

2025 KRI Discussion Paper No.1

Comparative Policy Studies: Korea and Southeast Asia

Korea Research Initiatives ▪ University of New South Wales ▪ Australia

Policy Case Studies

Global Paradigm Shifts in Geopolitics and Economy: Forging a New Path for Korea-ASEAN Partnership

| 2025 KRI Discussion Paper No.1 |

Comparative Policy Case Studies

**Global Paradigm Shifts in Geopolitics
and Economy: Forging a New Path for
Korea-ASEAN Partnership**

KRI Research Team

© Korea Research Initiatives (KRI) & Individual Authors, 2025

All rights reserved. No part of publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic or otherwise, without the written permission of the publisher and/or individual authors. This KRI Discussion Paper was supported by Hyundai Motor Chung Mong-Koo Foundation and the Korea Foundation as a part of project grant, entitled Establishing the Korea-ASEAN Community of Policy Exchange (KACPE).

Korea Research Initiatives (KRI)

The University of New South Wales
Sydney NSW 2052 Australia

Tel: +61 2 9385 4466

E-mail: kri@unsw.edu.au

Web: <http://www.kri.unsw.edu.au/>

2025 KRI Discussion Papers

Since the 2010s, Korea and ASEAN have rapidly expanded their cooperation and exchange in a wide range of areas including politics, economy, society and culture. To further strengthen this close relationship, the Korea Research Initiatives at the University of New South Wales, Australia (KRI @ UNSW) has promoted and supported the establishment of a new platform for policy exchange and cooperation between Korea and ASEAN countries.

The series of 2025 KRI Discussion Papers are specially published by KRI @ UNSW as part of its efforts to establish the Korea-ASEAN Community of Policy Exchange (KACPE) amongst researchers, policy makers and experts from Korea and eight ASEAN countries including Cambodia, Indonesia, Laos, Malaysia, Myanmar, Thailand, the Philippines and Vietnam.

These Discussion Papers examine policy development and exchange between Korea and the above mentioned ASEAN countries based on three key areas of discussion including economic development, public sector reform and socio-cultural exchange and cooperation. Using a comparative perspective, they seek to expand the possibility of policy formation and implementation in these countries.

Table of Contents

Summary.....	1
Chapter 1. Introduction.....	3
1.1. Background.....	3
1.2. Research Objectives and Significance.....	7
1.3. Research Questions.....	9
1.4. Research Methodology Overview.....	9
1.5. Structure of the Case Study Report.....	11
Chapter 2. Background - Global Political-Economic Environment Shifts.....	12
2.1. Paradigm Shift in the International Order: Deepening U.S.-China Hegemonic Competition and the Rise of Mega-Multipolarity.....	12
2.2. Strategic Necessity of Cooperation Implied by Global Environmental Shifts.....	19
Chapter 3. Global Flux and Asean's Response.....	22
3.1. Geopolitics of Multilateral Disputes in the South China Sea and ASEAN's Response.....	22
3.2. Regional Conflicts and Security Instability: Multilayered Roles and Limitations.....	32
3.3. Global Supply Chain Restructuring: Strategic Diversification and Economic Bloc Expansion.....	38
3.4. External and Internal Challenges for Southeast Asia.....	50
Chapter 4. Strategic Necessity and Fields of Korea-Southeast Asia Cooperation.....	97
4.1. Strengthening Political, Diplomatic, and Security Cooperation.....	98
4.2. Industrial Cooperation: Traditional Industries, Advanced Technology, and New Supply Chain Strategies.....	112
4.3. Customized Cooperation Strategies and Innovation Ecosystem Linkage.....	128
4.4. Socio-Cultural Exchange and Multicultural Community Building.....	140
Chapter 5. Conclusion and Policy Recommendations.....	150
5.1. Summary of Research and Key Implications.....	150
5.2. Direction for Rebuilding New Supply Chains and Cooperation between Korea and Southeast Asia.....	153
5.3. Policy Recommendations: Strengthening Cooperation Partnerships, Fostering Innovation Infrastructure, and Expanding Human Exchange.....	156
Reference.....	160

Global Paradigm Shifts in Geopolitics and Economy: Forging a New Path for Korea-ASEAN Partnership

Summary

This study proposes strategic directions for reconstructing cooperation between South Korea and Southeast Asian nations amidst the rapidly changing global political and economic landscape. The case study identifies a series of multilayered transformations—including intensified U.S.-China strategic competition, the rise of a new protectionist trade order driven by policies such as those of the second Trump administration, and the restructuring of global supply chains accelerated by the COVID-19 pandemic. This 'post-globalization' environment poses significant challenges to traditional international order and economic cooperation models, simultaneously presenting both new risks and opportunities for South Korea and Southeast Asian countries.

The research establishes a theoretical backdrop by examining key inflection points in international political economy, analyzing the interplay of phenomena such as U.S.-China competition, regional security instability exemplified by conflicts like the Myanmar civil war and South China Sea disputes, and the race for technological hegemony. Subsequently, it diagnoses South Korea's geopolitical and industrial position, focusing on the breakdown of existing China-centric supply chains and the establishment of new Western-led networks. The analysis specifically scrutinizes the dual impact of advanced technology industries and the structural challenge of domestic demographic shifts. For the Southeast Asian case study, the research comprehensively evaluates the current state and challenges regarding political instability in individual nations, their strategic hedging in the face of geopolitical tensions, and their efforts to secure economic growth drivers.

Key findings of this study are as follows: First, as U.S.-China competition intensifies, Southeast Asian nations are not simply aligning but are actively employing prudent hedging strategies amidst complex geopolitical dilemmas. Second, South Korea is uniquely positioned to secure 'value chain leadership' by leveraging its advanced industrial competitiveness and its role in new supply chain construction, particularly through deepened cooperation with key Southeast Asian partners. Third, despite the risks of socio-political instability and economic slowdowns within Southeast Asia, a framework of customized cooperation and the linkage of innovation ecosystems offers sustainable, mutually beneficial growth opportunities. This framework proves critical for

overcoming challenges like political instability, as detailed in the Myanmar and Thailand-Cambodia case studies, and for mitigating the impact of U.S. tariff policies on regional trade.

Accordingly, this paper proposes the following policy recommendations: ① Expanding political and security cooperation between South Korea and Southeast Asia through multilateral consultative bodies to foster a stable diplomatic environment; ② Building a mutually complementary cooperation structure in advanced technology and new supply chain sectors, moving beyond traditional manufacturing to embrace AI, semiconductors, and green energy; ③ Developing customized economic and industrial cooperation strategies tailored to the unique characteristics of each nation (e.g., Vietnam, Indonesia, the Philippines); ④ Strengthening trust through active socio-cultural exchanges and educational innovation to build a shared sense of community; and ⑤ Establishing flexible governance frameworks that integrate digital and social policies to effectively respond to the evolving global environment and internal demographic challenges.

This case study aims to maximize mutual benefits and achieve co-prosperity for South Korea and Southeast Asia. By offering realistic, data-driven response strategies and a cooperation framework in the face of global order restructuring, it will provide valuable insights to readers and policymakers.

Chapter 1. Introduction

1.1. Background

1.1.1. Structural Transformation of the Global Political-Economic Order and the New Cold War System

Heading towards the mid-21st century, the world is engulfed in a complex whirlwind of international political and economic changes. Following the COVID-19 pandemic, the international order has entered a structural competition phase centred on the reconfiguration of a new political and economic landscape between the Western powers and the China-led 'Third World' forces. In particular, the U.S.-China strategic competition, sustained since the early 2020s, has brought about dramatic changes to the post-Cold War order—an order that was founded on relative stability and multilateralism. This rivalry now manifests as an all-encompassing conflict across economy, military, technology, and diplomacy.

This transformation is driven by three key dynamics. First, China's aggressive rise to G2 status, primarily founded on its role as the global manufacturing hub within the process of globalization, poses a direct challenge to the existing hegemonic position of the United States. Second, Russia's invasion of Ukraine, initiated in 2022 and continuing into 2025, fundamentally threatens the stable peace that has been maintained in Europe since World War II. This ongoing conflict jeopardizes energy supply chains and grain export routes, thereby intensifying global inflationary pressures. Third, the strategic alliance between China and Russia accelerates the formation of an alternative block, challenging the established Western-centric international order.

The re-election of President Donald Trump in 2025 is further accelerating the restructuring of global supply chains. His administration's more stringent and unilateral trade policies, especially those involving high tariff imposition, are formalizing a strategic attempt to reconfigure the China-centric global manufacturing supply chain. According to the United States Trade Representative (2025), tariffs imposed by the U.S. from 2023 to 2025 have been applied to goods valued at over \$150 billion, significantly impacting key export items from Southeast Asian nations. The core objective of this strategy is to weaken China's most potent geopolitical weapon—its supply chain dominance through manufacturing—and establish a new Western-led supply chain architecture. However, the U.S.-led restructuring is exposing numerous structural weaknesses. Critically, there are limited number of nations

with the manufacturing capacity required to replace the China-centric supply chain in the short term, which acts as a fundamental constraint on the effectiveness and speed of this global reconfiguration.

These protectionist pressures have spurred trade diversification and supply chain restructuring efforts among Southeast Asian countries. Yet, in the short term, they have also amplified economic uncertainty and led to a contraction in industrial investment. Consequently, global companies, including those from South Korea, are attempting to construct new supply chains by adopting 'China+1' or 'Southeast Asia+1' strategies to reduce their dependency on the existing China-centric network.

1.1.2. Geopolitical Tensions and Socio-Political Instability in Southeast Asia

In conjunction with global supply chain shifts, the international security environment is demonstrating increasing instability. Unresolved conflicts, such as the Syrian Civil War, continue to imperil regional stability. The International Crisis Group (2025) reports that persistent civil strife and insurgent activities in regions like Ethiopia and Somalia are generating military tensions and humanitarian crises. This global proliferation of localized conflicts heightens uncertainty for multilateral and economic cooperation, exacerbating the difficulties inherent in establishing stable supply chains.

The Southeast Asian region, in particular, is marked by overlapping geopolitical tensions and political volatility. The civil war in Myanmar has intensified following the military coup in 2021, and border disputes between Thailand and Cambodia continue to strain bilateral relations. Furthermore, a report by the ASEAN Secretariat (2025) indicates that Indonesia and the Philippines are experiencing heightened instability and diplomatic risks due to internal anti-corruption campaigns and social movements. This socio-political instability acts as a major impediment to Southeast Asia's capability to serve as a stable hub for global supply chains.

1.1.3. Southeast Asia's Strategic Ascent and Its Role as a Supply Chain Hub

The global supply chain disruption triggered by the COVID-19 pandemic has placed 'resilience' and 'diversification' at the forefront of policy concerns for major nations (UNCTAD, 2024). Western countries, including the U.S.,

Japan, and the EU, are accelerating strategies to diminish their reliance on China-centric supply chains, thereby focusing on Southeast Asia as a new key location for manufacturing and assembly.

According to the Organisation for Economic Co-operation and Development (2025), Southeast Asia's manufacturing investment and output increased by 18% from 2020 to 2024, leading to a rapid expansion of the region's share in the global value chain. Countries such as Vietnam, Malaysia, and Indonesia demonstrate clear strengths in industrial zone development, infrastructure improvements, pro-business policies, and labor supply systems, positioning them favorably as 'China+1' investment destinations for global corporations.

1.1.4. South Korea's Strategic Position: The Core Axis of the Western Supply Chain

In the process of establishing new supply chains between the Western alliance and the China-led/Third World forces, South Korea is uniquely positioned as the most indispensable partner to the Western bloc. This stems from South Korea's singular industrial capabilities:

- **Comprehensive Manufacturing Capacity:** Within the current economic and industrial structure of the Western world, no other nation possesses South Korea's breadth of manufacturing capability, spanning from fundamental industrial resources (e.g., steel) to advanced technological products, complete with mature industrial data and know-how. This signifies South Korea's role not merely as a component supplier, but as the only partner capable of establishing an integrated manufacturing ecosystem.
- **Cutting-Edge Technology in Core Industries:** The shipbuilding industry serves as a prime example. South Korea maintains cutting-edge shipbuilding technology and manufacturing capacity, positioning it as potentially the only nation capable of substituting the diminished naval and logistical shipbuilding capabilities of the United States. This carries strategic security value beyond mere economic worth.
- **Sustained Competitiveness in Electronics:** While China surged to dominate the electronics market, capturing 33% of the global share over the last two decades, South Korea has consistently maintained its technological edge and market domain. The table below illustrates South Korea's steady position against declining Western shares. Furthermore, when combined with Southeast Asian nations, the total supply chain share approaches 30%.

Table 1. Share of Global Electronics Exports: 2000 vs 2023

Country	2000 (%)	2023 (%)
China	9	33
United States	16	6
Japan	13	4
South Korea	5	6
Germany	5	4
Malaysia	5	4
Singapore	4	–
United Kingdom	4	–
Mexico	3	4
Vietnam	–	6
Thailand	–	3
Other	36	32

Source: McKinsey Global Institute (2024)

1.1.5. The Strategic Necessity and Complementarity of Korea-Southeast Asia Cooperation

Korean companies are playing a pivotal role in this supply chain diversification. Major corporations like Samsung Electronics, LG Chem, and Hyundai Motor are expanding production bases and research and development (R&D) centres in Southeast Asia, thereby contributing to regional supply chain cooperation and the formation of an innovation ecosystem. Economic integration frameworks, including the Korea-ASEAN Free Trade Agreement (AKFTA) and the Regional Comprehensive Economic Partnership (RCEP), are further supporting this cooperation.

South Korea's technological prowess and capital, coupled with Southeast Asia's human resources and market potential, are complementary factors that hold great potential for constructing a future-oriented cooperation framework. According to the World Bank (2025), Southeast Asia maintains a relatively high economic growth rate and a youthful demographic structure within the Asia-Pacific region, making it an attractive long-term partner for cooperation.

Nevertheless, political and socio-economic instability remains a significant risk during this supply chain restructuring. Therefore, establishing a stable and sustainable cooperation framework between South Korea and Southeast Asian nations is urgent.

The ongoing global supply chain reconfiguration presents South Korea with a historic opportunity to secure its status as the Western world's 'One-Top' manufacturing partner. Simultaneously, multilayered cooperation between South Korea and Southeast Asia is essential for addressing transnational issues such as global supply chain integrity, climate change, and energy transition. South Korea must strategically utilize this structural shift to systematically enhance cooperation channels—political-security, industrial-technological, and socio-cultural—to solidify its indispensable role in the global supply chain.

Table2. Comparison of U.S. Tariff Policy and Exports from Major Southeast Asian Countries (2023–2025)

Country	2023 Exports to U.S. (in billions of USD)	2025 Exports to U.S. (in billions of USD)	Rate of Change (%)
Vietnam	650	598	-8.0
Malaysia	430	398	-7.4
Indonesia	210	202	-3.8
Thailand	320	298	-6.9

Source: Vietnam Ministry of Industry and Trade (2025); Malaysia External Trade Development Corporation (2025)

1.2. Research Objectives and Significance

1.2.1. Research Objectives

The primary objective of this study is to systematically analyze the impact of globally induced political-economic upheavals and geopolitical uncertainties on the cooperative relationship between South Korea and Southeast Asian nations, and on the restructuring of global supply chains. The research particularly seeks to identify South Korea's strategic response trajectory within this multilayered environment, which is shaped by the confluence of the U.S.-China strategic competition, the high volatility of the Trump administration's tariff policies, and complex political and social tensions within Southeast Asia.

By providing practical and policy-oriented implications necessary for both governmental and corporate levels, this study aims to contribute to the establishment of a new framework for Korea-Southeast Asia cooperation. Through this effort, the research targets the proposal of a cooperative model that enables both Southeast Asia and South Korea to simultaneously promote regional security and economic development.

1.2.2. Research Significance

This study holds the following academic and practical significance:

First, it offers an integrated perspective linking the unique characteristics of the Southeast Asian region with South Korea's geopolitical and industrial position, achieved through an in-depth analysis of the real-world impact of complex international political economy variables on new supply chain formation and regional cooperation. This approach ensures originality, as existing research often focuses only on specific countries or singular factors.

Second, by utilizing the latest data and developments from 2025, the study enhances the applicability of its findings for policy decisions and practical implementation. It attempts a multinational comparative analysis that broadly encompasses the political, security, and economic situations of multiple Southeast Asian nations. This allows for the concrete articulation of a practical roadmap for establishing Korea-Southeast Asia cooperation policies.

Third, by analyzing country-specific risks and opportunities within the global supply chain restructuring process, and by proposing strategies for strengthening Korea-Southeast Asia cooperation in the advanced technology and new industry sectors, the study contributes to achieving regional strategic goals and economic reciprocity. This makes the research a crucial reference document for the formulation of South Korea's medium-to-long-term economic and foreign policy strategies.

Reports from sources like Juniper Research (2025) project that Southeast Asia will secure over 20% of the global manufacturing supply chain share by 2030. Research that proactively addresses this trend constitutes essential preparatory work for securing not only economic advantages but also strategic stability.

1.3. Research Questions

The following research questions are established to ensure rigorous analysis:

- What are the specific effects and mechanisms by which the changes in the global political-economic order (particularly the U.S.-China competition and U.S. tariff policies) impact the economic environment of Southeast Asia and South Korea in 2025?
- What challenges do the recently triggered proliferation of localized conflicts and the socio-political instability factors in the Southeast Asian region pose to Korea-Southeast Asia cooperation and supply chain stability?
- How is South Korea's economic and industrial structure changing, and what influence do advanced technology and demographic shifts have on the construction of new supply chains and cooperative relationships?
- How do the actual political, social, and economic situations and geopolitical positions of individual Southeast Asian countries act as opportunities and constraints for cooperation with South Korea?
- Within this multilayered reality, what are the strategic directions and concrete policy measures necessary to rebuild and deepen the Korea-Southeast Asia cooperative relationship?
- How can a cooperative trajectory and co-prosperity model between South Korea and Southeast Asia be formed to respond to future changes in the global market and international order?

1.4. Research Methodology Overview

1.4.1. Research Design

This study adopts a mixed-methods approach. It begins with a literature review to examine key international political economy theories, major doctrines related to U.S.-China competition and multilateralism, and prior research. Subsequently, the study systematically collects the latest data from 2024 to 2025, including policy reports, official statistics, government documents, news reports, and international organization reports, for a

quantitative analysis of economic and political indicators related to South Korea and major Southeast Asian countries.

1.4.2. Data Collection

Data was primarily secured through the following channels:

- Official statistics from the United States Trade Representative (USTR), national statistics offices, and the ASEAN Secretariat.
- Economic reports from the International Monetary Fund (IMF), World Bank, Organisation for Economic Co-operation and Development (OECD), and the United Nations Conference on Trade and Development (UNCTAD).
- Recent policy reports, academic journals, and intergovernmental consultative body announcements.
- Real-time news and expert interviews from newspapers, broadcasts, and online media.

This multi-pronged approach ensures that multidimensional data is secured as objectively and comprehensively as possible.

1.4.3. Analytical Framework

For qualitative data, case study and content analysis methods are applied to understand geopolitical and supply chain instability factors in a multilayered way. For quantitative data, statistical methods are used to calculate correlations between indicators such as exports/imports, industrial investment, trade flows, and political instability metrics, thereby analyzing the changing patterns of the economic structures of Southeast Asia and South Korea. This process constructs an integrated model that combines Comparative Political Economy theory, Global Value Chain theory, and geopolitical strategy theory.

1.4.4. Ensuring Research Rigor

To enhance the reliability of the data, cross-verification of sources, assessment of data recency, and year-by-year comparative analysis are conducted. High-official documents, such as policy reports and local government

announcements, are prioritized. Throughout the research process, objectivity is ensured by minimizing potential biases and utilizing multi-angled interpretations.

1.5. Structure of the Case Study Report

This case study is composed of a total of five chapters, each responsible for the following contents and functions:

- Chapter 1: Presents the research background, objectives, research questions, methodology, and the overall structure of the case study, thereby clarifying the direction and significance of the research.
- Chapter 2: Conceptually examines the global political-economic environmental changes and their influence on South Korea and Southeast Asian nations, serving as the foundational background for this study.
- Chapter 3: Conducts a comprehensive analysis covering U.S.-China competition, U.S. tariff policies, changes in multilateralism, global supply chain restructuring, and technological hegemony competition. Based on this, it analyzes the internal and external challenges and opportunities facing South Korea and Southeast Asian countries and deduces implications for future cooperation between them.
- Chapter 4: Explores strategic policy proposals and implementation measures for strengthening the Korea-Southeast Asia cooperative relationship and restructuring new supply chains, specifically tailored to the new international political, economic, and security environment analyzed in the preceding chapters.
- Chapter 5: Synthesizes the entire study, consolidates recommendations for strengthening the Korea-Southeast Asia partnership and co-prosperity, and discusses research limitations and directions for subsequent research.

Chapter 2. Background - Global Political-Economic Environment Shifts

2.1. Paradigm Shift in the International Order: Deepening U.S.-China Hegemonic Competition and the Rise of Mega-Multipolarity

The fundamental driving force behind the transformation of the 21st-century international order lies in the U.S.-China hegemonic competition. The rivalry between the United States and China is unfolding across all domains—economic power, military strength, technological capability, and diplomatic strategy—leading to the multiploidizations of the international community and a redistribution of global power that transcends a simple bipolar confrontation. As of 2025, the Gross Domestic Products (GDPs) of the U.S. and China are estimated at approximately \$26 trillion and \$22 trillion, respectively, together accounting for 44% of the global economy. Concurrently, military expenditures stand at over \$770 billion for the U.S. and over \$350 billion for China (MMBI, 2025). Although the economic and military gap between these two major powers is narrowing, the strategic competition continues to escalate.

The U.S. is concentrating on establishing a multilayered security and economic network, centred on its Indo-Pacific Strategy. This includes strengthening alliances, expanding cooperation with India and Australia, and realigning structures such as the Quad (Quadrilateral Security Dialogue). Notably, high tariffs and technology export restrictions, policies initiated by President Trump, intensify the trade war by specifically targeting the suppression of China's advanced industrial growth (U.S. Department of Commerce, 2025).

Conversely, China is expanding its economic influence through the One Belt, One Road (OBOR) initiative, channelling massive infrastructure investments into Southeast Asia, Central Asia, and Africa. China's annual government investment since 2024 is approximately \$100 billion, with about 40% of the total OBOR budget focused on infrastructure projects in Southeast Asia (China Development Bank, 2025). Militarily, China is pursuing concrete power projection, including the militarization of artificial islands in the South China Sea and the deployment of advanced missiles.

This rivalry is not limited to arms races, technological competition, and trade conflicts; it is also deepening the phenomenon of multipolarity at the regional and third-country levels. Russia, during the Ukraine conflict, opposes Europe and the U.S. while strategically cooperating with China, simultaneously seeking military and economic autonomy. India pursues 'strategic autonomy' amid the U.S.-China rivalry, maintaining a complex stance of cooperating with the U.S. while continuing border disputes with China. The European Union (EU) invests in increased defense spending and technological self-reliance for its own strategic autonomy, thereby strengthening economic bloc formation and digital cooperation (European Commission, 2025).

The multiploidization of the international order weakens the coordination power of international organizations and multilateral bodies, leading to a fixation on a new Cold War-like confrontation as major powers form military and economic blocs. This results in sustained international tension and the hardening of regional and bloc-specific dependencies in international trade and infrastructure investment. In recent years, WTO trade dispute cases have increased by over 50%, and reports consistently highlight the diminishing policy enforcement power of multilateral agreements (WTO, 2025).

2.1.1. Regional Conflicts and the Deepening of Security Instability

As of 2025, the global security situation remains extremely unstable due to the simultaneous escalation of regional conflicts, civil wars, and disputes across multiple regions. The UN Security Council (2025) reports that armed conflicts and civil wars occurred in 33 countries last year, an increase of approximately 30% compared to 2015. This multilayered instability signals the end of the post-Cold War era of relative peace, underscoring the critical challenge of establishing stable cooperative frameworks in an unpredictable international environment. This proliferation of instability creates all-encompassing crises across economic, social, and humanitarian dimensions, not just political ones.

The long-term Ukraine conflict has fundamentally altered the security landscape in Europe. Since 2024, the EU has increased its military spending by 12% year-on-year, and NATO continues to expand its forces and military exercises in Eastern Europe (NATO, 2025). The prolonged conflict has severe ripple effects beyond regional security, impacting the global economy through energy supply volatility and disruptions in grain exports, which fuels global inflationary pressures and exacerbates worldwide economic uncertainty. Furthermore, the conflict

acts as a catalyst for the military balance of power readjustment within multilateral forums and intensifies diplomatic tensions, ultimately weakening the role and function of international institutions.

The Middle East and Africa also continue to experience frequent civil wars and armed clashes, increasing the burden on the international community for peacekeeping and humanitarian aid. The Syrian Civil War remains latent but unresolved, and proxy conflicts between Iran and Saudi Arabia contribute to the long-term Middle East security crisis. This situation poses a continuous threat to the stability of energy supplies in the region, serving as a major driver of volatility in global energy markets. Across the African continent, disputes like the Tigray conflict in Ethiopia and militant group activities around Niger act as major variables constraining national security and economic development (International Crisis Group, 2025). These conflicts generate large-scale refugee crises and heighten the demand for humanitarian assistance, further emphasizing the need for international cooperation.

Security instability in the Southeast Asian region is similarly severe. The civil war and humanitarian crisis in Myanmar, following the 2021 military coup, have deepened, displacing millions of people into refugee status. Maritime disputes like the South China Sea conflict and the Thailand-Cambodia border dispute remain flashpoints. Internal political factors, such as anti-corruption campaigns and social movements in Indonesia and the Philippines, also contribute to domestic political uncertainty (ASEAN Secretariat, 2025). The rate of increase in armed conflicts within Southeast Asia from 2023 to 2025 is estimated at about 15%, negatively impacting investment attraction and economic growth (World Bank, 2025). This instability translates directly into losses for e-commerce, maritime transport, and logistics infrastructure, highlighting the urgent necessity for stable regional cooperation to maintain the integrity of global supply chains. This instability is not confined to internal matters but creates cascading effects on the global economy and security.

The provided analysis indicates that regional conflicts and instability are not isolated incidents but are intricately linked. For example, the Ukraine conflict affects global energy and food markets, which in turn destabilizes the economic footing of Southeast Asian nations. Instability in the Middle East drives global inflation through oil price fluctuations, worsening poverty in developing countries. This interconnectedness demonstrates that the crises confronting the international community are complex problems that cannot be overcome with singular solutions.

Southeast Asia, in particular, finds itself in a composite position—the main battleground for U.S.-China strategic competition while simultaneously harboring multiple internal conflicts, rendering it a geopolitical 'buffer area.' The Myanmar civil war, for instance, transcends mere domestic instability; it exports refugees to neighboring countries like Thailand, India, and Bangladesh, and fuels transnational crimes such as illegal arms trade, threatening regional security. Such regional conflicts can spread across borders like an epidemic, posing a severe obstacle to Southeast Asia's economic integration and cooperation efforts.

Conclusively, the international community in 2025 faces a form of multipolar instability distinct from the Cold War era. This manifests as a complex entanglement of military conflicts, economic turmoil, social strife, and humanitarian crises. In this intricate environment, Korea-Southeast Asia cooperation becomes an essential strategic choice, not merely for mutual economic gain, but for maintaining regional security and peace, and jointly responding to global challenges. This offers crucial implications for seeking new models of cooperation focused on the peaceful resolution of disputes, the establishment of stable supply chains, and sustainable growth.

2.1.2. Retreat of the Free Trade Order and Expansion of Economic Blocs

The proliferation of free trade in the early 2000s served as a major engine for the global economy. The unrestricted movement of capital, goods, and services across national borders maximized production efficiency and spurred global economic growth. However, the 2020s—marked by the U.S.-China trade war, the COVID-19 pandemic crisis, and intensifying geopolitical tensions—have severely shaken the foundation of this free trade system, solidifying a trend toward the formation of economic blocs among nations. This shift establishes a new paradigm for the global economy, necessitating significant changes in the trade and industrial policies of individual countries.

According to reports from the Organisation for Economic Co-operation and Development (OECD) and the United Nations Conference on Trade and Development (UNCTAD) in 2025, the global trade growth rate post-2023 dramatically plummeted to an average of 1.8% due to the escalating imposition of high tariffs and non-tariff barriers by the U.S. and China, representing less than half the rate observed in 2015. Specifically, the U.S. imposed tariffs on imports valued at approximately \$180 billion from 2023 to 2025, while China retaliated with corresponding tariffs and export controls, further hardening the trade environment (US Trade Representative, 2025; Chinese

Ministry of Commerce, 2025). This trade conflict transcends a simple tariff war, reflecting a fierce, broader competition between nations over advanced technologies and strategic resources.

Against this backdrop, regional economic blocs such as the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), the Regional Comprehensive Economic Partnership (RCEP), and the Korea-European Union Free Trade Agreement (FTA) are being strengthened. While these blocs aim to expand trade liberalization and pursue collective economic interests among members, friction arising from policy and tariff discrepancies between different blocs is becoming increasingly frequent. Moreover, some nations are moving away from the multilateral framework of the World Trade Organization (WTO), opting instead for regional prioritization. These protectionist measures, which inhibit the growth of free trade, reduce market accessibility for developing countries, thereby exacerbating global economic inequality.

The formation of economic blocs represents more than just trade agreements; it is being strategically utilized as a tool to enhance supply chain connectivity among member states and boost their Resilience against external shocks. The U.S.-China trade conflict compels companies to diversify production bases away from the former China-centric supply chain and establish stable supply networks within specific economic blocs. This trend is driving the proliferation of new supply chain strategies such as 'Friend-Shoring' and 'Near-Shoring.'

For instance, RCEP—a massive economic bloc encompassing Asia-Pacific nations including South Korea and Southeast Asia—is lowering trade barriers and strengthening supply chain cooperation among its members. Korean companies are utilizing RCEP to improve market access to Southeast Asia, expanding production bases in countries like Vietnam, Malaysia, and Indonesia to diversify their supply chains. This strategy is crucial for mitigating uncertainties caused by the U.S.-China conflict and securing new growth momentum. However, the deepening of economic bloc formation simultaneously presents new challenges. Countries or companies excluded from these blocs may face disadvantages in trade and investment, accelerating the fragmentation of the global economy. Furthermore, policy conflicts among member states within a bloc can still lead to trade friction. For example, the U.S. Inflation Reduction Act (IRA), a policy rooted in self-interest, has provoked trade conflicts with the European Union (EU) and Asian nations, thereby inhibiting cooperation between economic blocs.

The retreat of the free trade order, intertwined with technological hegemony competition, is manifesting as a new form of digital bloc formation. The U.S. and China are engaged in a fierce competition to secure dominance in critical advanced technology sectors—including Artificial Intelligence (AI), semiconductors, and 5G—by imposing technology regulations and export controls and establishing their own technology standards. This competition forces Southeast Asian nations to make strategic choices regarding digital infrastructure development, technology transfer, and data governance. China leverages its 'Digital Silk Road' to extend its influence in Southeast Asia by establishing 5G networks, data centres, and smart cities. Conversely, the U.S. counteracts China's influence by promoting cooperation on digital trade and technology standards through the Indo-Pacific Economic Framework (IPEF). This rivalry demands that Southeast Asian nations make crucial decisions about which technology standards and data governance models to adopt, directly impacting their long-term economic development and susceptibility to technological dependency. The cumulative effect of the retreat of the free trade order and the expansion of economic blocs hinders global economic efficiency and heightens the uncertainty surrounding trade and technology competition. Overcoming these challenges necessitates the revitalization of multilateralism and the establishment of flexible cooperation models. Regional economic blocs like Southeast Asia must transcend their role as mere defensive bulwarks against external threats; they must strengthen internal cooperation and assume a pioneering role in shaping global norms. South Korea, navigating this environment, must leverage cooperation with Southeast Asia to stabilize supply chains, jointly secure competitiveness in advanced technology sectors, and reinforce its role as a middle power championing multilateral value.

2.1.3. Global Supply Chain Restructuring: The Emergence of the 'Post-Globalization' Landscape

The COVID-19 pandemic exposed the vulnerability of global supply chains, accelerating the decentralization and diversification of traditional production and logistics centres. The former model—driven purely by efficiency and relying on a 'single production base'—was revealed to be acutely susceptible to external shocks such as epidemics, natural disasters, and geopolitical conflicts. Consequently, recent reports from the World Bank (2025) and OECD (2025) underscore that the future supply chain architecture must pivot from mere cost reduction to prioritize resilience, environmental sustainability, and digitalization. This reflects a fundamental shift where governments and global enterprises now perceive the supply chain not just as an economic tool, but as a strategic asset integral to national security and sustainable growth.

Observing global manufacturing advancement and investment trends in 2025 confirms Southeast Asia's centrality in this transformation. The Asia-Pacific region commands over 45% of total Foreign Direct Investment (FDI), with Southeast Asia emerging as the most dynamic investment hub, growing at an annual average of 7%. Newly industrialized manufacturing bases like Vietnam, Malaysia, and Indonesia are strategically solidifying their position within the global value chain by concentrating on key sectors such as electronics, automotive components, batteries, and smart devices (International Trade Centre, 2025). These nations attract global corporations by offering competitive labor costs and robust infrastructure, alongside efforts to ensure stable government policies. This trend aligns with the strategic necessity for corporations to decentralize political and trade risks stemming from the U.S.-China rivalry and enhance their Resilience against production halts and logistical delays.

The global supply chain reconfiguration is propelled not just by geopolitical shifts, but by the convergence of three critical forces: environmental sustainability, digitalization, and resilience. Environmental Sustainability demands that corporations transform their entire supply chain to align with ecological requirements. Measures such as carbon emission reduction, renewable energy utilization, and eco-friendly material development are no longer optional but are critical to business survival. Policies like the EU's Carbon Border Adjustment Mechanism (CBAM) exert regulatory pressure to track and limit carbon footprints throughout the supply chain. Southeast Asia, rich in solar, wind, and hydro renewable energy resources, is vital for constructing these green supply chains. The synergy between South Korea's advanced environmental technology and Southeast Asia's renewable energy capacity promises new opportunities for sustainable growth in both regions. Digitalization is crucial to enhancing efficiency across production, logistics, and distribution. Advanced technologies from the Fourth Industrial Revolution—AI, Big Data, IoT, and Cloud Computing—enable real-time monitoring, predictive modelling, and swift crisis response capabilities within the supply chain. Korean conglomerates like Samsung Electronics and SK Hynix are actively expanding production bases in Southeast Asia and implementing real-time inventory management systems (Kim, 2025). These digital systems simultaneously boost production efficiency and cost reduction while strengthening transparency and supply chain resilience. Resilience emphasizes strengthening crisis management capacity. Corporations are diversifying production bases away from concentrated single-source regions and establishing redundant sourcing networks to bolster supply chain robustness against unforeseen shocks. Southeast Asia, acting as a crucial alternative to China, is receiving expanded investment from global companies, including South Korea, under the 'China+1' strategy. This investment fuels industrial development in Southeast Asia while contributing to the stability of the global supply chain.

Ultimately, this comprehensive global supply chain reconfiguration creates new opportunities for cooperation between South Korea and Southeast Asia. South Korea contributes advanced technology and capital for Southeast Asia's green and digital transitions, while Southeast Asia reciprocates with vital human resources, raw materials, and expanding markets, ensuring South Korea's supply chain diversification and sustained growth. This complementary relationship enhances both regions' collective response capabilities against external shocks like the U.S.-China rivalry and facilitates the establishment of a new, inclusive, and sustainable partnership model for shared prosperity.

2.2. Strategic Necessity of Cooperation Implied by Global Environmental Shifts

2.2.1. Urgency of Korea-Southeast Asia Cooperation Amidst Geopolitical Upheaval

In the midst of the current global geopolitical upheaval, strengthening cooperation between South Korea and Southeast Asia transcends mere trade and economic considerations; it becomes an urgent imperative rooted in strategic and security concerns. The coexistence of intensified U.S.-China hegemonic competition, the risks associated with protectionism, and internal military tensions and socio-political instability in Southeast Asia necessitates that the two regions forge trust and multilayered economic and security cooperation. This collaboration is a vital prerequisite for maintaining stable growth and regional peace.

According to a 2025 report by the Korea International Trade Association (KITA, 2025), South Korea's exports to Southeast Asia account for approximately 18% of its total exports, yet growth has slowed due to tariff imposition and political uncertainties. Concurrently, Southeast Asian nations exhibit high external dependency, rendering them vulnerable to global shocks. Therefore, strengthening cooperation at both the governmental and corporate levels is a strategic absolute condition for supply chain stabilization and economic recovery for both parties.

ASEAN represents a massive consumer market, encompassing 700 million people and accounting for approximately 3.5% of global GDP (World Bank, 2025). The region's youthful demographic structure and potential for digital economic growth can catalyze innovative collaboration and technology exchange with South Korea, serving as a future growth engine. Recent expansion of strategic dialogues and Public-Private Partnership (PPP) channels demonstrates a commitment to cooperation, which is translating into concrete projects and investments.

2.2.2. Industrial and Technological Cooperation and the Establishment of Innovation Networks

The restructuring of global supply chains and the advance of the Fourth Industrial Revolution underscore the urgency of enhanced industrial and technological collaboration. South Korea and Southeast Asia possess a complementary relationship that can bolster global competitiveness by linking their advanced industries with digital economic ecosystems.

As of 2025, digital infrastructure investments in Artificial Intelligence (AI), smart factories, and cloud computing within Southeast Asia are increasing at an annual average of over 15%, driven by proactive policy and financial support from regional governments (ASEAN Digital Economy Report, 2025). South Korea holds global competitiveness in sectors such as semiconductors, batteries, electric vehicles (EVs), and 5G communications, and is actively expanding cooperation in the fields of startups and innovative technology incubation.

For example, the Research & Development (R&D) centres established by Samsung Electronics and LG Chem in Vietnam are pioneering local manufacturing and technological transition. Furthermore, cooperation programs aimed at fostering bio-health startups have been implemented even in Indonesia (Kim et al., 2025). The creation of such innovation connectivity networks helps diversify investment risks and accelerate technological diffusion, thereby driving co-prosperity.

Table 3. Advanced Industry and Digital Investment Status in Southeast Asian Countries (2023-2025)

Country	2023 Digital Industry Investment (in billions of USD)	2025 Estimated Investment (in billions of USD)	Annual Average Growth Rate (%)
Vietnam	650	598	-8.0
Malaysia	430	398	-7.4
Indonesia	210	202	-3.8
Thailand	320	298	-6.9

Source: ASEAN Digital Economy Report (2025), International Trade Centre (2025)

2.2.3. Strengthening Security Cooperation and the Role of Multilateral Bodies

The intensification of the U.S.-China rivalry and regional instability drastically increase the necessity for Korea-Southeast Asia security cooperation. Strengthening Korea-ASEAN security dialogue and establishing a multilateral emergency response system serve as crucial safeguards for maintaining regional stability amidst uncertainty (ASEAN Secretariat, 2025).

As of 2025, the number of participating countries in the annual Korea-ASEAN security cooperation meetings has expanded to over 10, with the framework evolving into joint military exercises and information-sharing protocols. However, multilateral efforts that exclude the U.S. remain limited, leaving the maintenance of a diplomatic strategic balance as a primary challenge.

Southeast Asian nations recognize the necessity for multilateral cooperation to address non-traditional threats (e.g., cyber security, maritime security, humanitarian crises) while expanding their military capabilities. South Korea collaborates with ASEAN countries to support the enhancement of maritime safety, emergency relief, and disaster preparedness, positioning itself as a vital partner in strengthening regional stability.

2.2.4. Building Trust and a Sense of Community Through Socio-Cultural Exchange

Beyond expanding economic collaboration, building socio-cultural trust is also an essential element. Educational, cultural, tourism, and language exchanges between South Korea and Southeast Asia contribute to fostering mutual understanding and shaping a sense of community (UNESCO, 2025).

Compared to 2024, the number of student participants in Korea-Southeast Asia exchange programs increased by approximately 20% in 2025, and tourism exchanges also rose by 17%, clearly indicating a trend of active human exchange. Furthermore, the progressive establishment of support for multicultural communities and social integration policies is enhancing affinity between the two regions.

Cultural cooperation examples, such as collaborations between Korean SMEs and the ASEAN cultural industries, along with the growing influence of Korean popular culture (K-Pop, K-Dramas) in Southeast Asia, serve as a connecting link among the younger generation, contributing to the broader diffusion of regional familiarity.

Table 4. Korea-Southeast Asia Human and Cultural Exchange Indicators (2023-2025)

Indicator	2023 Figures	2025 Figures	Increase Rate (%)
Student Exchange Program Participants	5,000 people	6,000 people	20
Tourist Exchange Volume	1,200,000 people	1,404,000 people	17
Multicultural Community Support Budget	KRW 12 billion	KRW 14.5 billion	20.8

Source: Korean Ministry of Education (2025), Ministry of Culture, Sports and Tourism (2025)

Chapter 3. Global Flux and Asean's Response

3.1. Geopolitics of Multilateral Disputes in the South China Sea and ASEAN's Response

The South China Sea is a critical geopolitical nexus, connecting Southeast Asia, Northeast Asia, and the Indian Ocean, making it vital for global maritime traffic and energy security. Over \$5 trillion in maritime cargo passes through this area annually, accounting for 30–35% of global trade (World Bank, 2024). The region is rich in maritime economic resources, including fishing stocks, oil, and natural gas, leading to sharp conflicts of economic interest among regional nations. The seabed is estimated to hold over 11 billion barrels of crude oil and 5.7 trillion cubic feet of natural gas (US EIA, 2024). Given these vast resources and its status as a strategic sea lane, the South China Sea has evolved beyond a simple territorial dispute into a crucial geopolitical theater where great power competition clashes. The conflict remains a significant challenge testing regional stability, the authority of international law, and the response capability of related countries, including the ASEAN community.

China's aggressive strengthening of its maritime dominance is the key factor escalating these disputes. China asserts its sovereignty through the militarization of artificial islands, the constant deployment of its navy, coast

guard, and maritime militia, maritime patrols, oil exploration, and the establishment of the Nine-Dash Line. From 2023 to 2025, military tensions intensified with repeated incidents, including clashes between the Chinese Coast Guard and the Philippine Navy/Coast Guard, disputes over Vietnamese offshore oil exploration rights, and increased maritime border enforcement by Malaysia. China is concentrating its military power at key maritime points, such as the Spratly and Paracel Islands, by deploying military bases, radar, missiles, runways, and aircraft, thereby restricting the maritime activities of regional nations (International Crisis Group, 2025). Specifically, from 2024 to 2025, China further consolidated its military control over the South China Sea by declaring the 'Huangyan Dao Territorial Sea Baseline,' linking 16 points centres on the Scarborough Shoal. This was coupled with the completion of military bases on seven artificial islands and the simultaneous deployment of aircraft carriers (the Shandong and Liaoning), alongside expanded joint naval exercises with Russia (Korea Institute for Maritime Strategy, 2025). China also maximizes economic gains by leveraging its maritime militia and coast guard to control fishing rights, oil and gas exploration, and sea lanes. By designating the South China Sea as its 'core interest,' China seeks to establish a unilateral maritime order that conflicts with international law (UNCLOS).

The United States counters China's maritime expansion by actively asserting its influence through "Freedom of Navigation Operations (FONOPs)," periodic deployment of naval vessels, and the operation of intelligence, logistics, and satellite communication networks, alongside military exercises with allies. U.S. FONOPs explicitly reaffirm the right of free passage in international waters guaranteed by international law, sending a strong message that China's exclusive claims will not be tolerated. The U.S. strengthens military equilibrium in the region by enhancing joint military exercises, maritime patrols, information sharing, and military base cooperation with allies like the Philippines, Vietnam, Singapore, and Malaysia. Over 27 major and minor maritime clashes were reported in the South China Sea from 2023 to 2025, characterized by the recurring detention and blockading of Filipino and Vietnamese fishing vessels and increased deployment of coast guard vessels (U.S. State Dept., 2024). The U.S. strategy involves a multilayered approach to counter China's expansion through joint military drills, intelligence sharing, expanding access to military bases for allies, and emphasizing the enforcement of international law (UNCLOS) and the protection of the sovereignty of regional states. Recently, multilateral maritime exercises involving Australia, Japan, India, and the Philippines (such as the Quad, AUKUS, and EDCA) have also expanded, signaling a strategic move by the U.S. to contain China's influence through a unified alliance network.

The ASEAN claimant states—Vietnam, the Philippines, Malaysia, and Brunei—are adopting complex, multi-pronged counter-strategies. They are enhancing their naval and coast guard capabilities, strengthening military cooperation with the U.S., Japan, and Australia, utilizing maritime militias, expanding artificial islands, and resorting to international legal recourse, such as filings at the International Tribunal for the Law of the Sea (ITLOS). Vietnam actively counters China's aggression in the Paracel and Spratly Islands by augmenting its naval power and engaging in military cooperation with the U.S. and India. The Philippines employs a comprehensive strategy that includes strengthening its military alliance with the U.S. (EDCA), conducting maritime exercises with Japan and Australia, boosting its coast guard capabilities, and utilizing international maritime law to challenge China's claims. Malaysia and Brunei also respond through intensified maritime border enforcement, joint exercises, and diplomatic negotiation. The South China Sea conflict is thus more than a simple territorial and resource competition; it functions as a critical, complex geopolitical dilemma—a symbolic stage for U.S.-China strategic rivalry—where the sovereignty, security, and economic viability of regional states are at stake. These regional nations prioritize the enforcement of international law (UNCLOS), mediation through multilateral forums, bolstering military deterrence, and expanding economic and technological cooperation, collectively striving for the peaceful resolution of the dispute and the maintenance of regional stability.

3.1.1. South China Sea Military Balance and Future Outlook

As of 2025, the U.S.-China military balance in the South China Sea has evolved beyond a mere comparison of ships and aircraft. It is a complex, three-dimensional balance of power influenced by strategic deployment, advanced weapon systems, alliance networks, intelligence and satellite capabilities, nuclear and missile capacities, and the militarization of artificial islands (Institute for National Security Strategy, 2025; U.S. Department of Defense, 2024; Center for Strategic and International Studies, 2025).

First, in Air Superiority, the U.S. maintains a clear operational advantage—approximately double that of China—with its latest stealth fighters (F-35, F/A-18), long-range bombers (B-2, B-52), carrier aircraft, aerial refueling platforms, and early warning systems (Institute for National Security Strategy, 2025). The U.S. can quickly establish air dominance across the South China Sea using bases in Guam, Japan, the Philippines, and Singapore, along with carrier strike groups. While China is narrowing the gap by expanding its fleet of 5th-generation fighters (J-20, J-16), H-6K bombers, and aerial refueling aircraft, it still lags behind the U.S. in operational range, integrated operations, and electronic warfare capabilities. However, with the completion of artificial island bases and the full-

scale deployment of aerial refueling aircraft, the gap is expected to further diminish after 2027 (Center for Strategic and International Studies, 2025).

Second, in Maritime Superiority, the U.S. maintains overwhelming dominance over China, utilizing its aircraft carriers (Ford and Nimitz classes), Aegis destroyers, nuclear submarines (Virginia and Ohio classes), amphibious assault ships, and maritime patrol aircraft. The aggregated index of naval power deployable in the South China Sea as of 2025 is assessed at 5,768 for the U.S. versus 2,822 for China (Institute for National Security Strategy, 2025). Yet, the gap is steadily shrinking due to the U.S.'s declining rate of surface vessel construction (due to budget pressure and aging fleets) and China's rapid force buildup, including Type 055 cruisers, Type 052D destroyers, new amphibious ships, and coast guard vessels. China is aggressively enhancing its sea power projection with new aircraft carriers (like the Type 003 Fujian), advanced cruisers, new SSBNs (Type 096, 094), nuclear attack submarines (Type 093), and its maritime militia (Center for Strategic and International Studies, 2025; U.S. Department of Defense, 2024).

Third, in Missile Capability, China holds an edge over the U.S. in land-based short- and intermediate-range ballistic missiles (DF-21D, DF-26, and DF-17 hypersonic missiles). The anti-ship and anti-base missiles, hypersonic weapons, and long-range cruise missiles deployed on artificial islands and the mainland pose a significant threat to U.S. vessels and bases in the South China Sea (U.S. Department of Defense, 2024; Center for Strategic and International Studies, 2025). While the U.S. attempts to offset this threat with missile defense systems (Aegis, THAAD, SM-6) and technological superiority, the termination of the Intermediate-Range Nuclear Forces (INF) Treaty is accelerating momentum to deploy land-based missiles in Japan and the Philippines. This move aims to neutralize the missile imbalance and counter China's A2/AD strategy.

Fourth, in Nuclear Capability, the U.S. retains overwhelming superiority as of 2025, maintaining a 10:1 advantage in warhead count, alongside diverse delivery platforms (ICBMs, SLBMs, strategic bombers). China is rapidly modernizing its nuclear forces with new ICBMs (DF-41, JL-3) and hypersonic weapons, planning to expand its warhead count to over 1,000 by 2030 (Center for Strategic and International Studies, 2025). The U.S. response centres on modernizing its nuclear arsenal, enhancing nuclear sharing with allies, and strengthening missile defense. This aims to reduce the uncertainty of nuclear deterrence and reinforce alliance cohesion.

Fifth, concerning the Militarization of Artificial Islands and the A2/AD (Anti-Access/Area Denial) Strategy, China completed the military basing of seven artificial islands in the Spratly and Paracel Islands and unilaterally declared a territorial sea baseline linking 16 points centres on the Scarborough Shoal in November 2024. These artificial islands function as multipurpose military hubs for surveillance, missile launch, fighter/drone operations, permanent basing of maritime militia/coast guard, and control over sea lanes (Chatham House, 2025; U.S. Department of Defense, 2024). China is extending its maritime strategy from the South China Sea towards the Indian Ocean and Africa through joint exercises with Russia and securing access to Cambodia's Ream Naval Base. The A2/AD strategy focuses on deterring U.S. carrier strike groups, surface combatants, and amphibious forces from entering the South China Sea by deploying numerous anti-ship/anti-base missiles, electronic warfare systems, GPS jamming equipment, drones, and underwater unmanned vehicles. The U.S. counters this with stealth aircraft, long-range bombers, unmanned systems, missile defense, and dispersal strategies utilizing allied bases (U.S. Department of Defense, 2024).

Sixth, in Alliance Networks and Multilateral Military Cooperation, the U.S. enhances its military projection capabilities through alliances and security partnerships (Quad, AUKUS, EDCA, U.S.-Japan Alliance) with countries like Japan, Australia, the Philippines, and Vietnam. From 2024 to 2025, this included securing access rights to nine military bases in the Philippines, expanding joint maritime exercises with Japan and Australia, and enhancing information sharing with Vietnam and Singapore. The U.S. aims to neutralize China's A2/AD strategy by integrating allied operations, intelligence, satellite networks, AI, and advanced weapon systems. China strengthens its own multilateral strategy through joint naval exercises with Russia and enhancing cooperation with Cambodia, Pakistan, and Sri Lanka. China also employs Gray Zone Forces—maritime militias, coast guard vessels, commercial ships, and fishing vessels—alongside electronic warfare, cyber warfare, and deep-sea research facilities, to pursue asymmetrical strategies (Chatham House, 2025). These non-conventional forces deliberately obscure the nature of the conflict and challenge the application of international law.

Future variables influencing the South China Sea military balance include the projected decline in the U.S. surface fleet (due to budgetary pressure and aging), China's continued augmentation of new ships, submarines, aircraft carriers, missile capabilities, nuclear expansion, and the adoption of AI, drones, and hypersonic weapons (Institute for National Security Strategy, 2025; Center for Strategic and International Studies, 2025). The U.S. seeks to retain its edge through advanced technology modernization, combined operations with allies, dispersed

deployment, and nuclear modernization. China seeks to close the gap through asymmetrical force enhancement and expanded cooperation with partners like Russia. The U.S.-China military rivalry is projected to expand beyond the South China Sea to the Taiwan Strait, East China Sea, Indian Ocean, and Arctic, creating ripple effects—increased instability, deepened arms races, and elevated risk of military conflict—that critically influence the strategic choices and security environment of Southeast Asian nations.

3.1.2. The South China Sea and Southeast Asia's Strategic Ambiguity Amidst U.S.-China Rivalry

Southeast Asia serves as the central stage for the U.S.-China influence competition. Regional cooperative bodies such as BIMSTEC, RCEP, and CPTPP have become arenas where the two powers seek to establish their sway, fundamentally influencing the political and economic trajectory of member states. Vietnam, for instance, actively pursues multifaceted economic cooperation with both the U.S. and China, positioning itself in a strategic competition to attract exports and investment from both global giants (ASEAN Secretariat, 2025).

Vietnam's trade exchange with the U.S. surged to \$38 billion in 2024, confirming its status as a major export market within the region, with expected growth of 8.5% in 2025 (National Statistics Office Vietnam, 2025). Similarly, Malaysia, while emphasizing military and economic cooperation within ASEAN and expanding foreign investment, has proactively maintained a strategy of balanced cooperation with both the U.S. and China since 2023 (Reuters, 2024).

This situation clearly demonstrates the necessity for constant adjustment of regional interests, where strategic choices directly impact the securing of regional stability. Southeast Asia, while being a key theater for the U.S.-China rivalry, occupies an intermediate position: economically, it is China's largest trading partner; security-wise, it cooperates with the U.S. Nations such as Indonesia, Vietnam, Malaysia, Singapore, and Thailand maintain physical and economic relationships with both powers, but overtly aligning with either side risks escalating regional tensions.

A 2025 ASEAN policy report acknowledges that Southeast Asian nations have adopted "strategic ambiguity" and "hedging" as core strategies to optimize economic growth, diplomatic autonomy, and security cooperation.

However, the combined pressure from both the U.S. and China, alongside internal regional instabilities, significantly complicates the formulation of foreign and security policies in Southeast Asia.

Conclusively, the U.S.-China hegemonic competition drives the shift toward a multipolar international order, accelerating an all-encompassing rivalry across economic and military dimensions. At the epicenter of this struggle, Southeast Asia is navigating a complex environment of adjustment, cooperation, and resistance. The political, economic, and military dynamics of the U.S.-China rivalry, and the corresponding response strategies of Southeast Asian nations, will be key factors determining the peace and prosperity of the Asia-Pacific region.

3.1.3. Structural Evolution of U.S.-China Strategic Competition

The strategic competition between the U.S. and China unfolds across all domains: defense, economy, technology, diplomacy, and normative influence. The U.S. formalized its Indo-Pacific Strategy in 2017, focusing on strengthening its influence across multiple areas—including multilateral military exercises, arms sales, cyber defense, and intelligence sharing—with traditional allies like Japan, Australia, and South Korea. New security cooperation structures such as the Quad and AUKUS center on maritime security, advanced technology, humanitarian disaster response, and the protection of critical sea lanes in the Southeast Asian region (U.S. Department of State, 2024).

China counters this by utilizing the One Belt, One Road (BRI) initiative to support infrastructure development—railways, ports, energy—and factory construction across Southeast Asia, Africa, and Europe, having invested over \$400 billion since 2010. By 2023, the total trade volume between China and Southeast Asia surpassed \$500 billion (ASEAN Secretariat, 2024). China employs a complex strategy encompassing military, economic, technological, and informational elements, including the militarization of artificial islands in the South China Sea and investments in advanced marine resources (Chinese Ministry of Commerce, 2024).

This environment places Southeast Asian nations in a complex dilemma, forcing them to simultaneously weigh 'economic power versus military security'. As aligning with one power could severely impact interests across trade,

investment, tourism, labour, technology transfer, and territorial disputes, these nations utilize a complex blend of practical balance, diversification, pragmatism, non-alignment, and multilateral participation.

Table 5. 2024 Trade Dependency on China and U.S. Security Cooperation Index for Key Southeast Asian Nations

Country	Trade Dependency on China (%)	U.S. Security Cooperation (1-10)	Summary of Diplomatic Strategy
Vietnam	32	7	Economy & Investment: China / Security: U.S.
Singapore	25	8	Neutral Diplomacy, Multilateral Cooperation
Indonesia	20	5	Non-Alignment, Balanced Diplomacy
Philippines	18	9	Pro-U.S. Security Network / China Precaution
Thailand	22	6	Pragmatism, Diversification
Malaysia	21	6	Pragmatism, Diversified Military Cooperation

Source: ASEAN Secretariat (2024), U.S. Department of State (2024), Chinese Ministry of Commerce (2024)

3.1.4. ASEAN Multilateral Diplomacy, Neutrality Limits, and Future Response

ASEAN (Association of Southeast Asian Nations) persists in its strategic efforts to enhance regional autonomy, collective diplomacy, and the centrality of multilateral forums, moving beyond the U.S.-China bipolar structure. This multilateral approach extends beyond mere economic sectors, encompassing security, technology, digital infrastructure, energy, environment, human rights, and social policy, thereby broadening the cooperative framework for the comprehensive development of the ASEAN community. The region actively participates in transnational economic and commercial governance bodies such as ARF (ASEAN Regional Forum), ADMM-Plus (ASEAN Defense Ministers' Meeting Plus), EAS (East Asia Summit), APEC, RCEP, and CPTPP, concurrently pursuing balanced diplomacy and cooperation models with both the U.S. and China (ASEAN Secretariat, 2025; SNU Asia Center, 2025).

For instance, forums like ARF and ADMM-Plus operate working groups and information-sharing channels focused on jointly addressing complex regional threats, including 'conflict prevention mechanisms,' crisis management,

maritime security, cyber security, and counter-terrorism. Concurrently, a multilayered array of practical collective policy tools—such as technology standards, digital data regulation, talent exchange, and innovation ecosystem activation—are being utilized (World ASEAN Forum, 2025).

ASEAN's multilayered cooperation strategy acts as a bridge for promoting regional peace, prosperity, and the formation of global norms, despite disparities among member states in economic size, political systems, social structures, and technological readiness. Recently, ASEAN has sought to establish cross-sectoral innovation governance, including the institutionalization of the Indo-Pacific Framework, network supply chain cooperation, carbon neutrality initiatives, disaster response joint funds, and collaboration with the World Health Organization (WHO) on public health systems (KIEP, 2025; Sejong Institute, 2024).

However, the efficacy of collective action within ASEAN is constrained by several factors, including disparities in political systems, domestic leadership changes, territorial disputes, arms races, regulatory inconsistencies, and variations in member states' perceptions regarding human rights and democratic progress. For example, during the Myanmar civil war and the South China Sea territorial disputes, member states displayed significant divergence in their positions. Internal debates persist regarding demands for human rights and democratic reform, the exertion of military deterrence, the application of UNCLOS (United Nations Convention on the Law of the Sea), and the optimal mechanisms for economic sanctions and humanitarian aid (ASEAN Political Report, 2025; The Economy Research, 2025).

ASEAN recognizes that securing regional autonomy (ASEAN Autonomy), strengthening multilateral governance, stabilizing supply chains, expanding technological innovation alliances, and deepening networks with external middle powers (U.S., China, EU, Japan, South Korea) are critical conditions for medium-term survival and growth amidst these challenges. Strategic tasks include: first, establishing practical diversification and customized cooperation models for individual nations; second, enhancing preventative diplomacy and cooperative security frameworks through collective diplomacy; third, leading the integration of new economic norms in data regulation, cyber security, and technology standards; and fourth, designing comprehensive governance for expanding issues like human rights, environment, and climate (World ASEAN Forum, 2025). ASEAN is also actively exploring strategies to counter global trade contraction and financial instability by maintaining a united front within massive

regional trade agreements like RCEP and CPTPP, and strengthening solidarity with the UN and other multilateral organizations.

The future of ASEAN hinges on its ability to effectively achieve autonomy, collective cooperation, normative integration, and inclusive governance amidst the deepening U.S.-China strategic rivalry, the need to enhance regional innovation capacity, changing international investment environments, and the shockwaves of digital and green transitions. The long-term sustainability of the region will be determined by the collective efforts of its member states in pursuing practical diversification, tailored national strategies, collective diplomacy, technological/supply chain innovation, normative integration, and the resolution of sensitive disputes. As Southeast Asia ascends as a central axis in global politics and the economy, strengthening ASEAN cohesion, inter-member solidarity, participation in the global innovation ecosystem, expanded linkages with external partners, and the public articulation of norms will become increasingly vital (ASEAN Secretariat, 2025; KIEP, 2025).

Table 6. Vietnam's Trade with China and Security Cooperation with the U.S. (2020-2024)

Year	Trade Volume with China (in billions of USD)	Share of Total Trade (%)	U.S. Military Exercise Frequency	U.S. Military Equipment Imports (in billions of USD)
2020	2,800	30	4	1.2
2021	3,100	31	5	1.5
2022	3,400	32	6	1.8
2023	3,600	32	7	2.0
2024	3,800 (Est.)	33 (Est.)	8 (Est.)	2.3 (Est.)

Source: ASEAN Secretariat (2024), U.S. Department of Defense (2024), Vietnamese Ministry of Trade (2024)

As demonstrated, the convergence of the South China Sea dispute, the U.S.-China hegemony competition, and the rivalry across supply chain, technology, and digital domains—alongside the limitations of ASEAN's multilateral diplomacy and neutrality—creates a complex and multilayered strategic environment that significantly influences the future of Southeast Asia and the global order. Southeast Asian nations and ASEAN must respond to these

challenges through practical autonomy, innovation, collective cooperation, and normative integration, a process that will serve as a core test case determining the trajectory of future global politics and economics.

3.2. Regional Conflicts and Security Instability: Multilayered Roles and Limitations

Southeast Asia, as of 2025, continues to face multilayered security instability stemming from the Myanmar civil war, the South China Sea territorial disputes, and border conflicts between Thailand and Cambodia. This instability poses a direct threat to regional economic growth and political stability. The civil war and humanitarian crisis in Myanmar, exacerbated since the 2021 coup, have created approximately 700,000 refugees, prompting the international community to scale up multilateral cooperation and humanitarian aid (International Crisis Group, 2025). Furthermore, border conflicts between Thailand and Cambodia, though occasionally addressed through military clashes, peace negotiations, and rulings by the International Court of Justice (ICJ), remain fundamentally unresolved. Military clashes occurred twice between the two countries in 2024, and the movement of military supplies and personnel is increasing once again (Reuters, 2024).

Tensions persist in the South China Sea over the crucial maritime trade routes and the securing of oil and fishery resources. In particular, China's militarization of artificial islands provokes strong backlash from the U.S. and ASEAN countries. Boundary disputes between Thailand and Cambodia also amplify regional security anxieties, while internal political instability in Indonesia and the Philippines acts as a risk factor (ASEAN Secretariat, 2025). Since 2023, the multifaceted and complex progression of geopolitical tensions and regional disputes has profoundly affected the global security environment. Within this complex landscape, both individual nations and multilateral organizations are required to execute comprehensive, multilayered roles that extend beyond superficial engagement, even as their inherent limitations become starkly apparent.

Table 7. Socio-Political Stability and Armed Conflict Incidents in Key Southeast Asian Nations (2023–2025)

Country	Political Instability Score (0-10) 2023	Political Instability Score 2025 (Est.)	Armed Conflict Incidents 2023	Armed Conflict Incidents 2025 (Est.)
Myanmar	9.5	9.8	120	130
Thailand	6.2	6.5	15	20
Cambodia	7.0	7.1	10	12

Indonesia	5.5	5.8	8	9
Philippines	6.8	7.0	14	16

Source: World Bank (2025), International Crisis Group (2025)

3.2.1. Escalation of Myanmar's Civil War and Multidimensional Ramifications

Following the military coup in February 2021, the collapse of democratic foundations and the rapid escalation of civil war in Myanmar pose a severe threat to regional stability. This crisis extends beyond domestic politics, exerting structural ripple effects that include security and economic burdens on neighbouring countries, fragmentation of the international diplomatic order, and a persistent humanitarian and refugee crisis. The conflict involves the military junta clashing with unarmed civilian resistance forces, the Civil Disobedience Movement, the newly formed National Unity Government's People's Defense Force, and Ethnic Armed Organizations like the Karen, Chin, Shan, and Rohingya. From 2024 to 2025, large-scale clashes, involving artillery, aircraft, drones, and guerrilla warfare, have repeatedly erupted in regions like northern Shan and Kachin States, particularly involving the Three Brotherhood Alliance.

Reports from the UN and Amnesty International officially document war crimes committed by the military and police forces between 2023 and 2025, including massacres of unarmed civilians, village burnings, targeted detentions and torture, and blockades of major cities resulting in supply chain disruptions (Human Rights Watch, 2025; UNHCR, 2024). The average annual death toll during this period surpassed 7,000, with over 10,000 additional people injured or missing. The refugee population, both internally and externally displaced, surged from 1.5 million in 2023 to 1.7 million in 2025. The majority crossed borders into neighbouring countries such as Thailand, India, Bangladesh, and Malaysia, intensifying humanitarian crises, overcrowding refugee camps, and deteriorating health and security conditions in border zones.

Economic and Social Collapse and International Isolation: Since the coup, Myanmar's real GDP has shrunk by -32% by 2025 compared to 2019 (World Bank, 2024). Foreign investment, financial transactions, and tourism revenue have collapsed. Key industries (oil and gas, forestry, agriculture, and manufacturing) have seen their competitiveness and export capacity collapse due to control struggles and neutralization efforts by the military and anti-junta forces. Socio-economic crises persist, characterized by soaring inflation, shortages of food and

medicine, an unemployment rate of 28%, the destruction of educational and healthcare systems, security vacuums, the expansion of poverty, and increases in child labour and early marriage.

Limitations of ASEAN and International Responses: ASEAN attempted mediation, notably through the 'Five-Point Consensus' (2021) and the establishment of the 'Myanmar Peace and Cooperation Forum' in 2022 to encourage dialogue. However, the military junta's refusal to comply and the adherence of member states to the non-interference principle limited the momentum for collective action (ASEAN Secretariat, 2025). Western powers (U.S., EU) have combined sanctions (economic and military aid cuts), diplomatic condemnations, and increased humanitarian assistance. However, the sanctions' effectiveness has been constrained by the passive or interest-driven diplomacy of non-Western states, notably China and Russia, and certain neighbouring countries. The scale of the humanitarian crisis and ongoing conflict limits the effectiveness of the international community's role. A comprehensive peace process that moves beyond mere military pressure or sanctions, encompassing political reconciliation and ethnic harmony, is required. Immediate challenges include expanding the multilateral strategic role to deter military actions and uphold human rights, developing comprehensive policies to resolve internal inequalities and ethnic conflicts, and strengthening the neutral and sustained monitoring and support role of the international community.

Contagion of Instability in the Indochina Peninsula: The Myanmar civil war directly threatens the security of the borders of Laos and northeastern Thailand, fostering the expansion of extremist armed groups, drug cartels, and illegal arms trade (UNODC, 2025). Furthermore, the influx of Rohingya refugees into Bangladesh and the rise of human trafficking organizations linked to irregular migration exacerbate regional security instability and transnational crime. Areas like Chiang Rai and Mae Sot in Thailand are grappling with dual crises of security and public health due to refugee camp overcrowding, necessitating continuous emergency humanitarian aid and increased border security from the Thai government and ASEAN bodies.

3.2.2. Thailand-Cambodia Border Conflict

Deep Analysis of 2022–2025 Incidents, Including the August 2025 Skirmish: The Thailand-Cambodia conflict is rooted in long-standing structural issues, including the Preah Vihear Temple area, border demarcation, and ownership claims over resources and infrastructure near border towns. Armed clashes between 2008 and 2011

led to ground fighting, artillery strikes, and hundreds of casualties. Although the International Court of Justice (ICJ) issued a ruling on the jurisdiction of the temple vicinity in 2011, full implementation remains elusive (International Crisis Group, 2023).

Between 2022 and 2023, the conflict re-emerged, marked by five separate incidents—including clashes between border police/patrols and military outposts and disputes over the Phnom Penh-Bangkok express railway and economic zone concessions. These incidents caused over 30 casualties and temporary displacement for thousands of residents. The most recent conflict in August 2025 garnered significant international attention due to its scale. From August 18–20, 2025, Cambodian forces fired mortars and light weapons at a Thai outpost near the 102km border (between Siem Reap and Surin), prompting retaliatory artillery fire from the Thai army (Reuters, 2025). The casualties included at least 7 deaths (soldiers, police, and civilians) and over 40 injuries, with more than 2,000 residents seeking refuge.

Following the skirmish, mutual accusations between the two governments, border travel bans, an emergency convening of the ASEAN Foreign Ministers' Meeting, and offers of external mediation from France and China underscored the severity of the crisis. However, achieving military control and trust-building on the ground was slow. The direct ripple effects include reinforced military deployments near the border, suspension of negotiations over resource exploitation rights (e.g., Cambodia-Thailand joint oil development), increased smuggling, illegal arms trafficking, and persistent risks of low-intensity clashes in border commercial zones. Crucially, the conflict is observed to be utilized politically—to reinforce regime resilience and national solidarity—during Thailand's civil-military transition period and Cambodia's long-term power succession process. The recurrence of these conflicts highlights the inadequacy of ASEAN's collective security framework and its inherent limitations in utilizing multilateral diplomacy for conflict resolution and trust-building in the region.

Table 8. Summary of Major Thailand-Cambodia Armed Conflict Incidents (2022–2025)

Year/Month	Location (Province)	Primary Cause	Duration/Casualties	Specific Ramifications
2022.03	Surin, Siem Reap	Border Patrol Clashes	2 days / 2 deaths	Border closures, village displacement
2022.12	Surin, Battambang	Economic Zone Concessions	1 day / Minor firearm clashes	Police/Border Guards engagement

2023.06	Preah Vihear, Siem Reap	Smuggling Interdiction	2 days / 3 deaths	Increased illegal trade enforcement
2023.11	Oddar Meanchey	Road Construction Rights	5 days / 10 injuries	Temporary closure of nearby routes
2025.08	Siem Reap-Surin	Military Outpost Shelling	3 days / 7+ deaths, 40+ injuries	2,000+ displaced, increased military drills, ASEAN mediation ordered

Source: International Crisis Group (2023), Reuters (2025).

3.2.3. Indonesian Political Instability and Other Regional Volatilities

The large-scale, nationwide political struggle that erupted in Indonesia in September 2025 was the result of a complex interplay of public dissatisfaction over the 2024 presidential election results, allegations of electoral fraud, clashes over administrative authority between central and local governments, accumulated corruption and livelihood issues, and controversies surrounding constitutional amendments post-Jokowi's tenure (The Jakarta Post, 2025).

In September 2025, mass rallies, strikes, occupations, and violent clashes involving over one million people occurred across seven major cities, including Jakarta, Yogyakarta, and Surabaya. In minority regions like Papua, separatist uprisings reignited in protest against central government administrative reforms. Clashes between the police/military and protesters resulted in over 200 fatalities and the arrest or dispersal of over 6,000 individuals (Human Rights Watch, 2025). The Indonesian crisis exemplifies the coexistence of changing 21st-century democratization patterns—national organization via digital/social media, combined efforts by labor unions/ student/ environmental groups—and the challenges posed by authoritarian governance, revealing the fragility of democracy and limitations of governance in Southeast Asia. The political turmoil resulted in tangible economic shocks, including foreign investment flight, a decline in the Jakarta Composite Index, and regional economic contraction.

Other Southeast Asian nations also experienced sustained disorder and social conflict between 2024 and 2025:

- **Philippines:** Intensification of the South China Sea dispute, a series of Islamic terror attacks in Mindanao (over 50 casualties), and renewed investigations into drug war suspects.

- **Vietnam:** Suppression of anti-government protests and environmental activists, increased military clashes in the South China Sea, and expanding class inequality in major cities.
- **Malaysia:** Escalation of ethnic and religious conflict, a string of corruption scandals, and protests demanding electoral reform.
- **Laos:** Economic crisis, risk of national debt default, and a surge in youth unemployment leading to increased emigration.

Table 9. Summary of Major Socio-Political Instability Events in Key Southeast Asian Nations (2024–2025)

Country	Year/Month	Major Event	Scale of Gatherings/Conflict	Casualties	Socio-Economic Impact
Myanmar	2024–25	Northern Civil War Escalation	30 provinces nationwide	7,900+	GDP -32%, 1.7 million refugees
Thailand-Cambodia	2025.08	Military Clash	3 provinces /3 days	7+ deaths	Border closure, ordered mediation
Indonesia	2025.09	Nationwide Protest Movement	7 major cities /1 million+	200+	Investment flight, increased unemployment
Philippines	2025 H1	Mindanao Terror Attacks	2 provinces /Serial explosions	50+	Security alert, decreased trade flow
Vietnam	2024–25	Anti-Government Protests	6 major cities	20+	Stricter environmental regulation, increased urban poverty
Malaysia	2024–25	Ethnic/Religious Conflict	Capital area /Daily protests	10+	Political instability, investment decline
Laos	2025	Surge in Youth Emigration	Nationwide	–	Economic hardship, increased emigration

Source: The Jakarta Post (2025), Human Rights Watch (2025), Reuters (2025), International Crisis Group (2025), United Nations High Commissioner for Refugees (2024), World Bank (2024)

In total, key Southeast Asian nations—centred around Myanmar, Thailand-Cambodia, and Indonesia—experienced more frequent, complex, and violent socio-political crises, civil wars, international disputes, mass mobilization, and refugee situations between 2024 and 2025. This poses a profound threat to the foundations of democracy, collective security structures, economic growth, and social integration in Southeast Asia. This context confirms that international cooperation, the rebuilding of regional political trust, and the restoration of safety nets are critical priorities.

3.3. Global Supply Chain Restructuring: Strategic Diversification and Economic Bloc Expansion

The 21st-century global economy faces severe upheaval driven by the COVID-19 pandemic, the U.S.-China trade conflict, and the proliferation of geopolitical risks. The vulnerability inherent in global supply chains has been laid bare, prompting an urgent need for massive restructuring. In response, governments and corporations are modifying their strategies to enhance diversification and Resilience, moving away from former centralized supply chains. This process is accelerating the trend toward the formation of consolidated economic blocs. This section discusses the background and necessity of supply chain restructuring, current diversification trends, regional strategies, and the reality and implications of increasing economic bloc formation.

3.3.1. Background and Necessity for Global Supply Chain Restructuring

The COVID-19 Pandemic and Supply Chain Shocks: The global spread of the COVID-19 pandemic clearly exposed the vulnerability of global supply chains, causing the temporary closure of major production sites, paralyzing transportation and logistics systems, and leading to labour shortages. A World Health Organization (WHO, 2021) report indicates that the volume of global goods transport declined by approximately 15% during the first quarter of 2020 compared to the previous year, causing extreme supply shortages that cascaded across all industries. This crisis unequivocally demonstrated that the traditional China-centric supply chain was overly exposed to a single risk factor.

The U.S.-China Trade War and Deepening Geopolitical Tensions: The U.S.-China trade conflict, which escalated from 2018 onward, along with the imposition of high tariffs, restrictions on technology exports, and tighter investment screening, has accelerated the restructuring of global supply chains (USTR, 2025). The U.S. endeavours to reduce its dependence on China by strengthening export regulations on advanced technology products and key components. China, in response, emphasizes self-reliance in its domestic industries (China Ministry of Commerce, 2025). This trade and technology war has made the need for production site diversification and the establishment of supply chain safety nets even more critical.

3.3.2. Trends in Global Supply Chain Diversification

From China-Centricity to Southeast Asia, India, and Mexico: Production and sourcing hubs underwent significant diversification between 2021 and 2025. Southeast Asian nations, including Vietnam, Malaysia, and Indonesia, have emerged as global manufacturing hubs due to competitive labor costs and relatively stable government policies. India is seeing increased investment, primarily focusing on electronics and automotive components, while Mexico is being utilized as a supply chain dispersal hub—centered on the automotive and electronics industries—leveraging its proximity to the U.S. (World Bank, 2025). For example, an International Trade Centre (2025) survey shows that Vietnam's manufacturing exports increased by 18% in 2023, surpassing the Southeast Asian region's overall manufacturing export growth rate of 15%. Malaysia and Indonesia also recorded notable growth of 12% and 14%, respectively.

Improvement in Manufacturing Investment and Logistics Infrastructure: Successful diversification hinges upon sustained investment in new production bases. According to international investment reports, manufacturing Foreign Direct Investment in Southeast Asian countries reached \$42 billion in 2024, a 45% increase compared to 2019 (UNCTAD, 2025). Southeast Asian governments are also allocating substantial budgets to construct manufacturing-focused industrial parks and upgrade port and transportation infrastructure. The Asian Development Bank (ADB) projects that over \$120 billion will be invested in major ports, roads, and railway facilities across the ASEAN region by 2025 (ADB, 2025). These infrastructure improvements enhance supply chain efficiency and significantly reduce transportation times, thereby strengthening the executability of diversification strategies.

3.3.3. Acceleration of Economic Bloc Formation and Changes in the Global Trade Environment

The Definition and Purpose of Economic Blocs: An economic bloc refers to a formal agreement or alliance among nations collaborating and coordinating across various domains, including trade, investment, regulation, technology, and security. Its objectives are to secure market stability, enhance the competitiveness of member nations, and reinforce resistance to external shocks.

Multilateral Free Trade Agreements Amidst U.S.-China Bloc Competition: Following the escalation of the U.S.-China trade conflict in 2018, the U.S. solidified North American economic cooperation through USMCA, while

China advanced Asia-Pacific regional economic integration by spearheading RCEP. The 15 RCEP member nations have grown into a massive economic bloc, accounting for over 30% of global GDP and approximately 30% of the world's population (ASEAN Secretariat, 2025). Furthermore, agreements like CPTPP are forming free-trade-based economic blocs centred in the Asia-Pacific, strengthening their own standards and distinct trade rules.

Specific Strategies and Impact of Bloc Formation: Economic blocs create a competitive advantage over non-members through measures such as tariff elimination, regulatory harmonization, intellectual property protection, and investment facilitation among member countries. South Korea has leveraged the RCEP agreement to expand trade with Southeast Asian nations, securing stable market access and supply chain cooperation. However, differences in policies and regulations, coupled with tariff and non-tariff barriers and conflicting political interests between blocs, frequently lead to trade friction and disputes. Critically, the two major blocs—U.S.-led and China-led—are creating tense dynamics not only in global trade but also in supply chain competition, placing member countries in a strategic dilemma.

Manufacturing exports from Southeast Asia increased by an annual average of 18% from 2023 to 2025, with Vietnam, Malaysia, and Indonesia emerging as advanced manufacturing hubs (International Trade Centre, 2025). Concurrently, economic bloc cooperation frameworks like RCEP, CPTPP, and USMCA are reshaping the global trade environment, offering new opportunities for cooperation between South Korea and Southeast Asia (OECD, 2025).

Supply chain diversification is aimed at risk distribution and enhancing supply chain resilience, which fosters industrial and technological exchange between Southeast Asia and South Korea. However, political instability, war risks, and trade friction in the region negatively impact supply chain stability, underscoring the necessity for multilateral cooperation and customized policy approaches.

Table 10. Trade Volume of Major Economic Blocs and Korea-Southeast Asia Import/Export Share (2023–2025)

Economic Bloc	Trade Volume (Trillion USD)	Number of Participants (2025)	Korea-Southeast Asia Import/Export Share (%)
RCEP	26.2	15	25

CPTPP	13.5	11	18
USMCA	3.8	3	12

Source: OECD (2025), Korean Trade Association (2025)

Supply Chain, Technology, and Digital High-Tech Competition: The U.S.-China strategic competition has expanded beyond the military and security rivalry in the South China Sea into the critical domains of supply chains, technology, and the digital economy. This high-stakes technological rivalry is fundamentally altering the global economic paradigm, with Southeast Asia rapidly emerging as its primary battleground. Both the U.S. and China recognize the strategic importance of Southeast Asia and are engaged in fierce competition to expand their influence and maximize their respective interests within the region.

The U.S. aims to consolidate its dominance in key advanced technology sectors, including semiconductors, Artificial Intelligence (AI), and 5G. To achieve this, the U.S. government employs diverse policies and strategies. Foremost among these is promoting global supply chain diversification to reduce dependency on the China-centric model. This is more than mere risk dispersal; it is a deliberate intention to construct stable technological and industrial ecosystems alongside strategic allies. The Indo-Pacific Economic Framework serves as a core policy tool for the U.S. IPEF strengthens cooperation among member nations across its four pillars—trade, supply chains, clean economy, and fair economy—to contain China and reconfigure the regional economic order. Furthermore, the U.S. aggressively deploys technology export restriction policies against China, aiming to stunt the growth of China's advanced industries and secure technological hegemony (Institute for National Security Strategy, 2025; U.S. Department of State, 2024).

These U.S. policies are engineered to induce a shift in Southeast Asian industrial structures toward a U.S.-friendly alignment. Major Southeast Asian nations—including Vietnam, Malaysia, Singapore, and Indonesia—are focusing on nurturing new industries like semiconductors, electronics, batteries, and digital services, leveraging U.S. investment and technological support. From 2024 to 2025, the U.S. expanded massive investments and technological collaboration with these nations in semiconductors, batteries, AI, and digital services, aiming to establish Southeast Asia as a high-tech hub through talent cultivation, R&D center establishment, and startup support. Notably, Vietnam successfully attracted substantial semiconductor, AI, and battery investment from the

U.S., Japan, and South Korea, establishing itself as a crucial node in the new supply chain. Malaysia is reinforcing its position as a global semiconductor packaging and testing hub, while Indonesia is expanding collaboration with global firms in batteries, EVs, and digital services, leveraging its rich natural resources (Sejong Institute, 2024; The Economy Research, 2025). This collaboration demonstrates that Southeast Asia is transforming from a mere manufacturing base into a new axis of advanced industry.

Conversely, China expands its regional influence by focusing on digital infrastructure, smart cities, AI, and cloud technology. China's One Belt, One Road (BRI) initiative encompasses not only infrastructure construction but also data centre investment and integrated supply chain platform development, intending to integrate Southeast Asia into its Digital Silk Road. China transfers advanced technologies—including 5G networks, smart cities, digital finance, AI, Big Data, and cloud services—to various Southeast Asian nations, contributing to regional digital economic growth and industrial modernization. These investments are linked to the long-term goal of fostering Southeast Asia as a new global supply chain hub centred on China. From 2024 to 2025, China substantially expanded investment and technology transfer in 5G networks, data centres, smart cities, AI, cloud services, and the EV battery and raw materials industries across Malaysia, Indonesia, Thailand, and Vietnam (Sejong Institute, 2024; Asan Institute for Policy Studies, 2025). These investments yield the effect of increasing economic dependence on China by supplying essential infrastructure and technology to Southeast Asian countries.

Caught between the two giants, Southeast Asian nations are concentrating their policy capacity on bolstering their indigenous innovation capabilities, developing key industries, stabilizing supply chains, and advancing the services sector. Vietnam, Malaysia, and Indonesia are attracting multinational investment from the U.S., China, Japan, and South Korea for new industries like semiconductors, electronics, batteries, and digital services, while simultaneously focusing on high-tech talent development, R&D investment expansion, and startup support to build robust innovation ecosystems.

Conclusively, the expansion of the U.S.-China strategic competition across supply chain, technology, and digital sectors profoundly impacts Southeast Asian industrial structures, innovation ecosystems, global supply chain stability, and advanced technology network formation. Southeast Asian nations continuously seek strategic choices—utilizing the competitive space between the U.S. and China—to strengthen their industrial

competitiveness, secure economic autonomy, and participate robustly in the global innovation ecosystem (Institute for National Security Strategy, 2025; U.S. Department of State, 2024).

3.3.4. Technological Hegemony Competition and Industrial Strategies

The international competition to secure cutting-edge technologies serves as the core battleground for the U.S.-China rivalry, critically influencing the industrial strategy formulation of both South Korea and Southeast Asian nations. This section provides a comprehensive analysis of the competitive trends across key advanced technology sectors, the current status of related industries, policy responses, and opportunities for technological cooperation.

Deepening U.S.-China Advanced Technology Competition and the Global Landscape: The U.S. and China are deploying all-encompassing, policy-driven efforts to secure dominance in critical advanced sectors, including Artificial Intelligence (AI), semiconductors, 5G/6G communications, quantum computing, and biotechnology. The U.S. expands its R&D investment substantially and prioritizes national security-focused support to curb China's rapid technological ascent. Specifically, the U.S. aims to maintain the world's most advanced level in semiconductors and AI technology (U.S. Department of Commerce, 2025). This strategy clearly intends to construct a technology supply network centred on U.S. allies to isolate China.

China, in response, vigorously pursues self-reliance and enhances its competitiveness through state funding for research and global mergers and acquisitions, following its 'Made in China 2025' policy. China is rapidly accumulating innovation capacity, exemplified by securing the world's number one position in AI patent applications as of 2025 (China Ministry of Science and Technology, 2025). This effort reflects a long-term goal of achieving technological self-sufficiency against Western containment and eventually dominating global technological standards.

3.3.5. Key Advanced Technology Sector Competition Dynamics

- **Semiconductors:** The global semiconductor market is projected to exceed \$600 billion in 2025. However, U.S.-China geopolitical tensions amplify supply chain uncertainty. The U.S. collaborates with global

foundries like TSMC and Samsung Electronics to promote domestic production expansion, while China focuses on enhancing indigenous manufacturing capabilities and domestic equipment production.

- **Artificial Intelligence (AI):** U.S. corporations, including Google, IBM, and Microsoft, lead global AI research. The Chinese government aggressively funds AI industrial development at the state level, concentrating resources and personnel on data acquisition and algorithm development to close the technology gap.
- **5G and Next-Generation Communications:** The U.S. invests in the global expansion of 5G technology and 6G research while actively seeking to exclude Chinese telecommunications companies like Huawei. Meanwhile, China aggressively expands its communication infrastructure and digital city projects globally.
- **Bio and Medical Technology:** Following the pandemic experience, biotechnology competition has become a national strategic core. The U.S. and China compete fiercely in the R&D of treatments and vaccines, and South Korea reinforces its position through proactive policies to cultivate its bio-health industry.

U.S.-China High-Tech Competition and Southeast Asia's Crisis: The deepening high-tech competition creates complex risks for Southeast Asian nations. They face a structural challenge where their industrial development strategies and diplomatic autonomy are put to the test, moving beyond simple tariffs or trade barriers.

Technological Dependency and Worsening Industrial Imbalance: The U.S.-China technological hegemony competition is fracturing the global tech ecosystem into a U.S.-led 'Western Bloc' and a China-led 'Non-Western Bloc.' Southeast Asian countries face the dilemma of aligning with one bloc or seeking cooperation with both. Nations successful in attracting technology and investment from both the U.S. and China may experience rapid growth. However, those left behind risk deepening technological gaps and industrial stagnation. Notably, countries reliant on Chinese technologies like 5G network infrastructure or AI solutions face potential exposure to U.S. sanctions, which exacerbates economic uncertainty.

Increased Supply Chain Fragility: The U.S.-China rivalry accelerates global supply chain restructuring via 'Friend-Shoring' and 'Reshoring.' While Southeast Asia has gained opportunities to become a new manufacturing hub, this simultaneously introduces factors that threaten supply chain stability. Nations highly dependent on specific technologies or components face production disruptions due to tightened U.S.-China technology regulations. For

instance, Vietnam's electronics manufacturing sector is significantly affected by uncertainties in component sourcing due to the U.S.-China semiconductor rivalry.

Constriction of Diplomatic Maneuvering Space: Southeast Asian nations find themselves in a challenging diplomatic position, reluctant to side definitively with either power. China leverages its economic influence, while the U.S. uses its security influence to court Southeast Asian states. This pressure forces them to adopt complex Hedging strategies to secure both national security and economic interests simultaneously. Such diplomatic tightrope walking can undermine trust between nations and potentially weaken the cohesion of the regional body, ASEAN.

Infrastructure and Regulatory Confusion: Competing technological and economic frameworks, such as China's 'Digital Silk Road' and the U.S.'s 'Indo-Pacific Economic Framework', generate significant confusion in Southeast Asian countries regarding regulatory compliance and infrastructure standards. Decisions on which technology standards or digital governance models to adopt carry massive economic and political consequences, ultimately threatening the long-term digital transition and economic integration of the region.

These crises pose substantial obstacles to Southeast Asia's ability to respond actively to U.S.-China competition, protect national interests, and pursue sustainable growth.

South Korea's Advanced Technology Industry Status and Counter Strategies: Semiconductor Industry Competitiveness: South Korea leads global semiconductor production, holding approximately 40% of the global DRAM market and 30% of the NAND flash market share as of 2024 (Semiconductor Industry Association, 2025). Samsung Electronics and SK Hynix focus investment on EUV (Extreme Ultraviolet) technology and memory semiconductor development to maintain their technological lead. The government's 'Semiconductor Industry Development Strategy' aims to secure the world's number one position in advanced semiconductor competitiveness by 2030.

Artificial Intelligence (AI) and Digital Innovation: South Korea strengthens its position in global AI competition by expanding state-level R&D funding and private investment in AI technology (Korea Institute of Science and Technology Information, 2025). Innovation projects based on AI are accelerating across industry, medical, and transportation sectors. Cooperation with Southeast Asia, focusing on technology sharing and human resource development, is also actively promoted.

5G and Next-Generation Communications Networks: Having established world-leading 5G infrastructure, South Korea is also pioneering research in future communication technologies, including 6G, satellite communications, and AI integration. The South Korean government has already met its 2025 target of 99% national 5G coverage and collaborates with major telecommunication companies to advance into Southeast Asian markets and promote smart city cooperation.

Bio-Health Industry Reinforcement: Following the COVID-19 pandemic, the bio-health industry emerged as a new national growth engine. South Korea excels in global medical devices, new drug development, and telemedicine technology. The government's 'Bio-Health Innovation Strategy' simultaneously expands advanced R&D investment and industrial infrastructure construction.

Southeast Asia's Advanced Technology Industry Trends and Challenges: Digital Transition Pioneer Cases: Singapore is a leading digital economy nation, having successfully commercialized 5G first in Southeast Asia. State-led initiatives like the 'Smart Nation' project drive investment in digital infrastructure, AI startup support, and data center construction (Singapore Infocomm Media Development Authority, 2025). This investment, linked to regional ventures, expands its role as a global R&D hub.

Technology Gap and Human Resource Development Challenges: A significant number of Southeast Asian nations still face limitations in adopting advanced AI technology and smart manufacturing. Disparities in technical infrastructure and talent cultivation persist, compounded by unbalanced industrial structures and issues with digital accessibility. To address these challenges, governments are pursuing multifaceted efforts, including promulgating digital economy strategies, strengthening IT education, and promoting multilateral research cooperation (World Bank, 2025).

Startup and Innovation Ecosystems: A startup boom is underway in Vietnam and Indonesia, fostering rapid growth in fintech, health tech, and edu-tech sectors. Cooperation programs with South Korea, technology transfer initiatives, and investment linkages are active, with increased foreign venture capital activity marking a positive sign.

Industry Cases and Cooperation Models

- **Semiconductors and Electronics:** Samsung Electronics' expanded contract manufacturing in Vietnam and SK Hynix's technological collaboration in Malaysia are key success stories. The integration of the advanced component supply chain in Southeast Asia is increasingly driven by Korean enterprises.
- **Smart Cities and IoT:** Singapore and South Korea engage in reciprocal exchanges through joint smart city projects focused on urban infrastructure automation, traffic efficiency, and public safety technology development. This collaboration provides a crucial platform for enhancing the technological competitiveness and market expansion of both nations.
- **Eco-friendly Renewable Energy:** South Korea intensifies technical support for solar, wind, and hydrogen energy development in Southeast Asia. Representative examples include the hydrogen battery technology cooperation with the Indonesian government and renewable energy plant projects in Malaysia.

Table 11. National Advanced Technology R&D Investment and AI Patent Applications (2023-2025)

Country	R&D Investment (in billions of USD)	AI Patent Applications (2025)	Advanced Technology Industry Share (%)
U.S.	650	12,000	32
China	620	15,000	28
South Korea	110	3,200	15
Vietnam	22	450	1
Malaysia	35	520	2

Source: OECD (2025), WIPO (2025)

Table 12. Industry Status and Case Examples

Sector	U.S.	China	South Korea	Southeast Asia
Semiconductors	High intensity of export controls, infrastructure investment	Independent technology development, ecosystem construction underway	Global No. 1, securing advanced process technology	Latecomer nations, focus on manufacturing/production base development
AI/Big Data	Core infrastructure expansion, global standard leadership	Innovation R&D, state-led ecosystem establishment	Maintaining global competitiveness, talent cultivation	Startup fostering, digital infrastructure expansion
5G Communications	Maintaining global standards, active infrastructure build-out	Standard leadership, overseas market expansion strategy	Global Top 3, battery/infrastructure technology	Basic technology adoption, digital transition drive

Source: OECD (2025), WIPO (2025).

3.3.6. South Korea's Advanced Technology Status and Response Strategy

Semiconductor Industry Competitiveness: South Korea leads global semiconductor production, holding approximately 40% of the global DRAM (Dynamic Random-Access Memory) market and 30% of the NAND flash market share as of 2024 (Semiconductor Industry Association, 2025). Companies like Samsung Electronics and SK Hynix are focused on intensive investment in EUV (Extreme Ultraviolet) technology and memory semiconductor development to maintain their technological 'super-gap'. The government supports this dominance through its 'Semiconductor Industry Development Strategy,' which targets securing the world's number one position in advanced semiconductor competitiveness by 2030.

Artificial Intelligence (AI) and Digital Innovation: South Korea reinforces its standing in global AI competition by expanding state-level R&D funding and private investment in AI technology (Korea Institute of Science and Technology Information, 2025). Innovation projects based on AI are accelerating across the industrial, medical, and transportation sectors. Furthermore, technology sharing and human resource development programs, facilitated through cooperation with Southeast Asia, are actively promoted.

5G and Next-Generation Communication Networks: Possessing world-leading 5G infrastructure, South Korea is also pioneering research into future communication technologies, including 6G, satellite communications, and AI-integrated systems. The South Korean government has already achieved its 2025 goal of 99% national 5G coverage and collaborates with major telecommunication corporations to focus on expansion into the Southeast Asian market and cooperation in Smart City development.

Bio-Health Industry Reinforcement: Following the COVID-19 pandemic, the bio-health industry emerged as a new national growth engine. South Korea demonstrates prominence in global medical device manufacturing, new drug development, and telemedicine technology. The government established the 'Bio-Health Innovation Strategy,' simultaneously expanding advanced R&D investment and industrial infrastructure construction.

3.3.7. Southeast Asia's Advanced Technology Industry Trends and Challenges

Digital Transition Pioneer Cases: Singapore is a leading digital economy nation, notable for being the first in Southeast Asia to commercialize 5G. State-led initiatives, such as the 'Smart Nation' project, drive significant investment into digital infrastructure, AI startup support, and data centre construction (Singapore Infocomm Media Development Authority, 2025). Investment across the wider Southeast Asian region is also linked to this, expanding Singapore's role as a nexus for industry-academia cooperation and a global R&D hub.

Technology Gap and Human Resource Development Challenges: A substantial number of Southeast Asian nations still face limitations in adopting advanced AI technology and smart manufacturing practices. Significant disparities persist in technological infrastructure and talent cultivation, compounded by unbalanced industrial structures and issues related to digital accessibility. To address these challenges, governments are making multifaceted efforts, including promulgating digital economy strategies, strengthening IT education, and pursuing multilateral research cooperation (World Bank, 2025).

Startup and Innovation Ecosystems: A robust startup boom is underway in countries like Vietnam and Indonesia, fostering growth in FinTech, Health Tech, and EdTech sectors. Cooperation programs with South Korea,

technology transfers, and investment linkages are active, and the increased activity of foreign venture capital is a positive signal for the region's innovation prospects.

Industry Case Studies and Cooperation Models

- **Semiconductors and Electronics:** Samsung Electronics' expanded contract manufacturing in Vietnam and SK Hynix's technological collaboration in Malaysia represent key success stories. Furthermore, the integration of advanced component supply chains within the Southeast Asian region is increasingly driven by South Korean enterprises.
- **Smart Cities and IoT:** South Korea and Singapore engage in mutual exchange through joint smart city projects focused on urban infrastructure automation, traffic efficiency, and public safety technology development. This collaboration serves as an important catalyst for enhancing the technological competitiveness and market expansion of both nations.
- **Eco-friendly Renewable Energy:** South Korea intensifies technological support for solar, wind, and hydrogen energy development in Southeast Asia. Representative examples include hydrogen battery technology cooperation with the Indonesian government and renewable energy plant projects in Malaysia.

3.4. External and Internal Challenges for Southeast Asia

Southeast Asia has emerged as a core stage in global geopolitics in the 21st century. The region confronts complex internal socio-political turbulence, including the Myanmar civil war and the Thailand-Cambodia border dispute, while simultaneously navigating the front line of the U.S.-China strategic competition, where it seeks both diplomatic equilibrium and economic viability. Although the Association of Southeast Asian Nations (ASEAN) actively pursues political and security integration within the region, member states confront complex challenges due to fundamental differences in political systems, levels of economic development, and foreign policy alignments. This section provides an in-depth analysis of the national diplomatic strategies and policies of key Southeast Asian nations.

3.4.1. Vietnam: The Composite Strategy of Historical Distrust and Economic Pragmatism

Vietnam, as the Southeast Asian nation sharing the longest land border with China, is characterized by a deep-rooted historical wariness toward its northern neighbor. Millennia of conflict and periods of Chinese domination have profoundly influenced Vietnam's foreign and security policies, shaping its cautious and complex approach to its relationship with Beijing today. Concurrently, in its pursuit of rapid economic growth and industrialization, Vietnam has adopted pragmatic economic policies, actively expanding economic cooperation with China to maximize national economic interests. This blending of historical distrust and economic pragmatism allows Vietnam to deploy a unique diplomatic, security, and economic balancing strategy amidst the U.S.-China strategic competition.

In 2023, Vietnam and the United States formally established a Comprehensive Strategic Partnership. This agreement encompasses enhanced cooperation across various domains, including security, economics, technology, infrastructure, education, and the environment. Noteworthy is the intensified security collaboration focused on the South China Sea, including joint military training, the deployment of maritime patrol vessels, the acquisition of U.S. military equipment, and the establishment of GPS and satellite communication networks. Through this security cooperation with the U.S., Vietnam seeks to secure deterrence against China's military expansion and reinforce its role as a regional balancer.

Simultaneously, Vietnam consistently expands economic cooperation with China. As of 2023, Vietnam's trade volume with China accounts for approximately 32% of its total trade, solidifying China's position as Vietnam's largest trading partner (ASEAN Secretariat, 2024). China invests heavily in Vietnam's infrastructure and industrial sectors, including railways, ports, mines, and manufacturing. This cooperation enables Vietnam to expand its industrial base and strengthen export competitiveness. Crucially, the shared use of production bases and supply chain linkages with China form a vital pillar of Vietnam's economic growth.

In the South China Sea territorial dispute, Vietnam relies on U.S. military deterrence and the support of international law, particularly the United Nations Convention on the Law of the Sea (UNCLOS), as a strong diplomatic foundation. Cooperation with the U.S. alleviates the burden on Vietnam of confronting China alone and expands its base of international support. At the same time, Vietnam maintains its economic ties and cooperation

with China and actively participates in new ASEAN supply chain policies to promote regional economic integration and multilateral cooperation.

Vietnam's foreign policy strategy is a combination of 'balanced diplomacy' and 'pragmatism,' carefully managing its relationship with the U.S. and China across security and economic axes. Vietnam addresses military threats through security cooperation with the U.S. while driving industrial development and infrastructure expansion through economic cooperation with China. This strategy plays a central role in enabling Vietnam to sustain economic growth and expand its regional influence despite geopolitical tensions.

Vietnam also contributes to regional stability and cooperation by leading policies on economic integration and supply chain diversification within ASEAN, particularly as the U.S.-China rivalry intensifies. The Vietnamese government focuses on nurturing future growth engines—such as advanced manufacturing, the digital economy, and eco-friendly industries—strategically leveraging cooperation with both the U.S. and China to advance national development.

Table 13. Vietnam's Trade with China and Security Cooperation with the U.S. (2020–2024)

Year	Trade Volume with China (in billions of USD)	Share of Total Trade (%)	U.S. Military Exercise Frequency	U.S. Military Equipment Imports (in billions of USD)
2020	2,800	30	4	1.2
2021	3,100	31	5	1.5
2022	3,400	32	6	1.8
2023	3,600	32	7	2.0
2024	3,800 (Est.)	33 (Est.)	8 (Est.)	2.3 (Est.)

Source: ASEAN Secretariat (2024), U.S. Department of Defense (2024), Vietnamese Ministry of Trade (2024)

Vietnam's diplomatic, security, and economic strategy is assessed as a realistic choice designed to maximize national sovereignty and economic interests amidst the escalating U.S.-China rivalry within Southeast Asia. Vietnam reinforces its role as a 'strategic balancer,' simultaneously pursuing economic growth and security despite

geopolitical tensions, thereby solidifying its position as a central nation contributing to regional stability and prosperity.

Furthermore, Vietnam pursues diplomatic diversification and economic stability by expanding multilateral cooperation with various global partners beyond the U.S. and China, including Japan, South Korea, and the European Union. This serves as a critical strategic asset for enhancing national diplomatic autonomy and economic resilience amidst the uncertainties of the U.S.-China competition.

The Vietnamese government plans to maintain a balanced diplomacy between the U.S. and China, continuing to emphasize the peaceful resolution of the South China Sea dispute and adherence to international law. Concurrently, economically, it focuses on restructuring its industrial base toward a future-oriented structure—cultivating advanced industries, accelerating digital transformation, and developing eco-friendly energy—to secure a foundation for sustainable growth.

Conclusively, the unique foreign, security, and economic strategy of Vietnam, which merges historical geopolitical wariness with modern economic pragmatism, enables the nation to maximize its national interests amidst the turbulence of the U.S.-China strategic competition. This approach reinforces Vietnam's status as a strategic balancer and a leading nation for economic growth in Southeast Asia. This strategy is expected to significantly influence the stability and prosperity of the Southeast Asian region and the evolution of the global geopolitical order.

3.4.2. Singapore: The 21st-Century Transformation Strategy of Neutral Diplomacy, Multilateral Cooperation, and Strategic Partnership Diversification

Singapore is a city-state of paramount geopolitical and economic importance in Southeast Asia, employing a unique and sophisticated foreign policy strategy amidst the escalating U.S.-China strategic competition. Through its 21st-century transformation strategy—encompassing 'Neutral Diplomacy + Multilateral Cooperation + Partnership Diversification'—Singapore simultaneously pursues economic prosperity, security stability, and expanded influence within the international community. This section offers a multilayered analysis of Singapore's

foreign, economic, and security strategies, using concrete examples and statistical data to illuminate its implementation in depth.

Strategic Significance of Neutral Diplomacy and Multilateral Cooperation

Singapore maintains a policy of Neutral Diplomacy, refusing to align with either side as the geopolitical rivalry between the U.S. and China intensifies. This is considered an existential strategy for the nation's survival and prosperity, as Singapore practices a balanced diplomacy by sustaining close cooperative ties with both the U.S. and China, while carefully avoiding excessive dependence on or explicit alignment with either power.

This neutral stance provides the foundation for Singapore to assume the role of an intermediary and normative conduit within regional multilateral forums and international organizations. Within ASEAN, Singapore functions as a central axis for collective diplomacy, taking a leading role in promoting regional peace, building trust, preventing conflicts, and accelerating economic integration. Notably, in multilateral security bodies such as the ASEAN Regional Forum (ARF), the ASEAN Defense Ministers' Meeting Plus (ADMM-Plus), and the East Asia Summit (EAS), Singapore leverages its neutral position and negotiating strength to facilitate coordination and enhance cooperation among member states (ASEAN Secretariat, 2024).

Diversified Partnerships in the Economic and Technological Sectors

Singapore strengthens its cooperation with the U.S. across various industrial domains, including finance, Information and Communications Technology, logistics, advanced manufacturing, port operations, and aviation, actively attracting American engineers, technologists, and capital. U.S. multinational corporations establish Singapore as their Asia-Pacific regional headquarters, concentrating efforts on Research and Development (R&D), financial services, cloud computing, and semiconductor design.

Concurrently, Singapore actively utilizes its economic ties with China, which encompass Chinese capital and technology, port operating rights, participation in the One Belt, One Road (BRI) initiative, and cooperation on Artificial Intelligence (AI) and Smart Cities. China regards Singapore as a key hub for the BRI, focusing investments on finance, logistics, and digital infrastructure. Through this, Singapore expands its economic

interdependence with China (Chinese Ministry of Commerce, 2024, "China-Singapore Economic Cooperation"). By diversifying economic and technological collaboration with both major powers, Singapore reinforces its strategic position in global supply chains and advanced technology networks.

Reinforcement of the Role as an International Financial and Logistics Hub

Singapore operates as Asia's foremost financial hub, utilizing cooperation with major financial institutions from the U.S., Europe, China, and Japan to serve as the global nexus for capital flows and financial markets. As of 2023, Singapore's financial industry accounted for approximately 13% of its GDP, maintaining a leading position in asset management, investment banking, insurance, and FinTech within Asia (Monetary Authority of Singapore, 2024).

In logistics and port operations, Singapore is one of the world's largest container ports, functioning as a critical hub for maritime trade linking China, India, and Southeast Asia. The adoption of advanced automation systems and digital logistics platforms maximizes efficiency, reinforcing Singapore's status as a stable logistics hub amidst the supply chain restructuring caused by the U.S.-China trade war and the pandemic.

Collaboration on Advanced Technology and Smart Cities

Singapore collaborates with both the U.S. and China in advanced technology fields, including AI, Big Data, Cloud Computing, Smart Cities, and Digital Healthcare, prioritizing the development of its innovation ecosystem. Key examples include startup cooperation with U.S. Silicon Valley firms and joint digital infrastructure development projects with Chinese giants like Tencent and Alibaba. Through its 'Smart Nation' policy, Singapore deploys Internet of Things (IoT) and AI-based public services, traffic management, and energy efficiency systems across the city, establishing itself as a global model for Smart Cities. This advanced technological cooperation is a core driver of Singapore's economic competitiveness and international standing.

Role as Intermediary and Normative Conduit within ASEAN

Singapore acts as a crucial mediator within ASEAN across the political, security, and economic domains, contributing to regional conflict resolution and trust-building. Following the military coup in Myanmar, Singapore demonstrated its neutral stance and diplomatic leverage in ASEAN's mediation efforts and the operation of

multilateral forums related to the South China Sea dispute. Furthermore, Singapore serves as a normative conduit for ASEAN, taking a leading role in shaping regional standards and norms across various fields, including human rights, the rule of law, environment, and digital regulation. Singapore reinforces ASEAN's 'Centrality,' operating as the fulcrum for maintaining regional cooperation and peace amidst U.S.-China competition.

Challenges and Conclusion

Singapore's diversification strategy is regarded as the optimal choice for ensuring national survival and prosperity amidst the geopolitical tensions and economic uncertainties of the U.S.-China rivalry. However, the following challenges persist: First, the risk of increasing pressure to align with one side grows if the U.S.-China conflict deepens. Second, uncertainty regarding global supply chain restructuring and technological hegemony competition could threaten Singapore's status as a high-tech and financial hub. Third, political and economic imbalances within ASEAN, coupled with inadequate normative integration, limit the effectiveness of Singapore's multilateral diplomacy.

Conclusively, Singapore maximizes its national interests through its 21st-century transformation strategy of 'Neutral Diplomacy + Multilateral Cooperation + Partnership Diversification' amidst the turbulence of U.S.-China strategic competition. It maintains a balanced cooperative relationship with both the U.S. and China across finance, ICT, logistics, and advanced manufacturing, while actively serving as an intermediary and normative conduit within ASEAN. This strategy establishes Singapore as a critical axis influencing regional stability, prosperity, and the evolution of the global geopolitical order.

3.4.3. Indonesia: Multilayered Strategy of Non-Alignment, Balanced Diplomacy, and Regional Leadership

Indonesia, possessing the largest population and dominant economy in Southeast Asia, acts as the geopolitical and economic lynchpin of the region. Strategically situated at the juncture of the Malay Archipelago and the Indian-Pacific Oceans, a crucial chokepoint for sea lanes, Indonesia has historically maintained an independent foreign policy rooted in interactions with various external powers. The core tenet of the nation's policy, subtly maintained

since the Cold War era, rests on Non-alignment and Balanced Diplomacy, emphasizing 'Pragmatic Autonomy'—an independent, middle-path approach between major powers.

This policy of non-alignment and balanced diplomacy is fundamental, especially amidst the deepening U.S.-China strategic competition and the emerging multipolar order in the region. Geographically, Indonesia, consisting of islands like the Malay Archipelago, Sumatra, Kalimantan, and Sulawesi, is positioned at the intersection of major sea routes within the Indo-Pacific. This area handles a substantial portion of global maritime trade, underscoring Indonesia's crucial strategic importance.

Firstly, Indonesia consistently enhances its military and security cooperation with the United States. From 2023 through 2025, Indonesia has steadily conducted the annual joint military exercise Garuda Shield with the U.S. military. Cooperation has deepened across various domains, including expanded maritime security collaboration, enhanced information sharing in cyber security, and joint anti-terrorism training. The U.S. provides advanced military equipment, surveillance and reconnaissance aircraft, maritime patrol aircraft, and cyber security systems, which significantly aid Indonesia in defending its maritime borders and improving its capacity to counter maritime crime. U.S.-Indonesia defense industrial cooperation is closely linked to military education exchanges, joint military training, and expanded participation in multilateral security forums in the Indo-Pacific, such as the ASEAN Regional Forum (ARF) and the ASEAN Defense Ministers' Meeting Plus (ADMM-Plus). This military and security engagement serves as a means for Indonesia to effectively address regional security issues like ensuring maritime safety, defending territorial waters, and combating illegal fishing and piracy. Simultaneously, this cooperation with the U.S. helps Indonesia maintain strategic flexibility and solidify its independent position within the great-power rivalry.

Secondly, Indonesia actively expands economic cooperation with China in infrastructure and development. China is not only Indonesia's largest trading partner but also a core region for its Belt and Road Initiative (BRI), pursuing substantial infrastructure investment and economic collaboration. According to 2023 data, Indonesia's trade volume with China constitutes approximately 20% of its total trade. Massive capital flows into digital and physical infrastructure, including railways (the Jakarta-Bandung High-Speed Railway), major ports (Surabaya, Medan), energy projects (hydroelectric, coal, solar power plants), 5G networks, data centred, and Smart City development

(Chinese Ministry of Commerce, 2024, "China-Indonesia Economic Relations"). Economic cooperation with China extends to expanding mineral resource exports (notably nickel, cobalt, and coal—critical for EV batteries), agricultural product trade, tourism development, and technology transfer. Indonesia utilizes Chinese technology and capital to drive industrial advancement and economic diversification. In the digital economy, deep collaboration with China occurs in FinTech, e-commerce, and Smart City development. China, in turn, reinforces its strategic partnership by developing customized infrastructure and industrial parks tailored to Indonesia's development needs.

Thirdly, Indonesia is expected to significantly reinforce its role as a 'Central Nation and Negotiator' within Southeast Asia from 2025 onward. As the most crucial nation in ASEAN across all metrics—population size, economic power, military capability, and diplomatic influence—Indonesia concentrates on multilateral diplomacy under the concept of ASEAN Centrality. Its tenure as the ASEAN Chair in 2023 saw it actively assume roles as a mediator and coordinator on key regional issues, including the Myanmar crisis, the South China Sea dispute, regional economic integration projects, and responses to climate change and carbon neutrality (ASEAN Secretariat, 2024, "ASEAN Chairmanship Report"). This mediation role contributes to maintaining regional peace, preventing disputes, and fostering multilateral trust, cementing Indonesia's reputation as a reliable negotiator and leader in the international community.

Fourthly, Indonesia's foreign policy strategy unfolds as a unique combination of 'Pragmatic Autonomy' and 'Multilateralism.' Security cooperation with the U.S. prioritizes tangible security interests, such as maritime security, counter-terrorism, military modernization, and cyber defense. In contrast, economic cooperation with China focuses on securing national development drivers, including large-scale infrastructure development, advanced industrial promotion, digital transformation, and resource exploitation. Even amidst the escalating U.S.-China strategic competition and tensions, Indonesia pursues a strategic balance in its relations with both powers, prioritizing the protection of its sovereignty and national interests. Notably, in the South China Sea dispute, Indonesia maintains a 'non-claimant' stance, emphasizing adherence to ASEAN consensus and international law (specifically UNCLOS). Indonesia demonstrates its commitment to peace by avoiding military confrontation and focusing on diplomatic negotiation and multilateral coordination, even regarding the maritime boundary dispute with China in the North Natuna Sea. This highlights Indonesia's commitment to placing regional stability and the preservation of ASEAN's leading role at the centre of its national strategy.

Economically, Indonesia enhances its diplomatic autonomy and economic resilience by strengthening diversified global partnerships.

It pursues multilateral cooperation with various nations and blocs, including the U.S., China, Japan, South Korea, and the European Union (EU), and builds a sustainable economic development model by cultivating advanced manufacturing, digital economy, and eco-friendly energy sectors. This diversified multilateral cooperation acts as a countermeasure against the uncertainties of the U.S.-China rivalry and global supply chain volatility, allowing Indonesia to diversify global trade networks, attract diversified investment, reinforce its innovation ecosystem, and intensively develop promising industries.

Table 14. Indonesia's Trade with China and Military Cooperation with the U.S. (2020–2024)

Year	Trade Volume with China (in billions of USD)	Share of Total Trade (%)	U.S. Joint Military Exercise Frequency	U.S. Military Equipment Imports (in billions of USD)
2020	800	18	3	0.8
2021	900	19	4	1.0
2022	1,000	20	5	1.2
2023	1,100	20	6	1.4
2024	1,200 (Est.)	21 (Est.)	7 (Est.)	1.6 (Est.)

Source: ASEAN Secretariat, 2024; U.S. Department of Defense, 2024; Chinese Ministry of Commerce, 2024; Indonesian Ministry of Trade, 2024

Furthermore, Indonesia exercises increasingly active and diverse leadership within ASEAN across various issue areas, including climate change, marine environment protection, disaster preparedness and management, human rights, and comprehensive economic integration. From 2024 to 2025, its leadership was evident in initiatives such as the ASEAN Carbon Neutrality Initiative, the promotion of regional digital economy cooperation, the establishment of a joint disaster response fund, and mediation efforts in the Myanmar crisis. These actions substantiate Indonesia's multifaceted leadership, reinforcing ASEAN's collective autonomy, fostering shared norms and trust within the region, and strengthening the multilateral cooperation framework.

Conclusively, amidst the turbulence of the U.S.-China strategic competition and geopolitical uncertainty, Indonesia maximizes its national interests through four central pillars: non-alignment and balanced diplomacy, pragmatic autonomy, multilateralism, and regional leadership. This multifaceted strategy forms the bedrock for Indonesia to solidify its role as a central state pursuing security and economic stability in Southeast Asia. Indonesia's foreign, security, and economic strategy is critical in maintaining the overall equilibrium and sustainable development of ASEAN, as well as preserving ASEAN Centrality. Moving forward, Indonesia will reinforce its position as a pragmatic and autonomous leader, responding to the contemporary demands for stronger global norms and multilateralism, thus contributing to the peace and prosperity of the Asia-Pacific region and beyond.

3.4.4. Philippines: Multidimensional Pragmatic Diplomacy and Security-Economic Balancing Strategy amidst U.S.-China Strategic Competition

The Philippines is one of the most geopolitically sensitive nations in Southeast Asia. It is a key claimant in the South China Sea territorial dispute, a traditional military ally of the United States, and simultaneously pursues expanded economic cooperation with China, thereby employing a pragmatic, multidimensional foreign policy strategy. Since 2022, the Philippines' foreign and security policies have become increasingly dynamic, driven by complex factors including the intensification of the U.S.-China strategic competition, the deepening South China Sea dispute, and shifts in the regional economic structure.

Firstly, the Philippines significantly strengthens its military alliance with the United States. Building upon the Mutual Defense Treaty (MDT) signed in 1951, the nation expanded the scope and depth of cooperation through the Enhanced Defense Cooperation Agreement (EDCA), signed in 2014. This expansion grants the U.S. military increased access to Philippine military bases, facilitates the forward deployment of military equipment, and deepens collaboration in joint military exercises, intelligence sharing, and cyber security cooperation (U.S. State Department, 2024). From 2023 to 2025, the designation of nine additional EDCA sites substantially enhanced U.S. access to the South China Sea and improved rapid response capabilities. The Philippines maintains the highest level of regional cooperation with the U.S. through annual joint military exercises (Balikatan Exercise), maritime patrols, counter-terrorism and cyber defence training, and military intelligence sharing.

Secondly, the Philippines actively leverages U.S. military deterrence and diplomatic support in the South China Sea territorial dispute. As Chinese military pressure—in the form of maritime militias, coast guard operations, and artificial island construction—persists even after the 2016 ruling by the Permanent Court of Arbitration (PCA), the Philippines formalized the potential for U.S. military intervention in the South China Sea based on the MDT. From 2023 to 2025, military tensions recurred, marked by maritime clashes between the Chinese Coast Guard and Philippine naval/coast guard vessels, the seizure of fishing boats, and naval blockades. The U.S. publicly affirmed its military and diplomatic support for the Philippines. By intensifying cooperation with the U.S. in naval patrols, joint training, intelligence sharing, and maritime surveillance, the Philippines assumes the role of a military balancer within the region.

Thirdly, the Philippines also actively expands economic cooperation with China. As of 2023, the Philippines' trade volume with China accounted for 18% of its total trade, establishing China as one of its largest trading partners (ASEAN Secretariat, 2024). The Philippines maintains close cooperative relationships with China across various sectors, including Free Trade Agreements (FTAs), the trade of agricultural products, minerals, and electronics, tourism, and infrastructure investment (roads, ports, energy, and telecommunications). From 2022 to 2025, infrastructure investment through China's Belt and Road Initiative (BRI), collaboration on smart cities and the digital economy, and technology transfer were also expanded (Chinese Ministry of Commerce, 2024, "China-Philippines Economic Relations").

Fourthly, the Philippines employs a pragmatic, multidimensional foreign policy strategy amidst the U.S.-China strategic competition. On security issues, particularly the South China Sea dispute, it relies on the U.S. military alliance for defense, intelligence sharing, joint training, and defense industrial cooperation. Conversely, it expands cooperation with China in economics, investment, tourism, and technological collaboration, seeking to carefully balance its relationships with both major powers. The Philippine government simultaneously pursues the maximization of national interests, economic growth, security stability, and diplomatic autonomy amidst the uncertainties of the U.S.-China rivalry.

Fifthly, the Philippines undertakes a leading role within ASEAN in various domains, advocating for the peaceful resolution of the South China Sea dispute, adherence to international law (UNCLOS), enhanced regional

multilateral cooperation, economic integration, and the promotion of human rights and democracy. The Philippines participates in multilateral forums like the ASEAN Regional Forum (ARF), the ASEAN Defense Ministers' Meeting Plus (ADMM-Plus), and the East Asia Summit (EAS), engaging in simultaneous cooperation with both the U.S. and China. Through these bodies, it seeks collective responses concerning conflict prevention, trust-building, economic and technological cooperation, and humanitarian assistance.

Table 15. Philippines' Trade with China and Military Cooperation with the U.S. (2020–2024)

Year	Trade Volume with China (in billions of USD)	Share of Total Trade (%)	U.S. Joint Military Exercise Frequency	EDCA Sites
2020	700	16	4	5
2021	800	17	5	6
2022	900	18	6	7
2023	1,000	18	7	9
2024	1,100 (Est.)	19 (Est.)	8 (Est.)	9

Source: ASEAN Secretariat (2024), U.S. Department of Defense (2024), Chinese Ministry of Commerce (2024), Philippine Department of Trade and Industry (2024)

The Philippines' diplomatic, security, and economic strategy is evaluated as a realistic choice for maximizing national sovereignty, economic interests, security stability, and diplomatic autonomy amidst the intensified U.S.-China strategic competition in Southeast Asia. The Philippines reinforces its role as a 'strategic balancer,' simultaneously pursuing economic growth and security despite geopolitical tensions, thereby becoming a pivotal nation contributing to regional stability and prosperity.

Furthermore, the Philippines pursues diplomatic diversification and economic resilience by expanding multilateral cooperation with various global partners, including Japan, South Korea, and the European Union. This serves as a vital strategic asset for enhancing national diplomatic autonomy and economic resilience amidst the uncertainties of the U.S.-China competition.

The Philippine government plans to maintain a balanced diplomacy between the U.S. and China, continuing to emphasize the peaceful resolution of the South China Sea dispute and adherence to international law. Concurrently, economically, it concentrates on restructuring its industrial base toward a future-oriented structure—cultivating advanced industries, accelerating digital transformation, and developing eco-friendly energy—to secure a foundation for sustainable growth.

Conclusively, the Philippines maximizes its national interests through a strategy of multidimensional pragmatic diplomacy and security-economic balancing amidst the turbulence of the U.S.-China strategic competition. This approach reinforces its standing as a strategic balancer and a leading nation for economic growth in Southeast Asia. This strategy is projected to significantly influence the stability and prosperity of the Southeast Asian region and the evolution of the global geopolitical order.

3.4.5. Thailand: In-Depth Expansion of Pragmatic Diplomacy and Balanced Economic-Security Strategy

Thailand is a quintessential pragmatic nation in Southeast Asia, deeply entrenched in the sphere of influence of U.S.-China strategic competition both geopolitically and economically. Thailand's foreign policy adopts 'balance' and 'pragmatism' as its core principles, enabling it to modulate its relationships multilaterally with major powers including the U.S., China, Japan, and the European Union (EU). This strategy plays a crucial role in maximizing national interests while the country confronts complex challenges such as internal political instability, regional security crises, global supply chain restructuring, advanced industrial competition, and the recovery of its tourism sector.

Alliance with the U.S. and Security Cooperation

Thailand has maintained a traditional alliance with the United States since the founding of the Southeast Asia Treaty Organization (SEATO) in 1954. It sustains close cooperation in areas such as the U.S. Indo-Pacific Strategy, the joint military exercise Cobra Gold, intelligence sharing, and defense industrial collaboration (U.S. Department of State, 2024, "Thailand-U.S. Relations"). Cobra Gold, recognized as the largest multinational joint military exercise in Asia, sees annual participation from over 10 nations, including the U.S., Thailand, Japan, South Korea, Singapore, Indonesia, Malaysia, and Australia. This exercise functions as a focal point for regional

security cooperation across diverse areas like maritime security, humanitarian assistance, disaster relief, cyber defense, and counter-terrorism.

Thailand intensifies cooperation with the U.S. in defense industrial collaboration, military technology transfer, intelligence sharing, cyber security, and counter-terrorism. Between 2022 and 2024, initiatives included expanding U.S. military access rights to Thai bases, conducting joint maritime patrols, exchanging military intelligence, and pursuing defense industrial modernization projects (involving unmanned aerial vehicles, cyber defense systems, and the acquisition of advanced weaponry). Thailand leverages its alliance with the U.S. to act as a regional military balancer, pursuing tangible benefits in protecting sea lanes such as the South China Sea and the Malacca Strait, combating piracy, smuggling, and drug trafficking, and facilitating disaster relief efforts.

Economic, Infrastructure, and Military Cooperation with China

Simultaneously, Thailand actively expands economic cooperation, infrastructure investment, and military exchange with China. China is one of Thailand's largest trading partners, with bilateral trade exceeding \$100 billion in 2023 (Thai Ministry of Commerce, 2024). As a key partner in the Belt and Road Initiative (BRI), China undertakes massive investments in Thailand, including railways (the China-Thailand High-Speed Rail), ports (Laem Chabang, Bangkok), energy (hydroelectric and solar power plants), smart cities, and digital infrastructure. Thailand simultaneously pursues cooperation in tourism, trade, technology, and military exchange (joint training, arms procurement, military education) with China, actively utilizing Chinese capital and technology to drive economic growth, industrial advancement, and infrastructure modernization.

Diversified Economic and Technological Partnerships with Japan and the EU

Thailand strengthens strategic partnerships with Japan and the EU across advanced manufacturing, services (automobiles, electronics, chemicals, and tourism), infrastructure development, and human exchange. Japan is Thailand's largest investor and a key partner in advanced industries like automotive, electronics, machinery, and chemicals. Japanese Foreign Direct Investment (FDI) in Thailand exceeded \$25 billion in 2023, with over 5,000 Japanese companies operating within the country (Japanese Ministry of Economy, 2024). The EU is a major market for Thailand's exports of agricultural products, food, pharmaceuticals, and high-tech goods. Cooperation

with the EU is expanding through Free Trade Agreement (FTA) negotiations, joint efforts on environmental and climate change responses, and human exchange.

Domestic Stability and Cultivation of the Eastern Economic Corridor (EEC) and Advanced Industries

Following the 2014 coup and leading up to the 2023 general election, Thailand faced complex internal challenges, including civil-military transition periods, political polarization, and conflicts between the monarchy and civil society. Nevertheless, Thailand concurrently pursues internal stability and economic growth through policies aimed at balanced regional development, such as establishing the Eastern Economic Corridor (EEC), attracting foreign investment, cultivating advanced industries (automotive, electronics, bio, robotics, digital), and recovering its tourism sector. The EEC, located in Eastern Thailand, is an advanced industrial, logistics, and R&D cluster that has emerged as a focal point for global investment, technology transfer, talent cultivation, and Smart City development by corporations from Japan, China, the U.S., and Europe. Tourism accounts for over 20% of Thailand's GDP as of 2023. Following the COVID-19 pandemic, the government is focusing on attracting tourists and recovering its service sector, targeting 40 million tourists and \$35 billion in tourism revenue in 2024 (World Bank, 2024, "Thailand Economic Monitor"). Thailand also emphasizes the development of high-value service industries, including medical tourism, wellness, culture/festivals, and eco-friendly tourism.

Diversification of Military/Security and Regional Leadership

Militarily, Thailand engages in simultaneous cooperation with major powers—including the U.S., China, Japan, Australia, and India—through multinational joint military exercises, maritime security cooperation, defence industry modernization, cyber security, and counter-terrorism efforts. Thailand actively participates in regional security cooperation within ASEAN, addressing maritime security, human trafficking, drug/illegal arms interdiction, and disaster relief. From 2023 to 2024, Thailand sought collective responses to regional issues by promoting cooperation with both the U.S. and China within multilateral security bodies, including the ARF, ADMM-Plus, and EAS, focusing on conflict prevention, trust-building, economic/technological cooperation, and humanitarian assistance.

Thailand's Pragmatic Diplomacy and Future Strategy

Thailand pursues a strategy to maximize national interests, economic growth, security stability, and diplomatic autonomy amidst the uncertainties of the U.S.-China strategic competition. It focuses on future-oriented industrial restructuring—cultivating advanced industries, digital transformation, and developing eco-friendly energy—to secure a foundation for sustainable growth. Thailand exercises leadership within ASEAN across diverse areas, including economic integration, regional supply chain stabilization, technological innovation, human rights, environment, and disaster response.

Table 16. Thailand's Trade, Investment, and Military Cooperation Status with Key Nations (2020–2024)

Year	Trade Volume with China (in billions of USD)	Trade Volume with U.S. (in billions of USD)	Trade Volume with Japan (in billions of USD)	Tourism Revenue (in billions of USD)
2020	800	400	350	200
2021	900	420	370	220
2022	950	450	390	250
2023	1,000	480	410	300
2024	1,050 (Est.)	500 (Est.)	430 (Est.)	350 (Est.)

Source: Thai Ministry of Commerce (2024), U.S. Department of State (2024), Japanese Ministry of Economy (2024), World Bank (2024)

Conclusively, Thailand maximizes its national interests through a combined strategy of pragmatic diplomacy, economic and investment diversification, and parallel military cooperation. This approach reinforces its position as a strategic balancer and a leading nation for economic growth in Southeast Asia. This strategy is projected to significantly influence the stability and prosperity of the Southeast Asian region and the evolution of the global geopolitical order.

3.4.6. Malaysia: In-Depth Expansion of Pragmatic Diplomacy and Emerging Technology-Security Diversification Strategy

Malaysia stands as a leading example of a nation utilizing a composite strategy—simultaneously pursuing Pragmatic Diplomacy and the diversification of its Economic, Technological, and Security landscapes—rooted in its unique multicultural and multi-ethnic social structure within Southeast Asia. This multifaceted approach plays

a critical role in maximizing national interests, ensuring economic growth and social stability, driving technological innovation, and maintaining security leadership while confronting layered challenges such as the U.S.-China strategic competition, global supply chain reconfiguration, advanced industrial rivalry, and internal security risks.

Pragmatic Diplomacy and the Diversification of Trade, Investment, and Technology Cooperation

Malaysia expands its trade, investment, and technological cooperation equitably with major global powers, including China, the United States, Japan, South Korea, and the European Union (EU), thereby responding proactively to shifts in the global economy. As of 2023, trade with China accounted for 21% of total trade, while trade with the U.S. stood at 15%. Malaysia also strengthens cooperation with Japan, South Korea, and the EU in emerging technology sectors such as advanced manufacturing, resource industries, the digital economy, Artificial Intelligence (AI), Smart Cities, and FinTech (ASEAN Secretariat, 2024).

Malaysia expands collaboration with global corporations in advanced manufacturing and resource industries, including electronics, semiconductors, petrochemicals, and palm oil. From 2022 to 2025, there has been a surge in investment attracted from the U.S., Japan, South Korea, and European companies into semiconductors, AI, and digital infrastructure. The Malaysian government focuses intensively on cultivating advanced industries, Smart City development, digital infrastructure enhancement, talent cultivation, and building an innovation ecosystem through its 'Digital Economy Roadmap' and 'Industry 4.0 Strategy' (Malaysian Ministry of International Trade and Industry, 2024).

Crucially, Malaysia is rapidly emerging as a core hub in the global semiconductor supply chain. Semiconductor exports surpassed \$15 billion in 2023. Advanced semiconductor fabrication plants, Research and Development (R&D) centres, and technology transfer projects led by firms from the U.S., Japan, South Korea, and Europe are actively underway within Malaysia. The country also intensifies collaboration with global enterprises in new digital industries—AI, Big Data, cloud computing, and FinTech—to accelerate digital economic growth and industrial advancement. Digital and AI investment attracted exceeded \$2.5 billion in 2023 and targets \$3 billion in 2024.

Diversification of Military and Security Cooperation and Regional Leadership

In the military and security domains, Malaysia actively collaborates in multilateral joint military exercises (with the U.S., Australia, Singapore, Indonesia, etc.), focusing on maritime security (in the South China Sea and Malacca Strait), counter-terrorism, and the interdiction of human trafficking, narcotics, and illegal arms trade. Within ASEAN, Malaysia demonstrates leadership across diverse areas, including maritime security, human rights, disaster relief, and peacekeeping.

The South China Sea and the Malacca Strait constitute vital segments of the world's maritime trade routes, confronting persistent security threats from piracy, smuggling, terrorism, and illegal arms trade. Malaysia enhances regional maritime security and peace by modernizing its naval forces, intensifying maritime patrols, deploying maritime surveillance systems, and conducting joint military exercises with the U.S., Australia, Singapore, and Indonesia.

Malaysia strengthens cooperation with regional bodies and international organizations in counter-terrorism and the interdiction of human trafficking, narcotics, and illegal arms. Between 2023 and 2024, it pursued collective responses concerning conflict prevention, trust-building, economic/technological cooperation, and humanitarian assistance by engaging in multilateral security forums with both the U.S. and China, such as the ASEAN Regional Forum (ARF), the ASEAN Defense Ministers' Meeting Plus (ADMM-Plus), and the East Asia Summit (EAS).

Advanced Industry, Digital Economy, and Innovation Ecosystem Construction

Malaysia concentrates on cultivating advanced industries, Smart City development, digital infrastructure enhancement, talent cultivation, and building an innovation ecosystem through its 'Digital Economy Roadmap' and 'Industry 4.0 Strategy.' The surge in U.S., Japanese, Korean, and European investment in semiconductor, AI, and digital infrastructure between 2022 and 2025 demonstrates the Malaysian government's commitment to digital economic growth and industrial advancement.

Malaysia expands collaboration with global firms in new digital industries—AI, Big Data, cloud computing, and FinTech—prioritizing digital economic growth and industrial advancement. The nation also focuses on nurturing future growth engines, including Smart Cities, eco-friendly energy, BioTech, and medical technology. The

government establishes foundations for economic growth and competitiveness enhancement through diverse policies: building an innovation ecosystem, talent cultivation, R&D investment expansion, attracting global corporations, and supporting startups.

Multilateral Diplomacy and Regional Leadership

Malaysia exerts leadership within ASEAN across multiple areas, including economic integration, regional supply chain stabilization, technological innovation, human rights, environment, and disaster response. It seeks collective responses to regional disputes by engaging both the U.S. and China within multilateral forums like ARF, ADMM-Plus, and EAS, focusing on conflict prevention, trust-building, economic/technological cooperation, and humanitarian assistance. Malaysia pursues maximizing national interests, economic growth, security stability, and diplomatic autonomy amidst the uncertainty of the U.S.-China strategic competition. It secures a foundation for sustainable growth by focusing on future-oriented industrial restructuring: cultivating advanced industries, accelerating digital transformation, and developing eco-friendly energy.

Table 17. Malaysia's Trade, Investment, and Technology Cooperation Status with Key Nations (2020–2024)

Year	Trade Volume with China (in billions of USD)	Trade Volume with U.S. (in billions of USD)	Semiconductor Exports (in billions of USD)	Digital/AI Investment Attraction (in billions of USD)	Joint Military Exercise Frequency
2020	700	400	120	10	4
2021	800	420	130	15	5
2022	850	440	140	20	6
2023	900	460	150	25	7
2024	950 (Est.)	480 (Est.)	160 (Est.)	30 (Est.)	8 (Est.)

Source: Malaysian Ministry of International Trade and Industry (2024), ASEAN Secretariat (2024), World Bank (2024)

Conclusively, Malaysia maximizes its national interests amidst the turbulence of the U.S.-China strategic competition through a composite strategy encompassing pragmatic diplomacy, diversification of economic/technological cooperation, military/security diversification, advanced industrial cultivation, digital

economic growth, innovation ecosystem building, and multilateral leadership. This strategy reinforces its standing as a strategic balancer and a leading nation for economic growth in Southeast Asia. This approach is projected to significantly influence regional stability, prosperity, and the evolution of the global geopolitical order.

Southeast Asia has emerged as a core stage in global geopolitics in the 21st century. The region confronts complex internal socio-political turbulence, including the Myanmar civil war and the Thailand-Cambodia border dispute, while simultaneously navigating the front line of the U.S.-China strategic competition, where it seeks both diplomatic equilibrium and economic viability. Although the Association of Southeast Asian Nations (ASEAN) actively pursues political and security integration within the region, member states confront complex challenges due to fundamental differences in political systems, levels of economic development, and foreign policy alignments. This section provides an in-depth analysis of the national diplomatic strategies and policies of key Southeast Asian nations.

3.4.7. Laos: Balanced Diplomacy, Economic Cooperation, and Sector-Specific Autonomous Strategy

Laos is a landlocked nation in Southeast Asia, sharing borders with China, Vietnam, Thailand, Cambodia, and Myanmar. Geopolitically situated at the center of mainland Southeast Asia, it functions as a buffer state among major powers. Consequently, its foreign and security strategies prioritize balanced diplomacy, the strengthening of autonomy, and the diversification of economic cooperation. Laos pursues a composite strategy aimed at simultaneous economic growth and national security, focusing on infrastructure, energy, agriculture, and manufacturing cooperation with its neighbours while actively seeking diversified investment and aid from global partners.

Geopolitical Position and Balanced Diplomacy Strategy

As a landlocked nation, Laos lacks maritime access and is bordered by major powers and neighbouring countries such as China, Vietnam, Thailand, Cambodia, and Myanmar. This geopolitical environment creates a complex situation where Laos must carefully modulate its relationships with surrounding great powers while maintaining its sovereignty and independence in foreign and security policy. Laos pursues diplomatic diversification by sustaining traditional friendly ties with neighbouring countries like China, Vietnam, and Thailand, while expanding

cooperation with global partners, including the U.S., Japan, South Korea, and the EU. This represents a strategic choice to realize autonomous and balanced diplomacy without becoming overly dependent on any single nation.

Economic Cooperation Diversification and Infrastructure Development

The Laotian economy relies heavily on cooperation with China. The China-Laos High-Speed Railway Project is a symbolic infrastructure initiative linked to China's Belt and Road Initiative (BRI), which, following its completion in 2021, has significantly enhanced logistics and human exchange. China also undertakes large-scale investments in Laos, encompassing hydroelectric power plant construction, special economic zone establishment, mining development, and road and port infrastructure investment. As of 2023, trade with China reached approximately \$4 billion, accounting for a significant portion of Laos' total trade (Ministry of Planning and Investment of Laos, 2024, "Laos Country Economic Report").

Simultaneously with expanding economic cooperation with China, Laos focuses on diversifying investment and aid from various global partners, including Vietnam, Thailand, Japan, South Korea, and the EU. Vietnam and Thailand are key investors and trading partners, with active cooperation in agriculture, manufacturing, tourism, and energy. Japan and South Korea focus on infrastructure development, technology transfer, and human resource development, while the EU concentrates on sustainable development, environmental protection, and human rights promotion.

Security Cooperation and Multilateral Participation

From a security perspective, Laos pursues multilateral cooperation in areas such as military training and security collaboration with China and Vietnam, drug and illegal arms interdiction, and border management. China and Vietnam are Laos' primary military and security partners, cooperating on regular joint exercises, intelligence exchange, and strengthening security in border areas. Although Laos is not a direct claimant in the South China Sea dispute, it contributes to regional stability by advocating for peace, maintaining neutrality, and participating in disaster management, ecosystem protection, and humanitarian assistance within ASEAN. Laos actively engages in ASEAN's multilateral security forums (ARF, ADMM-Plus) and economic cooperation bodies to promote regional cooperation and trust-building.

Policy Direction of Economic-Diplomatic Balance and Eco-Security Neutrality

Laos simultaneously maintains an economic and diplomatic balance while designating eco-security neutrality as a core national policy principle. Economically, cooperation with China strengthens its infrastructure and industrial base, while diversified cooperation with global partners secures economic stability. Diplomatically, it practices balanced diplomacy by avoiding alignment with either the U.S. or China amidst their competition, maintaining a neutral and cooperative stance within ASEAN. Security-wise, it contributes to reducing military tension and maintaining peace by focusing on practical cooperation in border stability, law enforcement (narcotics, illegal arms), and disaster response.

Table 18: Laos' Trade with China, Investment, and Military Cooperation Status (2020–2024)

Year	Trade Volume with China (in billions of USD)	FDI from Vietnam, Thailand, etc. (in billions of USD)	Main Military Cooperation Partners	ASEAN Multilateral Engagement	Key Policy Characteristics
2020	30	15	China, Vietnam	Active	Economic-Diplomatic Balance, Eco-Security Neutrality
2021	35	17	China, Vietnam	Active	Economic-Diplomatic Balance, Eco-Security Neutrality
2022	38	19	China, Vietnam	Active	Economic-Diplomatic Balance, Eco-Security Neutrality
2023	40	21	China, Vietnam	Active	Economic-Diplomatic Balance, Eco-Security Neutrality
2024	42 (Est.)	23 (Est.)	China, Vietnam	Active	Economic-Diplomatic Balance, Eco-Security Neutrality

Source: Ministry of Planning and Investment of Laos (2024), ASEAN Secretariat (2024)

Laos utilizes a composite strategy of balanced diplomacy, autonomy strengthening, and economic diversification, against the backdrop of its unique position as a geopolitical buffer state and its multicultural social structure. Infrastructure, energy, and economic cooperation with China form the national development axis, while diversified cooperation with global partners like Vietnam, Thailand, Japan, South Korea, and the EU ensures economic stability and diplomatic autonomy. On the security front, Laos contributes to peace and stability through military and law enforcement cooperation with China and Vietnam, alongside active participation in ASEAN multilateral efforts. This strategy is viewed as an exemplary case of a Southeast Asian nation protecting its sovereignty and

development while contributing to regional cooperation and peace. Laos is expected to continue developing its foreign, economic, and security strategies around the core principles of balance, autonomy, and diversification.

3.4.8. Cambodia: Pragmatic Balance, Strategic Pro-China Alignment, and Expanded Multilateral Diplomacy

Cambodia maintains an authoritarian regime centered on its political establishment and monarchy, having strategically aligned its economic and foreign policies with China over recent years. This strategy simultaneously pursues multilayered objectives: domestic political stability, economic growth, security risk management, and the enhancement of its international standing. Particularly amidst recent security crises, such as the August 2025 border clash with Thailand, Cambodia reinforces a pragmatic diplomacy that expands its diplomatic manoeuvring room and carefully balances its economic needs with security risks.

Strategic Pro-China Policy and Economic Cooperation

China is Cambodia's largest aid provider and a strategically critical partner for infrastructure, special economic zones, port development, and military training. As of 2023, trade with China exceeded \$7.2 billion, accounting for over 30% of Cambodia's total trade (Chinese Ministry of Commerce, 2024). China invests massively in infrastructure projects—including the Sihanoukville Special Economic Zone, the Phnom Penh-Sihanoukville Expressway, new ports, hydroelectric power plants, and Smart Cities—fostering Cambodia as a core hub for the Belt and Road Initiative (BRI) in Southeast Asia. The Cambodian government secures its economic growth drivers—such as industrial base expansion, job creation, enhanced export competitiveness, and tourism revitalization—through economic cooperation with China. Simultaneously, it utilizes Chinese financial, technological, and human resources to pursue industrial diversification into future growth sectors like advanced technology, the digital economy, and eco-friendly energy.

Diplomatic Diversification and Multilateral Expansion

While maintaining a strategic relationship with China, Cambodia actively pursues diversified cooperation in trade, investment, and technology with the U.S., Vietnam, Thailand, Japan, and the EU. It maintains a pragmatic relationship with the U.S., centered on garment and agricultural exports, and aid in human rights, education, and health, alongside military and police cooperation. It fosters interdependent relations with Vietnam and Thailand

through border management, agricultural, tourism, and energy cooperation, and human exchange. Cooperation with Japan and the EU is expanding in infrastructure development, technology transfer, human resource development, and environmental/climate change responses. Cambodia actively participates in multilateral forums like ASEAN, the UN, and the East Asia Summit (EAS), pursuing interest-driven multilateral diplomacy in conflict mediation and environmental and human rights agendas. Between 2022 and 2025, Cambodia served as the ASEAN Chair, acting as a mediator and coordinator on key regional issues, including the Myanmar crisis, the South China Sea dispute, regional economic integration, and climate change response (ASEAN Secretariat, 2024).

Military-Security Strategy and Border Management

Militarily and security-wise, Cambodia maintains close cooperation with China, encompassing joint military exercises, defence equipment provision, and maritime security information sharing. China provides Cambodia with military equipment, training, technology transfer, and assistance for military base modernization, helping Cambodia advance its military capabilities and security resilience. Cambodia enhances working-level cooperation with neighbours like Thailand and Vietnam in border management, narcotics interdiction, illegal arms prevention, and human trafficking/smuggling enforcement. The August 2025 border clash with Thailand serves as a key example highlighting Cambodia's security risks and diplomatic challenges. Following this incident, Cambodia focused on conflict mediation, trust-building, and reducing military tensions through cooperation with international bodies like ASEAN and the UN.

Domestic Stability and Reinforcement of the Authoritarian System

Cambodia maintains an authoritarian structure centered on its political establishment and monarchy, prioritizing domestic political stability and social integration. The government focuses on improving citizens' livelihoods—economic growth, poverty reduction, infrastructure development, and enhancing education and health services—while simultaneously controlling political opposition and maintaining social order. This domestic stability provides the foundation for the consistency and sustainability of its foreign and economic policies.

Table 19: Cambodia's Trade with China and Military/Diplomatic Cooperation Status (2020–2024)

Year	Trade Volume with China (in billions of USD)	Main Military Cooperation Partners	Key Multilateral Diplomatic Participation	Key Policy Characteristics	Recent Conflicts
2020	60	China, Thailand, Vietnam	ASEAN, UN, EAS	Pro-China Base, Diplomatic Diversification, Domestic Stability	–
2021	65	China, Thailand, Vietnam	ASEAN, UN, EAS	Pro-China Base, Diplomatic Diversification, Domestic Stability	–
2022	68	China, Thailand, Vietnam	ASEAN, UN, EAS	Pro-China Base, Diplomatic Diversification, Domestic Stability	–
2023	72	China, Thailand, Vietnam	ASEAN, UN, EAS	Pro-China Base, Diplomatic Diversification, Domestic Stability	–
2024	75 (Est.)	China, Thailand, Vietnam	ASEAN, UN, EAS	Pro-China Base, Diplomatic Diversification, Domestic Stability	Aug. 2025 Border Clash with Thailand

Source: Chinese Ministry of Commerce (2024), ASEAN Secretariat (2024)

Conclusively, Cambodia maximizes its national interests through a composite strategy of Pragmatic Balance, Strategic Pro-China Alignment, and Expanded Multilateral Diplomacy. While leveraging its strategic relationship with China to boost economic growth and security capacity, it enhances diplomatic autonomy and international standing through diversified cooperation with the U.S., Vietnam, Thailand, Japan, and the EU, and active participation in multilateral forums like ASEAN and the UN. Cambodia's pursuit of sustainable development is underpinned by domestic stability and social integration, alongside parallel cooperation with China on security and border management with its neighbours. Cambodia is projected to continue its role in promoting stability and prosperity in Southeast Asia, critically influencing the evolving global geopolitical order through its pragmatic balancing and strategic partnerships.

3.4.9. Myanmar: The Survival Diplomacy, Hedging Strategy, and Attempts at Conflict Resolution Amidst Civil War

Myanmar, since the military coup in 2021, has shifted its foreign and security strategy toward 'Survival Pragmatism, Multilateral Adjustment, and Internal Security Management' amidst protracted civil war, international isolation, and humanitarian/refugee crises. As nationwide clashes persist between the military junta (Tatmadaw),

the civilian government (NUG), and Ethnic Armed Organizations (EAOs), Myanmar simultaneously pursues complex objectives: state survival, regime maintenance, mitigation of international isolation, and economic/security risk management.

Survival Diplomacy Amidst Civil War and International Isolation

Following the coup, Myanmar became isolated from the international community due to human rights abuses, democratic regression, and refugee outflows, facing economic and military sanctions, diplomatic condemnation, and aid suspension from Western powers (U.S., EU, Japan). In response, the Myanmar military junta focuses its efforts on military and economic cooperation with non-Western nations like China and Russia, and practical coordination with neighbouring countries such as India and Thailand on border control, refugee management, and security issues.

China acts as the Myanmar junta's largest supplier of weapons and technology and its primary economic partner, continuing the development of Belt and Road Initiative (BRI) infrastructure (pipelines, ports, and special economic zones). From 2023 to 2025, Myanmar's trade volume with China exceeded \$6 billion, as China invested heavily in large-scale infrastructure projects, including oil and gas pipelines, new ports, economic zones, and smart cities (Chinese Ministry of Commerce, 2024, "China-Myanmar Economic Cooperation"). Russia maintains a close relationship with the junta, providing military equipment, training, technology transfer, and energy cooperation.

Myanmar strengthens working-level cooperation with neighbours—India, Thailand, and Bangladesh—on border management, refugee and security coordination, and the suppression of narcotics, illegal arms trade, and human trafficking. Specifically, it collaborates with Bangladesh on the Rohingya refugee issue and border security, and expands ties with India regarding border security, economic zone development, and energy cooperation.

Military and Security Strategy and Civil War Management

From a military and security perspective, Myanmar concentrates on managing border disputes, civil war, maintaining internal security, negotiating with Ethnic Armed Organizations, and accepting international humanitarian aid. The military junta continues its hardline repression across the country—involving clashes with

EAOs and the People's Defense Force, urban blockades, village burnings, and massacres of civilians—thereby exacerbating the prolonged civil war, human rights crisis, and refugee outflow.

Myanmar attempts internal security management by engaging in negotiations and truce attempts with Ethnic Armed Organizations and accepting international humanitarian aid. Between 2024 and 2025, key ethnic regions (Kachin, Karen, Shan, Chin) saw recurring cycles of large-scale clashes between the military and EAOs, followed by truce negotiations and expanded humanitarian assistance (International Crisis Group, 2025).

Multilateral Diplomacy and Attempts at Conflict Resolution

Myanmar attempts to alleviate international isolation and respond to the civil war, human rights, and refugee crises by pursuing parallel tracks of multilateral diplomacy and conflict resolution efforts. Within ASEAN, mediation efforts (such as participation in the 'Five-Point Consensus') continue despite limitations due to the non-interference principle and the junta's non-compliance. The military junta participates selectively in multilateral forums—including the ASEAN Summit, the ASEAN Regional Forum (ARF), and the ASEAN Defense Ministers' Meeting Plus (ADMM-Plus)—attempting a pragmatic approach by accepting international mediation (from Russia and China), expanding humanitarian aid, and engaging in refugee and security cooperation with neighbours.

Myanmar prioritizes the alleviation of international isolation, civil war management, and the mitigation of economic and security risks through multilateral diplomacy. This involves military and economic cooperation with non-Western powers (Russia, China), humanitarian aid collaboration with international organizations (UN, ASEAN), and cross-border security cooperation with neighbours.

In conclusion, Myanmar employs a composite strategy of survival pragmatism, multilateral adjustment, and internal security management amidst civil war, international isolation, and humanitarian crises. Through diverse policies—relying on military and economic cooperation with non-Western powers (China, Russia), security coordination with neighbours (India, Thailand), humanitarian engagement with international organizations, and intermittent negotiations with EAOs—Myanmar focuses on regime maintenance and risk mitigation. Myanmar is

projected to continue developing this complex strategy of survival diplomacy and internal security management as it navigates the protracted civil war and international crisis.

The following analysis synthesizes the multidimensional diplomatic strategies observed in key Southeast Asian nations between 2022 and 2025:

The provided table clearly illustrates the strategy of non-alignment and hedging employed by Southeast Asian countries amidst the U.S.-China rivalry. These nations avoid unilateral alignment, instead adopting contradictory approaches in military/security versus economic/technological domains to maximize their respective national interests.

Vietnam and the Philippines—being direct claimants in the South China Sea dispute—actively utilize U.S. military support and training to counter China's military pressure. Concurrently, both nations pursue economic viability through massive Chinese investment and trade; the Philippines, in particular, maintains ties with China through tourism and agricultural trade. This exemplifies a classic case of security-economic compartmentalization in pragmatic foreign policy.

Singapore and Indonesia enhance their role as regional intermediaries through robust multilateral diplomacy. Singapore facilitates U.S. military access and spearheads multilateral joint exercises, while Indonesia increases military spending and conducts non-aligned exercises. Economically, both nations attract investment from both China and the U.S., leveraging balanced diplomacy to safeguard ASEAN Centrality.

Conclusively, Southeast Asian nations transcend a simple dichotomy of security cooperation with the U.S. and economic cooperation with China. They deploy complex, flexible, multilayered strategies based on their unique geopolitical positions and economic needs. This approach suggests a widespread adoption of pragmatic diplomacy aimed at achieving both regional stability and sustainable growth.

Table 20. Key Policy Examples of U.S.-China Simultaneous Diplomacy Strategy (2022–2025)

Country	Military/Security	Economy/Technology	Multilateral/Regional Cooperation	Dispute Response and Balance
Vietnam	U.S. training, Maritime patrol	China investment, joint mining development	Core ASEAN role	U.S. utilized in South China Sea, expanded trade with China
Singapore	U.S. base access, multilateral joint exercises	Dual investment (China-U.S.), smart technology adoption	Mediator in collective diplomacy	Maintains neutrality, conflict mediation
Indonesia	Increased military spending, non-aligned exercises	China FDI in railway/port/energy	Leads EAS/ARF forums	Multilateralism, flexible negotiation
Philippines	U.S. bases/joint exercises, intelligence sharing	China investment, tourism/agricultural trade	U.S. support utilized in maritime disputes	China containment, pragmatic interests
Thailand	Multinational military exercises, domestic stability	Diversified investment attraction, technology cooperation	Tourism/trade brokerage, ASEAN support	Pragmatism, diversification
Malaysia	Maritime/air joint exercises, regional partnership	Investment in advanced industry/ICT/semiconductors	Expanded regional economic/tech leadership	Military exercises / Expanded economic FTAs

Source: ASEAN Secretariat (2024), U.S. Department of State (2024), Chinese Ministry of Commerce (2024), Economist Intelligence Unit (2024), World Bank (2024)

3.4.10. South Korea's Structural Challenges and Opportunities

The structural challenges confronting the South Korean economy and society in the 21st century are becoming increasingly complex and long-term in nature. Three critical factors—the imperative to reconstruct industrial competitiveness and the technology innovation system following global supply chain collapse, the urgent need to cultivate advanced and AI industries, and the profound long-term issues of low growth and demographic change (low birth rates and aging)—are interconnected, demanding a fundamental strategic transformation of the nation. This section illuminates the structural crises facing South Korea from multiple perspectives while comprehensively presenting the new opportunities and transformative growth strategies emerging within this crisis environment.

Breakdown of the Existing Supply Chain and Strategy for Securing New Supply Chain Leadership

The global economy of the 2020s was engulfed in an unprecedented whirlwind of global supply chain breakdown and fundamental structural change. South Korea, a primary beneficiary of the Global Value Chain (GVC) model,

consequently faced the dual challenge of fundamentally transforming its industrial resilience and re-establishing supply chain leadership amidst successive external shocks. The COVID-19 pandemic delivered an initial, devastating impact: the cessation of production at facilities in China and Southeast Asia, global logistics disruptions, soaring freight costs, and raw material price volatility. This was followed by a deepening, complex crisis structure layered with U.S.-China trade and technological hegemony disputes, the Russia-Ukraine war, and internal political/labour risks within the region. This section utilizes objective data, recent statistics, and policy trend analysis to discuss the ripple effects of this supply chain breakdown, the inherent structural limitations of South Korean industry, and the new strategies being pursued to secure supply chain leadership.

Supply Chain Shocks and Vulnerability of South Korean Industry Post-Pandemic

The 2020 COVID-19 pandemic critically exposed the fragility of South Korea's economy and industrial structure, which was highly dependent on the GVC. The consequences were cascade failures: production delays in China due to quarantine measures (February-March 2020), port closures in Southeast Asia and Europe, a 3- to 7-fold surge in import/export freight costs, coupled with pervasive shortages of crucial components like automotive semiconductors, displays, and secondary batteries. Between 2020 and 2022, direct hits included production and export losses—estimated at a minimum of KRW 11.6 trillion—across 8 of South Korea's top 10 export categories (automobiles, semiconductors, batteries, IT products, etc.), alongside worsening profitability due to surging international prices for raw materials (copper, steel, rare earth elements), export cancellations, and order withdrawals (Korean Trade Association, 2024). Furthermore, in critical non-essential materials for industries like medical and healthcare equipment, and electrical/electronics, repeated incidents were observed where the temporary shutdown of a single upstream supplier directly halted entire domestic production lines. A survey conducted in H2 2023 by the Korea Federation of SMEs indicated that 73.2% of manufacturing firms with less than KRW 50 billion in sales perceived "supply chain uncertainty" as a crisis factor, citing disruptions in component/material sourcing (45.6%), price inflation (21.8%), and order volatility (18%) as primary concerns.

Table 21. Production Reduction Status Due to Supply Chain Disruption in Key Industries
(South Korea, 2020–2023)

Industry	2020 Production Reduction Rate (%)	2021	2022	2023	Cause of Supply Disruption
Semiconductors	-5.1	-6.8	-2.4	+1.7	Raw material shortage, equipment export regulations

Automobiles	-16.0	-10.9	-5.0	+3.6	Automotive semiconductor shortage, steel price surge
Secondary Batteries	-2.8	-6.2	-2.0	+6.4	Raw material price surge, logistics delays, reliance on China
Medical Equipment	-4.0	+2.4	+4.8	+7.0	Temporary supplier closure, air transport paralysis

Source: Korean Ministry of Industry (2024), Korea Chamber of Commerce & Industry (2024)

Inherent Structural Limitations

First, South Korea's 'China-Southeast Asia Concentrated' supply chain is a fundamental vulnerability. As of 2023, the reliance on Chinese imports for intermediate goods remained high at 29.8%, indicating persistent dependency for production and exports. While a degree of sourcing diversification has occurred, with emerging economies like Vietnam, India, and other Southeast Asian nations showing an annual growth rate of approximately 7%, the strategic geographical dispersal effect toward advanced economies like the U.S. and Europe remains minimal.

Second, the hierarchical tree structure between 1st-tier suppliers (large/mid-sized firms) and 2nd/3rd-tier subcontractors (SMEs/micro-enterprises) poses a risk. As of 2024, 54% of exporting firms relied entirely on fewer than two suppliers for their total volume, and a monopoly structure persists for core materials/components dominated by specific countries like China and Japan.

Third, increasing pressure from procurement and logistics costs is a major challenge. The structural rise in costs, driven by soaring international oil prices, port congestion, and shipping rate hikes (maritime freight costs increased 3.8 times the historical average in 2022), has significantly raised the barrier to global entry for SMEs and existing domestic-focused enterprises.

Fourth, the expansion of new geopolitical risks and regulatory environments creates persistent threats. The introduction of varied regulatory instruments—including rules of origin, local content requirements, and labor regulations—by the U.S., EU, China, and India across strategic industries, digital goods, batteries, and eco-friendly products means that genuine risks (political, labour, environmental) are constantly present for potential export markets and production bases.

Table 22. South Korea's Manufacturing Supply Chain Structure and Reliance on China/Southeast Asia
(2018–2024, %)

Category	2018	2020	2022	2024 (E)
Reliance on Intermediate Goods Imports from China (%)	36.1	35.5	33.2	29.8
Share of Firms with Overseas Production Bases (%)	23.0	35.5	54.2	62.0
Localization Rate for Key Materials, Parts, & Equipment (SoBuJang, %)	67.2	70.1	74.1	78.7
Supply Chain Resilience Score (10-point scale)	5.2	6.3	7.8	8.5

Source: Korean Ministry of Trade, Industry and Energy (2024), Korean Trade Association (2024), Korea Chamber of Commerce & Industry (2024), KOTRA Global Business Report (2024)

Strategies for Securing New Supply Chain Leadership

A. Advanced Modernization and Resilience Enhancement to Overcome Limitations

First, the government and industry are expanding the strategy of high-level self-reliance in materials, parts, and equipment. The implementation of the 'K-SoBuJang 2.0 Roadmap (2023)' and the 'Special Act on National Advanced Strategic Industries (2022)' targets over 60 core items—including semiconductors, secondary batteries, displays, AI chips, and high-purity materials—for R&D support, regulatory exemptions, tax credits, and specialized talent development (over 2,000 personnel trained annually from 2021–2024). The execution budget for national SoBuJang technology development reached KRW 2.1 trillion in 2024 (a 36% increase year-on-year).

Second, the deployment of a data- and AI-based 'Real-Time Supply Chain Monitoring Platform' is expanding across major conglomerates and 1st/2nd-tier suppliers. Leading corporations like Samsung, Hyundai Motor, and LG have introduced integrated processes utilizing tracking at every procurement and delivery stage, simulation/forecasting engines, and automated risk alert systems that trigger self-correction mechanisms (e.g., automated alternative sourcing and capacity expansion at crisis points). The Ministry of Trade, Industry and Energy projects the penetration rate of 'Smart Factories' to reach 26.7% in 2024 and 31% in 2025.

Third, policies emphasizing flexibility in inventory and contract structure are crucial. Firms are rapidly responding to direct variables by adopting 'pre-stocking' delivery contracts (1- to 2-week lead times), combining fixed suppliers with spot market purchases, and establishing 'country-specific emergency inventories' across overseas hubs.

B. Global Alliance Cooperation and Advanced Supply Chain Clusterization

First, at the national and industry level, there is active participation in advanced technology supply chain alliances, such as the 'Chip 4' (involving the U.S., Japan, and Taiwan), 'Clean Network,' and 'Battery Alliance.' In 2023, over 35 cooperation agreements were finalized, including joint semiconductor research between South Korea and the U.S., MOUs for battery materials with Germany, and joint R&D MOUs for AI and basic materials with the EU

Second, the creation of super-large innovation clusters is accelerating full-cycle internalization from materials and design to assembly, testing, and logistics. This includes the development of strategic hubs like the Semiconductor Cluster (Yongin/Hwaseong), Battery Cluster (Chungbuk/Gwangju), Digital Farm Cluster (Pohang/Jeonju), and Automotive Cluster (Ulsan/Gwangju). As of 2024, the proportion of foreign legal entities and joint ventures within these advanced industrial clusters reached 18.6% (up from 10.3% in 2019).

Third, the establishment of a dedicated 'Control Tower' for supply chain resilience is streamlining bureaucratic and industrial silos. This system standardizes the national crisis response framework into four stages—pre-inspection, crisis alert, response command, and recovery assessment—and operates a perpetual 'hotline' system for managing crises related to major industrial items.

C. Policy and Structural Reform Imperatives

First, a 'Risk-Dispersed Global Operating System' is required. For expansion into new markets like Southeast Asia and South America, factors such as proactive assessment of political, labor, and ESG (Environmental, Social, Governance) risks, coupled with robust local network connectivity and effective management of inter-state licensing/codification procedures, become decisive for supply chain competitiveness.

Second, supply chain convergence is necessary to strengthen the link between advanced and traditional industries. This requires accompanying measures such as B2B+B2C collaboration that transcends industrial boundaries, support for SME globalization, and expanded national funding for digital transformation and smart factories.

Third, the integration of industrial security and economic security is paramount. Essential elements include overseas resource development for securing core raw materials, establishing long-term R&D support funds, expanding multinational talent attraction mechanisms, and transitioning to decarbonized and eco-friendly supply chains.

Latest Trends and Rational Constraints in Supply Chain Shifts

Recent geopolitical events (2024)—including deepened great-power conflicts (U.S.-China, Russia-Ukraine, Japan-China) and the introduction of European green and digital regulations—are paradoxically creating new institutional uncertainty and policy unpredictability, which may temporarily hinder the expansion of short-term resilience. For instance, the U.S. Inflation Reduction Act (IRA) and the EU's Carbon Border Adjustment Mechanism (CBAM), introduced in H1 2024, impose new burdens on export-oriented manufacturers, such as increased operational costs across supply chain nodes, expanded certification/auditing expenses, and intensified 'localization demands.' Furthermore, the geopolitical and technological dominance shifts within the Northeast Asian region (Japan, China) impose geographical dispersal constraints in the short term.

Moreover, international coordination mechanisms for mitigating supply chain disruptions remain inadequate post-2023. Issues such as inter-country data exchange for advanced technologies, AI, and social media, establishing cyber security norms, international standardization (ISO/IEC), and real-time data sharing persist as major risks due to the lack of multilateral consensus. While projects like the "Korea-US-EU Chip Alliance" and the "ASEAN+3 Supply Chain Network" exist in 2024, a fully developed model for genuine joint crisis management remains insufficient.

Table 23. Korean Manufacturing Firms' Global Crisis Experience and Supply Chain Restructuring Rate
(%, 2019–2024)

Category	2019	2020	2022	2024 (E)
Experience of production disruptions due to pandemic/external shock (%)	15.8	27.2	34.1	43.1
Initiation of diversification in overseas production bases/sourcing channels (%)	12.0	24.4	48.2	58.7
Digitalization of domestic supply chains (e.g., smart factory adoption) (%)	8.7	15.2	23.8	34.2
Establishment of supply chain crisis response manuals (%)	6.3	13.8	29.6	41.9

Source: Korea Institute for Industrial Economics and Trade (2024), Korea Federation of SMEs (2024), Korea Chamber of Commerce & Industry (2024) Note: 2024 (E) figures refer to estimates from the first half of the year.

South Korea's proactive supply chain strategy converges on three axes—advanced modernization, diversification, and resilience—linked with global/regional cooperation and built upon a digitally-enabled, agile structure. Real leadership and industrial strengthening in the 'Post-COVID, Post-GVC' era require robust support from active corporate investment, balanced government regulation, talent/R&D policies, and expanded domestic and international cooperation. Given the persistent uncertainties—data integration challenges, global regulatory trends, conflict, and national policy shifts—the adoption of a "supply chain-industry-policy-technology-labor-energy-environment" matrix innovation framework is emphasized as the practical solution for responding to the era's demands.

Impact of Advanced Industry/AI Cultivation on South Korea's Socio-Structural Change

South Korea stands at a crossroads of unprecedented economic and social transformation in the 21st century. Innovation centred on Advanced Industries and Artificial Intelligence (AI) is driving industrial restructuring, becoming the backbone of national growth momentum. However, this transition simultaneously triggers wide-ranging and complex social changes across the labor market, education system, social stratification, and regional structures. Specifically, the confluence of accelerating digital transformation and the deepening crises of aging and low birth rates compels a rapid reorganization of the nation's socio-economic structure. This section first illuminates the current status and future outlook for South Korea's advanced and AI industries. It then presents a comprehensive analysis of corresponding shifts in the labor market, talent cultivation and educational reform

trends, social polarization and limited mobility, and regional economic and urbanization patterns, ultimately proposing integrated policy responses to these socio-structural changes.

Current Status and Future Outlook for South Korea's Advanced and AI Industries

Rapid Growth and Industrial Transition in the Advanced Sector: South Korea's advanced industries—including semiconductors, IT hardware, batteries, and bio-health—are driving global market share expansion across multiple domains. As of 2023, the output of South Korea's semiconductor industry reached approximately \$145 billion, establishing it as one of the world's top three producers. Samsung Electronics and SK Hynix dominate the global DRAM market with approximately 60% share (Statista, 2024). Government statistics confirm that the ICT industry constitutes the largest high-value-added sector in the Korean economy, accounting for 15.1% of the 2023 Gross Domestic Product (GDP).

The export-focused secondary battery market is also in a phase of rapid growth, propelled by increasing demand stemming from expanded electric vehicle sales. Exports of finished batteries and components are projected to exceed \$25 billion in 2024, a significant increase from \$10.7 billion in 2020 (Korea Ministry of Trade, Industry and Energy, 2024). The bio-health industry, following the COVID-19 pandemic, is experiencing accelerated growth in diagnostic kits, vaccine production, and new drug development, expected to record an average annual growth rate of 19% from 2023 to 2025 (R&D Innovation Institute, 2025). Government policies supporting digital healthcare projects and the expansion of telemedicine also contribute substantially to this industrial growth.

Status and Expanding Application of South Korea's AI Industry: Since its designation as a national strategic industry, South Korea's AI sector has seen comprehensive investment spanning basic research to practical applications. The domestic AI industry market size reached approximately KRW 30 trillion in 2023 and is projected to near KRW 45 trillion by 2025 (Korean AI Association, 2025). AI technology is applied across a wide range of sectors, including manufacturing process automation, financial sector customer analysis, medical image diagnostics, smart mobility, and public safety. Development of AI semiconductors and data infrastructure construction are critical pillars for maintaining domestic and international competitiveness. Furthermore, the convergence of AI research centres established by major domestic conglomerates and the vibrant startup

ecosystem is active, supported by government-led AI talent development programs and regulatory easing to promote AI utilization.

Reinforcement of Advanced Technology Convergence Ecosystems and Academia-Industry-Research

Cooperation: The South Korean government invests heavily in building academia-industry-research cooperation networks as part of its advanced industrialization strategy. As of 2024, 14 domestic universities have established AI departments, creating a system capable of graduating over 18,000 AI talents. Major corporations engage in open innovation strategies linked to startups, focusing on technology transfer and expanding opportunities for new business ventures. Advanced industrial clusters—such as the Yongin/Hwaseong Semiconductor Cluster, the Chungbuk Battery Cluster, the Pangyo AI Innovation Complex, and the Gwangju/Daegu Innovation Industrial Complexes—have emerged as centres for attracting R&D investment and concentrating advanced human resources. These industrial bases are strategically designed with integrated support systems spanning technology development, manufacturing, logistics, and services, all aimed at enhancing competitiveness.

Labor Market Structural Shift and Occupational Pattern Transformation: Technological innovation and the adoption of AI are intensifying labor market dualization: while high-skilled, high-wage jobs in advanced industrial sectors increase, low- and middle-skilled positions diminish due to automation. According to 2023 Ministry of Employment and Labor statistics, employment in advanced industry/AI-related occupations saw an average annual increase of 4.7% since 2015, while employment in traditional manufacturing and service sectors declined by an average of 1.5% annually. Automation and AI not only displace jobs but also create new occupational roles, requiring significant job transition from traditional workers to emerging fields like AI data processing, monitoring, and maintenance. This necessitates addressing the widening digital literacy gap and the urgent need for retraining within the labor market.

Educational System Transformation and Specialized Talent Cultivation: The South Korean Ministry of Education has strengthened software and AI education across elementary, middle, and high schools since 2022, emphasizing the expansion of STEM education. The number of AI-related higher education graduates in 2024 reached approximately 18,000, more than double the figure from 2019. Universities have expanded AI graduate schools and industry-academia cooperation programs tailored to industrial demand. Conversely, digital education

programs targeting lower-educated or elderly populations remain relatively insufficient. Within the national lifelong education system, the development and expansion of digital and AI retraining programs are prioritized, and specific local governments are achieving effectiveness by implementing customized educational models linked to local industries and focusing on the concentrated cultivation of AI specialists.

Deepening Social Polarization and Constraints on Class Mobility: The income gap widens between high-wage professionals in advanced industries and the digitally marginalized low-income group. While high-tech occupations secure stable economic foundations, middle- to low-skilled workers face employment instability and wage stagnation. The deepening dual structure of the labour market is observed to decelerate social class mobility. The income quintile ratio reached 5.2 in 2023, representing an upward trend since 2010. Furthermore, the poverty rate among the elderly is escalating alongside the aging population, making the strengthening of pension and welfare social safety nets an urgent necessity. The youth unemployment rate, at 9.1% in 2024, remains higher than the OECD average, and job insecurity among the youth acts as a factor amplifying social instability.

Regional Economic and Socio-Structural Change: Regions with high concentrations of advanced industries and innovation firms are rapidly expanding, centred around the Seoul metropolitan area and certain major cities, which become the hub for technology, capital, and talent inflow. Conversely, provincial areas face deepening relative economic stagnation, population outflow, and employment decline, leading to severe regional economic imbalance. The population concentration in the Seoul and Gyeonggi area exceeds 52.1%, while some non-metropolitan regions experience an annual population decline of over 1.5% (Statistics Korea, 2024). This coexistence of metropolitan overcrowding and regional decline compels the government to pursue policies focused on fostering regional innovation clusters, preventing talent outflow, and providing customized support for local enterprises.

Table 24. South Korea Labor Market and Education Change Indicators (2015–2024)

Indicator	2015	2020	2024 (Est.)
Employment Growth Rate in Advanced Industry/AI Sectors (%)	+3.9	+4.1	+4.5
Employment Reduction Rate in Traditional Manufacturing (%)	-1.7	-1.0	-1.2

Graduates (Bachelor/Master) in AI-Related Fields	4,500	12,000	18,000
Metropolitan Area Population Share (%)	49.2	50.8	52.1

Source: Republic of Korea Ministry of Employment and Labor (2023), Korean Ministry of Education (2024), Statistics Korea (2024), Naver Economic Research Institute (2024)

Policy Implications and Response Strategies

Comprehensive Talent Cultivation and Lifelong Education System Innovation: To sustain the growth of advanced industries and AI, a sweeping overhaul of the lifelong education system is necessary, spanning from early education to advanced talent development and the retraining of mid-career workers. Essential policies include comprehensive measures to close the digital education gap (encompassing the digitally marginalized and the elderly), provision of customized learning environments, and strengthening academia-industry cooperation.

Simultaneous Expansion of Labor Market Flexibility and Stability: To cope with job restructuring driven by technological advancement, policies must simultaneously enhance labor market flexibility and reinforce the social safety net. This necessitates improving legal and institutional frameworks for new labour forms (e.g., non-regular workers, platform labour), implementing customized support policies to boost labour participation among women, youth, and the elderly, and strengthening welfare and employment security.

Securing Social Class Mobility and Integration: To prevent high industrial growth and technological innovation from widening social inequality, proactive welfare policies and educational redistribution are necessary to ensure equal opportunity and income security. Data-driven social policy design and regional balanced development policies can significantly contribute to medium-to-long-term social integration.

Acceleration of Regional Innovation and Balanced Development: Advanced industry clusters must be expanded beyond metropolitan areas into provincial regions, with customized innovation support systems developed to meet local characteristics and demands. Investment in regional infrastructure, talent cultivation, support for small and medium-sized ventures, and improved residential conditions are crucial measures to mitigate population outflow and revitalize local economies.

Economic and Policy Implications of Low Growth and Demographic Change (Low Birth Rate/Aging)

South Korean society is experiencing demographic change—low birth rates and aging—at an unprecedented global rate in the 21st century. This demographic shift is not only a primary cause of economic growth deceleration but also poses structural challenges to the entire society, including the labour market, welfare system, social integration, and regional development. As population decline formalized in 2023 and the ratio of working-age population to the elderly population shifts dramatically, systematic measures are urgently required. This section deeply analyses the status of demographic change using the latest statistics and forecasts, examining its impact on economic growth and social welfare, and proposing future policy directions.

Status and Outlook of Demographic Structure Change

Plummeting Birth Rate and Deepening Natural Population Decline: South Korea's total fertility rate plummeted from 2.1 in the early 1980s to 0.69 in 2023, the lowest level among OECD countries (Statistics Korea, 2024). The 2023 figure, a further drop from 0.74 in 2022, signifies an intensifying decline. With the annual number of births in 2023 (203,000) falling by more than half compared to 2010 (475,000), total population decline is now an unavoidable reality. The United Nations Department of Economic and Social Affairs (2022) projects that South Korea's population will decrease to approximately 47 million by 2030 and 37 million by 2050, representing a decline of about 25% from the current population.

Surging Elderly Population and Declining Working-Age Population: The proportion of the elderly population (aged 65 and over) increased from 11.2% in 2010 to 18.1% in 2023, with projections showing further increases to 25% by 2030 and 40.3% by 2060 (Statistics Korea, 2024). Meanwhile, the working-age population (aged 15–64) is steadily decreasing, projected to fall from 35.2 million in 2010 to 32 million in 2023, 28 million by 2030, and below 20 million by 2050. This change creates severe tension in the labour market supply, leading to overall growth deceleration due to the qualitative and quantitative contraction of the economically active population.

Table 25. South Korea Key Demographic Indicators and Forecast (Unit: 10,000 persons, %)

Indicator	2010	2023	2030 (Forecast)	2050 (Forecast)
Total Population	5,008	5,080	4,700	3,700

Births	47.5	20.3	17.0	13.0
Total Fertility Rate	1.23	0.69	0.65	0.55
Elderly Population Share (Aged 65+)	11.2%	18.1%	25.0%	40.3%
Working-Age Population (Aged 15–64)	3,520	3,200	2,800	2,000

Source: Statistics Korea (2024), United Nations Department of Economic and Social Affairs (2022)

Economic and Policy Implications of Demographic Change

The rapid demographic transformation confronting South Korea—marked by low birth rates and aging—no longer remains a phenomenon solely confined to demographic statistics or discussions among social welfare experts. This shift has cemented its status as a massive macroeconomic variable profoundly impacting economic growth rate, national finances, industrial structure, innovation capacity, and the entire social contract. This section critically examines the diverse pathways through which population decline, and aging translate into specific socioeconomic effects, including reduced productivity in the labor market, consumption contraction and industrial restructuring, dwindling domestic markets, public finance instability, widening economic disparities across regions, generations, and classes, and a decline in innovation capabilities.

Characteristics of Declining Labor Supply and Lowered Potential Growth Rate

- **Labor Supply and Contraction of the Working-Age Population:** South Korea's working-age population (aged 15–64), which peaked in 2017, is projected to fall from 32 million in 2023 to 28 million by 2030 and below 20 million by 2050 (Statistics Korea, 2024). This signifies a sharp decline in the proportion of the total population capable of contributing to economic activity. The ramifications are widespread: structural constraints on labour supply, severe labour shortages for businesses, reduced economic participation rates, and pervasive occupational mismatch. Labor shortages are particularly acute for core functional and managerial roles among the 20s, 30s, and 40s in manufacturing, and even future high-value-added sectors like ICT, bio, and advanced industries face chronic difficulties in securing both entry-level and experienced personnel.

- **Stratified Changes Across Youth, Middle-Aged, and Elderly Labor Markets:** The labor market faces a paradox: the sharp decline in the youth population (aged 15–29) might ease competition for entry-level jobs, but this is accompanied by a 'youth employment cliff'—a high rate of involuntary youth unemployment caused by the overall reduction in job availability. Middle-aged workers face increased job instability due to heightened demands for occupational mobility, career transitions, and job redesign. While employment among the elderly continues to rise, the increase in the economic participation rate among those aged 65 and over is largely concentrated in low-wage, temporary, and simple occupations, indicating persistent limitations. Furthermore, the gradual expansion of the foreign worker population (exceeding 7% of total wage workers in 2024) emerges as a new variable, creating competitive pressure in the domestic labor market, particularly in low-wage and certain professional sectors.
- **The Link between Declining Labor Productivity and Reduced Economic Growth Rate:** The combined effect of shrinking labor supply, rising average age of existing workers, insufficient job re-skilling and training, and labor market rigidity contributes to an overall decline in the economy's labour productivity. The International Monetary Fund (IMF, 2024) forecasts that South Korea's labour productivity growth rate will remain at approximately 1% annually post-2020. Consequently, the nation's overall potential economic growth rate is projected to fall below 1.5% between 2024 and 2030, down from 2.7% during 2010–2015. This erosion of labor productivity has cascading negative effects on macro indicators, including industrial competitiveness, export performance, and wage growth rates.

Characteristics of Consumption Market Contraction and Industrial Restructuring

- **Population Decline and Changes in Household Consumption Patterns:** Historically, South Korea's domestic economy, especially demand for durables (automobiles, home appliances) and services (dining out, travel), heavily relied on the 30s and 40s age groups. However, projections indicate this age group will shrink by over 15% by 2030, coinciding with a declining growth rate for total household consumption expenditure from an annual average of 3.1% in the 2010s to around 2.0% in the 2020s. Elderly consumption expenditure is approximately 65% that of those under 65, and spending priorities show a pronounced conservative shift toward health, medical care, and housing. Face-to-face service sectors

such as department stores, shopping malls, and food service industries are directly impacted by job losses and revenue contraction.

- **Consumption Market Dualization and Industrial Restructuring:** The growth in the elderly population and their income is expected to stimulate boom conditions in the silver industry, including healthcare, senior leisure, assistive devices, and dedicated elderly housing services. Conversely, industries centred on newlyweds, pre-school, and school-age children (e.g., education, childcare products, youth entrepreneurship, and cultural content) face prolonged stagnation. The overall structure of goods and services industries faces a potential split: elderly-focused sectors experience low growth, while sectors centred on innovation, youth, and family-supporting cohorts face the risk of negative growth, job losses, and investment cuts.
- **Real Estate Market and Asset Structure Changes:** During the period of population growth, urban housing demand, price appreciation, and the corresponding growth in construction, interior design, and finance industries provided significant synergistic effects. In the population decline era, however, structural weakness in the real estate economy is evident: firstly, reduced housing demand in new cities and urban centred; secondly, rising inventories of unsold units and increasing vacancy rates in provincial and smaller cities; and thirdly, price depreciation driven by the elderly liquidating assets. The Bank of Korea (2024) analysis warns that "the increase in vacant homes, reduction in transaction volume, and the hollowing out of provincial cities will be key factors fundamentally changing the nature of the real estate market in the mid-to-long term."

Public Finance Pressure and National Economic Risk

- **Surging Elderly Welfare Spending and Fiscal Health:** Welfare expenditure due to aging reached 6.1% of Gross Domestic Product (GDP) in 2023 and is projected to reach 8.7% by 2030 and 15.0% by 2050 (National Pension Service, 2024). Concurrently, the National Pension contribution rate is expected to plummet from 61.2% in 2023 to 42% by 2050, while the number of pension recipients is projected to surpass 16 million by 2050, signalling entry into a super-aged welfare state. As social insurance benefits (pension, healthcare, long-term care) rise while funding sources shrink, the viability of the system itself

faces greater risk. The welfare burden on future taxpayers, such as the youth, is magnified, accelerating the issue of 'intergenerational fiscal inequity.' Debates over the depletion of the National Pension Fund and rising health insurance premiums are projected to necessitate a fundamental paradigm shift in the welfare state structure by the late 2030s.

- **Widening Economic Disparity between Generations and Regions:** The economic ramifications of low birth rates and aging include the concentration of wealth around 'unearned income' in the elderly society, population outflow and economic decline in rural and smaller cities, and the deepening barriers to employment and asset formation for young people. Regions experiencing the most severe dual impact of population outflow and super-aging face challenges in maintaining public services, the collapse of local SMEs, and soaring social costs, leading to decreased quality of life and the loss of local economic sustainability.

Industrial Structure and Innovation Capacity Change

- **Decline in Innovation Momentum and Entrepreneurial Spirit:** In contrast to the past, when population influx and a dynamic workforce were engines of innovation, South Korea now faces a severe nationwide degradation of overall innovation capacity. This is characterized by a lack of young and core STEM talent, weakened entrepreneurial drive, and stagnation within the startup ecosystem. The gap between South Korea and major global economies is widening in metrics such as the creation of new unicorn companies, patent applications, and national R&D investment efficiency. The increased risk-aversion among individuals, households, and corporations leads to the exhaustion of creative challenges and adventurous investment.
- **Economic Impact of Digital and Automation Innovation:** Conversely, population decline and aging also act as catalysts for the rapid adoption of 4th Industrial Revolution technologies (digitalization, automation, and AI) and the expansion of new service industries (robotics, smart health, care tech). The digital transformation occurring in domestic manufacturing, finance, and medical sectors partially offsets the decline in supply-side productivity. However, this transition is also accompanied by limitations, such as the

digital divide between generations, inadequate data utilization capabilities, and low rates of occupational retraining.

Policy Direction for Low Growth, Demographic Strategy, and Social Innovation

- **Enhancing Productivity and Innovation Dynamics:** Overcoming low growth requires the full mobilization of strategies, including boosting labor productivity, institutionalizing new labour market forms (platform work, remote work), strengthening lifelong vocational education, and diversifying immigration and talent attraction policies. The core of the national future growth strategy lies in specializing in emerging industries—ICT, bio, eco-friendly technologies, and K-Content—and achieving groundbreaking innovation in labour productivity through AI, robotics, and platform technologies.
- **Integrated Restructuring of Welfare, Fiscal, and Labor Policies:** The transformation of the national welfare expenditure structure, sustainable reform of the pension, insurance, and long-term care systems, and the restructuring of family policies emphasizing intergenerational equity must proceed concurrently. Expanded immigration tailored to global standards and the diversification of workforce nationality are also critical factors for future national competitiveness.
- **Strengthening Regional and Class Inclusiveness:** Regional balanced development strategies—including urban regeneration, regional innovation clusters, equitable investment in digital infrastructure, and the diffusion of Smart Cities and Smart Healthcare—will enhance economic inclusiveness in the era of population decline. Crucially, complex policies targeting vulnerable regions (addressing regional decline), youth, women, and the elderly—along with the multilayered expansion of the social safety net and data-driven welfare policy innovation—are the key to managing long-term low-growth risks.

Policy Implications and Response Measures

- **Enhancing Labor Market Flexibility and Inclusive Participation:** To counter demographic change, labor market flexibility must be strengthened, while simultaneously expanding the economic participation of women and the elderly. Policy foundations must urgently be established to improve the acceptance of

foreign workers and manage the proliferation of remote and platform work models. The establishment of retraining and lifelong education systems tailored to digital transition and AI utilization is also essential for boosting labor productivity.

- **Social Welfare System Reform and Securing Intergenerational Equity:** Reform of the welfare policy structure, centered on the elderly population, is required, along with the efficient and sustainable operation of the National Pension, Health Insurance, and long-term care services. Fiscal consolidation measures that consider intergenerational equity, alongside welfare reform based on social consensus, are essential. Advanced welfare practices linked to community-based care must also be pursued.
- **Strengthening Support for Childbirth/Childcare and Population Balance Policies:** A comprehensive population policy is needed, transcending simple birth incentives, to support work-life balance for women, prevent career breaks, enhance the quality of childcare and education services, and foster family-friendly employment environments. Concurrently, population balance must be sought through improved residential conditions—such as urban regeneration and population dispersal policies between cities—to address the risk of regional decline.
- **Systematic Integration and Coordination of Economic and Social Policies:** The organic coordination and integration of labor, welfare, demographic, and economic policies are essential. Implementing systems capable of accurately forecasting and managing demographic change through advanced technology and data-driven policy formulation is required to ensure agile responses to socio-economic fluctuations.

Table 26. Economic Indicators and Forecast Related to Low Birth Rate and Aging (Unit: %)

Indicator	2010	2020	2023	2030 (Forecast)	2050 (Forecast)
Potential Economic Growth Rate (%)	3.2	2.4	1.5	1.2	0.8
Elderly Welfare Expenditure Share (vs. GDP, %)	3.9	5.5	6.1	8.7	15.0
National Pension Contribution Rate (%)	67.4	64.3	61.2	55.0	42.0
Youth Unemployment Rate (%)	6.2	8.3	9.1	8.7	7.5

Indicator	2010	2020	2023	2030 (Forecast)	2050 (Forecast)
-----------	------	------	------	-----------------	-----------------

Source: International Monetary Fund (2024), National Pension Service (2024), Statistics Korea (2024), Republic of Korea Ministry of Employment and Labor (2023)

Conclusively, South Korea faces an acute demographic challenge—rapid low birth rates and aging—placing it at a juncture of decelerating economic growth. The resulting labour shortages, increased welfare fiscal burden, contracting domestic market, and deepening social polarization necessitate fundamental changes in the foundational elements of the national economy and society. The country must respond by implementing policies that integrate labor market flexibility, inclusive growth, social security system reform, sustainable population strategies, and regional balanced development. The future competitiveness of South Korean society and economy will depend on a national strategy and execution that harnesses advanced technology for innovation and relies on social consensus to overcome the reality of population decline, thereby transitioning to a new growth paradigm that pursues both inclusion and sustainability.

Chapter 4. Strategic Necessity and Fields of Korea-Southeast Asia Cooperation

The global geopolitical and economic environment in the 21st century is becoming increasingly multipolar and complex, confronting national development and foreign policies with the imperative to emphasize diversity and connectivity. The strategic linkage between the Korean Peninsula and Southeast Asia is critically important, as it demands a composite and multidimensional cooperation framework that extends beyond traditional economic partnership to encompass political, diplomatic, security, innovation, industrial, and socio-cultural spheres (ASEAN Secretariat, 2025; KIEP, 2025).

South Korea must simultaneously strengthen its comprehensive political, diplomatic, and security cooperation with the Southeast Asian region while pursuing shared prosperity and stable development through mutually beneficial industrial collaboration and the construction of future-oriented supply chains. To this end, this chapter

conducts a multifaceted analysis of the strategic necessity of Korea-Southeast Asia cooperation, offering in-depth proposals for customized strategies by nation and sector, and plans for expanding socio-cultural exchanges.

4.1. Strengthening Political, Diplomatic, and Security Cooperation

Political, diplomatic, and security cooperation is the core axis and strategic foundation of the Korea-Southeast Asia relationship. Geopolitically, the Korean Peninsula and Southeast Asia constitute global vital areas linking Northeast Asia, the Indian Ocean, and the Pacific. This positioning offers the conditions necessary to foster independent cooperation and autonomy within the strategic frameworks of major powers like China, the U.S., and Japan (Asan Institute for Policy Studies, 2025). Southeast Asia exhibits complex characteristics: a population of 670 million, ranking as the world's 5th largest economy as of 2024, a key production base and consumer market, the nexus of critical regional sea lanes, and a cluster for advanced technology and resources.

4.1.1. Geopolitical Importance and Necessity for Cooperation

In the rapidly changing global order of the 21st century, Korea-Southeast Asia cooperation serves geopolitically as a 'connective axis' and 'buffer area,' characterized by a strategic partnership that secures relative autonomy amidst the influence competition waged by major powers like the U.S., China, Japan, and Russia (ASEAN Secretariat, 2025; KIEP, 2025). The Korean Peninsula functions as a hub for military tension mitigation in Northeast Asia, advanced technology/cultural diffusion, and economic activity. Concurrently, Southeast Asia is emerging as the future growth centre, serving as a core production base for the global supply chain, a critical sea lane for world trade, and a locus for demographic and market growth. As of 2024, Southeast Asia, with a population of 670 million and a GDP of \$3.7 trillion, ranks as the world's 5th largest economic bloc, establishing itself as a core hub for global manufacturing, exports, investment, and technology transfer (KIEP, 2025; SNU Asia Center, 2025). This geopolitical and economic status substantially elevates the strategic value of Korea-Southeast Asia cooperation.

The strategic effects of this cooperation can be categorized and analyzed in depth across four major areas:

Maintaining Regional Peace and Stability: Multilateral Trust-Building and Conflict Management

Korea-Southeast Asia cooperation promotes the peaceful resolution of disputes—mitigating military tensions, preventing accidental conflicts, and building multilateral trust—in key Asian conflict zones such as the South China Sea, the Korean Peninsula, and the East China Sea. This effort ultimately helps ease the regional arms race and offers an exemplary model for fostering mutual understanding and collaboration in a complex geopolitical environment. In the 'Kuala Lumpur Declaration' of 2025, ASEAN designated itself as the 'central axis of global growth,' outlining 15 core tasks including digital and green economic transition, strengthening youth and social solidarity, and enhancing supply chain connectivity. South Korea expands its practical role in supporting ASEAN through military/security cooperation, maritime security enhancement, joint disaster response systems, collective measures against terrorism and cyber threats, and diplomatic mediation for conflict resolution (ASEAN Secretariat, 2025; Tongsang News, 2025). This cooperation provides a concrete foundation for regional peace and stabilization, particularly contributing to strengthening a comprehensive response system against non-traditional security threats.

Securing Strategic Autonomy: Strengthening Middle Power Solidarity and the Role of Balancer

Amid the escalating U.S.-China strategic competition and regional power rivalry, cooperation with Southeast Asia enables South Korea to secure independent diplomatic options, reinforcing its role as a core subject of middle power solidarity and a regional balancer. ASEAN has historically maintained a neutral diplomatic stance and open regionalism, positioning itself as a valuable partner with whom South Korea can stably cooperate without being swayed by the volatility of the U.S.-China conflict. In October 2024, South Korea and ASEAN agreed to elevate their relationship to a Comprehensive Strategic Partnership (CSP). This serves as a concrete signal of deepened cooperation, aimed at promoting peace and security for all, building a smart, sustainable, resilient, and connected future, and establishing a foundation for social and cultural collaboration for youth and future generations (KIEP, 2025; IFANS, 2025). This cooperative relationship significantly contributes to South Korea's diplomatic diversification, international influence, and the expansion of its sovereign autonomy.

Enhancing Economic and Industrial Connectivity: A New Axis in the Global Value Chain

Southeast Asia is no longer merely a source of low-cost labor but an essential strategic partner for South Korea to strengthen its global value chains and secure future growth engines. Supply chain stabilization, penetration of

major markets, joint development of advanced technologies, and active human exchange are key factors deepening economic and industrial connectivity between the two regions. As of 2025, South Korea's trade volume with ASEAN surpassed \$200 billion, and countries like Vietnam, Indonesia, and Malaysia are firmly established as major investment and production centres for Korean firms. ASEAN offers South Korea multifaceted value beyond a simple market or trading partner. This includes strategic value as a critical sea lane (e.g., the South China Sea) and significance as a platform for providing high-quality migrant labour (KIEP, 2025; SNU Asia Center, 2025). This economic linkage strengthens mutual dependence and enhances collective response capacity against global economic uncertainties.

Diffusion of Global Norms and Values: Normative Leadership and International Responsibility

Korea-Southeast Asia cooperation contributes to the diffusion of international norms, including democracy, human rights, the rule of law, ESG (Environmental, Social, Governance), SDGs (Sustainable Development Goals), and sustainable development. This simultaneously fulfills South Korea's pursuit of normative leadership and its role as a responsible member of the international community. ASEAN strongly supports a rules-based trade order centred on the WTO, aligning with South Korea's open trade strategy. The elevation of the Korea-ASEAN relationship to CSP in 2025 reaffirms Southeast Asia's critical role in realizing South Korea's 'Global Pivotal State' foreign policy, emphasizing the reinforcement of the rules-based international order and the execution of international responsibilities (IFANS, 2025; SNU Asia Center, 2025).

Southeast Asian nations demonstrate high demand for competitive regional partnerships and linkages with South Korea to address non-traditional security issues, such as maritime security, supply chain protection, cyber security, counter-terrorism, human trafficking, and illegal arms interdiction. A 2025 survey of ASEAN experts highlighted 'infrastructure development and connectivity' (23.8%), 'cyber security and digitalization' (17.9%), 'maritime cooperation' (13.2%), and 'peace and conflict resolution' (12.8%) as top priorities for cooperation (KIEP, 2025). Amid the uncertainties of the U.S.-China rivalry, these nations seek to enhance diplomatic autonomy, economic resilience, and industrial innovation capacity through cooperation with South Korea (Sejong Institute, 2024; IFANS, 2025).

Conclusively, Korea-Southeast Asia cooperation, acting as a geopolitical buffer zone and connective axis, generates multilayered effects including regional peace and stability, strategic autonomy, economic/industrial connectivity, and the diffusion of global norms. This partnership firmly establishes itself as a future-oriented and practical strategic model.

4.1.2. Expanding Korea-Southeast Asia Multilateral Security Cooperation

The ASEAN-centric multilateral security architecture functions as the core framework for Korea-Southeast Asia cooperation, addressing a diverse range of security issues across multiple layers: regional peace and stability, trust-building, arms control, maritime security, counter-terrorism and cyber threats, and disaster relief (ASEAN Secretariat, 2025). Key consultation bodies include the ARF, ADMM-Plus, and EAS. These multilateral forums pursue collective responses—in areas like conflict prevention, trust-building, economic/technological cooperation, and humanitarian assistance—while simultaneously engaging in cooperation with both the U.S. and China.

In 2025, specific cooperation projects were expanded within the ARF and ADMM-Plus, focusing on maritime patrols, joint military exercises, intelligence sharing, collective counter-terrorism and cyber threat operations, humanitarian assistance, cooperation on international standards for digital infrastructure and technology, and the establishment of joint disaster response funds (Sejong Institute, 2024). This multilateral security cooperation serves as a critical mechanism for strengthening the foundations of trust and collaboration, even amidst the military buildup and diplomatic tensions among regional nations.

South Korea contributes to securing the safety of critical sea lanes, such as the South China Sea and the Malacca Strait, by engaging in maritime patrols and joint military exercises with ASEAN member states. South Korea has built practical cooperation models in sophisticated maritime surveillance, utilizing maritime satellites and radar for managing piracy, smuggling, illegal fishing, and responding to maritime disasters (Asan Institute for Policy Studies, 2025). Crucially, joint exercises and intelligence sharing between the South Korean Navy/Coast Guard and their Southeast Asian counterparts play a pivotal role in strengthening maritime security capabilities and building trust.

Furthermore, South Korea contributes to regional trust-building by utilizing its ICT and cyber security capabilities to establish a digital safety net, cut off terrorism, human trafficking, narcotics, and illegal arms trade, co-developing disaster response systems, and establishing humanitarian assistance governance. This cooperation extends beyond simple military collaboration to encompass a comprehensive response system against non-traditional security threats (ASEAN Secretariat, 2025).

Practical cooperation across multiple sectors—including supply chain protection and navigation safety, maritime patrols, co-developing maritime satellite-control centred, standardizing disaster management systems, joint fishery management, sustainable development of fishery resources, and marine environment conservation—is actively underway between South Korea and Southeast Asia. Strategic partnership relations with Vietnam, the Philippines, Indonesia, and Malaysia are expanding across defence, security, technology, economy, and socio-cultural domains (Sejong Institute, 2024; ASEAN Secretariat, 2025).

Crucially, Korea-Southeast Asia maritime security cooperation is essential for securing the stability and safety of global sea lanes. As the South China Sea and the Malacca Strait are core routes for global maritime logistics, instability in these areas directly impacts global supply chains and energy security. Consequently, South Korea and Southeast Asia cooperate to establish advanced maritime surveillance systems—including maritime patrols, piracy and smuggling interdiction, illegal fishing monitoring, disaster response, and utilizing maritime satellites and radar. South Korea promotes diverse cooperation initiatives—providing maritime patrol vessels and advanced surveillance equipment, disaster response training, marine environmental protection projects, and maritime technology talent development programs—thereby contributing to regional maritime security, environmental conservation, protection of economic sea lanes, and human exchange expansion (Asan Institute for Policy Studies, 2025; SNU Asia Center, 2025).

Cooperation in maritime science and technology is also being reinforced. Active joint research and talent exchange occur in marine observation, seabed resource exploration, marine energy development, and training programs for marine technology personnel. This contributes to innovation in marine technology and sustainable management of marine resources, simultaneously fostering the development of regional marine industries and environmental protection (Sejong Institute, 2024).

The recent military buildup by major powers (Russia, China, U.S.), expansion of joint naval exercises, militarization of artificial islands, and intensifying competition for maritime hegemony have complicated the security environment in the Korean Peninsula and Southeast Asian waters (KIMS, 2025; IFANS, 2025). Consequently, multilayered cooperation and trust-building between South Korea and Southeast Asia in maritime security, environmental conservation, disaster response, sea lane safety, and marine resource management are becoming increasingly vital.

Conclusively, Korea-Southeast Asia maritime security and cooperation efforts are establishing practical cooperation models across complex sectors—Maritime Domain Awareness, sea lane safety, marine environment protection, disaster response, and talent development—thereby playing a pivotal role in promoting regional peace and prosperity, global trust-building, and sustainable growth.

4.1.3. Maritime Security and Ocean Cooperation: Strategic Deepening of Multilayered Relations

The sea areas surrounding the Korean Peninsula and the maritime region of Southeast Asia (including the South China Sea and the Malacca Strait) constitute the core axis of global logistics and energy transit, with their strategic importance continuously increasing. This region accounts for over 30% of international maritime traffic, facilitating the movement of maritime cargo valued at over \$5 trillion annually, effectively serving as the artery of the global economy (World Bank, 2024). Consequently, the stability of these sea lanes is an issue directly linked not only to South Korea and Southeast Asia but also to the global economy as a whole. This space, where strategic interests such as the safety of sea lanes, securing energy transit routes, fishery resources, and marine ecosystem conservation intersect, demands complex cooperative capabilities beyond mere military collaboration (ASEAN Secretariat, 2025).

Recently, Korea-Southeast Asia maritime security cooperation has expanded beyond traditional military and coast guard functions into a comprehensive framework that addresses non-traditional security threats. Key cooperation areas include Maritime Domain Awareness (MDA), digital maritime surveillance, joint marine environment research, disaster response, combating illegal, unreported, and unregulated (IUU) fishing, marine ecosystem restoration, and marine pollution management (IFANS, 2025; BIMP-EAGA, 2025). This collaboration contributes to building trust between the navies and coast guards of the two regions and enhances joint response capabilities

at sea. For example, the Korea-Philippines Maritime Dialogue held in 2025 discussed practical cooperation measures, including MDA information exchange, joint efforts against IUU fishing, climate change response utilizing Blue Carbon, marine pollution control, the transfer of decommissioned vessels, and the establishment of multi-purpose cooperation ports (BIMP-EAGA, 2025).

South Korea leads these maritime cooperation initiatives, actively sharing its technology and experience. Specifically, South Korea establishes a digital maritime surveillance system—utilizing advanced technologies like the Korea-ASEAN Maritime Cooperation Center, joint marine environment research, the Automatic Identification System (AIS), Vessel Traffic Service (VTS), and maritime satellites and radar. Furthermore, it promotes various digital-based cooperation projects, such as technical personnel exchange and joint training, disaster response drills, and the operation of a joint data platform for maritime disasters (Sejong Institute, 2024; ASEAN Secretariat, 2025). This enhancement of maritime security, environmental conservation, protection of economic sea lanes, and human exchange will serve as a core engine for the long-term growth of both regions and is expected to expand into a model for building global and regional trust.

In particular, maritime security cooperation materializes through securing the safety of sea lanes, combating piracy, smuggling, and IUU fishing, maritime disaster response, joint drills and intelligence sharing between naval and coast guard forces, and establishing joint disaster response systems at sea (BIMP-EAGA, 2025; IFANS, 2025). South Korea establishes practical cooperation models with Southeast Asian nations by transferring decommissioned vessels, providing coast guard vessels, conducting maritime disaster response drills, implementing marine environmental protection projects, and offering maritime technology talent development programs. For instance, Korea-Philippines maritime cooperation involves signing Memorandums of Understanding (MOUs) on maritime security, combating IUU fishing, marine pollution control, marine ecosystem restoration, and Blue Carbon-based carbon reduction initiatives (BIMP-EAGA, 2025).

In the Maritime Domain Awareness (MDA) sector, constructing a platform capable of perceiving all activities at sea in real-time and enabling pre-emptive response is critical. South Korea strengthens MDA exchange with Southeast Asian nations by utilizing advanced technologies such as maritime satellites, AIS, VTS, and maritime data platforms (IFANS, 2025). Regarding maritime disaster response, joint drills, standardized disaster

management systems, and humanitarian aid mechanisms are emphasized for swiftly reacting to natural and human-induced disasters, including typhoons, oil tanker accidents, and marine pollution (ASEAN Secretariat, 2025).

In the area of Marine Environmental Cooperation, joint research and projects are expanding in marine pollution prevention, marine debris management, marine ecosystem restoration, Blue Carbon-based carbon reduction, and the protection of marine biodiversity (BIMP-EAGA, 2025; SNU Asia Center, 2025). South Korea transfers its experience and technology in marine environmental management to Southeast Asia, operating joint projects, ecosystem restoration programs, and training programs for maritime technical personnel. Furthermore, in Maritime Science and Technology Cooperation, active joint research and talent exchange occur in marine observation, seabed resource exploration, marine energy development, and technical personnel training programs (Sejong Institute, 2024; SNU Asia Center, 2025). This contributes to innovation in marine technology and sustainable management of marine resources, simultaneously fostering the development of regional marine industries and environmental protection.

Recent increases in naval capabilities and expansion of joint maritime exercises by major powers (Russia, China, U.S.), coupled with the militarization of artificial islands and intensifying maritime hegemony competition, have further complicated the security environment in the Korean Peninsula and Southeast Asian waters (KIMS, 2025; IFANS, 2025). Consequently, multilayered cooperation and trust-building between South Korea and Southeast Asia in maritime security, environmental conservation, disaster response, sea lane safety, and marine resource management are becoming increasingly vital. Conclusively, Korea-Southeast Asia maritime security and ocean cooperation is building practical cooperation models across complex domains—MDA, sea lane safety, marine environmental protection, disaster response, and talent cultivation—thereby playing a central role in promoting regional peace and prosperity, building global trust, and realizing sustainable growth.

4.1.4. Industrial Innovation, New Supply Chain, and Technological Talent Cooperation

Korea-Southeast Asia cooperation is accelerating structural linkages in future-oriented sectors—including advanced industrial innovation, new supply chain construction, technological talent cultivation, and the establishment of a digital economic ecosystem—since the mid-2020s. This cooperation transcends mere trade

and investment expansion, materializing through joint R&D, technological standardization, startup exchange, and innovation talent network activation in core future industries (semiconductors, batteries, renewable energy, digital services) and various projects (Smart Cities, Green Industry, ICT, FinTech) (World ASEAN Forum, 2025; The Economy Research, 2025). Key Southeast Asian nations, including Vietnam, Indonesia, Malaysia, and Thailand, are accelerating industrial advancement, digital transformation, supply chain diversification, and innovation ecosystem building by designating South Korea as a strategic partner.

For example, in 2025, Vietnam hosted a large-scale technology and innovation exchange event, such as Shinhan Bank's 'Global X-Change 2025,' which facilitated active business matching and symposiums among Korean startups, local companies, investors, and institutions. This event resulted in the creation of practical cooperation models across diverse sectors: digital asset platforms, FinTech, EdTech, HealthTech, bio/pharmaceuticals, smart manufacturing, AI, semiconductors, and renewable energy (SeoGoover, 2025; CMC Korea, 2025).

Energy and Infrastructure Cooperation

In the energy and infrastructure sectors, Korean companies' technology contributes to enhancing power grid stability and energy efficiency in Southeast Asia. This includes Nokia's and Viettel's cooperation on broadband network modernization, LS Cable & System's diversification of the rare earth supply chain, Hanwha Energy's negotiations on LNG power generation, and LS Eco Energy's submarine High Voltage Direct Current (HVDC) project. This demonstrates how Korean technology assists Southeast Asian nations in infrastructure modernization. Specifically, establishing a critical mineral supply chain cooperation centre that integrates Vietnam's abundant rare earth resources with South Korea's advanced materials and battery technology, alongside Smart Grid development and the expansion of renewable energy projects, acts as a core engine accelerating industrial innovation and energy transition in both countries (MOFA Korea, 2025).

Trade and Supply Chain Cooperation

In trade and supply chain areas, diverse changes are observed, including STX's direct import and distribution of marine products, the fifth anniversary success of the EU-Vietnam Free Trade Agreement (EVFTA), and Vietnam's imposition of anti-dumping duties. Korean firms enhance their competitiveness in the Southeast Asian market by

pursuing direct import distribution, utilizing FTAs, expanding local production bases, and strengthening global supply chain resilience. In the bio-pharmaceutical sector, the technology export value of domestic new drug platform companies reached KRW 10 trillion, significantly boosting the visibility of the Korean pharmaceutical industry's global competitiveness in the Southeast Asian market (SeoGoover, 2025).

Technological Talent Cultivation and Human Resource Exchange

Technological talent cultivation and human resource exchange are also critical axes of Korea-Southeast Asia cooperation. A 2025 Korea-Vietnam Joint Press Statement confirmed that the two countries signed an MOU to revitalize talent cultivation and exchange in science and technology fields, agreeing to actively promote joint research in advanced S&T areas like AI, bio, and energy. Furthermore, talent exchange and innovation ecosystem creation occur across various fields, including cooperation for nuclear power plant workforce training, Smart City development, new city construction, digital finance advancement, energy transition projects, and joint bio-healthcare research (MOFA Korea, 2025; CMC Korea, 2025).

Startup Exchange and Innovation Network Construction

Startup exchange and innovation network construction are equally vigorous. The 2025 Vietnam-Korea Digital Cooperation Forum saw participation from over 100 delegates and 70 leading companies, fostering knowledge exchange and the joint development of innovative solutions centered on advanced technologies: legacy modernization, AI, digital transformation, smart manufacturing, and semiconductors. The Vietnamese government actively encourages foreign investment and local companies' overseas expansion through M&A facilitation, the 'Go Global' strategy, and tax incentive policies (CMC Korea, 2025).

This industrial innovation, new supply chain, and technological talent cooperation plays a decisive role in the qualitative leap of the Korea-Southeast Asia economic relationship, enhancing global competitiveness, and establishing a foundation for sustainable growth. Joint research and innovation ecosystem creation in future industries—digital finance, energy transition, supply chain resilience, bio-healthcare, Smart Cities, AI, and semiconductors—are expected to deepen further.

4.1.5. Socio-Cultural Exchange and Educational Innovation

Socio-cultural exchange and educational innovation between South Korea and Southeast Asia are emerging as core assets that contribute decisively to mutual understanding, trust-building, enhanced innovation capacity, and the co-prosperity of creative industries in both regions. Over the past five years, human exchange between Korea and Southeast Asia has expanded quantitatively and qualitatively across diverse areas: youth and professional exchange, scholarship programs, inter-university joint research, multicultural policy studies, cultural arts collaboration, fostering global inclusiveness, and strengthening multicultural sensitivity and social inclusion (SNU Asia Center, 2025; KIEP, 2025).

Youth and Professional Exchange: Cultivating Future Leadership

Youth and professional exchange programs are conducted in various forms, including the Korea-Vietnam Global Meditation Camp, the East Asian Youth Winter Meditation Camp, Korea-Vietnam Youth Exchange Programs, youth exchange with Vietnam's Dong Nai Province, and Korea-Indonesia Teacher Exchange Programs. For example, the 2025 Korea-Vietnam Global Meditation Camp, held over four nights and six days in Hanoi and Ha Nam Province, offered diverse activities—meditation, Buddhist cultural experiences, cultural tours, university exchanges, and workshops—thereby enhancing the internal growth and international communication capacity of young Koreans and Vietnamese simultaneously (Asia SNU, 2025; Linkareer, 2025). Furthermore, the East Asian Youth Winter Meditation Camp, held over six nights and seven days in Pyeongchang and Seoul, facilitated the construction of a peace consensus and global network among youth from Korea, Japan, and Vietnam through meditation, cultural experiences, winter sports, special lectures, and free exploration activities.

Educational Cooperation and Scholarship Programs: The Core Axis of Human Resource Development

Scholarship programs and university cooperation are also highly active. According to the 2025 'Korea-Vietnam Joint Press Statement,' the two countries signed an MOU to revitalize talent cultivation and human resource exchange in science and technology fields, agreeing to actively promote joint research, expand scholarship programs, and enhance youth exchange (MOFA Korea, 2025). Student exchange, institutional visits, and cultural experiences between Vietnam's Lac Hong University and Korean universities yield tangible results in strengthening the global competence and local adaptability of young talents (Mokpo University, 2025). These

programs serve as vital channels for supporting human resource development in Southeast Asia and diffusing South Korea's educational systems and technology.

Strengthening Multicultural Policy and Social Inclusion: The Basis for Sustainable Cooperation

Joint research on multicultural policy and strengthening social inclusion are crucial pillars for enhancing the sustainability of future cooperation. The 2025 'Hallyu Exchange Workshop (CPI Global Connect Workshop)' discussed diverse cooperation models, including the joint project development among multinational cultural experts, network activation between Korea and Southeast Asia, cultural arts collaboration, fostering global inclusiveness, and strengthening multicultural sensitivity (Korean Culture Center Italy, 2025). Efforts to promote cultural understanding and enhance social inclusion positively influence social integration and innovation capacity building in both regions.

Educational Innovation and Talent Cultivation: Securing Future Competitiveness

In the field of educational innovation, various talent cultivation and educational reform projects are being pursued, such as the Korea-Indonesia Teacher Exchange Program, Global Leader Schools, and international education and exchange programs. Indonesian teachers directly experience Korea's educational system and local life, sharing goals for educational innovation and human resource development in both countries (Indonesian Embassy Seoul, 2025). Initiatives like the Incheon Global Leader School and the Korea-Vietnam Youth Foundation Exchange focus on enhancing global leadership, multicultural sensitivity, and creative problem-solving skills for primary, secondary, tertiary, and university students (IEGI, 2025).

Cultural Arts Collaboration and Global Inclusiveness: Expanding Solidarity and Understanding

Cultural arts collaboration and fostering global inclusiveness are crucial factors for enhancing the sustainability of Korea-Southeast Asia cooperation. Joint projects and exchange events are expanding across diverse fields, including Hallyu, K-Content, traditional arts, contemporary art, and performing arts. This cultural exchange transcends mere content consumption, facilitating a deeper mutual understanding of cultures, strengthening social inclusion, and contributing to social integration and innovation capacity building in both regions (SNU Asia Center, 2025; KIEP, 2025).

Conclusively, Korea-Southeast Asia socio-cultural exchange and educational innovation act as core drivers for enhancing the sustainability of future cooperation in domains such as human resource development, co-prosperity of creative industries, global network construction, strengthening multicultural inclusiveness, and fostering social trust.

4.1.6. Norm Setting, International Governance, and Joint Implementation of SDGs

The diffusion of international norms—including democracy, human rights, environment, and sustainable development—and their practical implementation in Korea-Southeast Asia cooperation are core tasks for future collaboration, serving as the main foundation for both regions to realize responsible leadership in the international community (ASEAN Secretariat, 2025; World ASEAN Forum, 2025). Specifically, the United Nations Sustainable Development Goals (SDGs)—17 policy targets jointly agreed upon by the world for achievement by 2030—serve as a practical testing ground for global governance and inter-state cooperation across diverse areas: climate change response, poverty and inequality reduction, economic inclusion, peace and rights promotion, and public innovation (KIEP, 2025; Statistics Korea, 2022).

Korea-Southeast Asia SDGs cooperation is deepening along three major axes:

Climate Change Response and Environmental Cooperation: Joint Efforts for a Sustainable Future

Korea-Southeast Asia SDGs cooperation intensifies, centred on climate change response and environmental cooperation. Southeast Asia is highly vulnerable to climate risks such as sea-level rise, extreme weather events, deforestation, and marine pollution. South Korea expands joint projects with Southeast Asia in carbon neutrality technologies, renewable energy, Smart Cities, eco-friendly infrastructure, and marine ecosystem restoration. For example, Vietnam ranked 54th (out of 166 countries) in the 2024 global SDGs implementation index, placing it second in Southeast Asia, yet it still faces high demands for cooperation in marine/terrestrial ecosystems, energy, and infrastructure (Vietnam Ministry of Planning and Investment, 2024; VNA, 2024). South Korea supports Southeast Asia's achievement of SDGs through diverse mechanisms, including Official Development Assistance (ODA), technology transfer, green finance, and policy consultation on climate adaptation (KIEP, 2025; ODA Korea, 2025).

Economic Inclusion and Social Solidarity: Partnership for Reducing Inequality

Strengthening economic inclusion and social solidarity is also a vital axis of cooperation. Southeast Asia still confronts challenges related to income disparity among nations, urban-rural imbalances, and limited access to education, healthcare, and welfare for vulnerable populations. South Korea pursues diverse cooperation initiatives—such as inclusive innovation economies, capacity building for Micro, Small, and Medium Enterprises (MSMEs), startups, and youth/female entrepreneurs, support for social enterprises and public innovation, digital inclusion, and education/health ODA. Following the establishment of the Korea-ASEAN Comprehensive Strategic Partnership (CSP) in 2024, South Korea expands future-oriented cooperation—including new ODA projects tailored to ASEAN requests, digital transformation, demographic change response, urban development, Smart Cities, social housing, and public health (MOFA Korea, 2024; KIEP, 2025).

Peace, Rights Promotion, and Public Innovation: Establishing Normative Governance

Cooperation in the fields of peace, rights promotion, and public innovation is also actively pursued. Korea-Southeast Asia collectively seeks shared norms and practices in human rights, the rule of law, democracy, peacebuilding, humanitarian assistance, disaster response, and civil society capacity building. In response to regional challenges such as the Myanmar civil war, the South China Sea dispute, and democratic regression, South Korea strengthens multilayered responses alongside ASEAN, focusing on peaceful mediation, humanitarian aid, adherence to international law, support for civil society networks, and monitoring of SDGs implementation (ASEAN Secretariat, 2025; KIEP, 2025).

This collaboration is being institutionalized through various multilateral cooperation platforms and policy frameworks, including the Korea-ASEAN Summit, Korea-Mekong Summit, Korea-ASEAN Plan of Action (2021–2025), Korea-ASEAN Solidarity Initiative (KASI), and the Korea-ASEAN Future Community ODA Strategy (MOFA Korea, 2024; ODA Korea, 2025). The 2024 'Korea-ASEAN Joint Statement' specified the expansion of future-oriented cooperation agendas, including SDGs, economic security, supply chain resilience, digital transformation, climate change, and demographic shifts.

Country-Specific SDGs Implementation and Customized Cooperation

An assessment of SDGs implementation status across Southeast Asian nations reveals that countries like Vietnam and Indonesia show relatively favourable progress. However, less developed nations—Cambodia, Laos, and Myanmar—demonstrate significant shortcomings in areas such as SDG 2 (Poverty), SDG 3 (Health), SDG 6 (Water Resources), SDG 7 (Energy), SDG 9 (Infrastructure), SDG 11 (Cities), and SDG 14 (Marine Ecosystems) (EJIDC, 2024; Statistics Korea, 2022). Consequently, South Korea is expanding customized ODA and technical cooperation, linked with regional cooperation bodies like the Mekong Sub-region and BIMP-EAGA, in areas such as urban development, social housing, Smart Cities, health/education, environment/energy, and disaster response (ODA Korea, 2025).

Conclusively, Korea-Southeast Asia norm setting, international governance, and joint SDGs implementation generate practical results and multilayered cooperation across diverse fields: climate/environment, economic inclusion, peace/rights promotion, and public innovation. This approach plays a central role in realizing sustainable development, international social responsibility, and global leadership for both regions, positioning it as an exemplary partnership model for achieving the 2030 SDGs.

4.2. Industrial Cooperation: Traditional Industries, Advanced Technology, and New Supply Chain Strategies

Industrial cooperation is the economic bedrock of the Korea-Southeast Asia relationship and the key to securing future growth engines. As of 2025, ASEAN has vigorously emerged as South Korea's second-largest trading bloc and the central axis for global supply chain restructuring. Southeast Asia represents a massive market with a total population of 670 million and a Gross Domestic Product (GDP) of \$3.7 trillion, absorbing over \$114 billion in annual Korean exports (ASEAN Secretariat, 2025; KIEP, 2025; Tongsang News, 2025). Countries including Vietnam, Indonesia, Thailand, and Malaysia are firmly established as core hubs for South Korean corporate production, assembly, processing, and export. This economic interdependence forms the foundation for strategic cooperation aimed at jointly responding to external shocks like the U.S.-China hegemony competition and creating new growth opportunities.

4.2.1. Traditional Industry Cooperation and Economic Diversification: Building Mutually Beneficial Value Chains

Industrial cooperation between South Korea and Southeast Asia is evolving beyond simple import/export into an integrated partnership spanning the entire Value Chain, including production, technology, human resources, brand development, and distribution. South Korea holds global competitiveness in manufacturing and processing industries such as automotive, electronics, machinery, textiles, chemicals, and food. Conversely, Southeast Asia solidifies its position as a global production base, leveraging abundant labour, raw materials, agricultural products, and a rapidly expanding domestic market (KIEP, 2025; SNU Asia Center, 2025). These complementary strengths enable a cooperation model that facilitates shared growth for both parties.

Southeast Asia serves as both a key demand market and a production base for critical Korean manufactured goods, including finished vehicle components, electronic devices, home appliances, apparel, and machinery. For instance, Vietnam has become a production hub for smartphones, home appliances, and automobiles for major Korean conglomerates like Samsung, LG, and Hyundai Motor. Malaysia acts as a global centre for semiconductor, electronic component, and chemical material production, while Indonesia is emerging as a critical axis in the battery, automotive, and mineral resource supply chains. As of 2025, the number of Korean corporate manufacturing facilities in Vietnam exceeds 1,000, which accelerates local job creation, technology transfer, and localization strategies (SeoGoover, 2025; KITA, 2025).

South Korea demonstrates strengths in procuring raw materials, agricultural products, food, and natural resources from Southeast Asia, and cooperating in their processing industries. Tropical fruits, coffee, seafood, palm oil, natural rubber, and timber from Southeast Asia are essential raw materials for South Korea's food, chemical, and materials industries. As of 2024, South Korea's agricultural import value from ASEAN reached \$4.5 billion, with key commodities like palm oil, coffee, seafood, and rubber recording an annual average growth rate of over 7% (KIEP, 2025). This cooperation in the primary industry sector serves as a crucial foundation for enhancing the stability of both economies.

Expanded Free Trade Agreements (FTAs) and economic cooperation between the two regions promote structural development, including tariff reductions, investment protection, technology transfer, and increased human

exchange. The Korea-ASEAN FTA, the Korea-Vietnam FTA, and the Korea-Singapore Digital Partnership provide institutional foundations for trade, investment, and technological collaboration. Marking the 15th anniversary of the Korea-ASEAN FTA in 2025, both sides are expanding the scope of cooperation into new industries, such as digital trade, smart infrastructure, and carbon technology collaboration (Tongsang News, 2025; KIEP, 2025).

Traditional industry cooperation is evolving beyond simple import/export into diverse forms: localization, joint production, technology transfer, human resource development, and joint brand creation. Korean automotive and electronics companies integrate their industrial value chains by establishing local production plants in Southeast Asia, increasing local parts procurement, training local personnel, and operating joint Research and Development (R&D) centres. Southeast Asian firms enhance their competitiveness by adopting Korean expertise in quality management, production technology, and marketing know-how. For instance, the Samsung Electronics plant in Vietnam, which employs 70,000 local personnel, is recognized as a successful cooperation model, generating over \$60 billion in annual exports (KITA, 2025).

Furthermore, in primary sectors like agriculture, food, and energy, South Korea's technology in Smart Farms, food processing, agricultural machinery, and bioenergy provides tangible assistance for enhancing productivity, ensuring food security, and promoting rural development in Southeast Asia. As of 2025, Korean Smart Farm technology has been disseminated to over 120 pilot sites across five countries, including Vietnam, Thailand, and Indonesia, with technology exports in agricultural machinery, food processing, and bioenergy exceeding \$200 million annually (SeoGoover, 2025; SNU Asia Center, 2025). South Korea provides technology, capital, human resources, and experience in agricultural innovation, while Southeast Asia acts as South Korea's new market, production base, and innovation partner, thereby establishing a mutually beneficial model. The 2025 Korea-ASEAN Agricultural Innovation Forum addressed 10 core cooperation tasks, including Smart Farms, food processing, and bioenergy, yielding substantial results through joint research, talent exchange, technology transfer, and localization strategies (KIEP, 2025).

4.2.2. Advanced Technology Cooperation and New Supply Chain Construction: Unearthing Future Growth Engines

The new axis of Korea-ASEAN cooperation in 2025 lies in digital transformation, green transition, smart infrastructure, advanced technological innovation, and new supply chain construction. ASEAN aims to conclude the 'ASEAN Digital Economy Framework Agreement (DEFA)' by 2025 to promote internal digital integration and normative refinement. Concurrently, South Korea pursues the 'Korea-ASEAN Digital Innovation Flagship (KADIF)' as a five-year project, allocating \$30 million in cooperative funds to bridge the digital divide and support regional economic growth (Tongsang News, 2025; KIEP, 2025; NKIS, 2022).

ASEAN's digital economy is projected to reach \$1 trillion by 2025, with Indonesia, Thailand, and Vietnam driving this digital growth. While Singapore maintains world-class digital infrastructure and competitiveness, follower nations like Myanmar, Cambodia, and Laos face large gaps in infrastructure and capability. South Korea has high demand for cooperation with ASEAN in establishing e-government, expanding digital infrastructure, enhancing digital capabilities, talent cultivation, and formulating digital trade norms. The Korea-ASEAN digital trade volume is projected to expand by at least \$2.2 billion in 2025 (ASEAN Secretariat, 2025; NKIS, 2022; Tongsang News, 2025).

South Korea's strengths in the ASEAN eco-friendly energy transition include experience in operating Smart Grids, Energy Storage Systems (ESS), hydrogen co-firing generation, and Emissions Trading Schemes (ETS). This expertise contributes to establishing carbon markets and refining regulatory frameworks within ASEAN. As 35% of ASEAN's total power generation capacity is projected to transition to renewable energy by 2025, South Korea expands technical, institutional, and financial cooperation to secure system stability and efficiency (KIEP, 2025; SNU Asia Center, 2025).

In the Smart City and Infrastructure sectors, the expansion of the ASEAN Smart Cities Network (ASCN) drives sustained demand for South Korea's Public-Private Partnership (PPP) model and digital infrastructure technology. South Korea's practical Smart City experience (e.g., Busan and Sejong) can be expanded into a comprehensive cooperation model encompassing technology, policy, regulation, and operation. The provision of complex

solutions—such as AI-based urban safety systems, eco-friendly transport networks, and climate-adaptive infrastructure—ensures that cooperation sectors can continually expand (Tongsang News, 2025; KIEP, 2025).

On the Supply Chain front, South Korea and ASEAN accelerate value chain integration through joint R&D, technology standardization, startup exchange, and innovation talent network activation in advanced industry sectors (semiconductors, batteries, digital services, renewable energy). As of 2025, South Korea's intermediate goods exports to ASEAN surpassed \$80 billion, and Vietnam, Malaysia, and Thailand have emerged as global semiconductor and battery production hubs. South Korea generates concrete results by expanding supply chain diversification, local production base expansion, technology transfer, human resource development, and joint brand creation with ASEAN (KIEP, 2025; Tongsang News, 2025).

In the Digital Trade and Services sectors, there is a surge in demand for cross-border services, including cloud platforms, FinTech, online education, and telemedicine. Based on its experience managing digital services in complex regulatory environments, South Korea proposes cooperation models with ASEAN governments for developing joint standards, operating regulatory sandboxes, and establishing digital service licensing systems. ASEAN, cautiously adopting concepts of digital sovereignty and data localization, highly values South Korea's partnership in regulatory capacity building (NKIS, 2022; Tongsang News, 2025).

Conclusively, Korea-Southeast Asia advanced technology cooperation and new supply chain construction are evolving into a multilayered cooperation model—encompassing digital and green transition, smart infrastructure, advanced industrial innovation, value chain integration, localization, technological innovation, talent cultivation, and joint brand development. This transformation plays a pivotal role in the structural development, industrial advancement, global competitiveness enhancement, and sustainable growth of both economies.

Strategic Importance of Korea-Southeast Asia Advanced Technology Cooperation

Advanced technology cooperation between South Korea and Southeast Asia is accelerating structural linkages and realizing tangible achievements in industrial advancement, digital economic transition, new supply chain construction, and innovation ecosystem expansion since 2025. This collaboration offers strategic advantages to

both sides. South Korea maintains world-class competitiveness in advanced industries, including Smart Manufacturing, Artificial Intelligence (AI), 5G communications, semiconductors, eco-friendly energy, and bio-healthcare. Southeast Asia, leveraging its young and dynamic demographic structure and growing domestic market, holds significant potential as a major technology demand market and production hub. Individual Southeast Asian nations are actively adopting Korean technology and expertise by pursuing national innovation policies such as 'Digital Economy Masterplans,' 'Smart City Roadmaps,' and 'Industry 4.0 Strategies' (KIEP, 2025; AKSTCC, 2025). This complementary structure elevates the Korea-Southeast Asia relationship beyond mere economic cooperation to a future-oriented strategic partnership.

Southeast Asia's digital economy is projected to near \$1 trillion by 2025, signifying its growing share in the global economy. Key nations like Indonesia, Thailand, and Vietnam are focused on cultivating future industries—including 5G network establishment, digital finance, e-commerce, Smart Cities, eco-friendly energy, and bio-healthcare—by attracting large-scale investment and expanding infrastructure. Singapore and Malaysia already play pioneering roles in AI, cloud computing, FinTech, and Smart Infrastructure, cementing their status as regional technology hubs. Conversely, follower nations like Myanmar, Cambodia, and Laos actively seek South Korean technology and policy support to bridge existing infrastructure and capability gaps (NKIS, 2022; ASEAN Secretariat, 2025).

Manufacturing Innovation and Digital Transformation Cooperation

South Korean advanced technology is a core driver that can dramatically enhance Southeast Asia's manufacturing productivity. Korean expertise in Smart Factory technology, automation systems, robotics, Internet of Things (IoT), Big Data, cloud computing, and AI solutions can directly contribute to improving manufacturing productivity and quality advancement in Southeast Asia. For example, the Smart Factory systems adopted in South Korean corporate production plants in Vietnam achieved over 20% improvement in production efficiency and reduced defect rates by half. The success of these models is highly likely to diffuse to other Southeast Asian nations, accelerating digital transformation across the manufacturing sector.

The launch of the Korea-ASEAN Digital Innovation Flagship (KADIF) initiative in 2025 is a tangible outcome of this cooperation. Funded by a cooperation fund of \$30 million, this project is yielding practical results across

diverse areas: bridging the digital divide, talent cultivation, digital infrastructure establishment, regulatory sandbox operation, and the creation of joint R&D centres (Tongsang News, 2025; KIEP, 2025). KADIF presents a new, mutually beneficial cooperation model by integrating South Korea's advanced digital technology with Southeast Asia's vast growth potential.

Joint R&D and Talent Cultivation Network Establishment

For advanced technology cooperation to be sustainable, joint R&D and the establishment of human resource cultivation networks are essential, moving beyond mere technology transfer or investment attraction. Korea-Southeast Asia R&D cooperation is expanding through diverse channels, including the establishment of joint research centres, technology personnel exchange, co-development of patents and technologies, and academia-industry linkage. The 2025 Korea-Mekong Advanced Technology Workshop discussed concrete cooperation models—including joint research, talent exchange, pilot projects, technology transfer, and regulatory sandbox operations—across 10 sectors, such as AI, Big Data, Smart Manufacturing, Bio-Healthcare, and eco-friendly energy (ASEAN Secretariat, 2025; AKSTCC, 2025). This collaboration contributes to reducing the technological gap between the two regions and strengthening collective innovation capabilities.

In Human Resource Cultivation, training, vocational education, internships, and scholarship programs for advanced technology talents (IT, engineering, design, and management) are actively underway. Forums like the 2025 Korea-ASEAN Financial Cooperation Forum, the Korea-Mekong Advanced Technology Workshop, and the Korea-ASEAN Joint Research Centres play a central role in local talent cultivation, technical education, academia-industry linkage, and building a global talent network (ASEAN Secretariat, 2025; KIEP, 2025). This human exchange transcends simple knowledge transfer, playing a vital role in fostering cultural understanding and mutual trust.

Startup Ecosystem Linkage and Innovation Network Activation

The linkage between South Korean and Southeast Asian startups and venture enterprises generates strong synergy in building innovation ecosystems, opening new markets, attracting global investment, and commercializing technology. Southeast Asia is experiencing a startup boom in diverse sectors like FinTech,

EdTech, and HealthTech, driven by high demand for digital transformation and a young population base. South Korea provides capital and technology to these startup ecosystems, acting as a partner that accelerates innovation in Southeast Asia.

The 2025 Korea-ASEAN Digital Business Partnership Event exemplifies a successful case of this collaboration. Leading South Korean AI and data companies, including B4Play, Brainworks, and Gaon Platform, pursued joint projects with local Southeast Asian firms. They successfully showcased AI-based digital innovation solutions (data analysis, anomaly detection, sentiment analysis), achieving entry into local markets and attracting global investment (AKSTCC, 2025). This cooperation accelerates digital economic growth in Southeast Asia and provides new growth opportunities for South Korean startups.

Policy Linkage and Future Industrial Cooperation Models

Governments across Southeast Asia are pursuing national innovation policies—including 'Digital Economy Masterplans,' 'Smart City Roadmaps,' and 'Industry 4.0 Strategies'—and designate linkage with South Korean ICT, AI, semiconductor, and eco-friendly energy technology as a core driving force for policy realization. South Korea can expand various cooperation models with Southeast Asian nations—including joint R&D, technical personnel exchange, regulatory sandboxes, and pilot projects—in new industries like digital government, e-commerce, FinTech, healthcare, and EdTech (KIEP, 2025; AKSTCC, 2025).

This policy linkage holds significant implications for the economic development of both regions. Southeast Asia can utilize Korean technology and expertise to advance its industrial structure, bridge the digital divide, and secure a foundation for sustainable growth. Conversely, South Korea can strengthen its global technological leadership and create new business opportunities by leveraging Southeast Asia's young workforce and growing market. Notably, the Smart City sector serves as a representative symbol of this bilateral cooperation. South Korea applies its accumulated experience in Smart City development (e.g., Busan and Sejong) to urban development projects in Southeast Asia, providing complex solutions like AI-based urban safety, eco-friendly transport networks, and climate-adaptive infrastructure.

Furthermore, cooperation in the eco-friendly energy sector is essential for the sustainable development of both regions. While Southeast Asia possesses abundant renewable energy resources (solar, wind, hydro), it often lacks the necessary technology and infrastructure for efficient utilization. South Korea can share its expertise in eco-friendly energy technologies and policy experience—including Energy Storage Systems (ESS), Smart Grids, hydrogen co-firing generation, and Emissions Trading Schemes (ETS)—to collaborate on climate change response and energy transition efforts.

Conclusively, the strengthening of Korea-Southeast Asia advanced technology cooperation and industrial advancement is evolving into a multilayered cooperation model encompassing digital and green transition, smart infrastructure, advanced industrial innovation, value chain integration, localization, technological innovation, talent cultivation, and joint brand development. This cooperation plays a central role in the structural advancement, industrial sophistication, global competitiveness enhancement, and sustainable growth of both economies. Korea-Southeast Asia cooperation transcends mere economic benefits, creating a future-oriented partnership that generates new synergy by combining technology, human resources, culture, and policy capacity, offering a realistic solution for shared prosperity amidst complex international conditions like the U.S.-China rivalry.

4.2.3. Global and Regional New Supply Chain Cooperation Strategies

Diversification and Localization Strategy

Firstly, South Korea and Southeast Asia must prioritize both diversification and localization in their supply chains. The necessity to move away from the former China-centric structure—where risks were highly concentrated—allows for the geographical dispersion of production bases to Vietnam, Indonesia, Malaysia, and Thailand, thereby effectively mitigating geopolitical risks and exposure to trade barriers. This strategy transcends merely relocating production; it fundamentally aims to actively utilize the economic potential of the respective host countries. Major Korean conglomerates, including Samsung Electronics, LG, Hyundai Motor, and SK Hynix, are accelerating the transformation of their Value Chains by increasing local assembly and production, localizing intermediate goods procurement, promoting regional social integration, and cultivating local talent (KITA, 2025). This localization strategy directly contributes not only to enhancing the productivity and developing the industrial ecosystems of the host countries but also to strengthening the global competitiveness, cost efficiency, logistics effectiveness, and local brand image of bilateral enterprises. Southeast Asia is thus evolving beyond its role as an indispensable

production hub for Korean firms, offering new business opportunities through its rapidly growing domestic market, making this a critical strategic choice for maintaining South Korea's competitive edge in the global market.

Joint Development and Strategic Procurement of Core Materials, Parts, and Raw Materials

Secondly, securing a stable supply chain for core materials, parts, and raw materials essential for advanced industries—such as semiconductors, batteries, automobiles, and digital technologies—is paramount. This requires an essential blend of joint development, technology transfer, joint fund creation, long-term purchase agreements, and local extraction and processing cooperation between South Korea and Southeast Asia. For example, nations like Indonesia, the Philippines, and Vietnam are pursuing resource value-addition strategies through export control policies targeting critical minerals (e.g., nickel, cobalt, and rare earth elements) for electric vehicle batteries. South Korea must strengthen technological and investment cooperation with the governments and private sectors of these nations to secure stable raw material supplies while simultaneously advancing the sophistication of component materials (MOFA Korea, 2025; KIEP, 2025). This cooperation serves as an effective countermeasure against the dual threat of resource nationalism and supply chain instability. Furthermore, such collaboration must be expanded into future-oriented joint initiatives, including the development of eco-friendly and sustainable materials, linking with ESG (Environmental, Social, Governance) certification, and promoting the circular economy. This evolution ensures that the two regions move beyond a simple resource exchange to become genuine partners in co-creating sustainable industrial ecosystems.

Digital Supply Chain Innovation: Smart Logistics and Integrated Information Platforms

Thirdly, cooperation is needed to enhance the efficiency of logistics and distribution systems and to achieve digital innovation in Supply Chain Management (SCM). Both Korea and Southeast Asia must strengthen collaboration across various areas, including the development of logistics hubs (ports, airports, railways, roads), the creation of Smart Factories and industrial clusters, the establishment of digital customs and logistics platforms (cloud-based, blockchain-linked), real-time supply chain information sharing, automated Smart Data analysis systems, and the development of e-business and online transaction systems. Key countries like Vietnam, Thailand, and Malaysia are already benchmarking the models of Busan and Incheon Ports to expand advanced logistics complexes. South Korea can invest in integrating IT, AI, IoT, and Big Data technologies in these nations to optimize production processes and manage transportation risks (Tongsang News, 2025). This digital transformation is a core element

that simultaneously enhances the Resilience and global competitiveness of supply chains in sensitive sectors (e.g., semiconductors, batteries, pharmaceuticals, and food). Key measures also include establishing a Korea-ASEAN joint SCM Crisis Management Center, conducting joint logistics and disaster response drills, linking to international standardization efforts, and introducing local open innovation platforms. This cooperation increases supply chain efficiency and transparency, empowering swift response capabilities during unpredictable crisis situations.

ESG Supply Chain Cooperation and Green Transition

Fourthly, establishing an eco-friendly supply chain is crucial to meeting the ESG requirements of multinational corporations and aligning with the global carbon neutrality trend. This is a strategic choice for securing future competitiveness, not merely a compliance measure. Core future-oriented cooperation areas include the development of eco-friendly materials and components, carbon emission reduction, green logistics systems, circular economy models (e.g., recycling waste and component reuse), the establishment of green factories and eco-friendly clusters, and the linking of renewable energy infrastructure with joint certification protocols. Starting from 2025, joint initiatives are expanding in Vietnam and Malaysia (green factory construction) and in Thailand and Indonesia (carbon credit trading and renewable energy production expansion) (KIEP, 2025; Tongsang News, 2025). Furthermore, inclusive economic values—such as adherence to RE100 (100% renewable energy use), standardization of eco-friendly materials, local green factory operation, linking ESG certification with local community engagement (co-prosperity model), and fostering multicultural sensitivity—are also critical. This cooperation assists bilateral enterprises in complying with international ESG norms and generating new business models for sustainable growth.

Supply Chain Resilience, Disaster, and Crisis Management Community Building

Fifthly, establishing a joint crisis management model is essential for effectively responding to supply chain risks. South Korea and Southeast Asia can strengthen supply chain resilience against diverse threats (disasters, pandemics, wars, trade barriers) by establishing a supply chain crisis management centre, developing redundant production bases and alternative sourcing networks, building joint dispersal systems, implementing real-time information sharing, and adopting automated crisis response manuals (SeoGoover, 2025). Indeed, initiatives are expanding in 2025 across Vietnam, Thailand, and Malaysia, including the establishment of supply chain

information platforms, crisis response manuals, joint disaster response drills, and local dispersed production and sourcing facilities. Policy efforts are essential to monitor core inventory items by country and by item in real-time, swiftly switch procurement systems during emergencies, and diversify local production. This requires the international sharing of inventory, distribution, and logistics information platforms, seamlessly integrated with Smart Data cloud services. Concrete examples demonstrating the strengthening of regional supply chain stability include the 2025 Korea-ASEAN Methane Reduction Cooperation Project, climate change response ODA, and joint disaster management projects (MOFA Korea, 2025; KIEP, 2025).

Policy and Institutional Cooperation: International Agreements and Human Resource Exchange

Sixthly, actively utilizing and reinforcing institutional frameworks such as the Korea-ASEAN FTA, RCEP, and Digital Partnerships is necessary. Institutional structures for trade, investment, and technological cooperation must be refined, coupled with differentiated supply chain policies and investment cooperation models tailored to individual strategic partnerships (e.g., Korea-Vietnam, Korea-Malaysia, Korea-Thailand) (MOFA Korea, 2025). Digital trade, smart logistics, AI/IoT pilot projects, technology standardization and certification, joint policy research, and local talent cultivation must be concurrently pursued. Following the entry into force of RCEP, ASEAN is seeing reinforced linkages with South Korea in IT, AI, cloud computing, logistics/distribution innovation startups, and local social ventures. By establishing joint projects and clusters with local talent, universities, and startups, this can be expanded into regionally customized supply chain models. This forms a critical foundation for promoting supply chain reliability, flexibility, technological innovation, and human resource exchange. As of 2025, the number of companies utilizing FTAs and digital agreements has reached 2,150, demonstrating a clear impact on annual investment share and local job creation (KIEP, 2025; Tongsang News, 2025).

Socio-Cultural Supply Chain Linkage: Inclusiveness and Localization

Lastly, supply chain innovation must be reinforced by diverse forms of socially inclusive cooperation, extending beyond technology and production bases to encompass human resources, social partners, local brand development, and multicultural societal participation. Fostering local youth and professional talent through vocational training, developing local labour market standards, engaging local communities, linking with social enterprise networks, enhancing multicultural sensitivity, and promoting social inclusion contribute to the qualitative advancement of supply chains and the building of local trust (KIEP, 2025; SNU Asia Center, 2025). Examples

include capacity building for ASEAN Small and Medium Enterprises (SMEs), climate finance, health and education ODA, and digital transformation development cooperation, all promoting inclusive growth and social connectivity (ASEAN-Korea Centre, 2025; MK News, 2025). This socio-cultural linkage is essential for building sustainable partnerships that transcend mere economic benefit.

Conclusively, Korea-Southeast Asia cooperation in constructing global and regional new supply chains must proceed along multilayered and mutually complementary strategic sectors. This strategic cooperation model promotes the structural development of both economies' industrial, policy, human resource, social, and digital ecosystems, playing a central role in realizing global competitiveness, regional stability, and sustainability. Supply chain collaboration will strengthen the foundation of the future-oriented Korea-Southeast Asia partnership by generating multifaceted value—including technological innovation, environmental protection, social inclusion, crisis management, institutional trust, and localization—beyond simple economic gains.

These field-specific strategic cooperation models play a central role in fostering the structural development of the industrial, policy, human resource, social, and digital ecosystems in both South Korea and Southeast Asia, thereby enhancing global competitiveness, regional stability, and the realization of sustainability. Supply chain cooperation, in this context, transcends simple economic gains. It will reinforce the foundation of the future-oriented Korea-Southeast Asia partnership through the creation of multilayered value, including technological innovation, environmental protection, social inclusion, crisis management, institutional trust, and localization.

4.2.4. Future Cooperation Trajectories and Innovation Ecosystem Construction

The future trajectory of industrial cooperation between South Korea and Southeast Asia is expanding beyond simple production and exports into a multidimensional development path. This path encompasses the construction of innovation ecosystems, digital and eco-friendly transitions, the integration of the Global Value Chain (GVC), and the expansion of human and technological exchange. This transformation is becoming increasingly prominent from 2025 onward, with both regions establishing strategic foundations for industrial and economic sophistication, sustainable growth, and securing international technological competitiveness (KIEP, 2025; SeoGoover, 2025; KOICA, 2025). Therefore, the direction of future cooperation is not merely focused on quantitative expansion but on building an inclusive ecosystem that enables both regions to prosper through qualitative growth.

Infrastructure and Organizational Approach for Innovation Ecosystem Construction

The most fundamental foundation for future Korea-Southeast Asia industrial cooperation lies in the construction and organic connectivity of innovation ecosystems. To this end, both sides are concurrently pursuing diverse infrastructure and organizational approaches: establishing joint R&D centres, creating innovation clusters and academia-industry-research networks, operating startup accelerator programs, developing talent cultivation platforms (education, vocational training, research, entrepreneurship support), and forming digital and eco-friendly industrial complexes. These endeavours play a decisive role in fostering new industrial growth and technological exchange in both regions.

Concrete success stories include the Smart City Construction Technology Cooperation Center in Vietnam, the Nusantara New Capital Smart City Project in Indonesia, and the Digital Academy in Laos. These projects showcase customized cooperation models tailored to the specific conditions and needs of each country, and they are continuously expanding (KOICA, 2025; Tongsang News, 2025; Vientiane Post, 2025). Such models transcend simple technology transfer from South Korea, instead offering tangible benefits to both parties through the process of setting and executing joint goals with local partners.

Joint Utilization of Fourth Industrial Revolution Technology and Future Industry Projects

Joint projects utilizing Fourth Industrial Revolution technologies—including Artificial Intelligence (AI), robotics, Big Data, cloud computing, and blockchain—are a decisive foundation for industrial advancement and digital transition. For instance, in the 2025 Korea-Vietnam IT cooperation framework, various cooperation models were established, such as cloud-based management and analysis, AI Big Data solutions, Smart Factories, digital healthcare, and smart agriculture platforms. This simultaneously drives technological convergence and market penetration between Korean ICT enterprises and local Southeast Asian public institutions, manufacturers, and financial institutions (LinkIn Asia, 2025).

This collaboration is gradually expanding into future industry sectors like Smart Cities, Smart Factories, Smart Logistics, Smart Farms, and Smart Transportation. The accumulated expertise from South Korea's Smart City development (e.g., Sejong and Busan) is being applied to new city development and transportation/environmental

system innovation in Vietnam, Indonesia, and the Philippines. Furthermore, linkages among academia, industry, public sector entities, and startups are active in advanced new industries, including digital energy management, smart education (EdTech), telemedicine, bio/healthcare, and FinTech (KOICA, 2025; Tongsang News, 2025; KIEP, 2025). This joint utilization of technology accelerates economic growth and provides opportunities for new value creation in both regions.

Global Value Chain Integration and Sustainable Growth

Through the construction of innovation ecosystems, South Korea and Southeast Asia participate more effectively in the Global Value Chain (GVC), concentrating on supply chain diversification, localization, digitalization, and sustainability. Cooperation is expanding in joint core technology development, co-patenting and joint brand launches, simultaneous production of intermediate and finished goods, ESG (Environmental, Social, Governance) certification, adoption of carbon-reducing materials, renewable energy utilization, data and information sharing, and dispersed production collaboration. These efforts enhance supply chain stability and enable sustainable economic activities that comply with global norms.

In particular, joint acceleration programs for startups, ventures, and small and medium enterprises (SMEs), alongside regional customized innovation projects, are emerging as critical areas of cooperation. Countries like Vietnam, Indonesia, Singapore, and Thailand are institutionalizing various incubation systems, including government-led open innovation initiatives, public-private startup campuses, and innovation platforms (ASEAN Secretariat, 2025). This collaboration transcends the traditional large-conglomerate-centric model, contributing to new growth momentum discovery among startups and SMEs.

Expansion of Human and Technological Exchange and Capacity Building

The core of future cooperation lies in the expansion of human exchange and technological networks. Both regions focus on R&D talent cultivation, post-startup support, vocational training in advanced technology fields (ICT, engineering, design, digital marketing), dispatch of training delegations, academia-industry-community scholarship programs, and the development of field-centric curricula and certification systems. Various systems—including the Korea International Cooperation Agency (KOICA), the Korean Ministry of Land, Infrastructure and

Transport, university and public research institution-linked local academies, and training for local teachers and technicians—facilitate practical talent development and knowledge sharing (KOICA, 2025; Vientiane Post, 2025).

Cultivating local professional human resources concurrently supports youth and female talent opportunity expansion, job creation, social inclusion enhancement, multicultural competence, and local policy and technological innovation. Recent examples, such as the ODA for talent relocation following administrative restructuring in Vietnam and the adoption of a technician qualification system in the Philippines, align with the modernization of administrative and economic institutions in each country.

New Cooperation Trajectories: Digital/Green Transition, ODA/Knowledge Sharing, and Customized Linkages

The future of industrial cooperation encapsulates the broad objective of simultaneously realizing digital transition and eco-friendly/green growth. Policy frameworks—such as the ASEAN Community Vision 2045, the Korea-ASEAN Future Community ODA Strategy, and South Korea's ICT, Smart City, and Green Energy projects—centre on climate, digitalization, and inclusiveness as core values. South Korea executes diverse and concrete measures, including the Korea-ASEAN Digital Innovation Flagship (KADIF), customized joint research centres, Public-Private Partnership (PPP) projects, and local social contribution/corporate networks (Tongsang News, 2025; KOICA, 2025; KIEP, 2025).

Ultimately, future Korea-Southeast Asia cooperation and innovation ecosystem construction will be elevated to a composite value-creation model. This includes platforms for joint growth among academia, government, industry, and public institutions; data-driven decentralized clusters; ESG certification systems; youth- and female-centric talent networks; diffusion of new technologies like AI/IoT; ODA/Knowledge Sharing Projects; and the linkage of social economy with inclusive policies. This trajectory will concurrently drive the economic, social, technological, environmental, and cultural development of both regions, positioning it as a representative example of an inclusive and sustainable global innovation and growth equation.

4.3. Customized Cooperation Strategies and Innovation Ecosystem Linkage

Industrial and innovation cooperation between South Korea and Southeast Asian nations is not based on a single model. Instead, it is evolving into a specific and practical structure of "advanced super-cooperation," tailored to the unique industrial structure, technological capacity, development needs, security environment, and social vision of each country. This customized cooperation strategy is expected to drive sustainable growth, enhance global competitiveness, and promote inclusive prosperity over the next decade through the establishment of practical joint collaboration platforms, such as the Korea-ASEAN Joint Innovation Fund, nation-specific innovation hubs, joint educational campuses, multilateral security networks, and global supply chain risk centres (ASEAN Secretariat, 2025; KIEP, 2025).

4.3.1. Vietnam: Advanced Industry, Defense Cooperation, and Innovation Alliance

Vietnam is the Southeast Asian nation pursuing the most rapid industrial restructuring and digital transformation, firmly establishing itself as a global strategic hub for South Korean corporations. As of 2025, Vietnam is South Korea's third-largest trading partner and the largest investment destination within ASEAN, built upon a robust Korea-Vietnam production network over the past decade. Major Korean conglomerates—including Samsung, LG, Hyundai Motor, and SK—produce advanced products like smartphones, TVs, home appliances, automobiles, electronic components, and digital devices in Vietnam, with local factories serving as pivotal hubs in the global supply chain (KIEP, 2025; SeoGoover, 2025; KITA, 2025).

Joint R&D is actively pursued in Smart Factory, automation, flexible production, AI-based quality control, and IoT (sensor-data network establishment). R&D focus areas from 2021 to 2025 have expanded to include semiconductor post-processing, secondary batteries, medical devices, water treatment facilities, eco-friendly materials, Smart Farms, and robotics. Vietnam successfully contributes to global value chain integration and industrial advancement by blending South Korea's advanced manufacturing technology with its local human resources, natural assets, and market capabilities. As of 2025, the number of Korean corporate production facilities in Vietnam exceeds 10,000, accelerating local job creation, technology transfer, and localization strategies (SeoGoover, 2025; MOFA Korea, 2025).

The linkage between Vietnam's startup and IT industry ecosystem and Korean Venture Capital (VC) investment, along with the activation of incubation programs, is accelerating. Collaboration in digital content and platforms (gaming, cloud, FinTech) is also intensifying. As of 2025, Korean VC investment in Vietnam surpassed \$800 million, facilitating joint acceleration, technology transfer, and global market expansion support for local startups. The Vietnamese government utilizes its "Digital Economy Masterplan 2030" to cultivate Fourth Industrial Revolution technologies (AI, Big Data, Cloud, IoT) as national strategic industries, with linkage to South Korea's ICT, AI, and Smart Manufacturing expertise serving as a core driver for policy realization (ASEAN Secretariat, 2025; Tongsang News, 2025).

In terms of Defense and Security Technology Cooperation, ties between Vietnam and South Korea in military technology, maritime patrol, and naval defense systems are significantly reinforced, driven by the South China Sea dispute, territorial strengthening, and the U.S.-China competitive structure. Cooperation in advanced public security technologies—including South Korea's maritime patrol vessels, reconnaissance aircraft, surveillance radar, integrated communication systems, and unmanned surveillance capabilities—is increasing, alongside regular joint maritime exercises, cyber threat response, disaster relief, and counter-terrorism cooperation. The 2025 Korea-Vietnam Defense Cooperation Forum discussed practical cooperation models across 10 sectors, including maritime patrol, naval security, cyber security, disaster response, and joint military technology development (MOFA Korea, 2025; KIMA, 2025).

Energy, Battery, and Eco-friendly Cooperation is also deepening. Vietnam introduces industrial standards linked to renewable energy (wind, solar), green hydrogen, batteries (EVs, ESS), nuclear energy/eco-friendly construction, and green building certification (PASS2025) through large-scale consortiums with Korean corporations and public enterprises. Cooperation with the state-owned power utility (EVN) on energy efficiency and the establishment of EV component and battery assembly facilities is also active. The scope of collaboration is expanding to include Smart Grids, Energy Management Systems (EMS), and carbon emission trading utilizing IT/AI/platform technology. As of 2025, South Korean-linked renewable energy investment in Vietnam surpassed \$1.2 billion, contributing to the advancement of local industries and sustainable growth through green energy, Smart Grid, and carbon neutrality projects (KIEP, 2025; SeoGoover, 2025).

Cooperation is also expanding in the Finance and FinTech sectors. Initiatives like Shinhan Bank's 'Global X-Change 2025,' the entry of virtual asset exchanges Bithumb and Dunamu, Modu Tour and Bitoss's stablecoin payment MOU, and KuCoin's digital asset platform construction provide opportunities for Korean FinTech firms to enter the Southeast Asian market in earnest (SeoGoover, 2025). This holds significant implications for local financial innovation, the digital asset ecosystem, and expanded global exchange.

In Trade and Supply Chain, notable developments include STX's entry into the direct import and distribution of fishery products, the five-year successful implementation of the EU-Vietnam Free Trade Agreement (EVFTA), and Vietnam's imposition of anti-dumping duties. STX secured a global supply network through its new distribution model, and the EVFTA strengthens bilateral trade and economic relations. Vietnam has established itself as a major EU partner within ASEAN, with bilateral trade reaching \$298 billion. The EVFTA serves as a strategic mechanism to reinforce Vietnam's status within the global supply chain, with numerous Vietnamese companies directly benefiting from the agreement and creating diverse opportunities through trade liberalization (KITA, 2025; Tongsang News, 2025).

In the Bio-Pharmaceutical sector, the technology export performance of domestic new drug platform companies is notable. The scale of technology exports achieved by Korean bio firms this year, amounting to KRW 10 trillion, exemplifies the global competitiveness of the Korean pharmaceutical industry, suggesting sustained future cooperation. These diverse cooperative activities significantly enhance mutual benefits between South Korea and Vietnam and reinforce the foundation for future joint development (SeoGoover, 2025).

Finally, Human and Cultural Exchange and Social Linkages are also being strengthened. As of 2024, human exchange between the two countries exceeded 5 million people. Over 340,000 Vietnamese citizens reside in South Korea, and 190,000 Korean citizens reside in Vietnam. The number of Korea-Vietnam multicultural families approaches 100,000, prompting both governments to explore concrete cooperation measures to ensure the stable residence and welfare enhancement of expatriates and multicultural families (MOFA Korea, 2025).

Conclusively, the multilayered cooperation between Vietnam and South Korea—spanning advanced industry, defence, energy, finance, bio, and culture—drives future-oriented development across industrial advancement, innovation ecosystem building, global supply chain integration, sustainable growth, and social inclusion, thereby further solidifying the strategic partnership between the two nations.

4.3.2. Indonesia: Deep Supply Chain Integration and Smart Economy Cooperation

Indonesia, leveraging its complex strengths—the largest population in Southeast Asia (280 million), abundant strategic resources (nickel, tin, natural gas, palm oil), a rapidly growing domestic market, and its pivotal geopolitical location—is emerging as a central hub for the global supply chain and an emerging digital nexus as of 2025. Korea-Indonesia economic cooperation has deepened multilayered linkages across industry, technology, resources, human resources, and innovation ecosystems, evidenced by a 140-fold increase in trade over the last 50 years and an over 20% expansion in investment over the past decade (KIEP, 2025; KITA, 2025).

Focus on Supply Chain and Mineral Resource Value Chains

South Korea is deepening the construction of resource-manufacturing linked value chains with Indonesia, particularly in batteries (nickel and manganese materials), Electric Vehicle (EV) assembly, petrochemicals, refining, and new energy. Representative examples include the Hyundai Motor-LG EV battery factory in Indonesia, POSCO's nickel and steel joint ventures, SK Energy's renewable energy projects, and the construction of ICT infrastructure. In 2021, the LG-Hyundai Motor consortium broke ground on an EV battery plant in Indonesia, realizing value chain integration from local nickel smelting and battery material production to EV assembly. The Indonesian government is aggressively pursuing a nationalization and self-reliance strategy for manufacturing under its "Making Indonesia 4.0" strategy, aiming to achieve a 35% import substitution rate in the manufacturing sector by 2025. Indeed, Indonesia's Manufacturing Value Added (MVA) reached \$281 billion in 2021, the highest in ASEAN (KIEP, 2025; KITA, 2025).

Indonesia promotes technology transfer and the adoption of Industry 4.0 automation for domestic manufacturing firms, while fostering the local supply chain by imposing local component procurement ratios on foreign companies. These efforts mitigate external shocks and enhance global supply chain resilience alongside manufacturing revival. Recently, Indonesia has also employed export controls on strategic minerals (nickel,

bauxite, copper) alongside policies for domestic value addition, successfully inducing foreign companies' local investment and technological cooperation. As of 2025, Indonesia's nickel policy has resulted in a 30-fold increase in related exports, with a sharp rise in local investment from Korean firms, including LG, Hyundai Motor, and POSCO (KIEP, 2025; East Asia Forum, 2023).

Digital Economy and Smart City Innovation

Indonesia intensifies cooperation with South Korea in ICT, FinTech, platform services, unmanned logistics, Smart Cities (including participation in the construction of the new administrative capital, Nusantara), Transportation-as-a-Service (TaaS), Digital Healthcare, and data-driven Smart Farms. Innovation is expanding across numerous fronts, including AI, IoT, Cloud, and data centre establishment, support for startups and IT growth enterprises, digital financial inclusion, and MOUs for youth entrepreneurship education. In the 2025 Nusantara new administrative capital project, South Korea's expertise in Smart City technology, traffic/environment/energy management systems, and digital infrastructure construction is being applied locally. The Indonesian government is strategically cultivating new industries—ICT, AI, FinTech, Smart Manufacturing, and Digital Healthcare—through its "Digital Economy Masterplan 2030," with South Korean technology and experience serving as core drivers for policy realization (KIEP, 2025; KOICA, 2025).

Education, Human Resource Exchange, Climate, Environment, and Urban Innovation

Exchanges between Korea and Indonesia are expanding, including R&D collaboration between universities, talent cultivation (IT, engineering, design, green energy), vocational training, joint campus operations, and academic-industrial cooperation centres. Regular forums and UN projects related to climate change response (forest restoration, renewable energy) and urban eco-friendly projects (environmental sensors, water resources, low-carbon regenerative cities) are also being added. The Indonesian government simultaneously pursues policies to foster low-carbon transition industries—including the announcement of its revised Nationally Determined Contribution (NDC) roadmap, presentation of a carbon neutrality blueprint, expansion of renewable energy share, mandates for Biofuel (B30), and the EV/battery industry. Following its official accession to the Just Energy Transition Partnership (JETP) at the 2022 Bali G20 Summit, Indonesia committed to mobilizing \$20 billion in investment over the subsequent 3–5 years (KIEP, 2025; KOICA, 2025).

Regional Cooperation and Supply Chain Resilience Enhancement

Indonesia exercises leadership as an ASEAN Chair and a regional leader, prioritizing the establishment of mutual assistance systems for times of crisis. Immediately following the pandemic in 2020, Indonesia proposed mutual medical supply assistance and food security cooperation at the ASEAN+3 Special Summit, which led to institutionalization via the "Declaration on Strengthening ASEAN Connectivity in Supply Chains." ASEAN nations committed to facilitating the smooth customs clearance of essential goods and logistics cooperation, agreeing to openly operate logistics infrastructure (ports and airports) during crises. Indonesia is currently discussing the establishment of mutually complementary production systems for electronic components and automotive parts with Thailand and the Philippines. A regional value chain division of labour is emerging, wherein Malaysia supplies semiconductor chips to Indonesian auto factories, and finished vehicles are distributed across the region (KIEP, 2025; ASEAN Secretariat, 2025).

Indonesia enhances its supply chain resilience through a dual approach: raising industrial self-sufficiency domestically and strengthening regional cooperation externally. South Korea and Indonesia have signed numerous MOUs in areas such as core mineral supply chains, strategic advanced industry alliances, and new capital city construction collaboration, deepening multilayered linkages across industry, technology, resources, human resources, and innovation ecosystems. Concrete achievements and future-oriented development are expected in Smart Manufacturing, digital finance, eco-friendly energy, mineral resource supply chain innovation, talent cultivation, and climate/environmental cooperation.

4.3.3. Philippines: Deepening Security Alliance and Composite Economic Innovation

The Philippines has traditionally bolstered its security through its military alliance with the United States but has recently deepened its multilayered strategic cooperation with South Korea. As of 2025, the Philippines has emerged as the fastest and largest importer of South Korean weaponry in Southeast Asia, expanding the scope and depth of cooperation across defense, security, economy, technology, education, and culture (KIEP, 2025; Korea Biz Review, 2025).

Advanced Security and Military Cooperation

The Philippines expands strategic military cooperation with the South Korean Navy, encompassing regular maritime patrols, defence technology transfer, border control, intelligence sharing, and officer/cadet exchanges. In June 2025, the Philippine Department of National Defense and Korea Aerospace Industries (KAI) signed a contract for the additional export of 12 FA-50 light combat aircraft (valued at \$700 million). This continues a trend of over \$3 billion in Korean defense product imports over the last decade. The FA-50 serves as a primary fighter for the Philippine Air Force, and discussions on adopting advanced weapon systems—such as KF-21 fighters, Cheongung-II air defense systems, Chunmo multiple rocket launchers, and submarines—are actively underway. The Philippines shows keen interest in a large-scale defense cooperation package with South Korea, including the acquisition of Korean small submarines (Jangbogo-class) and associated training packages, even involving grant aid (President Global Window, 2025; Daum News, 2025).

This large-scale military cooperation transcends mere arms transactions, significantly impacting the modernization of the Philippine Armed Forces, regional security stabilization, the deepening of the Korea-Philippines strategic partnership, and shifts in the Southeast Asian security architecture. The Philippines reinforces military technology, joint exercises, cyber defense, disaster response, and counter-terrorism cooperation with South Korea, alongside multilateral security cooperation with the U.S., Japan, and Australia. As of 2025, the Philippines is South Korea's 4th largest defense export destination, demonstrating a clear tendency to procure all weapon systems through G2G (Government-to-Government) contracts (KIEP, 2025; Korea Biz Review, 2025).

Industrial, ICT, and Healthcare Innovation

South Korea deepens joint ventures, local production, technology transfer, and vocational training with the Philippines across diverse industries: automotive, electronics, food, agriculture, and tourism. As of 2025, over 1,500 Korean-affiliated companies operate in the Philippines, accelerating local job creation, technology transfer, and localization strategies. Innovation-centric support is expanding, including IT/digital education, startup ecosystem enhancement via accelerators, 'Smart Education Campuses,' and the establishment of healthcare/bio clusters. The Philippine government utilizes its "Digital Economy Roadmap 2030" to cultivate new industries—ICT, FinTech, Smart Manufacturing, and Digital Healthcare—as national strategies, with Korean technology and experience serving as core drivers for policy realization (KIEP, 2025; KCCP, 2025).

Crucially, the Philippines reopened new mineral exploration in 2025, raising the potential for cooperation with South Korea in core minerals like nickel, cobalt, gold, and copper. South Korea is realizing tangible achievements through joint mineral resource development, nuclear and eco-friendly energy, Smart Farms/food processing, and bio-healthcare collaboration with the Philippines. Korean investment in renewable energy in the Philippines exceeded \$500 million in 2025, contributing to local industrial advancement and sustainable growth through green energy, Smart Grid, and carbon neutrality projects (KIEP, 2025; KCCP, 2025).

Education, Tourism, and Cultural Networks

Multifaceted human exchange is strategically expanding, including university/vocational education MOUs, distance education/scholarship programs, MICE/ecotourism cooperation, cultural exchanges (IP, K-Content, performance arts), and international youth/women exchanges. As of 2025, human exchange between the two countries surpassed 2 million people. Over 120,000 Filipino citizens reside in South Korea, and 80,000 Korean citizens reside in the Philippines. The number of Korea-Philippines multicultural families reached 30,000, prompting both governments to explore specific cooperation measures for the stable residence and welfare enhancement of expatriates and multicultural families (KIEP, 2025; KCCP, 2025). In tourism and culture, diverse programs are operated—leveraging Hallyu (K-Content, performance, fashion, food), local traditions, ecotourism, MICE cooperation, youth/women exchange, and sports/arts exchanges. The two nations promote large-scale cultural events, art festivals, youth camps, and Korea-Philippines Friendship Day to celebrate the 2025 Year of Cultural Exchange (KIEP, 2025; KCCP, 2025).

The Philippines is deepening its strategic partnership with South Korea through multilayered cooperation across security, military, industry, technology, education, and culture. Tangible achievements and future-oriented development are expected in defense industry, advanced technology, digital economy, Smart Manufacturing, healthcare, energy, mineral resources, education, and culture. The customized Korea-Philippines cooperation strategy is driving real achievements and future-oriented development across multilayered fields—industry, technology, society, security, and culture—establishing itself as a core engine realizing global competitiveness, sustainable growth, and inclusive prosperity.

4.3.4. Malaysia and Thailand: In-Depth Expansion of Pragmatic Diplomacy, Industrial, and Carbon Neutrality Partnerships

Malaysia and Thailand are archetypal nations within Southeast Asia that utilize balanced diplomacy and engage in complex cooperation with South Korea across industrial diversification, new industries, and carbon neutrality. Both countries are emerging as centres for advanced manufacturing, smart infrastructure, green growth, and trade/investment/technological innovation within ASEAN. Cooperation with South Korea is expanding beyond mere trade into a multilayered partnership encompassing industry, technology, environment, security, and culture (KIEP, 2025; Tongsang News, 2025).

Trade and Industrial Advancement Partnerships

Malaysia and Thailand enter into agreements with South Korea—covering Foreign Direct Investment (FDI), joint production, R&D Memorandums of Understanding (MOUs), and technology transfer agreements—across semiconductors, electronics, automotive, chemical, food, tourism, bio, and medical device sectors. As of 2025, innovation hubs have been newly established, such as the Korea-Malaysia Innovation Hub and the Korea-Thailand Future Technology Campus and Smart Industrial Complexes, fostering active local production, research, talent cultivation, and technology exchange. Malaysia reinforces its position as a global semiconductor packaging and testing hub, while Thailand establishes itself as a production and export centre for Electric Vehicles (EVs), Smart Electronics, medical devices, and bio-industries. Both nations are realizing tangible results from joint R&D, localization strategies, linking to ESG (Environmental, Social, Governance) certification, and implementing green factory and renewable energy projects with South Korea (Tongsang News, 2025; KIEP, 2025).

Significantly, Korea-Malaysia and Korea-Thailand FTA negotiations in 2025 are progressing to encompass new trade issues, including digital trade, Artificial Intelligence (AI), data movement, environment, and labour. This move complements the limitations of the existing Korea-ASEAN FTA, establishing customized cooperation models tailored to each country's regulatory environment and industrial structure, thereby effectively addressing global supply chain restructuring, digital transition, and the proliferation of protectionism. Both Malaysia and Thailand utilize these individual FTAs to elevate their cooperation level with South Korea, simultaneously creating a foundation that can be expanded into broader ASEAN commitments in the future (Tongsang News, 2025).

Joint Military Exercises, Maritime Security, and Disaster Response

Malaysia and Thailand collaborate with South Korea in regular maritime patrols, intelligence sharing, joint defense industrial training, and cyber exercises. They integrate next-generation security technologies, including systems for countering piracy and illegal fishing, disaster response, and border surveillance, as well as Smart Command and Control (UAV TestBed), and AI-based perimeter security solutions. As of 2025, the Malaysian and South Korean navies regularly conduct joint maritime patrols and security exercises in the South China Sea and the Malacca Strait. Cooperation with Thailand is expanding across border surveillance, disaster response, cyber defence, and information sharing. Defence technology transfer, unmanned surveillance, integrated communication systems, and cooperation in disaster relief and counter-terrorism are also substantially reinforced (KIEP, 2025; ASEAN Secretariat, 2025).

Carbon Neutrality and Sustainable Growth Ecosystems

Cooperation focused on climate response and carbon neutrality is rapidly expanding, centred on eco-friendly manufacturing, ESG initiatives, green materials, hydrogen fuel cells, Smart Energy, renewable energy clusters, and the establishment of low-carbon industrial ecosystems. Malaysia, as the ASEAN Chair in 2025, proactively raises the issues of carbon neutrality, green growth, and sustainability as key regional agenda items. Thailand utilizes its "Thailand 4.0" strategy and the Eastern Economic Corridor (EEC) development to intensively cultivate future industries—including Smart Manufacturing, eco-friendly industries, high-value-added services, bio/medical, robotics, and EVs. The Thai government targets transitioning 50% of new vehicle production to EVs by 2030 and achieving a cumulative production of 18 million units by 2035, positioning the country as a central production and export hub for EVs, smart electronics, and bio-industries (KPMG, 2023; ASEAN Briefing, 2025).

Both countries adopt models for reducing environmental burden through collaboration with South Korea: green factory construction, eco-friendly production/material sourcing, carbon emission reduction/trading, and energy/waste circularity. As of 2025, South Korean-affiliated renewable energy investment in Malaysia and Thailand has surpassed \$1 billion, contributing to local industrial advancement and sustainable growth through green energy, Smart Grid, and carbon neutrality projects. ESG certification, RE100 (100% renewable energy use), local green factory operation, and community-linked cooperation are also being expanded (KIEP, 2025; Tongsang News, 2025).

Malaysia and Thailand engage in complex cooperation with South Korea across balanced diplomacy, industrial diversification, and new industry/carbon neutrality sectors, constructing a multilayered partnership spanning trade, investment, technology, security, and environment. Concrete achievements and future-oriented development are anticipated in semiconductors, smart electronics, EVs, bio/medical devices, eco-friendly manufacturing, renewable energy, Smart Industrial Zones, ESG certification, joint military exercises, maritime security, and disaster response. The customized Korea-Malaysia and Korea-Thailand cooperation strategies are driving practical results and future-oriented development across multilayered fields—industry, technology, society, security, and environment—establishing themselves as core drivers for realizing global competitiveness, sustainable growth, and inclusive prosperity.

4.3.5. Cambodia, Laos, and Myanmar: Development Cooperation, Humanitarian Aid, and Peace Mediation

Cambodia, Laos, and Myanmar are Southeast Asian nations grappling with complex challenges, including insufficient infrastructure, unbalanced growth, and internal conflicts/civil wars. Development and humanitarian cooperation, along with support for social innovation, are essential for these countries. Classified as Least Developed Countries (LDCs), they require large-scale development financing and international cooperation to achieve the Sustainable Development Goals (SDGs). South Korea pursues a multilayered strategy in its cooperation with these nations, focusing on ODA (Official Development Assistance) for infrastructure, education, and healthcare, support for conflict management and peacebuilding, humanitarian aid, and fostering innovation ecosystems (KIEP, 2025; IFANS, 2025; MOFA Korea, 2025).

Infrastructure, Education, and Healthcare ODA

South Korea expands its ODA, supporting Social Overhead Capital (SOC) infrastructure development—including roads, ports, power, water resources, and rural development—and establishing ICT, medical, and vocational education centres. ODA also prioritizes Human Resource Development (HRD), linking basic and higher education. As of 2025, Cambodia, Laos, and Myanmar are designated as South Korea's ODA priority cooperation countries, with over \$200 million annually allocated to infrastructure projects, such as roads, bridges, ports, power grids, and water resource management. Cambodia, through its 'Rectangular Strategy,' emphasizes growth, employment, equity, and efficiency, concentrating on water and irrigation management, rural development, and the expansion of education and healthcare infrastructure. Laos, as the 2024 ASEAN Chair, is planning cooperation projects with

South Korea in water resources, energy, education, and regional development. Myanmar receives South Korean ODA and development cooperation support in public administration (governance), transportation, education, regional development, and energy (KIEP, 2025; IFANS, 2025).

Conflict Management, Peacebuilding, and Humanitarian Aid

These countries are seeing intensified support for humanitarian and peace capabilities, including refugee assistance in conflict/civil war areas, health, medical, and food aid, UN/ASEAN-linked peace mediation and conflict negotiation training, capacity building for local human rights organizations, and the establishment of disaster response training centres. Myanmar faces a critical need for international cooperation due to the military coup and civil war since 2021. South Korea expands humanitarian aid—linked with the UN and ASEAN—covering refugee, food, and medical assistance, human rights capacity building, peace mediation training, and disaster response centre establishment. While Cambodia and Laos face less direct conflict impact, support for socially vulnerable populations—addressing poverty, education, health, and rural development—is crucial. South Korea strengthens humanitarian assistance in these countries by collaborating with local NGOs and international organizations (MOFA Korea, 2025; IFANS, 2025).

Cultivating Basic Innovation Ecosystems

Elementary hubs for fostering a 'Basic Innovation Ecosystem' are being established and gradually expanded, focusing on startup incubation, youth entrepreneurship funds, social enterprise cultivation, ICT basic education, farmer training, and green energy workshops. As of 2025, Cambodia, Laos, and Myanmar are targets for South Korea's innovation ecosystem support, with diverse innovation hubs being established, including ICT basic education centres, youth entrepreneurship funds, social enterprise incubators, farmer training programs, and green energy workshops. Cambodia operates ICT and entrepreneurship training centres, youth entrepreneurship funds, and social enterprise incubators in major cities like Phnom Penh and Siem Reap. Laos expands green energy workshops, farmer training, and ICT basic education centres in Vientiane and Luang Prabang. Myanmar establishes rudimentary centres for social enterprise cultivation, ICT education, farmer training, and youth entrepreneurship support in Yangon and Mandalay (KIEP, 2025; MOFA Korea, 2025).

Regional Cooperation and Supply Chain Resilience Enhancement

South Korea adopts a Triangular Cooperation model with Mekong region nations, promoting regional development and supply chain resilience initiatives linked with partners like Thailand, Vietnam, and Laos. For instance, joint triangular cooperation projects—involving Korea, Thailand, and Laos, or Korea, Vietnam, and Laos—are being planned and implemented across Mekong River water resource management, rural development, energy/environmental cooperation, and regional infrastructure development. This regional cooperation contributes to mitigating development disparities, enhancing connectivity, and achieving the Sustainable Development Goals (SDGs), establishing itself as a core axis of South Korea's ODA and development cooperation strategy (IFANS, 2025; KIEP, 2025).

Cambodia, Laos, and Myanmar contribute to mitigating development disparities, achieving sustainable growth, promoting social inclusion, and realizing peace/stability through multilayered cooperation in ODA (infrastructure, education, health), conflict management/ peacebuilding/ humanitarian aid, innovation ecosystem cultivation, and regional cooperation/ supply chain resilience enhancement. Moving forward, South Korea is expected to drive practical results and future-oriented development across diverse sectors—including infrastructure, education, health, rural development, ICT, energy, environment, and social innovation—through customized development cooperation strategies with these nations.

4.4. Socio-Cultural Exchange and Multicultural Community Building

Socio-cultural exchange and multicultural community building are essential for the sustainability and inclusiveness of the Korea-Southeast Asia relationship, and the core drivers for future growth momentum. Multilayered cooperation—encompassing human exchange, educational innovation, collaboration on migrant/multicultural policies, co-prosperity in tourism/cultural industries, and cultural/citizen diplomacy—promotes mutual understanding, trust, creativity, and economic prosperity in both regions. South Korea and Southeast Asia can lead the global multicultural era through an inclusive and innovative socio-cultural cooperation model.

4.4.1. Expansion of Human Exchange and Educational Cooperation

Socio-cultural cooperation and educational innovation are foundational assets for the Korea-Southeast Asia relationship, contributing decisively to mutual understanding, trust, innovation capacity, and the co-prosperity of creative industries in both regions. As of 2025, human exchange between South Korea and ASEAN surpasses 8 million people annually. This trend sees a simultaneous expansion of students, researchers, and professional workers from Southeast Asia residing in Korea, alongside an increased presence of Korean youth and professionals moving into Southeast Asia (KIEP, 2025; KCUE, 2025).

Scholarship Programs and University/Research Network Development

The South Korean government (through scholarships like the Global Talent Scholarship, KOICA, GKS), universities, and corporations operate diverse programs, including scholarships for attracting top Southeast Asian talents, exchange student programs, dual degrees, joint research, short-term training, and online education. The 'Higher Education for ASEAN Talents (HEAT)' scholarship program, which supports ASEAN master's degree-holding faculty to earn PhDs at Korean universities, has become a core initiative for Korea-ASEAN higher education cooperation and human resource development (KCUE, 2025). Southeast Asian students gain academic and research experience in advanced fields—engineering, IT, bio, business, and design—at Korean universities and research institutes, subsequently becoming key talents in their local innovation ecosystems upon return. Conversely, Korean students and researchers enhance their global competence through field placements, language/cultural training, and regional studies at local Southeast Asian universities, firms, and NGOs. Recently, innovative educational models, such as joint Korea-Southeast Asia R&D centres, international joint degrees, global academia-industry collaboration campuses, and collaborative Online Open Courses (MOOCs), are proliferating.

Vocational Training, Lifelong Education, and Academia-Industry Linkage

Customized vocational training, field practice, certification courses, and online vocational education platforms—linking South Korea's vocational education expertise (Polytechnic colleges, Meister High Schools, academia-industry cooperation) with the demand for youth labour in Southeast Asia—are expanding. This contributes to alleviating youth unemployment in Southeast Asia, industrial advancement, and securing local human resources for Korean companies. Recently, vocational training in Fourth Industrial Revolution fields (AI, Big Data, robotics,

smart manufacturing), digital competency enhancement for women and vulnerable groups, and entrepreneurial education for social enterprises are also active. The adoption of Korean vocational education models is expanding across Vietnam, Indonesia, and Thailand, through the establishment of local Polytechnics, academia-industry cooperation centres, and vocational training institutes (KIEP, 2025; KIEP, 2013).

Cultural Arts and Creative Industry Exchange and Joint Projects

Diverse cultural arts cooperation projects are underway, including Korea-Southeast Asia joint orchestras, art exhibitions, film festivals, literature/theatre workshops, traditional crafts exchange, and digital arts/gaming co-production. Recently, creative industry collaboration is also expanding, involving the fusion of K-Content with Southeast Asian traditional culture, joint creation and Joint IP (Intellectual Property) development, exchange among global creators, and Metaverse/VR-based cultural experiences. Events like the 2025 Korea-Thailand Cultural Joint Committee and the Korea-Vietnam Year of Cultural Exchange promote diverse exchange programs, including large-scale cultural events, arts festivals, youth camps, and Korea-Southeast Asia Friendship Day celebrations (MOFA Korea, 2025; KIEP, 2025).

Educational Innovation and Digital Cooperation

Future technology education in fields like AI, Big Data, and coding, along with the expansion of online education platforms, collaboration with EdTech startups, and joint development of digital educational materials, is expanding. This contributes to educational innovation and bridging the digital divide, accelerating future talent cultivation in both regions. Joint Korea-Southeast Asia AI education curricula, digital citizenship education, global youth leadership camps, and online mentoring programs are also active. EdTech companies from South Korea collaborate with local educational institutions in Vietnam, Indonesia, and the Philippines to jointly develop and operate AI, coding, and digital citizenship education (KIEP, 2025; KCUE, 2025).

Social Inclusion and Global Citizenship

Human exchange and educational cooperation contribute to enhancing multicultural sensitivity, respecting diversity, cultivating global citizenship, and strengthening social inclusion. Youth exchange programs, global volunteer activities, cooperation with international NGOs, and multicultural leadership training enhance mutual

understanding and the capacity for peaceful coexistence among future generations. The 2025 Korea-ASEAN Youth Forum, Global Leadership Camps, and multicultural family support projects make tangible contributions to fostering social inclusion and global citizenship.

Conclusively, Korea-Southeast Asia socio-cultural exchange and educational cooperation play a pivotal role in strengthening the innovation ecosystem, industrial advancement, social inclusion, and global competitiveness of both regions. Sustained future-oriented development is anticipated across multilayered areas, including scholarship programs, university/research networks, vocational training/academia-industry linkage, cultural arts/creative industries, educational innovation/digital cooperation, and social inclusion/global citizenship.

4.4.2. Cooperation on Migrants and Multicultural Society Policies

The population of Southeast Asian migrants (workers, marriage immigrants, students) in South Korea exceeded 600,000 in 2024. Total foreign residents recorded 2.7 million as of January 2025, accounting for approximately 5.2% of the total population. Migrants from Southeast Asia (Vietnam, Thailand, Cambodia, the Philippines, etc.) number around 800,000, integrating into Korean society in various forms: 180,000 marriage immigrants, 260,000 international students, and various workers/naturalized citizens (KOSTAT, 2025; MOJ, 2025; YNA, 2025).

While these individuals contribute significantly to the Korean economy and society, they also accelerate the transition toward a multicultural society. Migrant and multicultural families are spreading nationwide. As of 2025, multicultural households number 430,000, with 1.15 million household members, and 6.5% of all newborns are from multicultural families. Migrants' labour and social roles are becoming increasingly vital in response to regional decline and population decrease (Mystory, 2025; Joongdo, 2025).

Multicultural Policy and Social Integration

South Korea and Southeast Asia must expand policy exchange and joint research in supporting multicultural families, language/cultural education, operating multicultural schools/centres, local community integration programs, and cultivating multicultural leaders. Recent initiatives include enhanced support for dual language/culture education for children of multicultural families, mentoring programs for multicultural youth, local

multicultural festivals, multicultural leadership camps, and the use of multicultural media (broadcasting/YouTube). Nationwide expansion of support centres, schools, and integration programs ensures educational rights, prevents social marginalization, combats discrimination, and strengthens social inclusiveness (KOSTAT, 2025; MOJ, 2025).

Labour Rights Protection and Family/Women Support

Cooperation models involving governments, NGOs, and corporations from both countries are necessary for protecting migrant workers' rights, improving working conditions, providing legal/medical/counseling services, safeguarding women's and children's human rights, and supporting family reunification. Recent expansion includes Korean language/labour law education for migrant workers, industrial safety/vocational training, entrepreneurial support for migrant women, multicultural family counseling, and medical/health insurance support for migrants and their children (MOJ, 2025; KOSTAT, 2025).

Joint Policy Research and International Cooperation

Joint research and international cooperation between Korea and Southeast Asia are expanding in multicultural society policy, migrant statistics/status surveys, development of social integration indicators, international forums/seminars, and policy discourse exchange. Discussions include establishing a Korea-ASEAN Multicultural Policy Network, international migrant forums, a Multicultural Society Leadership Academy, and a Global Multicultural Policy Research Institute. Diverse international cooperation projects—such as joint research, international forums, policy seminars, development of social integration indicators, and multicultural leadership education—are underway as of 2025 (KIEP, 2025; MOFA Korea, 2025).

Reverse Migration and Global Networks

The role of Southeast Asian migrants who have gained experience in Korea, returning home to contribute to local industry, education, and entrepreneurship, is a critical asset for future cooperation, alongside the Korea-Southeast Asia Global Alumni Network and reverse migrant support programs. As of 2025, returned migrants from Southeast Asia are emerging as core talents in local industry, education, and entrepreneurship. Cooperation models are

diffusing across various fields, including the Global Alumni Network, reverse migrant support programs, and local social enterprise support (MOFA Korea, 2025; KIEP, 2025).

Cooperation on migrant and multicultural society policies plays a pivotal role in responding to demographic change, the regional decline crisis, enhancing social inclusion, and strengthening global competitiveness. Substantial achievements and future-oriented development are anticipated across multilayered areas: multicultural policy, social integration, labour rights protection, family/women support, joint policy research/international cooperation, and the reverse migration/global network activation.

4.4.3. Promotion of Tourism and Cultural Exchange

Tourism and cultural exchange serve as core drivers for mutual understanding and affinity, economic co-prosperity, and the development of creative industries between South Korea and Southeast Asia. Recently, this exchange has evolved beyond simple tourism into models intertwined with experiential, educational, creative, and industrial cooperation. As of 2025, Korea-ASEAN tourist exchanges exceed 6 million people annually. Diverse cooperation models are being actively pursued, including the expansion of direct flight routes with key nations (Vietnam, Thailand, the Philippines), joint tourism product development, Smart Tourism (AR/VR, Big Data-based customized travel), Eco-tourism, medical tourism, and cultural/traditional themes centred on Hallyu (ASEAN-Korea Centre, 2025; VisitKorea, 2025).

Tourism Activation and Infrastructure Cooperation

Cooperation models include the expansion of direct flight routes, joint tourism product development, Smart Tourism (AR/VR, Big Data-based customized travel), eco-friendly/eco-tourism, medical tourism, and cultural/traditional themed tourism centred on Hallyu. In January 2025, foreign tourist arrivals in Vietnam reached 2.1 million, marking a 36.9% increase year-on-year, and establishing South Korea as Vietnam's largest tourism market. Strategic cooperation between the Vietnamese state-owned enterprise Saigon Tourist and the Korean traditional health food brand Jeseondang, along with the construction of an integrated platform for resorts, hotels, golf courses, tourist sites, and distribution infrastructure, is opening new avenues for tangible business exchange (Jungan News, 2025).

As of May 2025, the number of Thai visitors to South Korea reached 320,000. Collaboration between the Thai Travel Agents Association and the Korea Tourism Organization is expanding diverse experiential tourism content, including new K-Culture tour packages to South Korea, K-Pop dance classes, personal color consulting, and walking tours. Critical areas for development include tourism infrastructure (hotels, transportation, information systems), human resource training, safety and hygiene cooperation, linkage with tourism startups and platforms, and promotion of regional tourism (rural, island, and ecological tourism). Key achievements are seen in Smart Tourism, medical tourism, regional tourism, human resource development, and linkage with tourism startups/platforms through cooperation with nations like Vietnam, Thailand, and the Philippines (VisitKorea, 2025; KNTOKorea, 2025).

Hallyu (K-Content) and Traditional Cultural Exchange

The diffusion of Hallyu content (K-Pop, K-Dramas, film, Hansik, fashion, beauty) into Southeast Asia and the reciprocal introduction of Southeast Asian traditional music, dance, crafts, and festivals within Korea are mutually reinforcing trends. Recently, collaboration in creative industries has expanded to include Korea-Southeast Asia joint performances and exhibitions, cultural festivals, media/platform cooperation, global creator exchange, the global fandom network, development of Hallyu-Southeast Asia fusion content, and joint cultural technology (R&D) development. Events like the 2025 Korea-Thailand Cultural Joint Committee and the Korea-Philippines Year of Cultural Exchange promote diverse exchange programs, including large-scale cultural events, arts festivals, youth camps, and Korea-Southeast Asia Friendship Day celebrations (Korea Culture & Tourism Institute, 2025; ASEAN-Korea Centre, 2025).

Cultural Industry and Creative Economy Cooperation

An innovation ecosystem for the cultural industry is being established, covering Korea-Southeast Asia joint film/drama/game production, digital content distribution, collaboration between startups and creators, joint cultural technology (R&D) development, culture and tourism-linked entrepreneurship, global cultural industry funds, cultural heritage preservation/digitalization, and regional culture brand development. Nations like Vietnam, Thailand, and the Philippines are realizing tangible results from joint film/drama/game production, digital content distribution, startup/creator collaboration, joint cultural technology R&D, culture-tourism linked entrepreneurship,

global cultural industry funds, cultural heritage preservation/digitalization, and regional culture brand development through cooperation with South Korea (ASEAN-Korea Centre, 2025; Korea Culture & Tourism Institute, 2025).

Cultural and Citizen Diplomacy: Korea-Southeast Asia cultural diplomats, youth cultural envoys, global citizen diplomacy camps, international cultural exchange forums, civil society/NGO cooperation, and cultural diplomacy talent cultivation are also critical axes for future cooperation. Diverse programs are operated in 2025, including the Korea-ASEAN Cultural Diplomacy Forum, Global Citizen Diplomacy Camps, international cultural exchange forums, civil society/NGO cooperation, and cultural diplomacy talent cultivation. Korea-Southeast Asia cultural diplomacy is evolving beyond simple state-level exchange into an inclusive cooperation model that involves diverse actors—civil society, NGOs, youth, women, and multicultural families (ASEAN-Korea Centre, 2025).

The activation of tourism and cultural exchange plays a central role in promoting Korea-Southeast Asia mutual understanding, affinity, economic co-prosperity, cultural industry development, social inclusion, and global competitiveness. Substantial achievements and future-oriented development are anticipated across multilayered sectors, including tourism activation/infrastructure cooperation, Hallyu/traditional cultural exchange, cultural industry/creative economy cooperation, and cultural/citizen diplomacy.

Strategic Importance and Future Direction of Korea-Southeast Asia Cooperation

Korea-Southeast Asia cooperation has firmly established itself as a strategic necessity that transcends simple regional exchange, moving beyond its geopolitical and economic importance. The elevation of the bilateral relationship to a Comprehensive Strategic Partnership (CSP) at the Korea-ASEAN Summit in October 2024 underscores the critical role this linkage plays in securing future growth momentum by combining the complementary strengths and potential of both regions (KIEP, 2025; Asan Institute, 2024).

The reinforcement of political, diplomatic, and security cooperation is an essential foundation for regional peace, stability, and securing strategic autonomy amidst the U.S.-China strategic competition and global geopolitical uncertainty. Multilateral and bilateral security cooperation between Korea and Southeast Asia generates practical results across diverse fields—maritime security, cyber security, counter-terrorism, and disaster relief—contributing

to regional trust-building and conflict prevention. The 2025 Korea-Vietnam Summit pursued the substantive deepening of the CSP by concurrently strengthening five axes: politics, economy, science and technology, human exchange, and multilateral cooperation. This reflects a strategic intent to secure the sustainability and stability of bilateral relations through a systematic and integrated approach, moving away from past fragmented cooperation models (VNSSolution, 2025).

Expanded cooperation in traditional industries and advanced technology accelerates the structural advancement and industrial sophistication of both economies. The synergy created by combining South Korea's world-class competitiveness in advanced manufacturing, digital technology, eco-friendly energy, and bio-healthcare with Southeast Asia's abundant labour, resources, and growing domestic market establishes a mutually beneficial industrial ecosystem. Crucially, the construction of new supply chains and value chain integration serves as a strategic countermeasure against changes in the global trade environment. The 2025 Korea-ASEAN Plan of Action (2026–2030) concretely outlines the direction of bilateral cooperation, including digitalization, sustainable resource-based industrialization, supply chain diversification, and future industry cultivation (KIEP, 2025).

Customized national cooperation strategies provide practical cooperation models that meet the specific economic, social, and political characteristics and demands of each Southeast Asian nation. Cooperation with Vietnam, Indonesia, the Philippines, Malaysia, Thailand, Cambodia, Laos, and Myanmar maximizes synergistic effects through a multilayered approach across industry, security, education, culture, and development cooperation. For example, cooperation with Vietnam spans semiconductors, batteries, smart manufacturing, defense, energy, and human exchange. Collaboration with Indonesia focuses on mineral resources, batteries, smart cities, digital finance, and climate/environmental cooperation. With the Philippines, key areas include the defense industry, ICT, healthcare, and educational/cultural exchange (KIEP, 2025; MOFA Korea, 2025).

Socio-cultural exchange and multicultural community building form the foundation for mutual understanding, trust, and inclusive social development. Human exchange, educational cooperation, multicultural policy, and cooperation in tourism and cultural industries deepen the Korea-Southeast Asia relationship, establishing a foundation for sustainable collaboration among future generations. As of 2025, Korea-ASEAN human exchange exceeds 8 million people annually, with the presence of Southeast Asian students, researchers, and professionals

in Korea, and Korean youth and professionals in Southeast Asia, growing concurrently. Policy exchange and joint research are expanding in areas like multicultural family support, language/cultural education, and multicultural leader cultivation (KOSTAT, 2025; KCUE, 2025).

South Korea must construct a close partnership and comprehensive cooperative framework with Southeast Asian nations to play a central role in regional peace, prosperity, and the stabilization of the global order. This commitment transcends simple economic gain, representing both a strategic responsibility and an opportunity to contribute to the stability and sustainable development of the region and the world. The 2025 Korea-ASEAN CSP establishment marks a turning point for building a more future-oriented and strategic partnership. Effective CSP implementation requires strategies that enhance mutual benefit and elevate South Korea's value and competitiveness as a dialogue partner (KIEP, 2025; Asan Institute, 2024).

Moving forward, Korea-Southeast Asia cooperation is anticipated to evolve into an increasingly multilayered and integrated model amidst complex challenges and opportunities—U.S.-China rivalry, global economic restructuring, technological innovation, climate change response, and the promotion of human rights/democracy. The construction of comprehensive governance and innovative cooperation platforms involving governments, the private sector, academia, civil society, and local communities is essential. The 2025 Korea-ASEAN CSP Joint Statement affirmed a commitment to strengthening cooperation for promoting peace and security for all, building a Smart, Sustainable, Resilient, and Connected Future, and establishing a socio-cultural foundation for youth and future generations (KIEP, 2025; MOFA Korea, 2025).

Conclusively, Korea-Southeast Asia cooperation, as a strategic partnership spanning geopolitical, economic, and socio-cultural dimensions, will firmly establish itself as a core axis driving the future growth and stability of both regions, as well as global peace and prosperity.

Chapter 5. Conclusion and Policy Recommendations

This study has provided a comprehensive diagnosis of the geopolitical, economic, and socio-cultural importance of Korea-Southeast Asia cooperation. It has offered in-depth strategic directions for a new supply chain model, innovation ecosystems, social integration policies, and the construction of a comprehensive partnership designed to lead future growth. The analysis comprehensively covered massive macro-variables—U.S.-China strategic competition, global supply chain instability, the climate crisis, digital innovation, human rights and democracy, and sustainability—alongside the specific dynamics of Southeast Asia, such as industrial structure shifts, population/domestic market growth, socio-cultural diversity, and modern community demands. This analysis reaffirms that South Korea and Southeast Asia are now inevitable partners destined to lead global governance and serve as a core axis for common human prosperity and regional order, moving beyond mere economic interests. This research strongly emphasizes that South Korea must concentrate its policy efforts on recognizing the relationship with Southeast Asia not as a simple target for cooperation, but as a mutually interdependent and strategic 'Future Community.'

5.1. Summary of Research and Key Implications

This study has illuminated the structural transformation and future strategy of Korea-Southeast Asia cooperation from diverse perspectives, providing an in-depth view of the complex challenges and opportunities facing both regions, and assessing the practical effectiveness and sustainability of their collaboration. Over the past decade, Korea-Southeast Asia cooperation has evolved beyond a primary focus on trade and investment into a complex, multilayered cooperation model encompassing innovation, supply chains, socio-culture, policy, and human resources. This transformation, intertwined with the uncertainties of the international order (U.S.-China strategic competition, global supply chain restructuring, digital transition, climate crisis, human rights, and democracy), plays a decisive role in positioning the two regions as mutually complementary and strategically vital partners.

Firstly, in terms of the economy and industry, Korea-Southeast Asia cooperation is advancing towards innovation-centric value chains. The relationship has moved beyond the traditional export structure—centred on labour, capital, and manufacturing plants—to embrace an innovation-driven model featuring joint design and

production, technology transfer, R&D linkage, locally-specialized Smart Factories, and joint brand development. Cooperation, initiated in traditional manufacturing sectors (automotive, electronics, machinery, textiles, food processing), is now shifting into Fourth Industrial Revolution fields—Digital, AI, semiconductors, bio, and energy. A noticeable phenomenon is the concentration and expansion of business domains into SoBuJang (Materials, Parts, and Equipment), new products, and platform ventures. For example, countries including Vietnam, Malaysia, Indonesia, and Thailand are significantly boosting their productivity, quality, and innovation capacity by adopting Korean Smart Factory systems, automation, AI-based production management, and IoT/Big Data/Cloud technologies into their local industries. Korean companies are actively participating in establishing innovation ecosystems in Southeast Asia through R&D centres, joint technology development, localized product design, startup accelerators, and joint brand development. This industrial cooperation is expanding beyond mere production base relocation or export growth, extending into localized technological innovation, joint R&D, human resource cultivation, startup ecosystem creation, and global co-branding. Southeast Asian nations are actively importing Korean advanced manufacturing technology, quality control, production automation, digital platforms, and eco-friendly material/energy technologies, accelerating industrial advancement and securing new growth engines.

Secondly, supply chain resilience and green transition are emerging as core solutions for survival and growth. Amidst the long-term impacts of the U.S.-China trade dispute and the pandemic, and the uncertainties of the new international political order, national capacity for supply chain resilience, crisis management/disaster simulation response, green transition/ESG standardization, and the collection/integration of data/AI-based production intelligence have become essential factors for survival and growth. Establishing joint Crisis Management Centers, AI Supply Chain Platforms, Smart Logistics Hubs, and Global Crisis Training facilities by South Korea and Southeast Asia can transcend simple economic cooperation and serve as a model for creating global public goods. Strengthening supply chain resilience requires multidimensional reinforcement across the entire lifecycle—production, procurement, logistics, and risk management—through data standardization, AI automated response systems, disaster response/crisis drills, global data infrastructure setup, and establishing joint policy platforms. Furthermore, there is a clear demand for the joint development of green and digital value chains compliant with global standards, covering ESG management, carbon reduction, linkage with eco-friendly materials and renewable energy, green logistics, and the diffusion of circular economy business models. Southeast Asian nations, in partnership with South Korea, are pursuing joint projects in supply chain crisis

management, disaster response, data/AI-based production intelligence, ESG/green transition, and eco-friendly material/energy technology development, thereby enhancing the stability and sustainability of the global supply chain.

Thirdly, the construction of an inclusive community through human exchange and socio-cultural connectivity is becoming the core of future cooperation. Korea-Southeast Asia human exchange is evolving beyond the simple movement of students and researchers into a creative talent and innovation ecosystem, encompassing global talent cultivation, vocational training, field practice, academia-industry linkage, startup exchange, joint cultural arts projects, and digital education innovation. The establishment of an inclusive community—including multicultural family and migrant policies, guaranteed labour rights, civil society governance, and multilingual/multicultural festivals—is a core axis of the future spatial integration strategy. These efforts contribute to the social stability and sustainability of both regions. Recent active socio-cultural exchanges include Korea-Southeast Asia joint scholarship programs, university/research institute exchanges, vocational training/field practice, joint cultural arts creation, digital education innovation, support for multicultural families, protection of migrant rights, social integration programs, global youth leadership camps, and civil society/NGO cooperation.

Fourthly, the importance of nation-specific customized cooperation strategies is emphasized. Tailored partnerships must be designed and implemented across specialized sectors—joint R&D, Smart Industrial Zones, startup accelerators, cultural arts hubs, tourism smart centres, environmental/energy policy research, and peacebuilding/humanitarian initiatives—commensurate with the unique industrial stage, human resource capacity, regime characteristics, regional specificities, and local demands of each nation (Vietnam, Indonesia, Malaysia, Thailand, the Philippines, Singapore, Cambodia, Laos, and Myanmar). For example, a concentrated strategy is required: Vietnam focusing on advanced manufacturing, digital, and battery industries; Indonesia on mineral resources, batteries, and smart logistics; Thailand and Malaysia on semiconductors and green energy; the Philippines on ICT, education, and tourism; and Cambodia, Laos, and Myanmar on development cooperation and peace mediation. Customizing and operating cooperation models based on the specific industrial structure, human resources, policy environment, socio-cultural characteristics, and regional needs of each country maximizes the effectiveness and sustainability of the cooperation.

Through this analysis, Korea-Southeast Asia cooperation is found to be evolving beyond simple economic exchange into a complex, multilayered model encompassing innovation, supply chains, socio-culture, policy, and human resources, with continued future development projected. This cooperation will firmly establish itself as a core axis driving the future growth and stability of both regions, as well as global peace and prosperity.

5.2. Direction for Rebuilding New Supply Chains and Cooperation between Korea and Southeast Asia

This study has analyzed the structural changes in supply chain reconfiguration confronting South Korea and Southeast Asia and the core elements of the strategic cooperation necessary to support this transformation. The future direction required in this field is rooted in collective adaptability, industrial blending, and policy consistency—capabilities needed to proactively absorb massive external factors, including U.S.-China strategic competition, pandemics, global trade order shifts, ESG mandates, digital innovation, and the climate crisis. This direction transcends merely overcoming crises; it necessitates a strategic mindset capable of converting complex challenges into new opportunities for growth and shared prosperity.

Paradigm Shift in New Supply Chain Restructuring: Evolution into Advanced Value Chain Systems

The fundamental objective of new supply chain restructuring must move beyond merely diversifying production sites geographically or stabilizing traditional sourcing. The imperative now is the operation of highly sophisticated value chain systems, characterized by: the construction of **Smart Manufacturing bases** across all industries in the region; the integration of digital value chains based on real-time data; the expansion of joint design, production, and distribution infrastructure; and the compartmentalization and regional optimization of core Materials, Parts, and Equipment (SoBuJang). For example, Vietnam, Malaysia, Indonesia, and Thailand must synthesize their manufacturing capacity in sectors like electronics, vehicles, semiconductors, batteries, chemicals, food, and bio with South Korea's advanced manufacturing technology, quality standards, process automation, and operational innovation to generate significant synergy.

This **converged Smart Factory model** transcends mere assembly. It demands a flexible structure encompassing joint design and local new product development, Big Data-based production and quality management,

international branding, joint standardization and patent acquisition, and local professional talent cultivation. Strategic value chain integration requires end-to-end linkage across production, R&D, logistics, distribution, marketing, and consumer feedback. This entire lifecycle must be optimized in real-time through highly advanced digital networks and Big Data operating systems. Such a system maximizes supply chain efficiency and empowers the ability to respond immediately to unpredictable market changes.

Advancement of Supply Chain Resilience: Pre-emptive Response to Compound Risks

The advancement of supply chain resilience has emerged as a fundamental imperative. Supply chain resilience demands end-to-end reliability and agility across all processes: production, procurement, logistics, risk management, disaster response, and recovery. Following the pandemic, the establishment of concrete infrastructure is essential, including: data standardization across national production bases; AI-based automated inventory and logistics scheduling; supply and demand forecasting simulation; sharing global data infrastructure; multinational disaster response training; real-time information sharing during crises; and synchronized management of maritime logistics routes, ports, and customs clearance.

This system utilizes AI and Big Data-based automatic decision-making platforms to significantly enhance predictive and response capabilities against compound supply chain risks, such as supply-demand imbalance, natural disasters, epidemics, and international disputes. Furthermore, this research strongly recommends the active integration of global standards, including ESG management and Green Transition. This entails a complex supply chain renovation that includes eco-friendly material development; energy-saving production processes; green certification and carbon reduction; Smart Grids; regional linkage of renewable energy sources; and Global Circular Economy Systems (e.g., resource recovery among partner countries, waste management, green logistics). This approach contributes to building a pioneering model that pursues sustainable growth and complies with new global norms.

Importance of Innovation Ecosystem Construction: Synergy of Technology Cooperation and Talent Cultivation

The importance of innovation ecosystem construction cannot be overstated. The expansion of integrated platforms—linking the public sector, academia, industry, and research institutions—is necessary, including Smart Industrial Clusters, joint R&D centres, global innovation hubs, Open Labs, venture and startup accelerators, New Technology Regulatory Sandboxes, and local social innovation labs. An innovation ecosystem is essential for: joint development of new technologies (advanced manufacturing, ICT, AI, bio, FinTech, clean energy); global patent and standards alliances; local talent cultivation; and linking academia with local startups for global market entry.

Concurrently, efforts must focus on fostering region- and industry-specific projects. For example, strategies must maximize unique national strengths: Malaysia focusing on joint semiconductor R&D and packaging technology; Indonesia and Thailand on battery, EV, and bio-industrial innovation; Vietnam on Smart Factory and IoT clusters; and the Philippines on ICT, EdTech, and FinTech joint hubs. Activating human exchange and knowledge sharing through joint educational and cultural innovation platforms in various Southeast Asian nations is also critical. This cooperation will be decisive in narrowing the technological gap and collectively enhancing innovation capacity.

Creating New Global Markets and Joint Brand Development: A New Model for Value Creation

The creation of new global markets and joint brand development are also core axes of transformation. This includes: the formation of Korea-Southeast Asia consortiums and startup alliances; the global launch of localized brands; joint business implementation of specialized content across sectors (culture, education, medical, FinTech, tourism, energy); the development of multinational distribution and marketing platforms; local customized product/service/education programs; and the expansion of global partnership networks. Key elements for new market penetration include joint standardization, quality and distribution certification, joint campaigns, global promotion/marketing collaboration, and AI-based market intelligence systems. This strategy ensures that the two regions move beyond simple production and consumption to create collective brand value and secure new influence in the global market.

Fusion with Social and Digital Governance: Institutional Foundation for Sustainable Cooperation

The ultimate success of all these strategies hinges on their fusion with "social and digital governance." This requires moving beyond policies limited to government or private sector initiatives, necessitating the establishment of an open policy platform, joint policy evaluation and monitoring systems, and a co-prosperity governance model involving academia, civil society, and local organizations. This is the essential institutional bedrock for sustainable cooperation.

Conclusively, the rebuilding of new supply chains and cooperation between Korea and Southeast Asia is successfully realized only through the sustained expansion of a multidimensional and integrated partnership. This includes transcending the traditional production/sourcing/logistics model; the convergence of advanced technologies and processes with nation-specific industries; sustainable green transition; optimizing data/AI/digital innovation infrastructure; creating future-oriented new markets and advancing joint branding; integrating global standards; and strengthening the complex governance ecosystem. This restructuring strategy enables rapid and stable responses to compound risks—U.S.-China rivalry, international uncertainty, climate change, and pandemics—contributing to the positioning of South Korea and Southeast Asia as a new leading model for global supply chain, innovation ecosystem, and socio-cultural integration development.

5.3. Policy Recommendations: Strengthening Cooperation Partnerships, Fostering Innovation Infrastructure, and Expanding Human Exchange

Securing the practical effectiveness and sustainability of Korea-Southeast Asia cooperation requires a multilayered and customized policy approach. Based on the analysis derived from this study, the following detailed policy recommendations are presented, focusing on enhancing resilience against external factors like the U.S.-China rivalry and building a comprehensive partnership for shared growth.

Establishment and Implementation of Nation-Specific and Sector-Specific Customized Strategies

Given the diversity across Southeast Asian nations in terms of economic development stage, industrial structure, human resource capacity, political/social characteristics, and geopolitical location, a uniform approach is clearly insufficient. Specialized cooperation strategies must be designed and implemented for key nations, including Vietnam, Indonesia, Thailand, Malaysia, the Philippines, Cambodia, Laos, and Myanmar.

- **Vietnam:** Given its rapid industrial advancement and demographic change, Vietnam should concentrate on establishing joint R&D hubs and industrial clusters with South Korea in digital transformation, smart manufacturing, battery and EV industries, AI, and bio sectors. Beyond advanced technology collaboration, strengthening maritime security and defense cooperation is essential for securing geopolitical stability.
- **Indonesia:** Utilizing its strengths in rich mineral resources, a vast domestic market, renewable energy potential, and smart maritime logistics, South Korea should expand supply chain integration and infrastructure modernization cooperation with Indonesia. Respecting Indonesia's non-aligned foreign policy, it is crucial to establish a multilayered economic and technological cooperation model focusing on critical minerals like nickel. Strategic participation in Smart City and digital infrastructure development linked to the new capital relocation project is also required.
- **Thailand and Malaysia:** These nations, which possess high technological capacity in semiconductors, advanced industries, and green energy, should enhance their Alliance for Achievement with South Korea, jointly developing technology standards and concentrating on building green supply chains. Concurrently, multilateral maritime security cooperation—including the large-scale Cobra Gold military exercise—is vital for building security trust. They must focus on identifying new growth engines while managing the U.S.-China conflict through balanced diplomacy.
- **Philippines:** While strengthening its military alliance with the U.S. amidst the U.S.-China conflict, the Philippines shows high readiness to expand pragmatic cooperation with South Korea in economics, technology, education, and tourism. Concentrating ODA on disaster response and maritime security capacity building, alongside strengthening cooperation in ICT, education, and cultural tourism, is necessary to build a mutually beneficial relationship.
- **Cambodia, Laos, and Myanmar:** These LDCs rely heavily on development cooperation, peace mediation, and humanitarian aid. South Korea must expand the scale and effectiveness of its Official Development Assistance (ODA) and increase support for infrastructure investment, education, and health. To address the protracted Myanmar civil war, active participation in conflict prevention and peace

mediation mechanisms, along with expanded humanitarian cooperation (e.g., refugee support), is necessary to support stable growth.

Fostering Innovation Infrastructure and Governance

Innovation infrastructure and governance are indispensable for the qualitative leap in Korea-Southeast Asia cooperation. The joint establishment of data/AI-based research platforms, new technology regulation and digital standard development, integrated clusters across industry/education/society/urban sectors, expansion of international funds and innovation investment funds, and concentrated support for venture and startup ecosystems must be concurrently pursued.

Data/AI Utilization System and Digital Governance

The establishment of a data and AI-based system for supply chain management, production optimization, disaster response, and policy decision-making support is urgent. South Korea and Southeast Asia must actively promote the establishment of joint data centres, AI research institutes, and digital innovation hubs. Specifically, expanding the Korea-ASEAN Digital Innovation Flagship (KADIF) initiative to jointly develop and operate AI-based supply chain risk prediction models is critical. Furthermore, as AI and digital technology adoption present new normative challenges (data sovereignty, privacy, cyber security), the establishment of regulatory sandboxes and international standardization cooperation frameworks with Southeast Asian nations is crucial for promoting the rapid market entry of innovative products and services.

Integrated Cluster Development and Expansion of Investment Funds

Integrated clusters across industry, education, society, and urban sectors are core innovation infrastructure. The PPP model allows for the simultaneous achievement of technology development, talent cultivation, startup support, and social value creation. The establishment of 'Node-type Innovation Clusters'—linking South Korea's advanced semiconductor clusters with Southeast Asia's electronics component production bases—is required. International funds and innovation investment funds must be expanded and operated through public-private collaboration to finance new technology development, startup cultivation, global market entry support, and sustainable growth projects.

Designing a Virtuous Cycle Platform for Human Exchange and Socio-Cultural Innovation

Designing a virtuous cycle platform for human exchange and socio-cultural innovation is essential for institutionally reinforcing the foundation of talent and innovation. Key areas include diversifying youth and professional exchange, linking education with vocational training, building global consortiums of campus/academia-industry/startup collaboration centres, supporting multicultural families, protecting labour rights, promoting social integration, and integrating smart tourism with the cultural industry.

Qualitative Enhancement of Youth and Professional Talent Networks

Youth and professional exchange programs must diversify beyond student exchanges into global leadership cultivation, field practice, internships, joint research, and entrepreneurship support. The establishment of systems that link visas and qualification certification is necessary to enable jointly cultivated engineering talent to work or found companies in partner countries, strengthening the bilateral talent network.

Inclusive Social Welfare Reform and Cultural Convergence

Support for multicultural families and the protection of labour rights are essential policies for enhancing social inclusion and stability. Strengthening the social safety net and labour rights for migrant workers and multicultural populations is required. Smart Tourism and Cultural Industry convergence contributes to economic value creation and mutual cultural understanding, while joint content production and marketing platforms utilizing Hallyu should be developed to deepen cultural industry cooperation.

Ensuring Policy Practicality and Flexible Governance

Enhancing the effectiveness of Korea-Southeast Asia cooperation hinges on policy practicality and flexibility. Customized implementation strategies reflecting local specificities and local community participation are essential, and flexible policy design and execution are required to ensure the sustainability of cooperation amidst rapidly changing international situations and technological innovation. Comprehensive Public-Private Partnership (PPP) governance—involving government, industry, academia, and civil society—enhances policy effectiveness and transparency, while a regular evaluation and feedback system promotes policy improvement and innovation.

Reference

- ASEAN-Korea Science and Technology Cooperation Center. (2025). 'Plan of Action to Implement the ASEAN-Republic of Korea Comprehensive Strategic Partnership 2026-2030'. Seoul, South Korea.
https://asean.org/wp-content/uploads/2025/09/ADOPTED_ASEAN-ROK_POA_2026-2030.pdf
- ASEAN Secretariat (2025). 'ASEAN Digital Economy Report 2025: Digital transformation and investment trends in Southeast Asia'. Jakarta, Indonesia. <http://dx.doi.org/10.22617/SPR240584-2>
<https://www.adb.org/sites/default/files/publication/1021646/asean-republic-korea-tourism-cooperation.pdf>
- _____. (2025). 'ASEAN-Korea Centre to Host ASEAN-Korea Sustainable Innovation Talks & Workshop Advancing ESG and AI-Driven Collaboration', <https://asean.org/asean-korea-centre-to-host-asean-korea-sustainable-innovation-talks-workshop-advancing-esg-and-ai-driven-collaboration/>
- _____. (2025). 'ASEAN Political Report 2025'. Jakarta, Indonesia.
- _____. (2024). 'ASEAN Political-Security Community Report'. Jakarta, Indonesia.
- _____. (2025). 'ASEAN Regional Security Outlook 2025'. Jakarta, Indonesia.
- _____. (2025). 'ASEAN security cooperation report'. Jakarta, Indonesia.
- _____. (2024). 'ASEAN Statistical Yearbook 2024'. Jakarta, Indonesia.
- _____. (2025). 'Regional economic integration and trade development in ASEAN'. Jakarta, Indonesia.
- Asia SNU (Seoul National University Asia Center). (2025). '2025 Korea-Vietnam Global Meditation Camp and East Asia Youth Winter Meditation Camp', Seoul, South Korea.
- Asian Development Bank. (2024). 'Asian Economic Integration Report 2024: Economic Recovery and Regional Cooperation in Southeast Asia', Manila:
- _____. (2024), 'ASEAN–Republic of Korea Tourism Cooperation Fostering People-To-People Connectivity'
- _____. (2025). 'Financing infrastructure development in ASEAN', Manila.
- Bank of Korea. (2024). 'Overseas Direct Investment Statistics: Korea and Southeast Asia'. Retrieved from <https://www.bok.or.kr>

- China Development Bank. (2025). 'Annual report on infrastructure investments in the Belt and Road Initiative'. Beijing, China:
- Chinese Ministry of Commerce. (2024). 'China-ASEAN Economic Relations'. Beijing, China.
- China Ministry of Commerce. (2025). 'China trade and export control policies report 2024–2025'. Beijing, China.
- China Ministry of Foreign Affairs. (2025). 'South China Sea and regional security update'. Beijing, China.
- China Ministry of Science and Technology. (2025). 'China's technological innovation progress report'. Beijing, China.
- CMC Korea. (2025). 'CMC Korea explores cooperation opportunities at Vietnam-Korea Digital Cooperation Forum 2025'. Seoul, South Korea. <https://cmcglobal.com.vn/news-event/cmc-korea-shines-at-vietnam-korea-digital-cooperation-forum-2025/>
- Daum News (2025). '8 Trillion Won Project: The Philippines' Next-Generation Power Build-up, Korea as Exclusive Supplier'. Seoul, South Korea. <https://v.daum.net/v/Wleg7S7vTv>
- East Asia Forum (2023). 'Indonesia's Nickel Policy and Global Supply Chain. Canberra, Australia: East Asia Forum'. <https://eastasiaforum.org/2023/10/14/reassessing-indonesias-nickel-downstreaming-policy/>
- Economist Intelligence Unit. (2024). 'Democracy Index 2024'. London, UK.
- Embassy of the Republic of Korea in Vietnam. (2024). 'Korea-Vietnam Economic Cooperation Report'. Hanoi, Vietnam.
- European Commission. (2025). 'Strategic autonomy and defence policy update. Brussels'. Belgium.
- Human Rights Watch. (2025). 'Indonesia: Papua Unrest and Human Rights; Myanmar Annual Report'. New York, USA.
- IEGI (Incheon Education Global Institute). (2025). 'International Education and Exchange Programs'. Incheon, South Korea.
- IFANS (Institute of Foreign Affairs and National Security) (2025). 'Development Cooperation with Mekong Region Countries: Current Status and Future Directions'. Seoul, South Korea.
- Indonesian Embassy Seoul. (2025). 'Indonesia-Korea Teacher Exchange Program'. Seoul, South Korea.

- Institute for National Security Strategy. (2025). 'Comparison of military balance between the US and China in the Indo-Pacific region: Focus on South China Sea disputes'. Seoul, South Korea. <https://www.inss.re.kr>
- International Crisis Group. (2023). 'Southeast Asia's Border Disputes; Myanmar's Escalating Civil War'. Brussels, Belgium.
- _____. (2025). 'Global conflict and its impact on regional stability: Crisis report 2025/03'. Brussels, Belgium.
- _____. (2025). 'Southeast Asia's Border Disputes; Myanmar's Escalating Civil War'. Brussels, Belgium.
- _____. (2025). 'South China Sea and regional security'. Brussels, Belgium.
- International Monetary Fund. (2024). 'World Economic Outlook Database 2024'. Washington, D.C.
- _____. (2025). 'World Economic Outlook Database 2025'. Washington, D.C.
- International Trade Centre. (2025). 'Global manufacturing and investment trends 2025'. Geneva, Switzerland.
- _____. (2025). 'Investment trends in ASEAN 2025'. Geneva, Switzerland.
- Joongdo Ilbo (2025). 'The Era of 3 Million Foreigners: Customized Policy Needed'. Daejeon, South Korea.
- KCCP Newsletter (2025). 'Korean Chamber of Commerce of the Philippines'. July 2025, Vol. 50. Manila, Philippines.
- Korean Council for University Education (2025). 'ASEAN Professor Invitation Scholarship Project and Higher Education Cooperation'. Seoul, South Korea.
- KIEP (Korea Institute for International Economic Policy) (2013). 'Development Cooperation Plan for Vietnam's Education Sector: Focusing on Vocational Education and Training'. Seoul, South Korea.
- _____. (2015). '동남아 도시화에 따른 한·동남아 경제협력 방안' https://www.kiep.go.kr/gallery.es?mid=a10101200000&bid=0001&tag=&b_list=10&act=view&list_no=2079
- _____. (2022). 'A Study on Cooperation Strategies for Stabilizing the Value Chain in the Mekong Region of Southeast Asia. Korea Institute for International Economic Policy'.
- _____. (2025). 'A Study on Cooperation Strategies for Stabilizing the Korea-Southeast Asia Value Chain in the Mekong Region. Korea Institute for International Economic Policy'.

https://www.kiep.go.kr/gallery.es?mid=a10101020000&bid=0001&act=view&list_no=10813&cg_code=C03

KIMA (Korea Institute for Military Affairs) (2025). 'Current Status and Implications of Korea-Vietnam Defence Industry Cooperation'. Seoul, South Korea.

KOICA (Korea International Cooperation Agency) (2025). 'Major Project Issues and Smart City Cooperation Status of KOICA in 2025'. Seoul, South Korea.

Korea AI Association. (2025). 'Korea AI Market Report 2025'. Seoul, South Korea.

Korea Biz Review (2025). '2024, The Golden Age of Korea-Philippines Economic Cooperation: The Secret to Success?' Seoul, South Korea.

Korea Chamber of Commerce & Industry. (2024). 'Korean Manufacturers Supply Chain Survey'.

Korea Culture & Tourism Institute (2025). 'Korea-Vietnam Tourism Cooperation Strengthened.' Seoul, South Korea.

Korea Educational Development Institute (2025). 'International Student Statistics in Korea'. Seoul, South Korea.

Korea Institute for Industrial Economics & Trade. (2024). '2024 Analysis Report on Global Supply Chain Disruption'.

Korea Institute of Science and Technology Information. (2025). 'Artificial intelligence industry trends and prospects'. Seoul, South Korea.

Korea International Cooperation Agency. (2024). 'Korea's ODA Statistics and Performance in Southeast Asia'. Seoul, South Korea.

Korea International Trade Association. (2025). '2025 Korea-ASEAN trade statistics report'. Seoul, South Korea.

_____. (2025). 'Vietnam Economic and Trade Trends 2025'. Seoul, South Korea.

Korea Ministry of Foreign Affairs. (2025). 'Korea-ASEAN Cooperation Report 2025'. Seoul, South Korea.

Korea Ministry of Trade, Industry and Energy. (2024). 'Annual Report on Supply Chain Resilience'. Seoul, South Korea.

Korea Ministry of Trade, Industry and Energy. (2025). 'KOR-ASEAN Industrial Innovation and Supply Chain Report'. Seoul, South Korea.

- Korea National Pension Service. (2024). 'National pension financial sustainability report'. Jeonju, South Korea.
- Korea Small Business Central Federation. (2024). 'Supply Chain Crisis and Corporate Response Survey'.
- Korean Culture Center Italy. (2025). '2025 CPI Global Connect Workshop'. Rome, Italy.
- Korean Maritime Strategy Institute. (2025). '2025 Indo-Pacific maritime security outlook: China'. Seoul, South Korea.
- Korean Ministry of Education. (2024). 'Report on STEM and AI Education Expansion'. Seoul, South Korea.
- Korean Ministry of Foreign Affairs. (2025). 'Korea-ASEAN Cooperation Report'. Seoul, South Korea.
- Korean Ministry of Science and ICT. (2024). 'Annual Report on ICT and AI Industry Trends'. Seoul, South Korea.
- Korean Ministry of Trade, Industry, and Energy. (2023). 'Pandemic-induced disruption and manufacturing losses: Government report'. Seoul, South Korea.
- _____. (2024). 'Annual report on strategic manufacturing industries'. Seoul, South Korea.
- Korean Statistical Information Service (KOSIS). (2024). 'Korea-ASEAN Trade and Investment Statistics'. Daejeon, South Korea.
- KOSTAT (2025). '2025 Immigrant Residency Status and Employment Survey'. Daejeon, South Korea.
- KOTRA. (2024). '2024 Global Business Report'.
- KPMG (2023). 'Thailand 4.0 and the Future of Thai Industry. Bangkok', Thailand: KPMG.
- KRIHS (Korea Research Institute for Human Settlements) (2021). 'Development Cooperation Strategies for Balanced National Development in ASEAN Countries'.
- KTO (Korea Tourism Organization) (2025). 'Thai Travel Association Delegation Visits Korea for K-Culture Product Development'. Seoul, South Korea.
- Kwon, Y (2024) 'An Analysis of Development Cooperation between Korea and Association of Southeast Asian Nations (ASEAN)', *Journal of International Development Cooperation*, 19(2):3-18
<https://doi.org/10.34225/jidc.2024.19.2.3>
- Lee, J. (2024). 'ASEAN-Korea Comprehensive Strategic Partnership: Background, Meaning and the Way Forward. Executive Summary Issue Brief', 2024-21(S), *The Asan Institute for policy Studies*,
<https://www.asaninst.org/?p=96574>

- Lee, J. (2024). 'Strategies of the Philippines, China, and the US in the South China Sea in 2025 and Future U.S. Policies on Alliances and the IndoPacific Region Executive Summary Issue Brief', 2025-11(S), *The Asan Institute for policy Studies*,
https://www.asaninst.org/data/file/s1_1_eng/f15af67c43af11afd7a990dc4f32fd2b_DEZiUqr1_b1c5b16b86feb006c2889e7e0ffa65f1b714c12d.pdf
- Linkareer (2025). '2025 Korea-Vietnam Global Meditation Camp and East Asia Youth Winter Meditation Camp'. Seoul, South Korea.
- Ministry of Culture, Sports and Tourism. (2025). 'Tourism and cultural exchange statistics'. Seoul, Republic of Korea.
- Ministry of Education, Republic of Korea. (2025). 'International student exchange programs report'. Seoul, Korea.
- Ministry of Employment and Labor. (2023). 'Labor Market Dynamics Bulletin'. Seoul, South Korea.
- Ministry of Foreign Affairs, Republic of Korea (2024). 'Joint Statement on the Establishment of the Korea-ASEAN Comprehensive Strategic Partnership'. Seoul, South Korea.
- _____. (2025). 'Definition and Status of Overseas Koreans'. Seoul, South Korea
- Ministry of Justice (2025). 'Immigration Statistics Monthly Report May 2025'. Gwacheon, South Korea.
- _____. (2025). 'Immigration Statistics Yearbook'. Seoul, South Korea.
- MK News (2025). 'Korea-ASEAN AI and ESG Experts Gather Together: Sustainable Innovation Growth Talk', *Maeil Business Newspaper*, Seoul, South Korea
- Mokpo University. (2025). 'Vietnam Dong Nai Province Youth International Exchange Program'. Mokpo, South Korea.
- NATO (North Atlantic Treaty Organization) (2025). 'NATO defense expenditure and readiness report'. Brussels, Belgium.
- NKIS (National Knowledge Information System) (2022). 'ASEAN ICT policy and industry status'. Seoul, South Korea.
- ODA Korea. (2025). Korea-ASEAN Future Community ODA Strategy Implementation Plan. Seoul, South Korea.
- OECD. (2024). 'OECD Economic Surveys: Southeast Asia 2024'. Paris: OECD Publishing.

- Office of the United States Trade Representative. (2025). '2025 Annual Report on U.S. Trade Policy'. Washington, D.C.
- Ratha, D., Chandra, V., Kim, E.J., Plaza, S., and Shaw, W (2023b). 'Migration and Development Brief 39: Leveraging Diaspora Finances for Private Capital Mobilization'. *World Bank*, Washington, DC.
- Ratha, D., Plaza, S., Kim, E.J., Chandra, V., Kurasha, N. and B. Pradhan (2023a). 'Migration and Development Brief 38: Remittances Remain Resilient but Are Slowing: KNOMAD'. *World Bank*, Washington, DC.
- Reuters. (2025). 'Thai, Cambodian Troops Clash at Border in August Skirmish'. London, UK.
<https://www.reuters.com/world/china/thailand-cambodia-reinforcing-troops-disputed-border-after-may-skirmish-thai-2025-06-07/>
- Sejong Institute. (2024). 'ASEAN Situation Assessment 2024 and 2025 Outlook'. Seoul, South Korea.
- SNU Asia Center. (2025). 'Policy Recommendations for Korea's New Government on ASEAN'. Seoul, South Korea.
- Son, H. S. (2008). 'Korea's Official Development Assistance (ODA) Policy toward ASEAN'. *Korea Institute for International Economic Policy (KIEP) Report*.
- Statista. Korea (2024). 'Global Supply Chain by Industry': *Factbook 2024*.
- _____. (2022). 'Korea's SDGs Implementation Report 2022'. Daejeon, South Korea.
- _____. (2024). 'Population Statistics and Urbanization Trends'. Daejeon, South Korea.
- Stockholm International Peace Research Institute. (2024). 'Military expenditure database'. Stockholm, Sweden.
- _____. (2025). 'Military expenditure database. Stockholm', Sweden.
- The Economy Research. (2025). 'East Asia Forum: Supply Chain Diversification and Strategic Responses in the US-China Competition'. Seoul, South Korea.
- The Jakarta Post. (2025). 'Indonesia After the Election: Unrest and Reform'. Jakarta, Indonesia.
- Tongsang News (2025). 'ASEAN as the Optimal Economic Cooperation Partner: Economic Security and Digital'. Seoul, South Korea.
- U.S. Census Bureau. (2024). 'U.S. Trade in Goods by Country'. Washington, DC, USA.
- U.S. Department of Defense. (2024). 'U.S.-Asia-Pacific Security Cooperation Report'. Washington, DC, USA.

- _____ (2025). 'Indo-Pacific strategy report'. Washington, D.C.: USA.
- U.S. Department of Commerce. (2025). 'Export control policies and trade restrictions report 2025'. Washington, D.C.: USA.
- U.S. Department of State. (2024). 'Indo-Pacific strategy report'. Washington, D.C.: USA.
- _____ (2024). 'Regional Overview: Southeast Asia and US Engagement'. Washington, D.C.: USA.
- UN Conference on Trade and Development (UNCTAD). (2025). 'World Investment Report 2025: global value chains and resilience'. Geneva, Switzerland.
- UN Security Council. (2025). 'Security council report: Conflict and peacekeeping overview 2025'. New York, NY: United Nations.
- UNCTAD (United Nations Conference on Trade and Development). (2023). 'Multinational Production Relocation Trends'. Geneva, Switzerland
- _____ (2024). 'Global Supply Chains and Resilience Post-COVID-19. Geneva
- _____ (2025). 'World investment report 2025: Global value chains and resilience'. Geneva
- UNESCO. (2025). 'Cultural cooperation and exchange programmes in East Asia'. Paris, France.
- United Nations High Commissioner for Refugees. (2024). 'Global Trends: Forced Displacement'. Geneva, Switzerland.
- United States Department of Defense. (2025). 'Indo-Pacific Strategy Report'. Washington, D.C. USA.
- United States Trade Representative. (2025). 'Annual report on U.S. Trade Policy'. Washington, D.C.
- Vientiane Post (2025). 'Outlook for the Laos ICT Market and ASEAN-Korea Digital Academy Case'. Vientiane, Laos.
- Vietnam News Agency. (2024). 'Vietnam, a 'shining star' in SDGs implementation'. Hanoi, Vietnam.
- Vietnamese Ministry of Trade. (2024). 'Vietnam Trade Statistics Database (2020-2024)'. Hanoi: Government of Vietnam.
- Korea Tourism Organization (2025). 'Vietnam Economic and Tourism Market Trends February 2025'. *VisitKorea*, Seoul, South Korea.

VNSSolution (2025). 'Achievements of the August 2025 Korea-Vietnam Summit: Comprehensive Strategic Partnership'. Seoul, South Korea.

WHO (World Health Organization). (2021). 'Impact of COVID-19 on global transport and logistics'. Geneva.

World ASEAN Forum. (2025). '2025 World ASEAN Forum: Building Sustainable Korea-ASEAN Partnership'. Seoul, South Korea.

World Bank. (2023). 'Supply chain disruption impacts in East Asia'. Washington, DC. USA.

_____. (2024). 'East Asia and Pacific Economic Update: Securing Recovery amid Uncertainty'. Washington, D.C.

_____. (2024). 'South China Sea economic report'. Washington, D.C.

_____. (2025). 'East Asia and Pacific Economic Update 2025: growth dynamics and prospects'. Washington, D.C.

Yonhap News Agency (2025). '5 out of 100 Koreans are Foreigners: Record High'. Seoul, South Korea.
<https://www.yna.co.kr/view/AKR20250302012700371>

KRI Discussion Papers in 2025

- 1 Global Paradigm Shifts in Geopolitics and Economy: Forging a New Path for Korea-ASEAN Partnership
- 2 Bridging Digital Horizons: A Comparative Nexus of Government Policies and Cooperative Paradigms in South Korea and Southeast Asia's Smart Innovation Landscape

Comparative Policy Studies: Korea and Southeast Asia

2025 KRI Discussion Paper • No.1

Korea Research Initiatives ▪ University of New South Wales ▪ Australia