Trade Agreement (AIFTA) (Mandal, 2022). With the signing of the AIFTA, India committed to reducing or eliminating tariffs on more than 89% of its agricultural, marine, and manufactured goods by 2016 (Francis, 2011). In the decade since signing the agreement, bilateral trade has grown exponentially (Singh, 2022). The implementation of the ASEAN-India Trade in Goods Agreement (AITIGA) in 2010 has played a pivotal role in enhancing trade and investment ties between the two regions. During the twentieth AEM (ASEAN Economic Ministers)-India Consultation meeting convened in Semarang, Indonesia, in August 2023, both ASEAN and India reached a consensus to accelerate negotiations for the revision of their current goods agreement, with the aim of finalizing the discussions by 2025. This review was a long-standing demand of Indian businesses, and its early initiation aims to make the Free Trade Agreement (FTA) more trade-facilitative and mutually beneficial (Bhardwaj, 2023).

Since India became a Dialogue Partner of ASEAN, India has participated in a series of consultative meetings with ASEAN under the ASEAN-India Dialogue Relations, which include summits, ministerial and senior officials meetings, and meetings at the experts level, as well as dialogue and cooperation frameworks initiated by ASEAN, such as the ASEAN Regional Forum (ARF), the Post Ministerial Conference (PMC) 10+1, the East Asia Summit (EAS), Mekong-Ganga Cooperation and Bengal Initiative for Multisectoral Technical and Economic Cooperation, which help contribute to enhancing regional dialogue and accelerating regional integration (ASEAN Secretariat, 2018a). ASEAN Economic Ministers-India Consultations (AEM + India) and ASEAN-India Business Council also served as primary formal institutional mechanisms employed to facilitate and enhance economic connectivity between India and ASEAN (Bhardwaj, 2023).

ASEAN and India also conduct the ASEAN-India Ministerial Meeting on Agriculture and Forestry (AIMMAF) annually. The Medium-Term Plan of Action for ASEAN-India Cooperation in Agriculture and Forestry for 2016-2020 was adopted at the 4th AIMMAF, held in January 2018 in New Delhi, India (ASEAN Secretariat, 2018b). To further enhance ASEAN-India cooperation in agriculture and forestry, the 6th AIMMAF held on 21 October 2020 via videoconference hosted by Cambodia adopted

the Medium-term Plan of Action of ASEAN-India Cooperation in Agriculture and Forestry for 2021-2025 (ASEAN Secretariat, 2020). The 7th AIMMAF held virtually in 2022, agreed to further strengthen and deepen collaboration in the priority areas to address climate change, sustainable agriculture, conservation and nature-positive agriculture, climate resilient agriculture, and sustainable soil management to ensure the sustainability of the Agri-ecological system (ASEAN Secretariat, 2022).

5.2 ASEAN-India Agricultural Trade

India is among the top agricultural trading partners for ASEAN, securing a notable position alongside major economies. India has always been ASEAN's fifth largest exporter, after China, the US, the EU and Japan. ASEAN's agricultural exports to India is 9.96 billion USD in 2021. India's share of ASEAN's total agricultural imports reached 5.7% in 2021, an increase from 2020, but the overall fluctuation is not significant. Indian agricultural exports to ASEAN rank seventh, after the US, China, the EU, Argentina, Brazil, and Australia. In 2021, ASEAN's imports from India increased to 7.0383 billion USD, accounting for 5.4% compared with 4.1% in 2020. Overall, ASEAN exports more agricultural products to India than it imports. India's significance is highlighted not only by its export ranking but also by the increasing share of ASEAN's imports originating from India.

5.3 India's Agricultural Investment to ASEAN

Investment is another important area of cooperation between India and ASEAN countries. Indian investments into ASEAN nations from April 2019 to March 2022 reached a total of 55.5 billion USD. Within this figure, a significant portion, specifically 51.5 billion USD, was invested in Singapore (Bhardwaj, 2023). At the same time, India's agricultural investment in ASEAN is relatively low. The agricultural FDI inward flows to ASEAN are decreasing overall, and it only remained at 1.2 million USD in 2021.

5.4 Dialogue Platform through Expos, Cooperation Forums, and Assistance

The 4th India-ASEAN Expo and Summit held in 2019 was based on the previous edition of the ASEAN-India Business and Investment Meet and Expo which was held in 2018 as a precursor to the India-ASEAN Commemorative Summit. This is a flagship event of the Department of Commerce to carry forward the momentum and to further strengthen India-ASEAN relations under the Act-East Policy. The expo showcased the best initiatives by the business communities of India and ASEAN countries to collaborate in the agricultural sector and improve food security (Ministry of Commerce and Industry, 2020).

ASEAN and India also regularly hold ASEAN-India summits. The 20th ASEAN-India Summit was held on 7th Sep 2023 in Jakarta, Indonesia. During the summit,

India and ASEAN released the ASEAN-India Joint Leaders' statement on strengthening food security and nutrition in response to crises. ASEAN and India have agreed to make concerted efforts to increase cooperation in food security, nutrition, food trade supply chain, cultivation of millet, and financing for climate-friendly technologies.

An India-ASEAN Working Group on Agriculture is very important, as agriculture is a critical sector for the economy of India as well as ASEAN Member States. ASEAN-India Agriculture Working Group Meeting was held regularly. Key activities in this cooperation have been organized under short-term and mid-term plans. Under the short-term plan (2011-12), various initiatives were undertaken, such as the publication of the "ASEAN India Newsletters on Agriculture," establishment of ASEAN India Fellowships for higher education in agriculture, conferences of heads of agricultural universities, exchange visits of farmers, training programs, workshops on climate change adaptation and mitigation, and meetings of agriculture ministers. These activities aimed to facilitate knowledge exchange and collaboration between India and ASEAN countries in the agriculture sector. In addition, under the mid-term plan (2011-15), efforts were made to enhance cooperation in food, agriculture, and forestry. This included networking between government authorities and agricultural experts, capacity building, technology transfer, and research and development. The plan also focused on joint collaborative projects in various areas, such as hybrid rice technology, resource conservation, and climate change resilience (Ministry of Agriculture and Farmers Welfare 2017). The 6th India-ASEAN Working Group Meeting on Agriculture and Forestry was held in 2019. During the meeting, ASEAN and India discussed the medium-term Plan of Action (2016-2020) and urged proactive engagement from ASEAN and its Secretariat. They suggested creating a directory of agricultural and forestry institutions for better interaction. Key areas for implementation by 2020 were identified, including climate-resilient agriculture, post-harvest technology, robotics in agriculture, and disease management Welfare (Ministry of Agriculture and Farmers Welfare 2019).

6. ASEAN's Agricultural Cooperation with the US

6.1 Bilateral and Multilateral Mechanisms

The ASEAN-US dialogue relations, established in 1977, were elevated to a strategic level at the 3rd ASEAN-US Summit in November 2015. The US-ASEAN Trade and Investment Facilitation Agreement (TIFA) was signed in 2006. In May 2022, the ASEAN-US Special Summit marked the 45th Anniversary of ASEAN-US Dialogue Relations, where leaders adopted a Joint Vision Statement reflecting the depth and breadth of the partnership. Subsequently, at the 10th ASEAN-US Summit in November 2022 in Phnom Penh, Cambodia, the leaders agreed to establish the ASEAN-US Comprehensive Strategic Partnership and issued a corresponding statement. The US actively participates in ASEAN regional forums such as the

ASEAN Regional Forum (ARF) and the East Asia Summit (EAS). Additionally, there are annual consultations between ASEAN Economic Ministers and the US Trade Representative, fostering trade and investment ties. Key initiatives include the 2022-2023 ASEAN-US Trade and Investment Framework Arrangement (TIFA) and the Expanded Economic Engagement (E3) Work Plan, which focuses on trade facilitation, Micro, Small & Medium Enterprises (MSMEs) development, and harmonization of standards and conformance (ASEAN Secretariat, 2023b).

6.2 ASEAN-US Agricultural Trade

Agricultural trade has significantly contributed to the well-being of both rural and urban communities in the US, providing vital support to farm incomes and fostering employment through trade-related economic endeavors. Even though the primary focus of US agricultural production is domestic consumption, exports constitute approximately 20% of the total value of US agricultural and food products (US Department of Agriculture, 2020).

US agricultural exports to ASEAN have increased significantly during the past 2 decades, from 2.7 billion USD in 2000 to 14.3 billion USD in 2021. Over the past decade, ASEAN has outperformed the EU and Japan to become the fourth-largest export market for the US, behind only China, Canada, and Mexico. Among other regional partners with room for expansion, US agricultural exports to ASEAN are particularly noteworthy. At the same time, the US is the second biggest agricultural supplier to ASEAN after China (Limaye et al., 2021).

ASEAN is already a significant market for several US agricultural products. For instance, the US sold 5.7 billion USD worth of cotton worldwide, of which 1.4 billion USD (or 25.4% of the total export share) went to ASEAN (USDA, 2022). Other bulk and intermediate products that have significant export shares to ASEAN are wheat (18.3%), distiller's grains (25.4%), and soybean meal (23.5%). These are goods that the US is relatively better at producing and have a strong potential for future export growth. In addition to exports that aid ASEAN's domestic feed and food processing industries, value-added and consumer-oriented food items are also growing in popularity as US exports increase. In 2021, the US exported 4.6 billion USD worth of consumer-ready food, up from 3.2 billion USD in 2011 (Lee & Jones, 2023).

6.3 US's Agricultural Investment to ASEAN

The US is ASEAN's largest external source of FDI in ASEAN (ASEAN Secretariat, 2023b). US FDI in ASEAN (stock) was 359.9 billion USD in 2022. US direct investment in ASEAN is led by nonbank holding companies, manufacturing, and wholesale trade (United States Trade Representative, 2023). According to data from the ASEAN Secretariat, agricultural investment is not the main investment focus of the US in Southeast Asia. Agricultural investment flows to ASEAN from the US in

2021 are merely 3.8 million USD, and agricultural investment has continued to decline since 2018.

US agribusiness actively contributes to the development of ASEAN through its substantial investments in various enterprises. Cargill, with a global workforce of 155,000 employees across 70 countries, including over 40,000 in ASEAN, is dedicated to fulfilling its mission of nourishing the world safely, responsibly, and sustainably. Likewise, Asia and Pacific Rim trading and sales operations of Archer Daniels Midland Company, are instrumental in serving emerging markets in Indonesia, the Philippines, Vietnam, and Thailand, with key businesses including food and beverage ingredients, agricultural commodities, and animal nutrition products (Limaye et al., 2021).

6.4 Dialogue Platform through Expo, Cooperation Forums, and Assistance

The US and ASEAN are enduring partners. From 2002 to 2021, the US provided over 12.1 billion USD in economic, health, and security assistance to Southeast Asian allies and partners, including the 10 ASEAN member states. Over that same period, the US has provided over 1.5 billion USD in humanitarian assistance, including emergency food aid, life-saving disaster assistance, and support to refugees throughout the region (US Department of States, 2023).

Commencing with the inaugural ASEAN-US Leaders Meeting in November 2009, the US and ASEAN have jointly worked towards addressing food security concerns within the region. This collaborative effort, initially undertaken through the ASEAN-US Technical Assistance and Training Facility (TATF) Project as part of the ADVANCE program since 2010, aimed at fostering sustainable food trade development in partnership with the private sector. A significant milestone in this partnership was the launch of the ASEAN-US Cooperation on Maximizing Agricultural Revenue Through Knowledge, Enterprise Development and Trade (MARKET) in 2012. The MARKET Project serves as a continuation of the US Government's food security endeavors initiated through the ASEAN-US TATF Project. It supports triennial conferences aimed at promoting private sector engagement with ASEAN's food security agenda. The US-funded Maximizing Agricultural Revenue through Knowledge, Enterprise Development, and Trade (MARKET) Program plays a pivotal role in advancing these critical public-private partnerships (USAID, 2014).

An important platform between the US and ASEAN is achieved through assistance from the US Agency for International Development (USAID). USAID collaborates with ASEAN to foster unity, consensus-building, and solidarity in order to strengthen ASEAN's credibility, coordination, and institutional capacity to develop policies and frameworks for national-level implementation of accepted commitments among ASEAN member states. In 2020, USAID and ASEAN inked the first-ever five-year,

50 million USD Regional Development Cooperation Agreement to assist regional problems, economic integration, and the rule of law in order to establish policies that affect national sectoral approaches (USAID, 2021).

7. ASEAN's Agricultural Cooperation with the EU

7.1 Bilateral and Multilateral Mechanisms

The EU and ASEAN have shared a history of engagement dating back to 1977 when EU became ASEAN's Dialogue Partner. Negotiations for a region-to-region trade and investment agreement between the EU and ASEAN were launched in 2007 and paused by mutual agreement in 2009 to give way to a bilateral format of negotiations. Negotiations with Singapore and Malaysia were launched in 2010, with Vietnam in June 2012, with Thailand in March 2013, with the Philippines in December 2015 and with Indonesia in July 2016. So far, the EU has completed negotiations for bilateral agreements with two of them (Singapore in 2014 and Vietnam in 2015), while negotiations with Malaysia and the Philippines are currently on hold. Negotiations with Indonesia are ongoing and negotiations with Thailand resumed recently, with the goal of further deepening bilateral trade and investment relations with both countries. Bilateral Free Trade Agreements (FTAs) between the EU and ASEAN countries can serve as building blocks towards a future EU-ASEAN agreement, which remains a long-term objective. In September 2022, the ASEAN Economic Ministers-EU Consultation resulted in a decision to re-orient the Joint EU-ASEAN Working Group for the development of a Framework setting out the parameters of a future ASEAN-EU FTA (European Commission, 2022). Besides, Everything but Arms (EBA) scheme removes tariffs and quotas for all imports of goods (except arms and ammunition), coming into the EU from least developed countries. Myanmar, Cambodia, and Laos are included in this EBA. However, in 2019 the European Commission decided to re-introduce import duties on rice from Cambodia and Myanmar, because imports of Indica rice from both countries combined had increased by 89% in the five previous rice-growing seasons.

Apart from the negotiation of the FTA and the EBA, Cooperation between the two regions is framed by a biannual ASEAN-EU Trade and Investment Work Programme, which is articulated along the following activities: EU-ASEAN dialogue, which includes discussions on trade and investment issues at ministerial and senior economic official's levels; bi-regional expert dialogue groups; cooperation activities, and; regular organization by business of ASEAN-EU Business Summits.

In 2017, the ASEAN-EU Plan of Action for 2018-2022 was adopted, a testament to their ongoing commitment. This commitment was also manifested in the adoption of its successor, the Plan of Action to Implement the ASEAN-EU Strategic Partnership for 2023-2027, which was endorsed in August 2022. Thus, this enduring partnership, strengthened over time through dialogues and action plans, underscores the

importance of the ASEAN-EU relationship in fostering cooperation and driving economic engagement in the region (ASEAN Secretariat, 2023a).

7.2 ASEAN-EU Agricultural Trade

EU is an important agricultural trade partner. In 2021, the EU accounted for 8.7% of ASEAN's agricultural product exports and is the third agriculture trade partner for ASEAN. At the same time, the EU is the fourth ASEAN's major origin of agricultural import among other countries, which occupies 7.7% of ASEAN's total agricultural import market. Top EU Agri-food exports to ASEAN are remaining Agri-food products (42%); Dairy products (18%); pig meat (12%); and others. Top EU Agri-food imports from ASEAN are remaining Agri-food products (25%); Vegetable oils (22%); non-edible for technical use (21%); coffee, tea and spices (14%); and others (European Commission, 2023). Indonesia, Vietnam and Malaysia are key sources of agri-food imports for the EU.

7.3 EU's Agricultural Investment in ASEAN

The FDI inflow from the EU to ASEAN, according to the preliminary figures, amounted to USD 24 billion in 2022, a decrease from 2021. The EU has become ASEAN's third largest external source of FDI among all ASEAN's Dialogue Partners in 2022 (ASEAN Secretariat, 2023a). Compared with UAS and India, the agricultural FDI inward flows to ASEAN are relatively high, but experiencing a decline since 2019. Compared with 228.3 million USD in agricultural FDI in 2012, 15.9 million dollars in 2021 indicates a sharp contraction in the EU's overall agricultural investment in ASEAN.

7.4 Dialogue Platform through Expo, Cooperation Forums, and Assistance

ASEAN and the EU celebrated the 45th Anniversary of their dialogue partnership on 14th December 2022. In commemoration of this special event, the EU-ASEAN Business Council held its 10th Business Summit on the sidelines of the official bilateral meeting. Given the pressing need to tackle climate action, alleviate poverty through the digital economy, improve connectivity, and present concerns around food security, it is important to further enhance exchanges and cooperation between these two complementary regions.

The EU has been actively engaged in supporting the sustainability of agricultural development in ASEAN. Over the years, the EU has provided both financial backing and technical expertise to assist various programs and projects, including the ASEAN Farmers' Organizations Support Programme which ran from 2015 to 2020. In late 2021, the European Investment Bank extended a grant of 15 million EUR aimed at promoting sustainable agriculture practices in Cambodia. Furthermore, in August of

the previous year, the EU entered into collaborations with Thailand, focusing on sustainable food production initiatives. The EU's commitment to fostering green economy practices in the Philippines is evident through its substantial 60 million EUR Team Europe Initiative.

8. Conclusions on Deepening Agricultural Cooperation for Future

ASEAN's agricultural food system and its cooperative agricultural development are now facing multiple challenges. Over the past three years, the recurring and persistent impacts of the COVID-19 pandemic have echoed through ASEAN's agri-food systems, upsetting the delicate equilibrium of demand, supply, and trade. This crisis has exacerbated pre-existing disparities: laying bare significant inequalities in income and access to essential public services, while also deepening the urban-rural and gender divides (IFPRI, 2023). Moreover, the global climate risk index underscores the region's vulnerability to extreme weather events, with countries like Myanmar, the Philippines, Bangladesh, and Thailand ranking among the top ten most affected globally (David Eckstein, 2021). The extreme weather will further compound the challenges of maintaining agricultural production and trade stability. Additionally, any regional conflicts may also lead to food price fluctuations and impede agricultural trade. Recognizing that such challenges pose significant threats to agricultural trade in the ASEAN region, it becomes imperative to strengthen cooperation both within ASEAN and with external partners. Therefore, continuing the regional collaboration, both intra-ASEAN and inter-regional with external partners, is key to navigating the complexities of these challenges to foster a resilient and prosperous agricultural sector.

8.1 Deepening Agricultural Cooperation with Important Partners

According to our previous analysis, an intricate pattern emerges in the agricultural FDI landscape. The overall agricultural investment in ASEAN is decreasing. Among the five important agricultural partners, there is a decrease in FDI from the EU and Japan, signaling a potential shift in their engagement with the ASEAN agricultural sector. In contrast, China stands out with a consistent increase in FDI, underlining its growing role as a key investor. Meanwhile, the US and India maintain relatively low levels of agricultural FDI. In light of these dynamics, it becomes imperative for ASEAN to strategically position itself to attract more investment in the agriculture sector. Acknowledging China's increasing contribution, ASEAN could explore avenues for deeper collaborations with Chinese investors, leveraging their interest and commitment for mutual benefits. At the same time, keep diversifying with the other four partners will be equally important for ASEAN as it would stabilize the overall incoming investments. Apart from China, ASEAN also needs to make efforts on other cooperation partners. For example, understanding the reasons behind the decline in FDI from the EU and Japan could inform targeted initiatives to reinvigorate partnerships. Recognizing the potential for growth in the agricultural sector and the need for diverse investment sources, ASEAN's proactive measures to attract more

investment could involve creating an investor-friendly environment, promoting innovation, and fostering sustainable agricultural practices. This approach aligns with the regional bloc's aspirations for comprehensive and resilient agricultural development, fostering a dynamic and collaborative landscape for the future.

ASEAN may need to further develop cooperation mechanisms. In terms of the varied landscape of free trade agreements (FTAs) with its major partners. While China, Japan, and India have successfully established FTAs with ASEAN, it's noteworthy that the EU and the US lack such agreements, with the EU having FTAs only with two ASEAN member states. This underscores the potential for ASEAN to intensify efforts in negotiating FTAs, creating a foundation for a comprehensive regional trade agreement. Notably, there's currently no specific agricultural trade agreement between ASEAN and the US, with only the Trade and Investment Framework Arrangement (TIFA) in place. China and Japan, despite having direct dialogue mechanisms, also engage in agricultural cooperation through ASEAN+3. To further diversify its agricultural cooperation, ASEAN could extend its efforts beyond East Asia, to deepen partnerships with India, the US, and the EU, thus enhancing the resilience and inclusivity of its agricultural collaboration.

ASEAN may need to diversify agricultural cooperation with its key partners. The agricultural cooperation with China appears to be more diverse, spanning from high-profile expos to dedicated Agricultural Cooperation Forums and comprehensive assistance programs. China's multifaceted approach, including smart farming projects, poverty alleviation initiatives, and the establishment of agricultural promotion centers, showcased a holistic collaboration. On the other hand, while other partners, like India, Japan, the US, and the EU, engage in essential forums and assistance, there seems to be room for expanding the range of cooperation mechanisms. India, for instance, emphasizes working groups and summits, while Japan actively participates in forums and initiatives like the JAIF projects. The US focuses on assistance and private sector engagement, particularly through USAID's MARKET program. The EU, emphasizes financial backing and technical assistance. In summary, while China provides a comprehensive model, other partners can enhance cooperation by exploring and expanding their engagement through various forms of expos, forums, and assistance programs.

8.2 Towards Effective Planning, Coordination, and Integration

ASEAN's external agricultural cooperation is carried out under the framework of the Strategic Plan for ASEAN Cooperation in Food, Agriculture, and Forestry for the period 2016-2025 of the "ASEAN Community Vision 2025". ASEAN and different partners have issued plans of action. To reduce the overlapping and duplicative efforts among projects led by individual countries, it might be useful to establish a planning and dialogue mechanism to coordinate among ASEAN member countries. It may need to strengthen the steering role of planning and coordination with such a committee to establish a communication and coordination mechanism in ASEAN. We

recommend that: by actively integrating the resources of all internal parties can ASEAN effectively promote sustainable agricultural development cooperation with external countries such as the big five countries discussed in this report and even enhancing ASEAN's effectiveness within the RCEP.

It was the mutual benefit of trade that brought together the ten southeast countries in Asia. Within the ten ASEAN member states, deepening agricultural collaboration still needs to consider the differences between countries. It is imperative that ASEAN carefully considers the varying levels of development and agricultural potential present among its member states. This necessitates the formulation of a comprehensive strategy that places a strong emphasis on specific products and industries. Throughout this strategic development, ASEAN needs to actively harness a range of collaborative approaches, including offering assistance, facilitating investments, and transferring technology by expanding both intra-regional and inter-regional trade. By doing so, ASEAN can establish enduring cooperation mechanisms and forge robust internal and external partnerships that stand the test of time.

References

- Agricultural Trade Promotion Center, Ministry of Agricultural and Rural Affairs, PRC. (2023). *China Agricultural Trade Development Report*.
- ASEAN Secretariat. (2015). *Vision and Strategic Plan for ASEAN Cooperation in Food, Agricultural, and Forestry 2016-2025*.
- ASEAN Secretariat. (2017). *ASEAN Plus Three Cooperation Strategy on Food, Agriculture and Forestry (APTCS) 2016-2025*.
<https://aseanplusthree.asean.org/wp-content/uploads/2022/06/22.-APTCS-2016-2025.pdf>
- ASEAN Secretariat. (2018a). *Overview ASEAN-India Dialogue Relations*.
<https://asean.org/wp-content/uploads/2012/05/Overview-ASEAN-India-as-of-July-2018-fn.pdf>
- ASEAN Secretariat. (2018b). *The Fourth ASEAN-India Ministerial Meeting on Agriculture and Forestry*. <https://asean.org/the-fourth-asean-india-ministerial-meeting-on-agriculture-and-forestry/>
- ASEAN Secretariat. (2020). *Joint Press Statement of the Sixth ASEAN-India Ministerial Meeting on Agriculture and Forestry*. <https://asean.org/joint-press-statement-of-the-sixth-asean-india-ministerial-meeting-on-agriculture-and-forestry/>
- ASEAN Secretariat. (2021). *ASEAN's Free Trade Agreements: An Overview*.
<https://www.aseanbriefing.com/news/aseans-free-trade-agreements-an-overview/>
- ASEAN Secretariat. (2022). *Joint Press Statement of the Seventh ASEAN-India Ministerial Meeting on Agriculture and Forestry (the 7th AIMMAF)*.
<https://asean.org/joint-press-statement-of-the-seventh-asean-india-ministerial-meeting-on-agriculture-and-forestry-the-7th-aimmaf/>
- ASEAN Secretariat. (2023a). *Overview ASEAN-EU Dialogue Relations*.
<https://asean.org/wp-content/uploads/2023/06/Overview-ASEAN-EU-DR-as-of-June-2023.pdf>
- ASEAN Secretariat. (2023b). *Overview of ASEAN-US Comprehensive Strategic Partnership*. <https://asean.org/wp-content/uploads/2023/07/Overview-of-ASEAN-US-Dialogue-Relations-as-of-July-2023-1.pdf>
- ASEAN-China Center. (2023). *China-ASEAN Agricultural Cooperation has Broad Prospects—Record of China-ASEAN Agricultural Cooperation Symposium*.
<http://www.asean-china-center.org/asean/dmzx/2023-02/11530.html>
- Association of Southeast Asian Nations. (2023). *Joint Press Statement of the ASEAN-Japan Ministers on Agriculture and Forestry (AJMAF)*. <https://asean.org/the-meeting-of-the-asean-japan-ministers-on-agriculture-and-forestry-ajmaf/>
- Bhardwaj, N. (2023, September 8). Boosting India-ASEAN Economic Collaboration. *ASEAN Business News*. <https://www.aseanbriefing.com/news/boosting-india-asean-economic-collaboration-key-highlights-from-pm-modis-12-point-proposal/>
- CAITEC. (2021). *RECP Assessment Report on Regional Economic Impact*.
<https://www.caitec.org.cn/upfiles/file/2021/11/20211230093751639.pdf>

- China Daily. (2016). *China's Belt and Road Initiative Delivers Promising Initial Results*.
http://www.chinadaily.com.cn/business/201612/19/content_27706426.htm
- David Eckstein, V. K. (2021, January 25). *Global Climate Risk Index 2021 | Germanwatch e.V.* <https://www.germanwatch.org/en/19777>
- Economist Impact. (2023). *Global Food Security Index 2022*.
https://impact.economist.com/sustainability/project/food-security-index/resources/Economist_Impact_GFSI_2022_Website_Navigation_Guide_Sept_2022.pdf
- European Commission. (2022). *EU trade relations with Association of South East Asian Nations (ASEAN)*. https://policy.trade.ec.europa.eu/eu-trade-relationships-country-and-region/countries-and-regions/association-south-east-asian-nations-asean_en
- European Commission. (2023). *Agri-Food Trade Statistical Factsheet EU-ASEAN*.
https://agriculture.ec.europa.eu/system/files/2023-05/agrifood-asean-association-of-south-east-asian-nations_en.pdf
- FAO. (2004). *Strategic Plan of Action on ASEAN Cooperation in Food, Agriculture and Forestry*.
- Foreign Economic Cooperation Center, Ministry of Agricultural and Rural Affairs, PRC. (2022). *Report of China's Agricultural Foreign Investment Cooperation*.
- Francis, S. (2011). A Sectoral Impact Analysis of the ASEAN-India Free Trade Agreement. *Economic and Political Weekly*, 46(2), 46–55.
<https://www.jstor.org/stable/27918013>
- Greenville, J., & Kawasaki, K. (2018). *Agro-food trade, GVCs and agricultural development in ASEAN*. OECD. <https://doi.org/10.1787/89d40ebb-en>
- IFPRI. (2019). *Overview of the agricultural modernization in Southeast Asia*.
<https://asean.org/wp-content/uploads/2023/06/Overview-of-ASEAN-China-CSP-as-of-June-2023.pdf>
- IFPRI. (2023). *Global food policy report 2023: Rethinking food crisis responses*,
https://doi.org/10.2499/9780896294417_08
- JAIF. (2023). *JAIF Support for Food, Agriculture, and Forestry*.
<https://jaif.asean.org/sector-brief/jaif-support-for-food-agriculture-and-forestry/>
- Jusoh, S. (2018). *The Impact of the BRI on Trade and Investment in ASEAN (China's Belt and Road Initiative (BRI) and Southeast Asia)*.
<https://www.lse.ac.uk/ideas/Assets/Documents/reports/LSE-IDEAS-China-SEA-BRI.pdf>
- Kundu, S. (2022). Thirty Years of ASEAN-India Relations: The Stock-taking of Outcomes for 1992-2022. *AIC Working Paper*.
- Lee, I., & Jones, K. (Eds.). (2023). Is ASEAN the Next Big Opportunity for Agricultural Export Expansion? *Choices*.
<https://doi.org/10.22004/ag.econ.337193>
- Li, M., Mao, R., & Chen, K. (2020). *China's Agricultural Cooperation in Southeast, Central and South Asia: Situation, Challenges, and Look Forward*.

- Limaye, S., Brophy, C., Reyes, M. H., Ayala, I., Engeline, N., Imai, K., Lam, A., Madaj, P., Sullivan, M., Tokola, R., Tran, L., Valente, P., Wang, S., Wilson, K., & Woock, R. (2021). *ASEAN Matters for America, America Matters for ASEAN*.
- MAFF. (2016). *Overseas Agricultural Investment Status Report*.
https://www.maff.go.jp/j/kokusai/kokkyo/toushi/pdf/2016_5_invest.pdf
- MAFF. (2023). *Japan's food self-sufficiency rate*.
https://www.maff.go.jp/j/zyukyu/zikyu_ritu/012.html
- Mandal, S. (2022). *Agricultural Trade between India and ASEAN: Intensity and Composition*.
- Ministry of Agriculture and Farmers Welfare. (2017). *ASEAN-India cooperation in Agriculture*. <https://dare.gov.in/en/about-us/international-cooperation/multilateral/asean-india-cooperation-agriculture>
- Ministry of Agriculture and Farmers Welfare. (2019). *6th India-ASEAN Working Group Meeting on Agriculture and Forestry*.
<https://dare.gov.in/en/media/announcement/6th-india-asean-working-group-meeting-agriculture-and-forestry>
- Ministry of Commerce and Industry. (2020, October 28). 4th India-asean Expo Summit On 21 – 23 February 2019 In New Delhi. *Mcommerce*.
<https://commerce.gov.in/press-releases/4th-india-asean-expo-summit-on-21-23-february-2019-in-new-delhi160/>
- Mission of Japan to ASEAN. (2016). *Japan's cooperation with ASEAN 2025 (Food, agriculture and forestry)*. <https://www.asean.emb-japan.go.jp/asean2025/jpasean-ec02.html>
- MOA. (2023). *The 7th China-ASEAN Agricultural Cooperation Forum*.
http://www.moa.gov.cn/xw/zwtdt/202309/t20230917_6436620.htm
- Renmin Net. (2023). *Guangxi's high-level opening up promotes high-quality agricultural development*. <http://gx.people.com.cn/n2/2023/0907/c179435-40561043.html>
- Roy, D., Kamar, A., Pradhan, M., Saroj, S., & Ajmani, M. (2023). *Agricultural Transformation and Market Integration in the ASEAN Region*.
- Singh, H. (2022). *ASEAN-India Relations: Potential for Further Growth – NUS Institute of South Asian Studies (ISAS)*.
<https://www.isas.nus.edu.sg/papers/asean-india-relations-potential-for-further-growth/>
- Soesastro, H. (2005). *Accelerating ASEAN Economic Integration: Moving Beyond AFTA*.
- Sukegawa, S. (2021). ASEAN's initiatives for free trade in East Asia under AEC. *Journal of Contemporary East Asia Studies*, 10(1), 42–64.
<https://doi.org/10.1080/24761028.2021.1902068>
- United States Trade Representative. (2023). *Association of Southeast Asian Nations (ASEAN)*. <https://ustr.gov/countries-regions/southeast-asia-pacific/association-southeast-asian-nations-asean>

- US Department of Agriculture. (2020). *Agricultural Trade at a Glance*.
<https://www.ers.usda.gov/topics/international-markets-u-s-trade/u-s-agricultural-trade/u-s-agricultural-trade-at-a-glance/>
- Department of States. (2023). The United States-ASEAN Relationship. *United States Department of State*. <https://www.state.gov/the-united-states-asean-relationship-2/>
- USAID. (2014, March 17). *Maximizing Agricultural Revenue through Knowledge, Enterprise Development, and Trade Project*. <https://2017-2020.usaid.gov/asia-regional/fact-sheets/maximizing-agricultural-revenue-through-knowledge-enterprise>
- USAID. (2021, April 28). *Mission to ASEAN*. Mission to ASEAN.
<https://asean.usmission.gov/usaidasean/>
- Vientiane Times. (2022, July 19). *Chinese investment in Laos tops US\$16 billion*. Asia News Network. <https://asianews.network/chinese-investment-in-laos-tops-us16-billion/>
- WTO Secretariat. (2023). *Trade Policy Review: Japan*.
https://www.wto.org/english/tratop_e/tpr_e/tp538_e.htm
- Ye, X. (2014). Correctly grasp four new changes in the national food security strategy. *China Development Observer*.
- Zhang, H. (2019). *Securing the 'Rice Bowl.'* Springer. <https://doi.org/10.1007/978-981-13-0236-7>