SPECIAL ECONOMIC ZONES FOR SHARED PROSPERITY

BRUNEI DARUSSALAM–INDONESIA–MALAYSIA–PHILIPPINES EAST ASEAN GROWTH AREA

Aradhna Aggarwal

NOVEMBER 2022

ASIAN DEVELOPMENT BANK

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Foreword

The Brunei Darussalam–Indonesia–Malaysia–Philippines East ASEAN Growth Area (BIMP-EAGA), supported by the Asian Development Bank (ADB), has long adopted an active policy of developing industrial estates and special economic zones (SEZs) in economic corridors, underpinned by wide-ranging investment policies. The ultimate development goal of these policies is to achieve shared prosperity with balanced and inclusive development, and narrow development gaps in lagging and geographically remote areas to accelerate the integration of the Association of Southeast Asian Nations (ASEAN).

BIMP-EAGA member countries recognize the need for a well-coordinated, proactive, and strategic approach to maximize the potential benefits of SEZ development. This includes the identification of concrete measures to leverage economic corridors in establishing SEZs and other production hubs in order to bolster trade expansion and generate network externalities via regional cooperation.

Against this background, during the 24th BIMP-EAGA Ministerial Meeting held on 26 November 2018 in Kuala Belait, Brunei Darussalam, BIMP-EAGA ministers requested ADB, as regional development advisor, to conduct a study on SEZs development and cooperation toward prosperity.

This novel technical study significantly contributes to the existing literature on economic zones and SEZs. Across BIMP-EAGA member countries, there are 2,434 cluster-based economic zones (excluding hybrid and single enterprise zones). This proliferation necessitates mapping the universe of SEZs and other industrial zones in BIMP-EAGA member countries using a comparative framework to harmonize data and to apply a clearly defined zones typology. Key actions anchored on BIMP-EAGA cooperation for economic zones to thrive amid the coronavirus disease (COVID-19) pandemic are highlighted. The study also identifies challenges facing BIMP-EAGA economic zones, and offers recommendations to overcome them.

The technical study characterizes BIMP-EAGA as a transborder hybrid zone and proposes a "coopetition strategy," founded on cooperation and competition, to strengthen BIMP-EAGA economic zones and corridors. The underlying principle is to establish a single market and production base in the subregion through cooperation, alongside competition, for investment in the economic zones. Cooperation enables countries to augment spatial capabilities by ensuring access to subregional resources and markets, which countries can also use to compete for more investment in their respective zones.

The proposed strategy includes the promotion of cross-border mobility of people and goods; a comprehensive policy package for enhancing subregional capabilities through innovation, networking, quality of human capital, knowledge infrastructure, finance, entrepreneurship, and

digitization of small and medium-sized enterprises; a targeted approach in promoting cross-border production networks supported by a unified cross-border digital marketplace for small and medium-sized enterprises; branding and marketing of the subregion; enhancing the attractiveness of SEZs and industrial zones; and improving spillovers through targeted policies. Effective implementation of the strategy can be impeded by many varied constraints. Recognizing this, specific enabling actions to overcome institutional constraints, human resource constraints, social and environmental costs, and border security threats involved in integrating border areas and promoting SEZs are discussed.

We hope this study will guide BIMP-EAGA stakeholders as they carry out crucial steps to further improve and expand SEZs and economic corridors as prime catalysts for sustainable, resilient, and inclusive growth in the subregion.

Ramesh Subramaniam
Director General
Southeast Asia Department
Asian Development Bank

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Aradhna Aggarwal, an internationally renowned special economic zone (SEZ) expert and professor at Copenhagen Business School, served as the main author and leader of the study team. The team was supervised by Alfredo Perdiguero, director of ADB's Southeast Asia Regional Cooperation and Operations Coordination Division, with support from Jason Rush, principal operations communications specialist; Maria Theresa Bugayong, operations officer (Resource Planning); and consultants Pamela Asis-Layugan, Jordana Queddeng-Cosme, and Alona Mae Agustin.

The ministers of the Brunei Darussalam–Indonesia–Malaysia–Philippines East ASEAN Growth Area (BIMP-EAGA) member countries and their designated representatives—H.E. Dato Seri Paduka Dr. Awang Haji Abdul Manaf bin Haji Metussin, Ministry of Finance and Economy, Brunei Darussalam; Hon. Edi Prio Pambudi, acting deputy minister for International Cooperation, Coordinating Ministry for Economic Affairs, Indonesia; H.E. Dato' Sri Mustapa Mohamed, minister in the Prime Minister's Department (Economy), Malaysia; and Hon. Abdulgani Macatoman, Department of Trade and Industry, Philippines—provided overall strategic guidance at the 24th BIMP-EAGA Ministerial Meeting held in October 2021, which greatly enhanced the relevance and overall quality of the report.

Regular consultations and discussions with BIMP-EAGA senior officials Hajah May Fa'ezah binti Haji Ahmad Ariffin, Ministry of Finance and Economy of Brunei Darussalam; Rizal Affandi Lukman, Raldi Hendro Koestoer, and Edi Prio Pambudi, Coordinating Ministry for Economic Affairs of Indonesia; Saiful Anuar Bin Lebai Hussen, Noor Zari Bin Hamat, Mohd Shafiee B. Mohd Shah, and Sarimah Binti Amran, Economic Planning Unit, Prime Minister's Office of Malaysia; and Abdulgani Macatoman, Department of Trade and Industry of the Philippines generated valuable inputs.

Peer reviews and technical guidance from the BIMP-EAGA national secretariats—Norhayati Ismail, Yusdiman Saman, and Rokiah Kesut, Ministry of Finance and Economy of Brunei Darussalam; Netty Muharni, Irfan Adhitya Permadi, Tri Hidayatno, and Sonny Ameriansah Soekoer, Coordinating Ministry for Economic Affairs of Indonesia; Ahmad Zamri Bin Khairuddin Suhana Binti Md Saleh, Paarteeben A/L Subramaniam, Nurul Ezzah Binti Md Zin, Balamurugan Ratha Krishnan, Mohammad Akhir Abdul Rahman, and Mattias Murphy Lai of the Economic Planning Unit, Prime Minister's Office of Malaysia; and Romeo Montenegro, Jonathan Miral, Ernesto Tomas, Jr., and Ruel Abril of the Mindanao Development Authority of the Philippines—helped fine-tune

the report. The BIMP-EAGA Facilitation Center headed by Susanna Chew, relevant BIMP-EAGA clusters and working groups, and the BIMP-EAGA Business Council provided valuable perspectives and insights.

Fieldwork and interviews by Aradhna Aggarwal and Pamela Asis-Layugan in 2019 in the BIMP-EAGA economic zones were conducted with assistance from the BIMP-EAGA national secretariats and coordinated by the following SEZ authorities and local government agencies: the National Council for Special Economic Zones in Indonesia; Sarawak Corridor of Renewable Energy and Ministry of Industrial and Entrepreneur Development-Sarawak, Sarawak State Economic Planning Unit, Kota Kinabalu Industrial Park, Ministry of Industrial Development, Palm Oil Industrial Cluster, Sabah State Economic Planning Unit in Malaysia; and the Philippine Economic Zone Authority. Virtual interviews and consultation meetings were conducted with the Darussalam Enterprise.

Pamela Asis-Layugan and Hammed Bolotaolo gave instrumental editorial advice on this study. Judy Yñiguez handled the typesetting and layout, graphics generation, and created the cover design. Corazon Desuasido, Maria Theresa Mercado, and Ma. Cecilia Abellar proofread the draft layout. Alona Mae Agustin, Raquel Tabanao, Nicole Marie Afable, and Camille Genevieve Salvador provided overall support for the publication process. The publishing team of ADB's Department of Communications supervised the graphic design and provided production support.

Abbreviations

AEC	ASEAN Economic Community
AI	artificial intelligence
ASEAN	Association of Southeast Asian Nations
BARMM	Bangsamoro Autonomous Region in Muslim Mindanao
B-EAGA	Brunei Darussalam EAGA
B2B	business-to-business
B2C	business-to-consumer
BEBC	BIMP-EAGA Business Council
BIMP-EAGA	Brunei Darussalam–Indonesia–Malaysia–Philippines East ASEAN Growth Area
BIMP-FC	BIMP-EAGA Facilitation Center
BINA	Brunei Darussalam Industrial Development Authority
BKPM	Badan Koordinasi Penanaman Modal (Indonesian Investment Coordinating Board)
BSC	Business Support Centre
COVID-19	coronavirus disease
DARe	Darussalam Enterprise
DFTZ	digital free trade zone
EAGA	East ASEAN Growth Area
ECER	East Coast Economic Region
EPZ	export processing zone
EU	European Union
FCZ	free commercial zone
FDI	foreign direct investment
FIZ	free industrial zone
FTZ	free trade zone
GDP	gross domestic product
GEZ	general economic zone
GRDP	gross regional domestic product
GVC	global value chain
HKI	Himpunan Kawasan Industri Indonesia (Industrial Estate Association of Indonesia)
ICT	information and communication technology
I-EAGA	Indonesia-EAGA
IT	information technology

KAPET	Kawasan Pengembangan Ekonomi Terpadu (Integrated Economic Development Zone)
KEK	Kawasan Ekonomi Khusus (Special Economic Zone)
KLIA	Kuala Lumpur International Airport
km	kilometer
km^2	square kilometer
KPBPB	Kawasan Perdagangan Bebas dan Pelabuhan Bebas
LMW	licensed manufacturing warehouse
M&E	monitoring and evaluation
M-EAGA	Malaysia-EAGA
MIDA	Malaysian Investment Development Authority
MinDA	Mindanao Development Authority
MOU	memorandum of understanding
MSC	Multimedia Super Corridor
MSMEs	micro, small, and medium-sized enterprises
MTPDP	Medium-Term Philippine Development Plan
ODR	online dispute resolution
OECD	Organisation for Economic Co-operation and Development
P-EAGA	Philippines-EAGA
PEZA	Philippine Economic Zone Authority
PHIVIDEC	Philippine Veterans Investment Development Corporation
POIC	Palm Oil Industrial Cluster
PPP	public–private partnership
PRC	People's Republic of China
R&D	research and development
RPJMN	Rencana Pembangunan Jangka Menengah Nasional (National Medium-Term Development Plan)
RPJPN	Rencana Pembangunan Jangka Panjang Nasional (National Long-Term Development Plan)
SBEZ	special border economic zone
SCORE	Sarawak Corridor of Renewable Energy
SEZ	special economic zone
SMEs	small and medium-sized enterprises
STP	science and technology park
UNCTAD	United Nations Conference on Trade and Development
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
US	United States
WTO	World Trade Organization

Executive Summary

Background. The Brunei Darussalam–Indonesia–Malaysia–Philippines East ASEAN Growth Area (BIMP-EAGA) and Indonesia–Malaysia–Thailand Growth Triangle (IMT-GT) subregional cooperation programs supported by the Asian Development Bank (ADB) accord a high priority to the development of regional and cross-border production networks using special economic zones (SEZs) and special border economic zones as the key tools. The subregional SEZs are potentially effective mechanisms to stimulate economic activities, employment, exports, and foreign direct investment by deepening subregional cooperation. However, little is known about whether the participating economies have developed coordinated strategies to integrate trade expansion and growth with SEZ development in the subregion. Bearing this consideration in mind, ADB—a regional development advisor to BIMP-EAGA and IMT-GT—has initiated a study on the collaborative approach to SEZ development and cooperation in the two subregions under ADB technical assistance 9572 at the request of the member countries. Against that background, this study focuses on the BIMP-EAGA economic zones. This is the first study of its kind that takes stock of the BIMP-EAGA SEZs and other economic zones, reviews the extent to which these are aligned with national and subnational development strategies of the member countries, and reviews their performance. It also identifies the challenges facing BIMP-EAGA economic zones and offers recommendations for policy makers to support active clustering and specialization efforts in the subregion. No earlier study has assessed the implementation of the subregional agenda from the perspective of economic zones.

Objectives. The study sets out the following specific objectives:

- Map out the economic zones in the BIMP-EAGA countries;
- Map out the economic zones on BIMP-EAGA economic corridor routes;
- Map out the policies, regulations, institutions, and governance relating to BIMP-EAGA economic zones;
- Review the economic performance of the subregion to gauge the success of economic zones;
- Assess the alignment between the national and subnational development agendas on the one hand and the BIMP-EAGA economic corridors and zones development approaches on the other;
- Identify the challenges facing the subregional economic zones; and
- Offer recommendations for actions and mechanisms to deepen the economic zones' development and cross-border cooperation in the BIMP-EAGA subregion.

The ultimate objective of the study is to strengthen the strategic relevance of economic zones in the subregional initiative and identify actions for promoting them. The geographical scope of the study includes all provinces and states covered under the BIMP-EAGA.

Data. The analysis is based on both primary and secondary data. The primary data were gathered through field trips to selected economic zones in the subregion. Consultations and interviews were conducted with a cross section of government officials at the federal as well as the state and provincial levels, economic zones' management authorities, the management team of the BIMP-EAGA Facilitation Center (BIMP-FC), representatives of the BIMP-EAGA Business Council, and private entrepreneurs. It was combined with the secondary data that encompassed an enormous range of sources including nationally and internationally published studies; development plan documents of the four countries since the 1960s; texts of relevant acts, decrees, and regulations; government reports and press releases; academic and news articles; blogs and books; and websites of various government agencies.

Methodology. The data are assessed using descriptive, exploratory, and explanatory approaches. The descriptive element includes mapping the economic zones and their policy frameworks in the four member countries: Brunei Darussalam, Indonesia, Malaysia, and the Philippines. The exploratory part delves into the linkages between the zones and national and subnational development strategies, and reviews the performance of economic zones. Finally, the explanatory part explains the subregional program's relevance using both the theoretical arguments and empirical evidence, discusses the challenges, and offers recommendations to strengthen the subregional economic zones.

Typological framework of economic zones. A two-layered classification is proposed to map out the economic zones. At the top (level 1) is the typology based on the legal perspective, with mainly three types of economic zones: general, special, and hybrid. The distinction between the general economic zones (GEZs) and SEZs centers mostly around the type of regulatory regime that governs them. The SEZ is a distinct economic zone with a specialized legal regime to overcome the institutional deficit in developing countries. Hybrid zones consist of both GEZs and SEZs. Each type of economic zone further branches out according to its functional characteristics in level 2. In this typological framework, subregions are classified as cross-border hybrid zones covering contiguous subnational units from two or more nation-states that can drive growth by reinforcing local competencies through regional integration with economic zones as the tool.

Mapping of the economic zones. The governments of all four member countries of BIMP-EAGA adopted the economic zones program at different times; followed different policies regarding the designs, types, and names of the zones; and implemented them with different rigor. However, over time their policies and approaches converged and resulted in a proliferation of economic zones. The four countries have 2,434 cluster-based economic zones (excluding the hybrid and single enterprise zones). Of these zones, 482 (20%) are general zones, and the rest (1,952) are cluster-based SEZs of different varieties. Indonesia has the largest number of SEZs (1,482), followed by the Philippines (420), Malaysia (45), and Brunei Darussalam (1). The Philippines leads in terms of the dependence on SEZs with all its economic zones being SEZs, followed by Indonesia (92%), Malaysia (13%), and Brunei Darussalam (4%). Economic zones have evolved toward larger spatial dimensions, complex structures, high-tech orientation, multisectors, and flexible locations.

This evolution reflects a strong commitment, pragmatic approach, and dynamic learning toward economic zones adopted by all four countries.

Legal and institutional frameworks of special economic zones and general economic zones. The economic zones are evolving not only in terms of their structural features but also in legal and institutional frameworks. Along with the provision of fiscal incentives, the range of facilities, services, and amenities available within zones have been extended in new ambitious zone programs. The preferential regulatory contents of SEZs have been enriched and enlarged over time, particularly in Indonesia and the Philippines. Malaysia and Brunei Darussalam are relying more on larger, specialized, and integrated GEZs. Overall, the economic zones, which remain the centerpiece of industrial policy of all four BIMP-EAGA countries since the early stage of their development, have grown in importance in recent years. These countries have launched an aggressive drive to build a variety of zones and achieve various goals by unleashing their full potential.

Special economic zones and general economic zones in BIMP-EAGA corridors. The study identifies 145 economic zones in the BIMP-EAGA subregion (including both operational and those that are under development), which are almost evenly distributed across the four East ASEAN Growth Area (EAGA) countries. Moreover, there are several projects in the pipeline. Out of 145 economic zones, 64 are SEZs, mostly in the Philippines and Indonesia. The growth of economic zones in the subregion in recent years can be gauged from the fact that in 2003, the number of SEZs stood at 25, which has now grown to 64. This is in addition to an increasing number of GEZs.

Assessing the performance of economic zones and corridors. BIMP-EAGA is primarily perceived as a mechanism to promote the economic development of relatively backward and remote territories of the member countries, and close the development gap between its constituent subnational areas and their more developed counterparts within the same country and across the subregion. This study draws on the vision, outputs, and targets set by the BIMP-EAGA Vision 2025 to identify the following five performance indicators: (i) gross regional domestic product as a ratio to the national average, (ii) contribution of the EAGA economies to national gross domestic product, (iii) poverty ratios in EAGA areas relative to the national average, (iv) intra-EAGA trade, and (v) inward foreign direct investment inflows to EAGA areas by country. The analysis indicates that the BIMP-EAGA subregional program, even with the proliferation of economic zones, has not made the subregion significantly better off in relative terms despite considerable achievements in connectivity on the one hand and growth in gross regional domestic product per capita and reduction in poverty on the other.

Assessing the alignment of the national and subnational development policies with the BIMP-EAGA agenda. The study identifies four forms of linkages between the subregional program on the one hand and national and subnational development agenda on the other. It explores them one by one based on an in-depth review of the long- and medium-term plan documents at the national level and development strategies of the subnational governments. These forms of linkages are as follows:

- alignment between the national and BIMP-EAGA objectives,
- mainstreaming of BIMP-EAGA spatial approach as a strategic pillar in national and subnational development policies,
- mainstreaming of BIMP-EAGA projects, and
- mainstreaming of the development of subregional production networks through SEZs.

The analysis reveals that the role of the BIMP-EAGA spatial approach in unlocking subregional potential is not fully recognized in the national development agenda. However, there is evidence of local governments integrating BIMP-EAGA as a strategic tool in their development strategies, particularly in Malaysia and the Philippines where the BIMP-EAGA states and provinces enjoy relatively greater autonomy.

Mainstreaming the subregional program into broader development agenda. The reasons for mainstreaming the subregional program are the following:

- **Growing importance of cross-border and regional value chains in the changing global context**. The expansion of global value chains (GVCs) has slowed down since 2011 due to various reasons. As the GVCs are becoming shorter, cross-border and regional value chains are growing in importance, relying on stronger ties with the supply base in regional economies and cross-border cooperation. The coronavirus disease (COVID-19) pandemic and lockdowns have further underscored the need for cross-border cooperation in trade and investment.
- **Intrinsic characteristics of subregional programs, which in essence are informal.** The success of subregional programs depends on a long-term vision, strong political will, and collective ownership—all of which should be backed by generous financial resources. This, in turn, requires integrating subregional agendas into national development planning to receive wide government support beyond specific line ministries and resource commitments for the program. Thus, a renewed thrust on zone programs from the perspective of promoting cross-border and regional value chains calls for the mainstreaming of the subregional program into the national development agendas.

Challenges. Notwithstanding their importance in promoting cross-border investment, the subregional SEZs are facing challenges, which arise due to the following:

- Subregional factors, such as gaps in physical connectivity and transport facilitation; nontariff and custom barriers; non-differential treatment of economic zones in the subregion; weak alignment between the national development agendas and BIMP-EAGA economic corridor approach; heterogeneous policies, regulations, and standards followed in member countries; and border security threats due to history of ethnic conflicts within the subregion; and
- Domestic factors including social, political, and economic dynamics that shape the member countries' preferences; regional disparities; limited spillover effects; and proliferation of economic zones in these countries.

Policy and strategy development. The study proposes a "coopetition" strategic approach—founded on cooperation and competition—to strengthen the BIMP-EAGA corridors and economic zone programs. The underlying principle of the former is to establish a single market and production base in the subregion through cooperation, while the latter focuses on competition for investment in the economic zones. The central idea is that cooperation enables countries to augment the spatial capabilities by ensuring access to subregional resources and markets, which they can use to compete for more investment in their respective zones. Each of these two approaches consists of a set of strategies that are further divided into enabling actions.

Cooperative Approach

- **Strategy 1: Implement priority economic corridors of BIMP-EAGA effectively.** This requires integrating BIMP-EAGA into national plans by recognizing regional cooperation as part of the national development strategy. Cross-border value chains can help build formidable industries through aggregation and diversification of resources and markets in the subregion if economic corridors are implemented effectively.
- **Strategy 2: Augment regional capabilities through cross-border cooperation programs.** Micro, small, and medium-sized enterprises (MSMEs) hold the key to the sustained development of subregional capabilities. This report proposes a multipronged strategic approach that addresses the bottlenecks to MSMEs' production, technological, and marketing capabilities through cross-border cooperation. The focus is on the digital transformation of MSMEs. The report also recommends forming a digital consortia of subregional entrepreneurs (both large and small) in key industries to encourage networking among them and their participation in strategy building. Social capital needs to be strengthened by instituting small-scale local funds for projects and activities to sustain participation in BIMP-EAGA.
- **Strategy 3: Promote regional and cross-border value chains.** The opportunities of cross-border production networks are limited in the subregion. Therefore, the report recommends the facilitation of the cross-border movement of goods, services, and factors to assist resource aggregation, research and development, and marketing and distribution. This would promote economies of scale and scope in the economic zones. Creating a unified digital marketplace for MSMEs in BIMP-EAGA is highly recommended, which may be supported by digital free trade zones, harmonized product standards rules and regulations, and systematic approaches to building the capabilities of regional firms to participate in the digital marketplace.
- **Strategy 4: Adopt a rigorous branding and marketing strategy.** Position the subregion as an investment destination for food, mineral-based, and energy industries. It can be promoted as a global hub for food industries including halal, fisheries, and seaweeds. The investment promotion agencies of each member state and the BIMP-EAGA Facilitation Center may join hands in maintaining a web page on BIMP-EAGA economic zones and update it regularly.

Competitive Approach

- **Strategy 5: Improve the attractiveness of special economic zones and industrial zones.** Promote sustainable economic zones incorporating sustainability criteria in site selection and master plans. Since the BIMP-EAGA region is one of the world's most important biodiversity hot spots, it is critical to those inside and outside the subregion to manage the development process according to sustainability principles. Further, compensate the locational disadvantages through strategic master planning of the economic zones, including innovative on-site solutions, specialized infrastructure to cater to a specific investor, on-site social infrastructure, centers for labor training, and favorable off-site infrastructure. Provide investor-friendly one-stop services via custom facilitation, specialized management services, digitization of services and transactions, and customized incentives. The general investment climate in economic zones locations can be improved by promoting urban development in the surrounding areas. Expediting integration efforts for GVC's smooth operation, especially amid the COVID-19

pandemic, can be achieved in parallel with the establishment of the ASEAN Economic Community and by introducing broader economic reforms. Finally, decentralize financial powers to states and provinces to assign a greater role to local governments and the private sector in the subregional development.

- **Strategy 6: Improve spillovers through horizontal and vertical (or targeted) policies.** Target goods and services required by the SEZs for local production. Complement the targeted approach with horizontal approaches by implementing initiatives to promote investment in skills, technologies, research and development, and infrastructure in the wider economy to create conditions for spillovers from the SEZs.

Policy adoption into planning. For adopting the proposed strategic framework into planning, a fourfold solution is proposed.

- First, adopt a holistic and integrated approach that requires simultaneously adopting all the broad policy prescriptions as a package. A piecemeal approach cannot be effective.
- Second, break down the strategic interventions into three time frames (short, medium, and long terms) and focus on the short- and medium-term measures as low-hanging fruits while building consensus for the long-term measures.
- Third, mainstream all proposed strategic interventions and enabling actions for economic zones into the relevant sectoral or thematic strategies of the development plans and the agendas of the working groups.
- Fourth, design special programs and initiatives to be effectively implemented by the subregion.

A sound strategy for implementing the spatial approach. Implementation is the process that turns strategies and plans into actions to accomplish strategic goals. This study proposes four approaches for implementing specific enabling actions. These approaches focus on overcoming institutional constraints, human resource constraints, social and environmental costs, and border security threats involved in integrating border areas and promoting SEZs in these areas. The strategy also proposes strengthening and institutionalizing the monitoring and evaluation frameworks for both the corridors and economic zones. This study identifies the BIMP-EAGA working groups and government agencies that need to collaborate closely to adopt these strategies and deliver the desired results.

Chapter 1

Introduction

Background

The Brunei Darussalam–Indonesia–Malaysia–Philippines East ASEAN Growth Area (BIMP-EAGA) was launched in 1994 by the four member nations covering the entire sultanate of Brunei Darussalam; and the provinces of Kalimantan, Sulawesi, Maluku, and Papua in Indonesia; states of Sabah, Sarawak, and the federal territory of Labuan in Malaysia; and the entire island of Mindanao and the island province of Palawan in the Philippines. BIMP-EAGA aims to address their socioeconomic development challenges and narrow their development gaps with the rest of the BIMP areas through cross-border cooperation in five strategic areas: connectivity, agribusiness, tourism, environment, and sociocultural education. Two well-defined priority economic corridors (West Borneo and Greater Sulu Sulawesi) have been designated to facilitate cross-border movement of people, goods, and the factors of production across the archipelagic subregion through physical connectivity and trade facilitation; and catalyze investment in processing and value-added production by fostering cross-border and regional value chains through coordinated strategies of special and other industrial zones along the corridors (BIMP-EAGA Vision 2025).

It is widely acknowledged that the BIMP-EAGA corridors have had noteworthy accomplishments in forging transport connectivity through sea, air, and highway links within the subregion (Lord and Tangtrongjita 2016, ADB 2019a). Notwithstanding, little is known if the participating countries have indeed coordinated special economic zone (SEZ) strategies to leverage the benefits of economic corridors and unlock the full potential of the subregional economies. With this in mind, the Asian Development Bank (ADB)—a regional development advisor to BIMP-EAGA since 2002—initiated a study in July 2019 on the collaborative approach to SEZ development and cooperation in BIMP-EAGA under ADB technical assistance 9572 at the request of the member countries. The main objectives of the study are to take stock of the BIMP-EAGA SEZs and other economic zones, assess the national and subnational policies governing economic zones, review the extent to which the BIMP-EAGA agenda of the collaborative approach to economic zones is integrated into national and subnational development agendas of the member countries, review the performance of economic corridors and zones, identify challenges, and offer recommendations for policy makers to support active clustering and specialization efforts in the subregion.

BIMP-EAGA is one of two subregional cooperation initiatives in archipelagic Southeast Asia that ADB supports, with Indonesia–Malaysia–Thailand Growth Triangle (IMT-GT) being the other. This study on SEZs and economic zones in BIMP-EAGA complements a similar study for the IMT-GT subregion. Both IMT-GT and BIMP-EAGA are government-inspired transborder cooperation with the same fundamental objective: to achieve synergetic development outcomes through cross-border cooperation. However, they have different specificities. In IMT-GT, trade and

investment opportunities flow from significant differences in economic structures and comparative advantages, a critical success factor in subregional arrangements. Sumatera is abundant in labor, land, and natural resources, with emerging competitiveness in light and processing industries. The Peninsular Malaysian provinces on the west coast specialize in highly skilled manufacturing and services, while Southern Thailand is rich in resources such as marine and plantation forests. BIMP-EAGA, on the other hand, faces unique challenges of fostering subregional development cooperation between a set of local economies that are (i) peripheral and remotely located from their national capital regions (except Brunei Darussalam), (ii) marginalized in the process of development with their economies heavily dependent on natural resources, and (iii) exposed to medium to high climate change vulnerability (ADB 2015a).

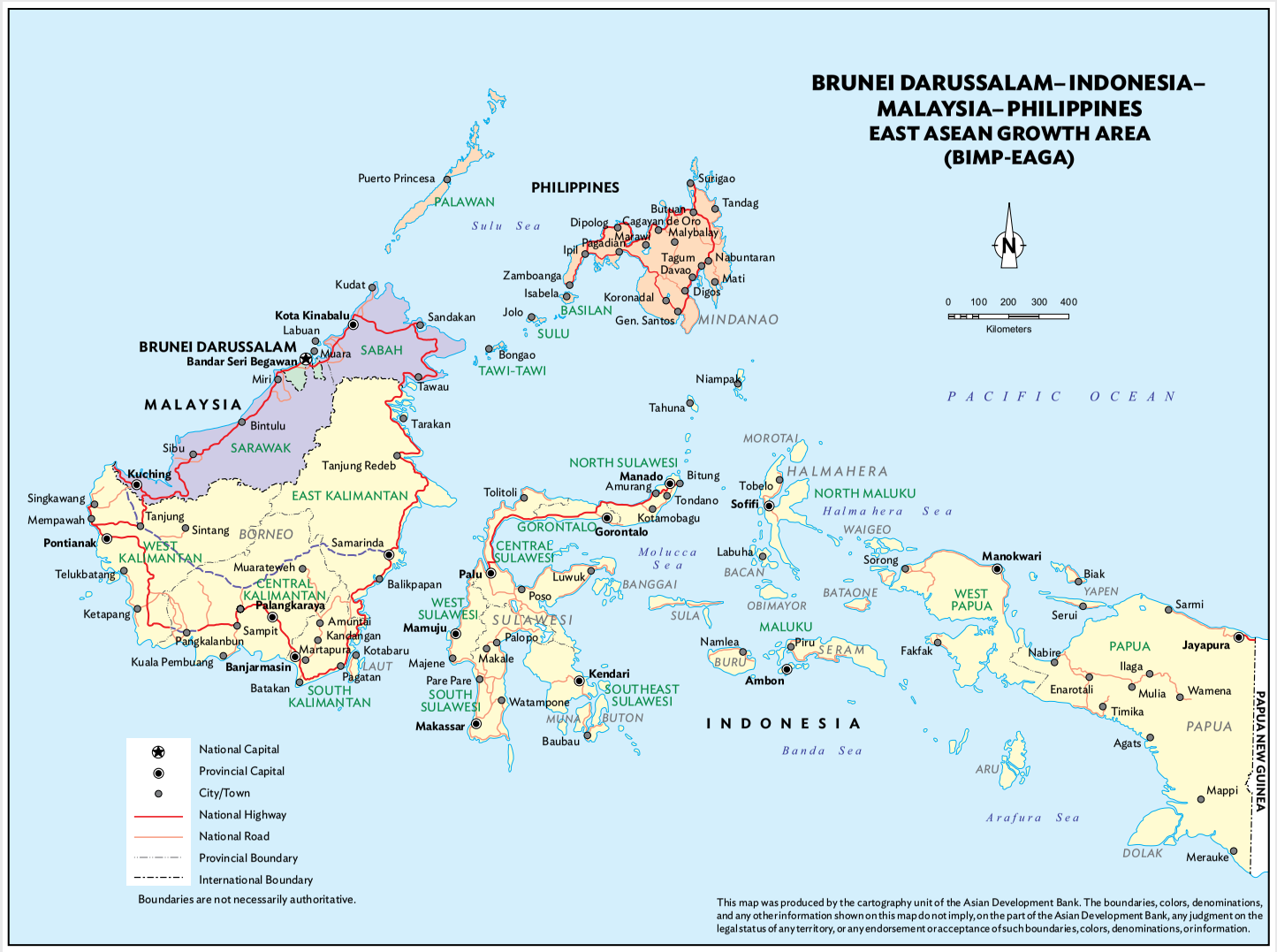
Nonetheless, these areas enjoy certain advantages such as a munificent resource base, a long tradition of trade and transborder cooperation, a multiethnic composition, and relatively greater autonomy (as in Malaysia and the Philippines). These advantages can serve as pillars for facilitating the subregion to become a dynamic region able to actively mobilize the resources and generate benefits through coordinated economic zones' strategies. However, to our best knowledge, no earlier study has assessed the implementation of the subregional agenda from the perspective of economic zones. This study addresses this gap. It makes three major contributions to the existing literature on economic zones, SEZs in particular. First, it maps the universe of SEZs and other industrial zones in a comparative framework to harmonize the data on economic zones in the member countries. Harmonization of data means transforming the data of varying zone types and naming conventions into one cohesive data set by developing a framework for zone typology. Second, it underlines the relevance of the collaborative approach for the subregional economic zones and highlights how the coronavirus disease (COVID-19) pandemic has further underscored the need for the collaborative approach to economic zones. Typically, economic zones are a tool of competitive strategies for attracting investment. Third and most important, it identifies the transborder subregion with a hybrid zone and proposes a strategic framework for the success of economic zones in the subregion, which integrates the collaborative approach with the competitive approach. It is termed the "coopetition strategy."

Objectives and Scope

The study sets out the following specific objectives:

- map out the economic zones in the BIMP-EAGA countries;
- map out the economic zones on BIMP-EAGA economic corridor routes;
- map out the national policies, regulations, institutions, and governance relating to BIMP-EAGA economic zones;
- review the economic performance of the subregion to gauge the success of economic zones;
- assess the alignment between the national and subnational development agendas on the one hand and the BIMP-EAGA economic corridors and zones development approaches on the other;
- identify the challenges facing the subregional economic zones; and
- offer recommendations for actions and mechanisms to deepen economic zones' development and cross-border cooperation in the BIMP-EAGA subregion.

Map: Brunei Darussalam–Indonesia–Malaysia–Philippines East ASEAN Growth Area



Source: Asian Development Bank.

The ultimate objective of the study is to strengthen the strategic relevance of economic zones in the subregional initiative and identify actions for promoting them.

While the study proposal was designed to cover only SEZs and special border economic zones, it was decided during the study to include all other types of economic zones for three reasons. First, there has been a proliferation of not only SEZs but also other economic zones in the subregion; any study based only on SEZs would, therefore, present a partial view of trade and investment activity along the economic corridors. Second, the distinction between SEZs and other economic zones is becoming blurred, with many of the advantages of the former being offered in the latter as well. Finally, the ultimate objective of both these types of zones is to promote industrial clustering and production networks.

The geographical scope of the study includes the entire Brunei Darussalam and 43 provinces, 2 states, and 1 federal territory covered under the BIMP-EAGA, as follows:

- Kalimantan (5 provinces), Sulawesi (6), Papua (2), and Maluku (2) in Indonesia;
- the states of Sabah and Sarawak, and the Federal Territory of Labuan in Malaysia; and
- Mindanao (27 provinces) and Palawan island province in the Philippines.

Methodology

The methodology employed in this study involves a combination of secondary and primary research. Extensive country consultations were conducted during July and August 2019. A study team comprising the author and ADB's project management team conducted face-to-face interviews with key informants such as government officials at the national and subnational levels, SEZs and other economic zones officials, the BIMP-EAGA Facilitation Center (BIMP-FC) management team, and BIMP-EAGA Business Council (BEBC) members using semi-structured questionnaires. The field-based consultations offered crucial insights into the implementation of the subregional agenda at the national level. Country consultations were also filled with presentations by various government agencies, discussions, and site visits, yielding rich information on the existing and proposed economic zones in these countries.[1]

The primary data gathered during field trips were then combined with the secondary data, which encompassed an enormous range of sources including nationally and internationally published studies; development plan documents of the member countries since the 1960s; texts of relevant acts, decrees, and regulations; government reports and press releases; academic and news articles; blogs and books; and websites of investment promotion agencies including the Malaysian Investment Development Authority (MIDA), Badan Koordinasi Penanaman Modal (Indonesian Investment Coordinating Board [BKPM]), Philippine Economic Zone Authority (PEZA), and Darussalam Enterprise (DARe); and the relevant ministries. The data are assessed using the descriptive, exploratory, and explanatory approaches. The descriptive element includes the mapping of economic zones in the BIMP-EAGA countries and policy frameworks surrounding

[1] Field trips to Brunei Darussalam could not be conducted for unforeseen reasons. However, online interviews were organized to gather information.

them. The exploratory part seeks to analyze the linkages between the subregional and national development agendas and review the economic impacts of the former. Finally, the explanatory part explains the relevance of the subregional program using both theoretical arguments and empirical evidence, discusses the challenges, and suggests approaches to strengthen the subregional economic zones for the program's success.

Organization of the Study

Since the ultimate objective of the study is to identify policy actions for promoting economic zones created within the subregional economic corridors, it is structured using the "stages model framework" of the public policy literature. According to this model, producing public policies can be divided into five to seven stages. This report uses the Howlett and Ramesh's model (Howlett and Ramesh 2003), which proposes five stages of public policy: agenda building, policy formulation, adoption, implementation, and monitoring and evaluation. The agenda building stage establishes the relevance of an issue for public intervention, while policy formulation means strategy building to address the issue. Policy adoption is the third phase of the policy process in which government bodies adopt policies for implementation. Implementation involves putting the policies into effect, and monitoring and evaluation (the final stage) requires policy impact assessment. In this study, these stages are adapted and reorganized into four stages: agenda building, strategy development, policy adoption into planning, and policy implementation. The fifth stage of monitoring and evaluation (M&E) is grouped into the implementation stage. The rest of the study is organized into 10 chapters covering these four stages and concluding remarks (Figure 1).

Figure 1: Organization of the Study

BIMP-EAGA = Brunei Darussalam–Indonesia–Malaysia–Philippines East ASEAN Growth Area.

Source: Author.

Chapter 2

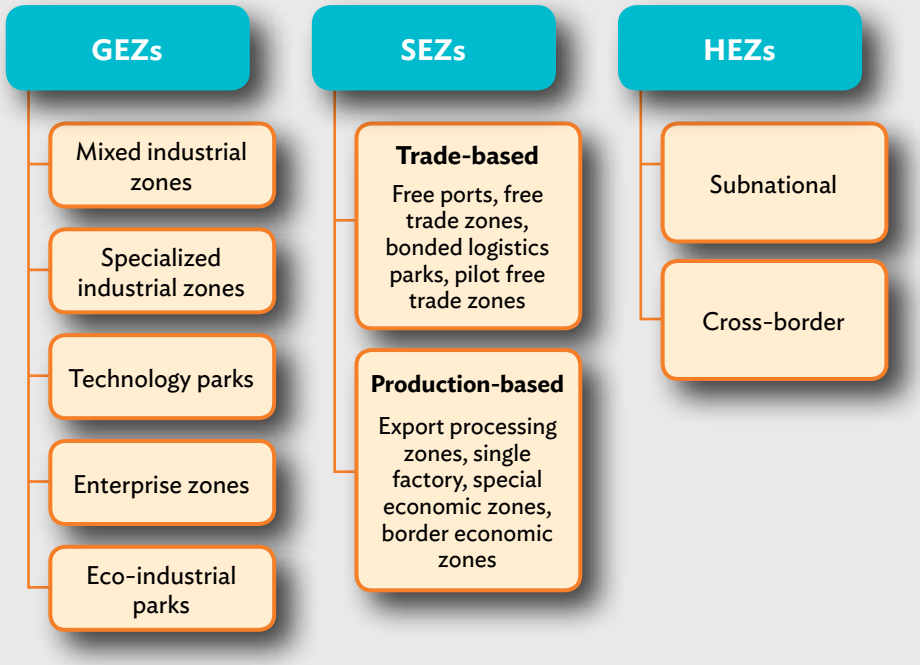
Understanding the Concept of Economic Zones: The Conceptual Framework

Typological Framework of Economic Zones

Economic zones are geographically delimited areas created to offer well-developed industrial spaces with or without special rules and incentives. While the underlying principle for economic zones is clustering general or specialized firms and generating agglomeration economies, they are different from industrial or economic clusters in terms of origin, entry barriers, and composition of enterprises. Clusters are often organically formed geographic concentration of highly interconnected companies, specialized suppliers, and service providers (investment and other business consultants; and academic, financial, and technological institutions) linked by commonalities and complementarities without a clearly demarcated geographical boundary (Porter 1998) and as determined by historical legacy (Miller and Côté 1989). They are instrumental in improving the competitiveness of firms in a globalizing world by exploiting the strength of agglomeration economies through collaborative networks developed among economic actors operating within them (Krugman 1991). By contrast, economic zones are government-designated or approved industrial areas with specific geographical boundaries. They are developed by public and/or private entities, offering enabling environments in a limited place with a single administrative regime and infrastructure such as roads, power, and other utility services (ADB 2018). The zone management authorities determine the type, size, and number of firms operating in them. The collaborative networks and social capital that develop among various economic actors engaged in production processes in natural (organic) clusters may not be seen in these government-designated zones. However, they can evolve and transform into economic clusters to serve as a useful policy tool.

Policy makers across the globe have pinned their hopes on economic zones for promoting agglomeration economies and have been experimenting with innovative designs, features, and incentives to generate the intended effects. This experimentation has led to a proliferation in the number and variety of zones in terms of the objectives, designs, ownership, sectoral composition, and geographical spread. With their evolution, it has become difficult to present any universally accepted, all-encompassing, and comprehensive definition or terminology for economic zones (ADB 2018, Bost 2019). Therefore, the typological method is used here to understand the concept of economic zones. But there is no uniform typology of economic zones either. They can be categorized in various ways based on their legal regimes or geographical, institutional, and economic characteristics, resulting in diverse typologies, each addressing certain analytical requirements. In this study, a two-layered classification is proposed in Figure 2 to map the universe of economic zones. At the top (level 1) is the typology based on the legal perspective, from which there are three types of economic zones: general, special, and hybrid. The distinction between

Figure 2: Typological Framework of Economic Zones



GEZ = general economic zone, HEZ = hybrid economic zone, SEZ = special economic zone.
Source: Author, based on various sources.

general economic zones (GEZs) and special economic zones (SEZs) centers on the type of regulatory regime that governs them. Hybrid zones consist of both GEZs and SEZs. Each type of economic zone further branches out according to its functional characteristics in level 2.

Types of Economic Zones

General Economic Zones or Industrial Zones

According to the United Nations Industrial Development Organization (UNIDO 1997, 10), an industrial zone or park is "a tract of land developed and subdivided into plots according to a comprehensive plan with provision for roads, transport and public utilities with or without built-up (advance) factories, sometimes with common facilities and sometimes without them, for the use of a group of industrialists." Industrial parks started emerging in the early 20th century in advanced countries,[2] and their number exploded post-World War II. The United States (US) alone had as many as 1,000 industrial parks by 1959, which grew to 2,400 by 1970 (World Bank 1992). In Asia, the first publicly funded industrial estate was set up in Singapore in 1951 (World Bank 1992). The concept spread quickly, with industrial estates emerging and multiplying in other Asian countries. The most common names used are industrial zones, industrial parks, industrial districts, and industrial estates.

[2] Manchester's Trafford Park, set up in 1896, was the world's first industrial estate (World Bank 1992).

This chapter uses the term GEZ or industrial zone throughout the analysis. Table 1 provides a second layer typology of GEZs, based on their functions (objectives and forms).

Table 1: Functional Typology of General Economic Zones

GEZ	Description
Mixed type industrial zones	• **Industrial zones of mixed type** accommodate a wide range of industrial activities and firms.
Specialized industrial zones	• **Specialized industrial zones** provide factory accommodations exclusively to industrial units belonging to the same trade in manufacturing or services, with the advantage of common services and facilities organized efficiently and economically for the benefit of the tenants. Some illustrative examples are textile parks, food parks, halal parks, or computer software parks. • A **business park** is a variety of specialized zones with non-pollutive light, high-technology, research-oriented, and service-based businesses clustered in them. They also cover cyber cities and centers. • A **specialized business district** is a business hub specializing in a specific type of activity. • **Logistics parks** are specialized zones that provide transport, logistics, and distribution services to lower freight and transaction costs, vehicular pollution, congestion, and warehousing costs.
Technology and/or science parks, or science and technology parks	• **Technology parks** are specialized industrial parks with research and development institutions, companies, and markets that facilitate the creation and growth of innovation-based companies through incubation and spin-off processes.[a] • **An innovation district** is a second-generation technology park with a top–down urban innovation ecosystem designed with the ultimate objectives of accelerating the process of innovation and strengthening the location's competitiveness (UNIDO 2015).[b]
Enterprise zones	• **Enterprise zones** are intended to revitalize distressed urban or rural areas by providing tax incentives and financial grants. Most such zones are in developed countries such as France, the United Kingdom, and the United States.
Eco-industrial parks	• **Eco-industrial parks** are communities of businesses both in manufacturing and services, seeking enhanced environmental and economic performance by sharing common pollution-control services and facilities, and promoting the exchange of goods, services, material, energy, water, waste, and by-products through a process called industrial symbiosis (Lowe 2001, UNIDO 2019).

UNIDO = United Nations Industrial Development Organization.

[a] Science parks are found worldwide, but they are most common in the developed world. Some of the earliest science and technology parks in Asia were set up in Taipei,China and the Republic of Korea.

[b] Daedeok Innopolis in the Republic of Korea, for instance, has 30 government-funded institutions, 5 universities, over 400 corporate research and development centers, and more than 1,200 high-tech companies. Over 11% of all doctor of philosophy (PhD)-level researchers in the Republic of Korea who specialize in engineering and the natural sciences are residents of this town (Oh and Yeom 2012).

Sources: Author, based on the existing literature; D.-S. Oh and I. Yeom. 2012. Daedeok Innopolis in Korea: From Science Park to Innovation Cluster. *World Technopolis Review*. 1 (2): pp. 141–154; UNIDO. 2015. *Economic Zones in the ASEAN: Industrial Parks, Special Economic Zones, Eco Industrial Parks, Innovation Districts as Strategies for Industrial Competitiveness*. Ha Noi; Lowe, E. A. 2001. *Eco-Industrial Park Handbook for Asian Developing Countries*. Manila: ADB; and UNIDO. 2019. *Eco-Industrial Parks: Achievements and Key Insights from the Global RECP Programme, 2012–2018*. Vienna.

Special Economic Zones

The SEZ is a distinct variety of economic zone with a specialized legal regime and institutional environment different from the rest of the economy. Typically, an SEZ is set up for export-oriented enterprises, particularly those with foreign investments, to offer them a special regulatory regime for exporting activity with a separate customs area, duty-free benefits, streamlined procedures, and its own management authority (Akinci and Crittle 2008). But SEZs can also target import-substituting activity or investment in priority industries. In today's world, they have become a critical tool for developing countries to plug them into global value chains (GVCs). According to the United Nations Conference on Trade and Development (UNCTAD) (2019), 147 countries have established nearly 5,400 SEZs within their borders, and more than 500 are in the pipeline. Over time, SEZs have evolved into various forms, depending on their objectives (Table 2).

Hybrid Zones

Typically, hybrid economic zones are subdivided into a general zone open to all industries and a separate SEZ area reserved for export-oriented production. Over time, however, hybrid zones have taken a conceptual leap with the emergence of contiguous subnational or transborder economic regions comprising clusters of SEZs and GEZs.

- **Subnational hybrid zones.** Known as micro-regions, these are groupings of contiguous subnational economic regions being promoted on a premise to create specialized territorial areas that can enable the development of distinct polarities (such as SEZs and GEZs) around which activities, resources, and economic and market relations structure themselves to generate a cumulative process of territorial agglomeration and a virtuous circle of development (Capello 2009). It means that the concept of a single node (a single factory or economic zone) growth pole has been upscaled to a hybrid zone comprising a cluster of such nodes (SEZs and industrial zones) to exploit externalities generated by them on a larger scale.
- **Cross-border hybrid zones.** The early 1990s witnessed a resurgence of regionalism with an explosion of the number and types of new regional programs across the globe. One of the major developments was extending the concept of micro-regions to transborder regions covering contiguous subnational units from two or more nation-states (Söderbaum 2004, Hutchinson and Chong 2016, Jessop 2003). Originated in Germany, the concept had been in existence since 1958. However, such early regions were in the form of cross-border cooperation by local governments with no formal organizational arrangements (Perkmann 2003). In 1980, the Madrid Convention was signed to provide a legal framework for binational and multinational agreements for cross-border regions between local governments in Europe, which started growing in the 1990s under the Interreg Community Initiative launched by the European Commission.[3] In Europe, these are termed "macro-regions" and are initiated on the request of the European Union (EU) member states (and in some cases, non-EU countries) in the same geographic area via the European Council with a focus on territorial development (European Commission 2017). In Asia, these arrangements arose in the form of growth triangles, growth polygons, and growth areas, which are orchestrated by central governments' policies. One of the earliest subregions in Asia was the Singapore–Johor–Riau (SIJORI) Growth Triangle initiated

[3] By 2002, there were over 70 such zones in Europe (Perkmann 2003).

Table 2: Functional Typology of Special Economic Zones

Trade-Based SEZs	
Free ports	• **Free ports** are a special kind of maritime port or airport where normal tax and customs rules do not apply.
Free trade zone (FTZ)	• An **FTZ** is a small-enclosed area carved out in or adjacent to ports or airports, offering warehousing, storage, and distribution facilities for trade, transshipment, and reexport operations and located in the ports of entry or airports (UNCTAD 2019).
Bonded logistics parks (BLPs)	• **BLPs** are essentially a variant of the logistics parks established especially on port hinterlands, offering a range of transport and logistics services to all types of trade, including swift, customer-oriented just-in-time services and value-added logistics services to reduce inventory and raw material procurement costs.
Digital free trade zones (DFTZ)	• A **DFTZ** aims at providing physical and virtual space for SMEs to grow through cross-border e-commerce activities. It is supported by logistics centers set up in selected locations.
Production-Based SEZs	
Export processing zones (EPZs)	• A **first-generation EPZ** is a relatively small, geographically separated area within a country to attract export-oriented processing activity by offering favorable investment and trade conditions. It provides for importing goods to be used in the production of exports on a bonded, duty-free basis. • **Second-generation EPZs** are relatively larger and more sophisticated in terms of the composition of export processing activities, and services and facilities offered than the traditional ones.
Single factory EPZs	• **EPZs** may be promoted as a single firm or factory that is a designated enterprise with EPZ benefits. Mexico's *maquilas* and Mauritius's EPZs are well-known examples of single factory zones.
Special economic zones (SEZs)	• **SEZs** are mega open industrial towns spread over several square kilometers. The key features of SEZs are that they accommodate all activities, including tourism and retail sales, and permit people to reside on-site with an elaborate on-site social infrastructure. • **Second-generation SEZs** are more specialized and more complex than first-generation SEZs.
Special border economic zones (SBEZs)	• **SBEZs** were first introduced in Mexico (on US–Mexico border) in the early 1960s in the form of *maquiladoras*. These border economic zones were set up to exploit comparative advantages of border areas that arise due to their climatic conditions, factor endowment, spatial proximity to foreign markets, and the relatively high potential for developing cross-border backward and forward linkages and regional cooperation.
Cross- border economic zones (CBEZs)	• **CBEZs** are established by integrating border economic zones on both sides of the border to catalyze economic activity and promote regional cooperation. ADB supports the development of the Hekou–Lao Cai and Pingxiang–Dong Dang CBEZs on the PRC–Viet Nam border.

ADB = Asian Development Bank, PRC = People's Republic of China, SEZs = special economic zones, SMEs = small and medium-sized enterprises, UNCTAD = United Nations Conference on Trade and Development, US = United States.

Sources: Author, based on existing literature; and UNCTAD. 2019. *World Investment Report 2019: Special Economic Zones*. Geneva.

by Singapore. It was followed by other subregional arrangements in Asia, including the Greater Mekong Subregion Economic Cooperation Program, Tumen River Delta Initiative, IMT-GT, and BIMP-EAGA. Backed by a formal organizational structure, a cross-border subregion is an eco-territorial unit designated to promote economic nodes, which drive growth by accelerating trade, investment flows, and productivity growth, reinforcing local competencies through regional integration. From this perspective, the BIMP-EAGA subregion is a cross-border hybrid zone. Physical integration of institutionally and physically fragmented cross-border areas is necessary to create a contiguous economic spatiality to ensure the efficient movement of people, resources, and goods and services. This integration facilitates the promotion of new production hubs and urban centers on the one hand, and the expansion of the existing one on the other hand. Economic corridors that support connectivity infrastructure and regulatory reforms are, therefore, integral to the economic fabric and economic actors (including economic zones of different types) of the subregion (Brunner 2013). In general, the assessment of a subregion focuses either on the primary goals (connectivity and regulatory reforms) or the final outcomes (gross domestic product [GDP], investment, and trade); the intermediate goal, i.e., the promotion of economic zones, is often ignored. This study deals precisely with this gap.

Chapter 3

General Economic Zones and Special Economic Zones in BIMP-EAGA Countries

Economic zones have been a core element in the economic development strategy of the ASEAN countries since the early phases of their development. Currently, all ASEAN countries have economic zones of different types. Three of the four BIMP-EAGA countries were among the first major economies of ASEAN and Asia that successfully leveraged economic zones to support their manufacturing-centered industrialization strategy (Aggarwal 2019a). The Philippines was the first BIMP-EAGA country to have an SEZ in 1969, followed by Malaysia (1971), Indonesia (1973), and Brunei Darussalam (2017). However, Malaysia became the first country to have an industrial zone among the BIMP countries in 1955, followed by Indonesia (1970), the Philippines (1974), and Brunei Darussalam (1992). Over time, the economic zones in these countries have undergone several transformations, with changing macroeconomic contexts. Several different economic zones have emerged with their objectives evolved from promoting economic diversification to achieving balanced regional growth to improving competitiveness. This chapter describes the evolution of economic zones in the BIMP-EAGA countries through different phases of economic development and maps them using the typological framework outlined in Chapter 2.

Brunei Darussalam

Brunei Darussalam, an oil-rich country with over half of the country's GDP accounted for by petroleum and natural gas (hydrocarbons) exports, is a high-income developing country and enjoys the highest income per capita in the region. Over 94% of the total merchandise exports during 2013–2017 were accounted for by hydrocarbons alone. Since 1959, when Brunei Darussalam's status as a British protectorate was changed to self-rule, the government has been pursuing diversification of the economy as one of the objectives of its economic planning (Table 3). However, it was not before its independence from the United Kingdom in 1984 that Brunei Darussalam initiated serious efforts to create an industrial base. To improve facilities for industrial development, the government started setting up small industrial parks in the early 1990s. Initially, the focus was on micro, small, and medium-sized enterprises (MSMEs), but subsequently, large industrial parks were also set up to attract foreign direct investment (FDI) and promote priority industries.

In 2007, a 30-year long-term development plan framework, better known as "Wawasan Brunei Darussalam 2035" or "Brunei Darussalam Vision 2035," came into force to be implemented by six 5-year medium-term plans. It focuses on strengthening the foundation of a knowledge-based economy with increasing capital investments to enhance research and development (R&D) capacity, enrollment in tertiary education, innovativeness, creativity, capacity, and skills in technology. It marked a strategic shift in the planning and implementation of development projects in line with the objectives of the long-term development vision. Since then, there has been a proliferation of

economic zones in the country. Brunei Darussalam currently hosts 25 industrial parks, of which 24 are general economic zones (GEZs) and one is an SEZ. What follows is an overview of the evolution of economic zones in the country.

Table 3: Evolution of Industrial Policy and Economic Zones in Brunei Darussalam

Development Phase	Subphases	Strategic Focus of Industrial Policies	Industrial Strategy	Evolution of Economic Zones	Evolution of Special Economic Zones
Phase 1: 1950–1984	1953–1958	Infrastructure, communication, and social development			
	1959–1984	Diversification of the economy			
Phase 2: 1984–2007		Industrial development and widening of industrial base	Creating facilities for industrial development	Industrial estates	
Phase 3: 2007–onward		Knowledge, innovation, and increased productivity	Sector-specific approach with a focus on high value-added activities	Proliferation of industrial estates and improvement in their attractiveness	Export processing zone

Source: Author, based on various sources.

General Economic Zones

- **Industrial parks.** Soon after independence, the government set up an industrial promotion agency, which was eventually turned into the Brunei Darussalam Industrial Development Authority (BINA) and was mandated to develop industrial sites in the country. The industrial estates started emerging in the early 1990s when Pekan Belait and Sungai Bera industrial estates were set up in 1992 and 1996, respectively. Other industrial estates or zones under BINA included Beribi, Serasa, Bato Apoi, Kuala Lurah, Serambungum, and Lambak Kanan West. These estates essentially targeted domestic market-oriented MSMEs with an average plot size of 0.2–2.0 hectares. In 2002, Brunei Darussalam Economic Development Board (BEBD) was set up to complement BINA's efforts by developing large, integrated industrial estates encouraging FDI. The new generation of industrial estates developed by the BEBD offer modern infrastructure and are supported by a range of services including marketing to target the export market as well as develop priority industries (Oxford Business Group 2013). In 2016, Darussalam Enterprise (DARe) was set up, bringing under its umbrella all the industrial parks formerly run by the BEBD and BINA. Functionally, there are two types of GEZs.

- **Industrial zones of mixed variety.** As many as 20 industrial parks comprise mixed economic activities, with most hosting light and medium manufacturing and services including food and beverages, construction-related, garments making industries, and other manufacturing activities.
- **Specialized parks.** In addition to mixed industrial parks, specialized parks have also been built for petrochemical (Pulau Muara Besar Industrial Park and Sungai Liang Industrial Park [SPARK]), halal (Bio-Innovation Corridor Industrial Park), and information and communication technology (ICT) (Anggerek Desa Technology Park and Digital Junction).

Brunei Darussalam is divided into four districts: Brunei-Muara, Tutong, Belait, and Temburong. Out of 25 industrial parks (GEZs), 16 are in Brunei-Muara and within 50 kilometers (km) from the Muara port and airport. Most GEZs are small, with 14 of the 25 parks having a size less than 100 hectares (ha). Pulau Muara Besar (1,057 ha) and Telisai (2,808 ha) industrial parks are the only mega industrial parks.

Special Economic Zones

- **Terunjing Free Trade Zone.** Under the Free Trade Zone Order 2014, Terunjing Industrial Site was declared Brunei Darussalam's first free trade zone (FTZ). Spread over 95 ha near Muara Port (22 km) and Brunei International Airport (8 km), it is set up to attract light and medium industries where goods can be stored, manufactured, handled, and reexported. Even though it is named as an FTZ, it is a traditional export processing zone (EPZ). In 2017, the minister of finance and economy authorized DARe to maintain and operate the FTZ.

Indonesia

Indonesia is known for its abundance of natural resources: spices, wood, rice, copper, tin, gold, coffee, tea, cacao, tobacco, rubber, and—since 1883—mineral oil. At the time of independence, the economy was heavily dependent on commodity trade. In 1949, the government embarked on industrialization as the engine of economic development. Over time, economic development policies evolved with changing political regimes and can be broadly classified into three distinct phases: 1949–1966, 1967–1999, and 2005 onward.[4] Each phase is associated with evolutionary changes in the economic zones (Table 4).

The first phase of growth (1949–1966) focused on widening the industrial base to support economic development. During this period, a nationalistic industrialization strategy was adopted with the nationalization of foreign enterprises, extensive foreign exchange controls, and all-pervasive government interventions and regulations as major policy tools (Humphrey 1962). This economic strategy resulted in economic stagnation and structural retrogression after a short period of industrial momentum. Foreign capital fled, while many private companies dependent on imported materials shut down or turned to quick return activities such as trade and currency exchange.

In 1967, a change in the political regime led to a series of reforms and marked a shift in the policy regime from nationalist to import-substituting industrialization (Ananta, Soekarni, and Arifin 2011). A systematic approach to economic planning was adopted with the introduction of the first 25-year

[4] The recovery period covered the years 2000–2004 and, hence, was excluded from the analysis.

Table 4: Evolution of Industrial Policy and Economic Zones in Indonesia

Development Phase	Subphases	Industrial Policies Strategic Focus	Industrial Strategy	Evolution of Economic Zones	Evolution of Special Economic Zones
Phase 1: 1949–1966		Widening of the industrial base	Nationalistic industrialization		
Phase 2: 1967–1999	1967–1972	Economic and political stabilization	Import-substituting industrialization	Industrial estates (1970)	Bonded zones (1973) Batam bonded zone (1974)
	1973–1999	Economic growth and regional equity	Export-led growth with selective import substitution	Private industrial estates (1989) Integrated Economic Development Zones (KAPETs) (1996)	Export-oriented production entrepôts (EPTEs) (1993)
Phase 3: 2005–onward	2005–2014	International competitiveness, modernization, and high value-added activities, with regional equity	Cluster development approach	Science and technology park	Free Port of Batam (2007), KEKs (2009)
	2015–onward			Proliferation of industrial estates and improvement in their attractiveness	Bonded logistics centers (2015) Proliferation of KEKs and bonded zones

KAPET = Kawasan Pengembangan Ekonomi Terpadu (Integrated Economic Development Zone), KEK = Kawasan Ekonomi Khusus (Special Economic Zone).

Source: Compiled by the author from various sources.

development plan from 1969–1970 to 1993–1994. It was implemented through 5-year development plans called *Repelita*. During this phase, all successive 5-year plans emphasized redressing regional disparities and spreading economic growth more evenly. It was against this background that various industrial estates and bonded zones were created in Indonesia. The emergence of economic zones had transformative effects on the economic structure, as is evident from the share of manufacturing in GDP, which grew from 10% in 1970 to 27% by 1997 (Grabowski and Self 2020). The 1997/98 Asian financial crisis, followed by the political regime change, hit Indonesia hard and took the country 6 long years to show signs of recovery (Tijaja and Faisal 2014).

Indonesia entered the third phase of development in 2005 when it scrapped the then planning system and introduced the *Rencana Pembangunan Jangka Panjang Nasional* (RPJPN) (National Long-Term Development Plan) for 2005–2025 to be implemented through 5-year medium-term plans called the *Rencana Pembangunan Jangka Menengah Nasional* (RPJMN) (National Medium-Term Development Plan). Under this plan, the country placed the industrial sector at the center of growth to strengthen the economic structure, improve efficiency with modernization, promote local and international competitiveness, strengthen the national industrial base, and achieve more balanced economic development outside Java, with a focus on developing resource-based industries. Cluster development is envisaged as the basis of industrial growth. A major thrust was provided to economic zone establishment in the first two medium-term plans or RPJMN. However, the share

of manufacturing in the GDP did not improve. To give manufacturing a thrust, the government renewed its focus on promoting economic zones in the third RPJMN in 2015. Since then, efforts to increase the number of economic zones and improve their attractiveness have accelerated. Currently, Indonesia has a variety of economic zones, as described below.

General Economic Zones

- **Industrial estates.** The Government of Indonesia started to develop industrial estates in the early 1970s to support the promotion of domestic direct investment and FDI and encourage regional development. The country's first industrial estate, Jakarta Industrial Estate Pulogadung, was set up in 1970 over 500 ha of land. In 1971, a presidential decree designated Batam as an industrial estate (Kam and Kee 2009). In 1973, the Batam Industrial Development Authority was established for the industrial development of the island. Subsequently, a series of regulations formed the legal and technical basis of industrial estate development. However, the progress in industrial estate development remained slow due to the highly regulated business environment. A few more industrial estates were set up by public companies, covering 2,596 ha of land until 1989 (Himpunan Kawasan Industri Indonesia [HKI] 2019a)—Surabaya Industrial Estate Rungkut (1974), Cilacap Industrial Estate (1974), Medan Industrial Estate (1975), Makassar Industrial Estate (1978), Cirebon Industrial Estate (1984), and Lampung Industrial Estate (1986).

  In the late 1980s, a series of reforms were initiated to stabilize the economy, encourage private investment, and promote industrial growth. In 1989, the Presidential Decree 53/1989 concerning industrial estates opened the industrial estate development to private companies and set the legal and technical standards for their development, giving an impetus to the industrial estate program. Several local entrepreneurs partnered with foreign companies to set up industrial estates, including Sumitomo, Itochu, and Marubeni from Japan; Hyundai from the Republic of Korea; and Sembcorp from Singapore. By 2007, 40 industrial estates had become operational, 32 of which were on the main Java island (WTO 2007). Since then, the number has further surged.

  In 2019, 87 industrial estates covering over 86,000 ha of land were in operation (HKI 2019): 53 in Java, 23 in Sumatera, 6 in Kalimantan, and 5 in Sulawesi. In addition, 15 industrial states are under construction and 10 are in the planning stage. The most successful, relatively larger, and more diversified industrial estates are in Java, attracting investment in wide-ranging products from technology and knowledge-intensive consumer goods such as electronics and electrical, automotive, and other consumer items to labor-intensive industries (HKI 2015). The concentration of economic activity in Java started with the rise of the colonial economy based on the exports of plantation crops accompanied by the growth of processing industries and infrastructure development. Post-independence, despite the government's transmigration policies, industrial hubs in Java continued to expand and extended to adjacent cities. Java, accounting for 7% of land and home to 57% of the population, contributed 70% of total manufacturing value added in 2014 (ADB 2019a).

- In recent years, new industrial centers are emerging in natural resource-abundant areas outside Java with favorable conditions for growth in processing activities to leverage the opportunities presented by abundant natural resources such as gold, copper, tin, palm, rubber, cocoa, spices, fruits, forests, oil and gas fields, and marine life. The 2020–2024 RPJMN, the National Medium-Term Development Plan, has set to promote 24 industrial estates outside Java by 2024 (Government of Indonesia 2020). In the long term (2015–2035), industrial estates in 36 locations are planned,

requiring the availability of land of about 50,000 ha prioritized in areas outside Java and the establishment of new small and medium-sized enterprises (SMEs) centers so that each district or city owns at least one SMEs center (Government of Indonesia 2016).

- **Kawasan Pengembangan Ekonomi Terpadu (Integrated Economic Development Zones).** The Presidential Decree No. 89 of 1996 introduced the *Kawasan Pengembangan Ekonomi Terpadu* (KAPETs) (Integrated Economic Development Zones) to address regional inequality under the program Acceleration of Development in Eastern Indonesia creating 13 such zones in the island groups of Kalimantan, Sulawesi, Maluku, Papua, and Nusa Tenggara. There is one KAPET in Aceh. These zones are large industrial areas in lagging regions, which are endowed with fiscal and non-fiscal benefits. These are modeled after enterprise zones of France, the United Kingdom (UK), and the US (Table 1). An attractive feature of a KAPET is that it offers, along with financial incentives, several nonfinancial incentives including 31 priority programs in human, economic, and natural resources; facilities and infrastructure; and investment facilitation services (Temenggung 2013). These programs cover business counseling and assistance programs to help small and medium entrepreneurs apply for loans, and the promotion of a one-stop-shop integrated licensing system. The target is to attract 20% of the national investment to KAPET regions (Organisation for Economic Co-operation and Development [OECD] 2016). However, during 2005–2010, these regions could attract only 3.4% of the national investment (OECD 2016). The studies that evaluated the performance of KAPETs invariably conclude that, despite attractive features, these regions could not measure up to expectations (Rothenberg et al. 2017, Temenggung 2013, and Rothenberg and Temenggung 2019).
- **Science and technology parks.** Indonesia took an early lead to promote high-technology-intensive industries when supporting aircraft manufacturing and biotechnology research in the late 1970s. One of the initiatives was to establish the Center for Research, Science and Technology (Puspiptek) in 1976 (Amir 2013), which was developed as a township complex of government-funded research institutes to focus on science and technology development (UNESCAP 2019). However, the synergies could not be created between institutional science and technology on the one hand and industry on the other. In 2002, the development of technology parks received attention through legislation, Undang-Undang Nomor 18 Tahun 2002, which encouraged the government and private sector to develop the science and technology infrastructure and connect that with the industry (Sihotang, Hadian, and Muslim 2019). This led to the creation of Bandung Technopark by the Ministry of Industry (2010); Solo Technopark (2009), Batam Technopark (2018), and Palembang Technopark by their respective city administrations; and Cikarang Technopark (2011) by industry players (Narita 2015).

  There is no systematic study on these parks or their performance. However, the RPJMN 2015–2019 (Government of Indonesia 2015) gave a major thrust to specialized high-tech parks by proposing 100 science and technology parks (STPs) to support the government's nine-priority agenda called *Nawacita*. The five ministries or agencies that were given the task to build 100 STPs until 2019 were the (i) Indonesian Institute of Sciences, (ii) Ministry of Agriculture, (iii) Ministry of Marine Affairs and Fisheries, (iv) National Atomic Energy Agency, and (v) Board for Research and the Application of Technology. The Ministry of Research and Technology—or another appropriate institution—oversees the program at the provincial and district levels. According to the RPJMN 2020–2024, there are currently 45 operational STPs, with eight more planned for the next 5 years (Government of Indonesia 2020). Many of these STPs are in Java and at public universities.

- **Halal parks.** A halal zone being built at Modern Cikande Industrial Estate in Serang in West Java is the first industrial estate to receive halal industrial estate status. The 500-ha halal zone is carved out of the 3,175-ha Modern Cikande Industrial Estate developed by PT Modern Group in the early 1990s (Winosa 2019). The park will have halal certification facilities with a laboratory for tests by halal guarantee institutions, a halal wastewater treatment plant, and a logistics park with storage facilities. Halal Industrial Park Sidoarjo in East Java Province managed by PT. Makmur Berkah Amanda is another integrated park expected to enter the global market in 2021. Other proposed halal industrial zones are Surya Borneo Industrial Zone in Central Kalimantan, Batamindo Industrial Park (a 17-ha site for halal cosmetics and pharmaceuticals), Bintan Industrial Park (100 ha dedicated to halal food and beverages), and Jakarta Industrial Estate Pulogadung (part of a 433-ha area) (Winosa 2019). The RPJMN 2020–2024 has targeted developing three halal hubs by 2024.

Special Economic Zones

- **Bonded zones.** Bonded zones are buildings or confined areas used to process goods and materials for exports. These are traditional first-generation EPZs. The bonded zones program was initiated in the early 1970s, soon after the introduction of the industrial estates. The oldest bonded zone is the Kawasan Berikat Nusantara, on the outskirts of Jakarta set up in 1973. It mainly produces garments for the EU and US markets. Overall, 114 establishments in the Kawasan Berikat Nusantara zone employed 75,551 workers as of 2006 (Sivananthiran 2009). The second major area that was designated as a bonded zone in 1978 was Batam, near Singapore. It was earlier given the status of an industrial estate. The bonded zone status given to Batam accelerated the growth of this island, transforming it from a fishing village into a hub of electronics, shipbuilding, and oil and gas industries. Currently, there are 1,372 bonded zones in the country. Bonded zones are dominated by labor-intensive and medium-technology activities such as textile (33%), electricals and electronics (20%), rubber and plastics (12%), and other items (Damuri, Christian, and Atje 2015). To rebrand bonded zones, the Regulation of the Minister of Finance Number 131/PMK.04/2018 streamlined the procedures of these zones by expediting the permit process, improving the efficiency of online transactional permits, extending the permit's validity period until it is revoked, extending the subcontracting facility, and offering flexible incentives.
- **Export-oriented production entrepôts.** Export-oriented production entrepôts (EPTEs) were introduced in 1993. These resemble single enterprise EPZs and enjoy the benefits of bonded zones. They may be set up inside or outside an industrial estate. Their number is not known.
- **Free trade areas and free ports.** Indonesia has four free trade areas and free ports, officially termed *Kawasan Perdagangan Bebas dan Pelabuhan Bebas* (KPBPB) or FTZS: Batam, Bintan, Karimun on Riau Islands, and Sabang in Aceh. Batam, Bintan, and Karimun received the status of free trade areas and free ports in 2007 after having enjoyed that of industrial zone, bonded zone, and bonded plus zone at different times since the early 1970s.

  Typically, FTZs allow only commercial activities such as sorting, initial or final inspection, packing, repackaging, and repairing or rebuilding machinery (Table 1). However, Indonesia's KPBPBs are not traditional commercial FTZs since they allow processing activities. Further, they allow social infrastructure such as housing, condominiums, trade centers, and all related facilities. These zones are, therefore, equivalent to SEZs. The Riau Islands' KPBPBs allow the province to attract investment in the shipbuilding and shipyard industry, given its strategic location.

More than 150 major maritime, oil and gas, and electronics companies operate in the province (*Global Business Guide Indonesia* 2014). These KPBPBs also host medical equipment, agribusiness, tourism, metal fabrication, and other sectors. However, their technology content is not high (Rothenberg and Temenggung 2019). There is also a KPBPB at Sabang in the north of Indonesia (Weh Island, Aceh province). The development of a deep seaport in Sabang is a joint venture with India to enhance maritime connectivity to attract investment to the northern part of Indonesia (Roy Chaudhury 2019). These KPBPBs will expire in accordance with a predetermined period unless they are subsumed within Indonesia's SEZs program (Article 48, Law Number 39 of 2009, Concerning SEZs, Government of Indonesia 2009).

- **Bonded logistics center.** The Government Regulation 85/2015 introduced bonded logistics centers (logistics parks) of "bonded logistics parks" variety to reduce logistics costs in Indonesia (Table 2) (Hadiputranto, Hadinoto and Partners 2015). Since the launch of the first logistics center in March 2016, the number has grown to 91, spread across various regions of Indonesia (Haryana and Wahyuniarti 2017). The Minister of Finance Regulation Number 131/PMK.04/2018, concerning bonded zones, encourages the setting up of integrated bonded zones, with bonded logistics centers built within the bonded zones. It is expected to increase the production capacity of the latter by optimizing supply chains.
- **Kawasan Ekonomi Khusus (Special Economic Zones).** In 2009, the government introduced a new variety of zones named Kawasan Ekonomi Khusus (KEKs) as its most ambitious zone program.[5] These zones, with specific boundaries within Indonesia, carry out economic functions including export processing activities, industrial engineering, and logistics (storage; assembly; and sorting, packing, distributing, repairing, or rebuilding machinery) and are expected to encourage value-added processing activities and exports. They are to be situated in strategic positions (i.e., close to trade and/or maritime routes), supported by well-developed external infrastructure. However, the PP 40/2021 concerning the implementation of SEZs has relaxed this condition. It has also allowed all or part of KPBPB locations to become the SEZs.

  Each SEZ can have a variety of zones within them, including bonded zones, EPTEs, and industrial zones, which are supported by facilities such as ports and logistics services. Even though there is no export requirement on the units, it is essentially an export-oriented investment targeted in the KEKs. These are second-generation EPZs, which focus on processing activity but are characterized by large size, complex structure, and extended facilities and services. The SEZ program took off post-2014. Until then, only two SEZs were announced: Sei Mangkei (rubber and palm oil) and Tanjung Lesung (tourism). Currently, there are 19 SEZs and each one is to be developed for a set of specific sectors. Of the 19 SEZs, eight are tourism zones, while the rest focus on manufacturing. The target industries are essentially resource intensive, including palm oil, rubber, fertilizer, logistics, wood, coal, mineral, oil and gas, paper, agro-processing, and energy.

Hybrid Zones

- **Economic corridors.** In 2011, the government adopted the concept of (subnational) economic corridors as part of its long-term industrial strategy, the "Masterplan for Acceleration and Expansion of Indonesia's Economic Development" (MP3EI). One of the key elements of this strategy was developing economic potentials in six economic corridors: Sumatera, Java,

[5] This report considers KEKs as one of the different types of SEZs in Indonesia even though they are the only ones officially named as SEZs.

Kalimantan, Sulawesi, Bali–Nusa Tenggara, and Papua–Maluku. The corridors are defined as six economic development highways to improve internal connectivity. They are located along coastlines, which would connect the existing economic growth centers to support the comparative advantages of the local economies. A study by Berawi, Miraj, and Sidqi (2017) shows that each corridor has its comparative advantages—Sumatera as national plantation and processing industry corridor, Java as cyber technology innovation and services center, Kalimantan for national energy reserves and processing, Sulawesi for national aquaculture and processing industry, Bali–Nusa Tenggara as national ecotourism corridor, and Papua–Maluku for national ore mining and processing. These corridors are to be implemented through medium-term national development programs. Although *Nawacita* replaced MP3EI in 2014, the development of economic corridors continues to be a government priority.

In sum, Indonesia started establishing industrial estates and export zones in the early 1970s. The next 3 decades witnessed the emergence of a large and broad-based industrial sector. In 2009, Indonesia accelerated its drive to attract industrial investment by introducing new economic zones. Post-2015, the drive is given further momentum.

Malaysia

Malaysia, the most rapidly industrializing country in the subregion, has achieved remarkably high economic growth since its independence in 1957. At the time of independence, Malaysia was an agrarian economy, with heavy dependence on rubber and tin exports, and entrepôt trade centered on the free ports of Singapore, Penang, and Malacca. Given the risks associated with the overdependence on commodities trade, the government set out to diversify the economic base by promoting manufacturing with SEZs and GEZs as the centerpiece of its national development strategy. In general, three broad phases of development strategy may be identified in Malaysia, which are manifested in the evolutionary changes in economic zones (Table 5).

Phase 1. Soon after independence, Malaysia embarked on import-substituting industrialization (Rasiah, Crinis, and Lee 2015; Jomo 2013; Rasiah 1996). In this first phase of development (1957–1970), specific industries were promoted primarily through tariff protection and quotas, and provisions of basic infrastructure including industrial zones to cater to the domestic market. Malaysia thus adopted industrial estates (GEZs) as a critical element of the industrialization strategy right in the first phase of growth. In 1958, the Pioneer Industries Ordinance Act was introduced, under which companies that were granted pioneer companies' status enjoyed tariff protection along with other tax breaks. The pioneer import-substituting firms grew in number in the 1960s, but widespread unemployment and social unrest in the late 1960s led the government to change the development agenda from growth to growth with social restructuring and regional equity (Second Malaysia Plan, 1971–1975, Government of Malaysia 1971).

Phase 2. For accelerating economic growth in the second phase (1971–1990), the import-substituting regime was complemented with export-oriented policies in selected sectors. This led to the creation of EPZs that aimed at attracting labor-intensive assembly-type activity of imported components for trade-based growth and employment generation. To achieve the objective of regional equity, the government set up industrial estates in backward regions. Kedah was the only backward state that had an industrial estate in 1971. However, by the end of 1980, 20 of 76 industrial estates were

Table 5: Evolution of Industrial Policy and Economic Zones in Malaysia

Phase	Subphase	Strategic Focus of Industrial Policies	Trade Regime	Industrial and Spatial Policies	Evolution of GEZs	Evolution of SEZs
Phase 1: 1957–1970	1957–1970	Growth	1st stage ISI	Pioneer Industries Ordinance Act 1958	1st GEZs developed by state economic development corporations	
Phase 2: 1971–1990 New Economic Policy	1971–1980	Growth with social restructuring and regional equity	1st stage ISI–1st stage EOI	Investment Incentives Act 1968; Industrial Coordination Act 1975	Spread of industrial estates in backward states	Free Export Zone Act 1971. FIZs and LMWs set up.
	1981–1985	Growth with expanding the manufacturing base	2nd stage ISI–1st stage EOI	Heavy Industrial Policy 1981; Look East Policy 1981	Growth of first-generation GEZs	
	1986–1990	Efficiency and competitiveness	2nd stage EOI	Industrial Master Plan 1 (1986–1995)	Emergence of private industrial parks	Integration of EPZs with the wider economy
Phase 3: 1991–2020 New Develop-ment Policy	1991–2000	R&D, innovation, and competitiveness	Knowledge economy	Industrial Master Plan 2 (1995–2005)	Specialized high technology parks 1995, Multimedia Super Corridor 1996	Setting up of free commercial zones for efficiency in logistics
	2001–2010 New Vision	Balanced industrial development with a shift to a knowledge-based economy	Cluster-based industrialization	Industrial Master Plan 3 (2006–2020); Five economic corridors (2005–2020); National Physical Plan, 2005	Proliferation of both GEZs expansion of specialized high-tech and halal parks	Emergence of hybrid economic zones
	2011–2020 New Trans-formation Policy	Economic transformation with balanced regional development	High-density cluster-based policy		Proliferation of GEZs, specialized high-tech and halal parks	Zones within zones strategy

EOI = export-oriented industrialization, EPZ = export processing zone, FIZ = free industrial zone, GEZ = general economic zone, ISI = import substitution industrialization, LMW = licensed manufacturing warehouse, R&D = research and development, SEZ = special economic zone.

Note: Ist stage ISI: Promotion of consumer goods industries; 2nd stage ISI: Promotion of heavy industries; Ist stage EOI: promotion of labor intensive exports; 2nd stage EOI: Promotion of high value added exports.

Source: Compiled by the author from 5-year development plans.

in the economically backward states of Kedah, Kelantan, Pahang, Sabah, Sarawak, and Terengganu (Fourth Malaysia Plan, 1981–1985, Government of Malaysia 1981).

Phase 3. In 1991, Malaysia launched Vision 2020, embarking on the third phase of economic development to induce a structural shift from low to high value-added activities through information- and knowledge-led growth along with equity. This led to the creation of high-tech parks and the Multimedia Super Corridor (MSC) modeled after Silicon Valley. Efforts to enhance competitiveness were further intensified following the 1997 Asian financial crisis. In 2006, the Government of Malaysia announced five regional economic corridors to unlock the potential of all the regions through micro-planning and build competitive cities by integrating economic zones into urban planning. With a thrust on promoting a high-productivity society supported by infrastructure, industrial investment, and innovation, a high-density integrated cluster development approach was adopted in the Tenth Malaysia Plan, 2011–2015 (Government of Malaysia 2010a). Based on the principle of concentrated decentralization laid down in the National Physical Plan-2 (Government of Malaysia 2010b), this approach has dominated Malaysia's broader industrial strategy since then.

According to the Malaysian Investment Development Authority (MIDA) statistics, over the three economic development phases, Malaysia has created more than 600 different economic zones, of which 247 are major facilities developed by various government agencies such as the state economic development corporations, regional development authorities (RDAs), port authorities, and municipalities (MIDA, Infrastructure Support). What follows is an overview of the evolution and status of these economic zones.

General Economic Zones

- **Industrial parks or estates.** As early as 1955, the first industrial site was created in Petaling Jaya in Selangor over 730 acres. It was followed by nine more industrial estates by the end of 1970 (Second Malaysia Plan, Government of Malaysia 1971). Since then, there has been a rapid growth in the number of industrial estates. By the end of 1980, the number of industrial estates rose to 76, covering about 9,650 ha developed principally by state economic development corporations (Fourth Malaysia Plan, Government of Malaysia 1981). In the late 1980s, establishing industrial estates was open to the private sector, leading to a proliferation of privately developed industrial estates, particularly in the developed states of Melaka and Selangor. There is no comprehensive statistics available on the number, type, or location of industrial estates in Malaysia. MIDA provides a list of 247 major economic zones by state, of which nearly 200 are industrial estates. Most of these parks are in manufacturing and comprise wide-ranging economic activities from light to high-tech ones. Johor hosts the largest number of industrial estates, followed by Terengganu, Melaka, and Selangor. Most parks are mixed in terms of their economic composition. However, there are some parks in single trades as well, including integrated fisheries park (Kelantan), maritime park (Johor), furniture park, biopolymer park (Terengganu), and Aerotech Park (Selangor), among others. There are a few business parks for office spaces, but they are concentrated in Johor.
- **Technology parks.** In the early 1990s, technology parks were launched to cater to technology-intensive industries and research and development (R&D) activities. Kulim Hi-Tech Park, the country's first high-technology park created in 1995, was developed as a self-contained township with a shopping center, a hospital, educational institutions, and recreational facilities.

According to MIDA statistics, there are currently 17 public-owned and managed STPs with different nomenclatures and specifications. These include Kulim Hi-Tech Park, Kulim STP, Technology Park Malaysia (Kuala Lumpur), Seri Iskandar Technology Park (Perak), Selangor Science Park (Selangor), Science Parks (Penang), and Johor Technovation Park (Johor) (MIDA, Infrastructure Support).

- **Multimedia Super Corridor.** In 1996, Malaysia set up the MSC as a high-technology business district measuring 15 km by 40 km in central-southern Selangor, anchoring cyber cities, cyber centers, and digital hubs. While digital hubs are the designated areas created for start-ups, cyber cities and centers are built to host information technology (IT)-related domestic and foreign companies. Together they present an attractive ecosystem to spur Malaysia's IT industry and digital economy. As of July 2019, there were 61 cyber cities and centers within the MSC Malaysia (MIDA, Infrastructure Support). Cyberjaya Technology Park of Malaysia and Technology Park Malaysia are two major technology hubs on the MSC. Spread over 2,883 ha of land, Cyberjaya is an information and communication technology (ICT) city designed to attract world-class multimedia and ICT companies. Technology Park Malaysia, spread over 686 acres, is not dedicated exclusively to ICT companies, yet the ICT cluster has recorded the highest tenancy within the park. In addition to the companies in cyber cities, centers, and digital hubs, eligible ICT-related businesses located outside may also be granted the MSC Malaysia status with the same rights and privileges to promote continuous growth. As of December 2020, the number of active MSC status companies stood at 2,794 (Malaysia Digital Economy Corporation 2020).
- **Halal parks.** In addition to technology parks and cyber cities, a new variety of specialized parks called halal parks emerged when the Negri Sembilan government built the first Halal Products Industrial Park on a 22-ha land at the Pedas MIEL Industrial Park near Rembau in 2004 (*The Halal Journal* 2004). A halal park "is a community of manufacturing and service businesses located on a common property with the aim of preserving the integrity of halal products" (Islam and Madkouri 2018). These are eco-friendly parks for halal products developed with a focus on the green design of park infrastructure, cleaner production, pollution prevention, availability and accessibility of raw materials and ingredients, and energy efficiency. The Halal Industry Development Corporation is responsible for the overall management of these parks, while the Department of Islamic Development Malaysia (Jabatan Kemajuan Islam Malaysia) is responsible for the halal certification. Currently, there are 21 halal parks, of which 14 are HALMAS (accreditation given to halal parks) and the rest are nonaccredited. The largest one is a halal hub in Sarawak, spread over 124,000 ha of land.

Special Economic Zones

- **Free industrial zones.** Malaysia promulgated its Free Trade Zone Act 1971 to set up traditional EPZs (named FTZs), where the companies had to export 80% of their production to avail themselves of the benefits. The first zone was built near Penang International Airport in Bayan Lepas in 1971 to revive entrepôt trade, attract foreign investment in labor-intensive industries, and promote manufacturing exports. These zones benefited from large waves of foreign investors, particularly from the US, who relocated electric and electronics assembly and processing plants in Penang to benefit from its large, educated pool of English-speaking cheap labor; attractive incentives; and political stability. As a result, the electronics industry grew rapidly during the 1970s and 1980s to become the main economic growth engine. Encouraged by the success of Bayan Lepas, the government set up more such geographic spaces. In 1990, the name of these zones was

changed from FTZs to free industrial zones (FIZs) to better reflect their objective. To date, there are 22 FIZs at Johor (Pasir Gudang, Tanjung Pelepa), Melaka (Batu Berendam I, Batu Berendam II, Tanjung Kling), Selangor (Pulau Indah, Sungai Way I, Sungai Way II, Ulu Kelang, Telok Panglima Garang), Perak (Jelapang II, Kinta), Penang (Bayan Lepas I, II, III, IV, Seberang Perai), and Sarawak (Sama Jaya).

- **Single enterprise zones.** In 1975, Malaysia introduced single factory EPZs termed licensed manufacturing warehouses (LMWs) under Chapter 65/65A of the Customs Act 1967. An LMW is a manufacturing unit (factory) granted to any person for warehousing and manufacturing approved products on the same premise with the same benefits as FIZs. It could be set up where FIZs did not exist. Companies with 80% or more exports qualify for the status of LMWs.
- **Free commercial zones.** The Free Zones Act 1990 introduced free commercial zones (FCZs) of traditional FTZ variety. Commercial activities in these zones include trading (except retail trading), breaking bulk, grading, repacking, relabeling, transshipment, and transit. All major ports and international airports in Malaysia are integrated with free zones, which have been instrumental in attracting foreign companies to establish regional distribution centers and turning Malaysia into a major distribution hub. These are, for instance, France's oil and gas giant Technip SA, Deutsche Post DHL, Brazil's Vale SA (the world's biggest iron ore producer), and Germany's Schlumberger Ltd. In 2020, there were 21 FCZs at north, south, and west of Port Klang, Port Klang Free Zone, Pulau Indah MILS Logistic Hub, Butterworth, Bayan Leas, Kuala Lumpur International Airport (KLIA), Rantau Panjang, Pengkalan Kubor, Stulang Laut, Johor Port, and Port of Tanjung Pelepas.
- **Digital free trade zone.** It is a digital export platform for small and medium-sized companies to carry out e-commerce and benefit from globalization. A digital free trade zone (DFTZ) has three components:
  - **e-fulfillment hub.** It helps SMEs and other businesses export their goods easily, with the support of leading fulfillment service providers. Alibaba, a Chinese company, hosts its regional e-fulfillment hub at KLIA Air Cargo Terminal 1, which Pos Aviation has developed.
  - **Satellite services hub.** It connects SMEs and businesses with leading players who offer financing, last-mile fulfillment, insurance, and other essential services in cross-border trade.
  - **e-services platform.** It allows for direct communication between Malaysian businesses and Chinese manufacturers. Lazada Malaysia serves as the e-commerce platform for the micro, small, and medium-sized enterprise (MSME) players.

  Through MIDA, the government approved eight e-fulfillment projects as of March 2019, with more in the pipeline (Nee 2019). In the second phase, a logistics center over a 60-acre plot will be operational at KLIA to support the DFTZ. In addition, facilities will be created within Penang International Airport, the Subang Airport, and Port Klang (*Free Malaysia Today* 2019). The number of companies on DFTZ increased from 1,972 in late 2017 to 13,000 by the end of 2019 (Malaysia Digital Economy Corporation 2020).
- **Special border economic zone.** A special border economic zone (SBEZ) is coming up in Bukit Kayu Hitam, a Malaysia–Thailand border town, as a duty-free logistics hub covering 6,000 ha of land, which will be developed by the Government of Malaysia jointly with the Kedah state government.

Hybrid Zones

- **Regional economic corridors.** The idea of national economic corridors was mooted in the Ninth Malaysia Plan (2006–2010) (Government of Malaysia 2006), following which, in the 2008 Mid-Term Review of the Ninth Malaysia Plan, 2006–2010 (Government of Malaysia 2008), the government announced five economic corridors for balanced growth and to move the economy up the value chains as a key objective. These corridors are East Coast Economic Region (ECER), Iskandar Malaysia in Johor, Northern Corridor Economic Region, Sabah Development Corridor, and Sarawak Corridor of Renewable Energy (SCORE). Unlike Indonesia's regional corridors, which aim to address inter- and intra-island connectivity gaps, those of Malaysia are essentially micro-regions that transcend the boundaries of Malaysian administrative states to generate agglomeration economies by upscaling the clusters through factor complementarities and pooling of resources. Iskandar targets creative industries, Northern Corridor Economic Region focuses on automobile and aerospace, ECER is into petrochemical, Sabah Development Corridor is in tourism and palm oil, and SCORE focuses on hydropower.

The overall development of these regions in Peninsular Malaysia is guided by the spatial strategy of concentrated decentralization, aiming to concentrate the resources into a few priority urban areas with the greatest growth potential while protecting the rural areas and natural environment (Government of Malaysia 2010b). Some locations within the urban conurbations have been earmarked to establish clusters of economic zones. In addition to the federal government's extensive subsidies, the state governments have also developed some incentives to encourage investors in industrial areas in these concentrations. In August 2009, Malaysia introduced an SEZ within the ECER micro-region, which stretches from the district of Kerteh, Terengganu in the north to the district of Pekan, Pahang in the south for an integrated development of commercial, residential, education, industries, service, and knowledge components as part of the concentrated decentralization strategy (high-density cluster approach). Four separate zones are to be established within this SEZ to promote and focus on groupings of industries: manufacturing, agro-industry, petrochemical, tourism, ICT, and logistics. Officially named the ECER SEZ, it is a sub-micro region with no distinct administrative framework.

Philippines

At the time of independence in July 1946, the major challenges facing the Philippines were rehabilitation, reconstruction, and stabilization of the economy devastated by war. It was a typical colonial export economy dependent on a few plantation crops: copra, hemp, sugar, and tobacco. These crops constituted 80% of its exports, with a small minority of population engaged in it. The majority of population was employed in traditional subsistence agriculture. Manufacturing was virtually nonexistent. Against this backdrop, the economy embarked on industrialization with the first development plan launched in 1950 and has traversed three broad phases of development since then (Table 6). During the first phase of development (1950–1967), the strategy was spurred by macroeconomic policies including import substitution, exchange rate controls, and fiscal incentives given to local producers (Ishikawa 2015). The establishment of industrial zones did not find favor with the government. The monetary and foreign exchange crisis of the 1960s led to a series of reforms, marking a shift from the import-substitution to export-promotion regime. To support the transition in the policy regime, the government set up the first SEZ in the form of the Bataan free port zone in 1969. A foreign trade zone authority was set up to develop and manage the zone.

Table 6: Evolution of Industrial Policy and Economic Zones in the Philippines

Development Phase	Subphases	Strategic Focus of the Industrial Policies	Industrial Strategy	Selected Policy Initiative	Evolution of Economic Zones	Evolution of SEZs
Phase 1: 1950–1967		Growth	Import substitution			
Phase 2: 1968–1992		Growth with regional development: The policy of concentrated decentralization	Export promotion, non-interventionist policies	Long-term plan (1978–1990)	Industrial estates emerged	Traditional export processing zones
Phase 3: 1993–2017	1993–2010	Growth with regional development	Liberal trade and cautiously liberal FDI regime, shift to market-enhancing policies like trade facilitation	National Physical Framework Plan (1993–2022) replaced by National Framework for Physical Planning (2001–2030), Special Economic Zone Act of 1995 and other acts	Proliferation of SEZs, and special economic and free port zones	
	2011–2016	Competitiveness and efficiency	Increasingly liberal regime with a more targeted approach	New industrial policy and manufacturing resurgence program		
	2017	Inclusive and globally competitive knowledge economy		Long-term plan AmBisyon Natin 2040 in continuation of the medium-term plans		

FDI = foreign direct investment, SEZ = special economic zone.

Source: Compiled by the author from development plans.

In the early 1970s, the government turned its attention for the first time toward balanced regional development and initiated a program of industrial dispersal away from Metro Manila. Economic zones were adopted as an important policy tool to achieve this objective. In accordance with this objective, in 1972, the free port of Bataan was replaced by a manufacturing-oriented EPZ, and the Export Processing Zone Authority was set up to administer the program. Later, three more EPZs were founded: the Mactan Export Processing Zone in Cebu (1978), the Baguio City Export Processing Zone (1979), and Cavite Export Processing Zone in Rosario (1986). Further, in 1974, the Philippine Veterans Investment Development Corporation (PHIVIDEC) Industrial Estate Authority

was created to establish industrial estates in the country to catalyze regional economic growth and enhance regional economic balance. It set up the first industrial estate of the country in Misamis Oriental in Northern Mindanao. Between 1969 and 1994, 16 public and private economic zones were in operation in the Philippines, covering 3,183 ha—four were state-owned EPZs, and the rest were industrial estates or parks and business parks (PEZA 2021).

In the 1990s, the government introduced a series of acts establishing 19 investment promotion agencies that led to a proliferation of economic zones. The most important of them is the Philippine Economic Zone Authority (PEZA). Currently, the industrial landscape in the country is dominated by PEZA-registered SEZs, which target large domestic and foreign investment as a mechanism for export promotion and regional development through urbanization. The National Spatial Strategy supported the rise in the number of SEZs in the country. First introduced in 1993 with a long-term perspective, and currently in the form of National Framework for Physical Planning, 2001–2030, it is geared toward the diffusion of economic activities through "integration," which means connecting metropolitan centers (hubs of economic activities) with regional centers, subregional centers, and local centers and promoting these subnational growth networks (or development corridors)through airports and seaports, SEZs, and state universities (Dumayas 2015).

Currently, economic zones in the Philippines can be classified into two broad groups: (i) SEZs, and (ii) special economic and free port zones.

Special Economic Zones

- **Special economic zones.** The Special Economic Zone Act, 1995 replaced the then purely export-oriented zones with a more comprehensive zone model and created PEZA as a regulatory body. All government-owned EPZs and industrial estates were converted into SEZs. Major existing private industrial parks and estates were also registered with PEZA to avail fiscal and non-fiscal incentives for their export-oriented activities. Following these policy initiatives, different SEZs—manufacturing, tourism, agro-industrial, and IT—started mushrooming mostly in the private sector, with PEZA playing the regulatory role. Two pillars of the Filipino development strategy—balanced regional and balanced agro-industrial development—underlie the development of these zones in the country. By definition, PEZA SEZs comprise industrial estates, EPZs, IT parks and centers, tourism zones, and agro-industrial zones. These SEZs are essentially second-generation EPZs, which are primarily export market-oriented (Manasan 2013). As of December 2020, 410 SEZs were operational nationwide: 76 were industrial and EPZs, 290 IT parks and centers, 22 agro-industrial zones, 19 tourism zones, and 3 medical tourism parks (PEZA 2021). To complement PEZA's efforts, the Tourism Infrastructure and Enterprise Zone Authority also developed and designated 10 tourism zones.
- **Special economic and free port zones.** The Philippines also promotes—besides SEZs—special and free port zones that can host both industrial and tourism zones, and are integrated with free ports. These zones share the structural characteristics with Indonesia's KPBPBs (FTZs). Each zone is governed by a distinct act and regulatory body set up under the act. The Bases Conversion and Development Authority, constituted by the Bases Conversion and Development Act (1992) to facilitate the establishment of economic zones in former US military bases, administers four such zones through its subsidiaries: Clark Freeport and Special Economic Zone, Camp John Hay Special Economic Zone, Poro Point Freeport Zone, and Bataan Technology Park.

The former two are also registered with PEZA. Six other SEZs have been created under separate special laws and/or authority: Subic Bay Freeport Zone (The Subic Bay Metropolitan Authority under the Bases Conversion and Development Act of 1992), Freeport Area of Bataan (the Freeport Area of Bataan Act of 2009), Cagayan Special Economic Zone and Freeport (Cagayan Special Economic Zone Act of 1995), Aurora Pacific Economic Zone and Freeport (Aurora Special Economic Zone Act of 2007), Polloc Freeport and Ecozone (proclaimed pursuant to Muslim Mindanao Autonomy Act No.154), and the Zamboanga City Special Economic Zone (Zamboanga City Special Economic Zone Act of 1995).

The opportunity for establishing GEZs for small and medium-sized domestic firms is underutilized in the country (NEDA 2017). Similarly, the high-tech parks of traditional variety have attracted little attention from policy makers, even though PEZA approved in 2020, the Batangas State University Knowledge, Innovation and Science Technology Park (KIST), the first of its kind to foster innovation, techno-preneurship, and business incubation (Medina 2020).

Mapping of General Economic Zones and Special Economic Zones in the BIMP-EAGA Economies

As discussed in this chapter, economic zones have been the centerpiece of the development strategy in all four BIMP-EAGA countries. As the countries' development agendas evolved, changes were introduced in the objectives of the economic zones also to support them. As a result, several functional and spatial variants of the economic zones have spawned over the years, with their objectives evolving from industrial diversification to balanced regional development to industrial upgrading to urban development.

Table 7 maps the economic zones of the four BIMP-EAGA countries using the typological framework in Figure 2. It provides the generic category, the name used, the year of initiation, and the number of these zones. The number of industrial estates reported for Malaysia is based on the MIDA's list of 247 industrial estates. Information on other types of economic zones in the country is compiled from official sources.

Based on the data in Table 7, two major observations can be made. First, there has been a proliferation of both the number and types of economic zones in the BIMP-EAGA countries, which have been continuously expanding their economic zones in newer directions. The countries have 2,434 cluster-based economic zones (excluding the hybrid and single enterprise zones)—482 (20%) are general zones, and the rest (1,952) are cluster-based SEZs of different varieties. Second, Indonesia has the largest number of SEZs (1,486), followed by the Philippines (420), Malaysia (45), and Brunei Darussalam (1). However, the Philippines leads in terms of dependence on SEZs, with all its economic zones being developed as SEZs, followed by Indonesia (92%), Malaysia (13%), and Brunei Darussalam (4%). Malaysia leads in terms of the number of GEZs, followed by Indonesia (122), and Brunei Darussalam (24) .

SEZs are essentially a safety valve in development (Aggarwal 2017). They allow the government to adopt a special legal and institutional regime to fast-track economic growth without changing the institutional setup in the wider economy. Therefore, at lower levels of development, the wider the distance between the institutional regime of the wider economy and that of the SEZs, the more

Table 7: Economic Zones in BIMP-EAGA Countries

		Brunei Darussalam	Indonesia	Malaysia	Philippines	Total
General Economic Zones						
Industrial estates/parks or business parks	Name	Industrial parks	Industrial estates/parks	Industrial estates/parks or business parks	Industrial parks/zones	
	Number	24	87	210		321
	Year of initiation	1989	1970	1955		
Technology parks (first generation)	Name		Techno parks	High-tech/ science parks	Knowledge, Innovation, and Science Technology Park	
	Number		4	17		21
	Year of initiation		2002	1995		
Technology parks (second generation)	Name		Science and techno parks	MSC cyber cities/centers		
	Number		45	61		106
	Year of initiation		2015	1996		
Specialized industrial parks	Name		Halal parks	Halal parks		
	Number		Under construction	21		21
	Year of initiation		2020	2004		
Enterprise zone	Name		KAPETs			
	Number		13			13
	Year of initiation		1996			
Eco-industrial parks	Type					
	Year of initiation		Unknown			
Special Economic Zones						
FTZs: First generation	Name		Bonded logistic centers	Free commercial zones		
	Number		91	21		112
	Year of initiation		2015	1990		
FTZ: Second generation	Name		KPBPB (Free trade zone)	Digital free trade zone	Free ports and SEZ	
	Number		4	1	10	15
	Year of initiation		2007			
EPZs (cluster based); Traditional	Name	FTZs	Bonded zones	Free industrial zones		
	Number	1	1,372	22		1,395
	Year of initiation	2014	1973	1971		

continued on next page

Table 7 *continued*

		Brunei Darussalam	Indonesia	Malaysia	Philippines	Total
Special Economic Zones						
Second-generation EPZs	Name		Special economic zones for manufacturing		Special economic zones (manufacturing)	
	Number		11		98	109
	Year of initiation		2012		1995	
Enterprise specific EPZs	Name		Export-oriented production entrepôts	Licensed manufacturing warehouse		
	Number		Unknown	2096		
	Year of initiation		1992	1975		
Border economic zones	Name			SBEZ		
	Number			1		1
	Year of initiation			2019		
SEZs: Traditional	Name					
	Number					
	Year of initiation					
EZs: Second generation	Name		Special economic zones for tourism		Services zones tourism and information technology	
	Number		8		312	320
	Year of initiation		2012		1995	
Hybrid zones*	Name		Regional corridors	Regional economic corridors	Development corridors	
	Number		6	5		11
	Year of initiation		2009	2006		

BIMP-EAGA = Brunei Darussalam–Indonesia–Malaysia–Philippines East ASEAN Growth Area, EPTE = export-oriented production entrepôt, EPZ = export processing zone, EZ = economic zone, FTZ = free trade zone, KAPET = Kawasan Pengembangan Ekonomi Terpadu (Integrated Economic Development Zone), KPBPB=Kawasan Perdagangan Bebas dan Pelabuhan Bebas, MSC = Multimedia Super Corridor, SBEZ = special border economic zone, SEZ = special economic zone.

* The hybrid zones in Malaysia and Indonesia are not comparable. The only science and technology park of the Philippines is designated as an SEZ.

Source: Compiled by the author from various sources.

attractive the SEZs are. However, institutional transformations occur with economic development, reducing the institutional distance between existing SEZs and the wider economy. At the same time, policy makers set more ambitious goals, which, in turn, may pose new institutional challenges to be addressed in SEZs. To deal with these dynamics, SEZs must evolve to remain relevant and attractive. Once the economy reaches a threshold level of economic development, SEZs become less relevant. Thus, Brunei Darussalam and Malaysia, the most well-off countries in the group, rely mainly on GEZs. In contrast, Indonesia and the Philippines (with the lowest GDP per capita in the group) focus on creating SEZs to give a major thrust to economic growth and promoting new growth poles in the country.

Chapter 4

Structural and Institutional Features of Special Economic Zones and General Economic Zones

The evolutionary changes in the objectives and types of economic zones have been accompanied by the evolution in their structural and institutional characteristics as well. This chapter provides an overview of the structural and institutional features, comprising the governance structures and legal regulations.

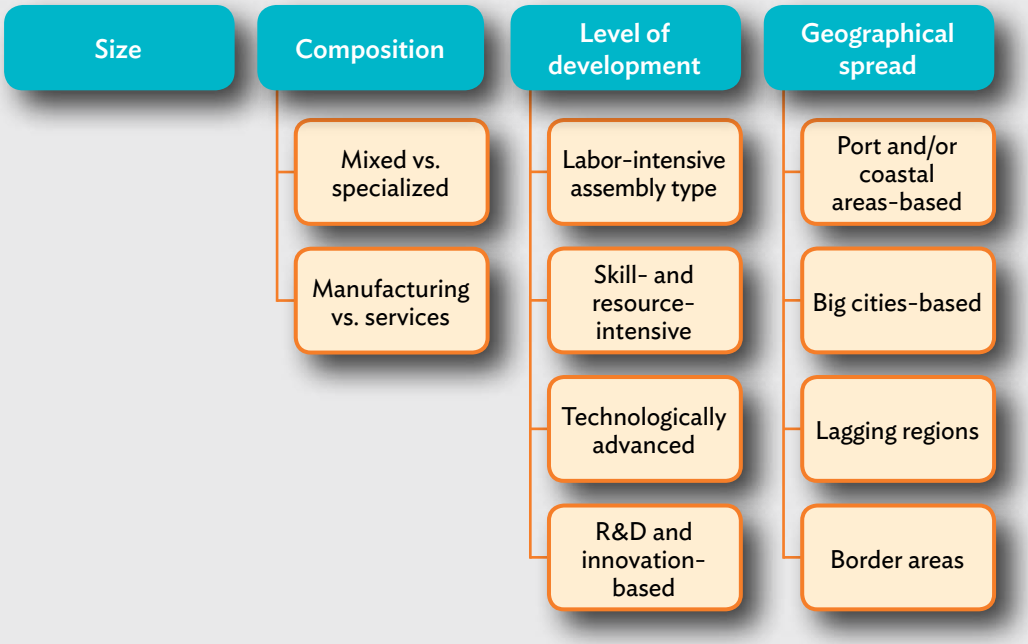
Structural Features

- **Size.** Economic zones are growing larger, more diverse, and more complex in all Brunei Darussalam–Indonesia–Malaysia–Philippines (BIMP) countries. Even Brunei Darussalam—with a total area of a mere 5,675 square kilometers (km^2), of which 75% is covered in pristine rainforest and other eco-habitats—has scaled up its industrial parks and set up two mega industrial parks. Further, while the traditional export processing type SEZs are still operating in all BIMP countries, they are complemented by more complex varieties. Finally, new hybrid zones spread across some states and provinces are emerging with multiple growth poles formed by the clusters of GEZs and SEZs located within them.
- **Composition.** Economic zones in the region are essentially dominated by manufacturing. However, services zones have also started emerging, including the Multimedia Super Corridor (MSC) in Malaysia, information technology (IT) parks and centers in the Philippines, Brunei Darussalam, and more recently in Indonesia (PP 40/2021), and tourism zones in Indonesia and the Philippines. The Philippines also hosts medical tourism SEZs. Indonesia has extended the scope of business activities in SEZs to health, education, financial services, and creative industries as well (Government Regulation No. 40 of 2021). Further, the zones are increasingly becoming specialized. Early zones were multi-activity zones. In recent years, SEZs are being set up to target priority industries to upgrade the economy.
- **Level of development.** In the early stages of evolution, SEZs in these countries (except Brunei Darussalam) were dominated by assembly type low-skill labor-intensive production in textile and electrical and electronics industries, while industrial estates hosted import-substituting industries. Over time, both SEZs and GEZs upgraded and are now dominated by skill- and resource-intensive activities in various industries including electronics and electricals, automotive, rubber, food products, and chemical and petrochemical industries. The third-generation economic zones have emerged, catering to high value-added and relatively more technologically sophisticated manufacturing. In parallel with this, efforts have been made to promote fourth-generation science and technology parks (STPs) to contribute to technology generation and spillovers. There is increasing awareness of environmental concerns as well. But these concerns have not yet been translated into creating eco-industrial parks as defined in Table 1.

- **Location.** Originally, economic zones were set up in the most strategic locations, essentially in coastal areas: Penang, Selangor, and Melaka in Malaysia; Java in Indonesia; Brunei-Muara in Brunei Darussalam; and Metro Manila and Cavite, Laguna, Batangas, Rizal, and Quezon (CALABARZON) region in the Philippines. In recent years, they are increasingly being located in lagging interior regions and border areas.

To sum up, the economic zones, which have always been the centerpiece of industrial policy of the BIMP countries since the 1970s, have grown in importance with an aggressive drive launched by these countries to build a new variety of zones in recent years to achieve various goals by leveraging their full potential. Economic zones have evolved toward larger spatial dimensions, complex structures, more comprehensive high-tech orientation, and flexible locations irrespective of whether they are SEZs or GEZs. This reflects a strong commitment, pragmatic approach, and dynamic learning toward economic zones adopted by all the four countries (Aggarwal 2012b).

Figure 3: Structural Features of Economic Zones: A Framework



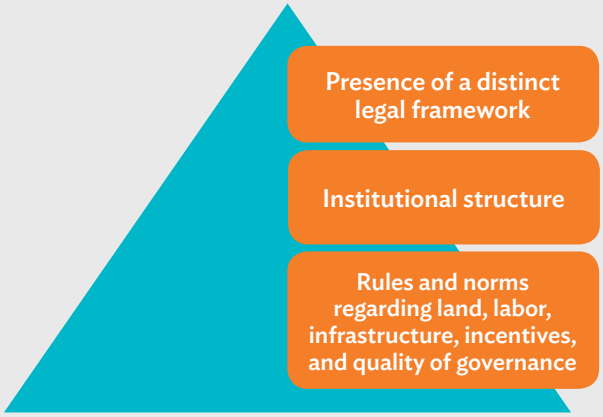
R&D = research and development.

Source: Author, based on Aggarwal, A. 2012. *Social and Economic Impact of SEZs in India*. Delhi: Oxford University Press.

Institutional Features

This section presents the legal and institutional framework of economic zones in the BIMP-EAGA member countries to understand how they operate. The framework comprises three components, as shown in Figure 4: (i) the presence of a legal framework defining a broad set of rules that govern and regulate the zones, (ii) the institutional structure created for law enforcement, and (iii) the rules and

Figure 4: Legal and Institutional Framework



Source: Author.

norms determining the substance of the legal framework in the zones. The effectiveness of the legal framework depends on its enforcement (institutional structure) and substance (rules and norms).

Legal Framework

The economic zone policy is explicitly cross-cutting in that it does not fit within one ministerial portfolio or government level, and there is often disagreement among different government organs over the policy provisions. Further, it asymmetrically affects different interest groups, including private businesses and individuals. Successfully addressing the conflicting interests calls for a well-developed and comprehensive legal framework that governs the establishment, development, management, and termination of these zones with stable and transparent rules established for all stakeholders. While it is not necessary, it may lay a critical foundation for any successful economic zone program. A sound legal framework is particularly important for the SEZ program because it offers a different legal regime from the rest of the economy. Evidence suggests that most countries with successful zone programs put in place a distinct legal framework when they launch the SEZ program to signal strong and long-term government commitment, policy continuity (despite the change in government), and the adequate provision of various public goods such as infrastructures and services (Farole 2011, Zeng 2016).

Table 8 shows that the SEZs in all four countries are being governed by their respective legal frameworks. However, the practice regarding GEZs varies across countries. Malaysia, Brunei Darussalam,[6] and the Philippines do not have distinguished legal frameworks governing GEZs. It may be partly attributed to the common law system that these countries have adopted. In contrast, Indonesia is a civil law country where GEZs are also governed by their respective laws. There is, however, an official hierarchy of laws and regulations. The 1945 Constitution of Indonesia is the country's highest legal authority, followed by Resolutions of the People's Representative Council, acts, government

[6] Brunei Darussalam has a parallel Syariah law system for Muslims, which supersedes the common law system in areas such as family and property laws.

Table 8: Legal Framework of Economic Zones in BIMP-EAGA Countries

Brunei Darussalam		Indonesia		Malaysia		Philippines	
General Economic Zones							
Industrial parks		**Industrial estates**	Government Regulation (GR) 24/2009 as amended by GR 142/2015	**Industrial parks**			
		Science and techno parks		**High tech parks**			
		KAPETs	Presidential Decree No. 89/1996	**MSC**			
		Halal parks		**Halal parks**			
Special Economic Zones							
FTZ (export processing zone)	Free Trade Zone 2014 Order	**Bonded**	The Minister of Finance Regulation No. 147/PMK.04/2011 as last amended through 131/PMK.04/2018	**FIZs/FCZs**	Free Zones Act 1990	**Ecozones/ SEZs**	PEZA Act 1995
		Bonded logistics	Government Regulation No. 85 of 2015	**SBEZ**	Given the status of LMW to be governed by chapter 65/65A of the Customs Act 1967	**Special economic and free port zones**	Distinct act for each one of the seven such zones
		Free trade and port zone	Government Regulation Number 36 of 2000 amended most recently in 2020	**DFTZ**			
		KEKs	Law number 39 of 2009 concerning SEZs; PP 40 of 2021 concerning the implementation of SEZs				

BIMP-EAGA = Brunei Darussalam–Indonesia–Malaysia–Philippines East ASEAN Growth Area, DFTZ = digital free trade zone, FCZ = free commercial zone, FIZ = free industrial zone, FTZ = free trade zone, KAPET = Kawasan Pengembangan Ekonomi Terpadu (Integrated Economic Development Zone), KEK = Kawasan Ekonomi Khusus (Special Economic Zone), LMW = licensed manufacturing warehouse, MSC = Multimedia Super Corridor, PEZA = Philippine Economic Zone Authority, SBEZ = special border economic zone, SEZ = special economic zone.

Source: Author.

regulations, presidential regulations, and regional regulations (provincial and cities and/or regencies), in that order. In practice, there are also ministerial regulations, but they are surrounded by legal uncertainty and may be conflicting with higher regulations (Aji, Helmi, and Yunus 2020). According to this hierarchy, the SEZs (called *Kawasan Ekonomi Khusus* or KEKs), which are supported by a distinct SEZ act, have been accorded the highest importance of all zone programs. On the other side of the spectrum are STPs, which are supported by Presidential Regulation 106/2017. Regulations of different hierarchy levels govern the rest of the zones. It may also be noted that post-2005, all new zone programs have been supported either by an act (KEKs) or government regulations (just below acts), indicating increasing importance attached to economic zones. The STPs, which are an exception, are expected to have a legal framework in place in the ongoing RPJMN, 2020–2024.

Institutional Structure

Ownership. The spectrum of possible institutional models extends from those almost entirely developed and managed by the private sector, at one end, to those almost entirely controlled by the public sector, at the other. Between the two are various models involving public–private partnerships (PPPs). According to a World Bank study (Akinci and Crittle 2008), the number of private zones has been growing rapidly across the globe. In 2008, 62% of the 2,301 SEZs in the developing countries were privately developed and managed, in contrast with less than 25% in the 1980s. However, the practice varies in the BIMP-EAGA member countries (Table 9). In Brunei Darussalam, all major economic zones,[7] including its only first free trade zone (FTZ) (which is also a traditional export processing zone or EPZ), are publicly owned. However, Darussalam Enterprise (DARe) can invite private companies for the development, marketing, and management of the industrial sites, but it reserves some rights and influence in these projects. In contrast, in the Philippines, the practice of privately owned and developed economic zones is widespread. In the middle of the spectrum, Indonesia and Malaysia allowed the private sector (both domestic and foreign) to own and develop designated land for industrial estates in the late 1980s. In Indonesia, the industrial estate business has become overwhelmingly dominated by the private sector, with 94% of industrial estates being privately managed as compared with 78% in Malaysia (Tijaja and Faisal 2014). Over time, private partnership is increasingly being recognized in the development of SEZs in Indonesia. For instance, bonded zones and bonded logistics zones can be privately owned. The KEKs are publicly managed, but can be proposed and developed by the private business entities (PP 40/2021). In Malaysia, SEZs (free industrial zones [FIZs] and free commercial zones [FCZs]) are publicly owned, but the upcoming special border economic zone (SBEZ) on Malaysia–Thailand border is being developed in a PPP mode (Lim 2020). The DFTZ is also being developed by Alibaba, a PRC multinational company, in collaboration with domestic private companies.

Further, all countries are open to foreign participation in the development of GEZs. There are collaborations with foreign governments for building GEZs, such as Malaysia–People's Republic of China (PRC) Kuantan Park and the PRC–Indonesia Julong Agricultural Industry Cooperation Zone. Brunei Darussalam's Darussalam Assets has signed a term sheet with the PRC's state-owned port operator, Guangxi Beibu Gulf International Port Group, to operate the Muara Port and set up and manage industrial parks around the port area (*Brunei Darussalam Times* 2016). Foreign and national companies can also collaborate to set up GEZs in Malaysia, Indonesia, and SEZs in the Philippines. For instance, G3 Global Bhd collaborates with two PRC-based companies to establish the first

[7] There are also privately owned lands with "industrial syarat." But little information is available on them.

Table 9: Institutional Framework of Economic Zones in BIMP-EAGA Countries

Brunei Darussalam		Indonesia		Malaysia		Philippines	
General Economic Zones							
Industrial parks	Public	**Industrial estates**	All types of ownership	**Industrial parks**	All types of ownership		
		Science and techno parks	Public	**High-tech parks**	Public/private		
		KAPETs	Public	**MSC**	Mixed		
				Halal parks	Public/private		
Special Economic Zones							
FTZ	Public	**Bonded/bonded logistics**	Public/private	**FIZs/FCZs**	Public	**SEZs**	All types of ownerships
		Free trade and port zone	Public	**SBEZ**	Public (PPP in development)		
		KEKs	Public (with PPP in development)	**DFTZ**	Private		

BIMP-EAGA = Brunei Darussalam–Indonesia–Malaysia–Philippines East ASEAN Growth Area, FIZ = free industrial zone, FCZ = free commercial zone, FTZ = free trade zone, KAPET = Kawasan Pengembangan Ekonomi Terpadu (Integrated Economic Development Zone), KEK = Kawasan Ekonomi Khusus (special economic zone), MSC = Multimedia Super Corridor, PPP = public–private partnership, SBEZ = special border economic zone, SEZ = special economic zone.

Source: Author.

artificial intelligence (AI) park in Malaysia. Morowali PRC–Indonesia industrial park is developed by Shanghai Decent Investment (Group) Co. Ltd. and Bintang Delapan Group. In the Philippines, out of 377 SEZs, 70 are collaborations between national and foreign companies.

Regulatory approach: Centralized vs. decentralized. The government may adopt a centralized or decentralized approach in regulating economic zones. A decentralized approach to economic zones is one in which the provincial and state governments own and regulate the zones. Such an approach contrasts with the centralized approach wherein the central government entity is responsible for regulation. In general, relying on a centralized zone regime is considered a good practice because it provides a strong centralized framework and uniformity throughout the country. Yet, because the regional officials are better equipped with the knowledge of regional economic opportunities and challenges (Aggarwal 2012), the centralized regulatory approach may be complemented with models that involve administrative and fiscal decentralization, ensuring greater autonomy to provincial and state governments in the development and operation of SEZs.

From this perspective, Brunei Darussalam, a unitary state, is at one extreme of the spectrum where regulatory, administrative, and fiscal powers are concentrated at the center. At the other extreme of the spectrum is Indonesia (a unitary state like Brunei Darussalam) that has been following the system of decentralized governance and development planning with substantial authority and

financial resources assigned directly to regencies and municipalities, bypassing even provincial governments in the hope of better service delivery. However, evidence shows that the local governments do not have adequate capacity for economic planning or to take initiatives to promote economic growth or exercise fiscal powers in their jurisdictions (Nasution 2016). The Philippines, another unitary state, has also adopted decentralization of regulatory, administrative, and fiscal powers through the Local Government Code of 1991. However, studies on Philippine decentralization have highlighted the high and persistent dependency of local governments on central resource transfers (Diokno-Sicat 2019). This makes the decentralization process less effective and can be said to be moderate as in Indonesia. In Malaysia, a federal constitutional monarchy, regulatory (or political) centralization is combined with administrative decentralization. But the latter is not supported by fiscal decentralization, which severely curbs the financial powers of the local governments, makes them dependent on the federal government for funding their development projects, and leaves immense scope for political favoritism (Wilson 1996).

While all four countries have adopted centralized regulatory regimes for their zone programs, which is considered a good practice, the lack of institutional distribution of administrative and fiscal powers to lower levels of governments may constrain the success of the zone programs. The PRC experience, where the local governments have played a critical role in the success of SEZs, shows that the local governments should have certain administrative and financial autonomy to create an open and conducive policy environment for the SEZs (Zeng 2016, Zheng and Aggarwal 2020).

Regulatory body. The regulatory body may be fully anchored to a single ministry (Republic of Korea and Taipei,China), be a cross-ministerial government body (India), or an autonomous board or body with a board of directors—including cross-ministerial and private sector membership (Bangladesh, Costa Rica, Dominican Republic, Jordan, and Thailand). The setting up of an autonomous regulator of SEZs chaired by the highest possible level of government is considered a best global practice (Bangladesh, Dominican Republic, Mauritius, the PRC, and Viet Nam)—a signal to officials that the program is a central instrument in the government's industrial development strategy and to foreign investors that the government is committed to the program, lowering their perception of risk. It also empowers the regulator to effectively coordinate actions with other ministries. Many consider the practice of running the SEZ program by a single ministry as suboptimal. While it provides greater flexibility to the zone programs, each time a new government takes office, there is a possibility that it will reverse decisions taken by the predecessors. The BIMP-EAGA countries follow diverse practices regarding the regulatory body.

- **Brunei Darussalam.** DARe is a statutory body formed in February 2016 to develop and manage Brunei Darussalam's industrial zones, both general and special, and to support the growth of businesses. Anchored in the Ministry of Finance and Economy, it also nurtures and supports business enterprises by providing capacity-building programs, market access, and access to financing.
- **Indonesia.** Regulatory powers are anchored within the relevant ministries for all economic zones except KEKs (Table 10). KEKs are regulated by an autonomous interministerial body named National Council, chaired by the minister in charge of economic affairs.
- **Malaysia.** Most industrial area programs (including SEZs) are being directly run by the relevant federal ministries as their programs; the only exceptions are halal parks and the MSC, which have autonomous regulatory bodies (Table 10). For overseeing the economic corridors

Table 10: Regulatory Bodies of Economic Zones in BIMP-EAGA Countries

Brunei Darussalam		Indonesia		Malaysia		Philippines	
General Economic Zones							
Industrial parks	DARe	**Industrial estates**	Directorate general for the development of industry in the Ministry of Industry	**Industrial parks**	Ministry of International Trade and Industry		
		Science and techno parks	Ministry of Research and Technology	**High tech parks**	Ministry of Energy, Science, Technology, Environment and Climate Change		
		KAPETs	Ministry of Economic Affairs	**MSC**	Multimedia Development Corporation (MDeC)		
		Halal parks	Coordination of the Ministry of Industry and Ministry of State-Owned Enterprises	**Halal parks**	Halal industries development corporation		
Special Economic Zones							
FTZ	DARe	**Bonded zones**	Head of Customs Regional Office	**FIZs/FCZs**	Ministry of Finance	**SEZs**	PEZA
		Bonded logistics zones	Ministry of Finance	**SBEZ**	Ministry of Finance	**Special economic and free port zones**	A distinct autonomous body for each of them
		Free trade and port zones	Ministry of Transportation	**DFTZ**	MDeC		
		KEKs	National Zone Council anchored in the Ministry of Economic Affairs	**Regional corridors**	Regional corridors authorities		

BIMP-EAGA = Brunei Darussalam–Indonesia–Malaysia–Philippines East ASEAN Growth Area, DARe = Darussalam Enterprise, DFTZ = digital free trade zone, FCZ = free commercial zone, FIZ = free industrial zone, FTZ = free trade zone, KAPET = Kawasan Pengembangan Ekonomi Terpadu (Integrated Economic Development Zone), KEK = Kawasan Ekonomi Khusus (special economic zone), MSC = Multimedia Super Corridor, PEZA = Philippine Economic Zone Authority, SBEZ = special border economic zone, SEZ = special economic zone.

Source: Author.

program, regional corridor authorities have been set up. But they have little regulatory role. They are created as an administrative layer between the center and states to support the latter in planning and negotiating for development projects' funding with the center.

- **Philippines.** PEZA, which is attached to the Department of Trade and Industry, has been empowered with a broad mandate to develop ecozones all over the country to spur industrialization and countryside development. Apart from PEZA, there are 10 other ecozone/free port authorities with operational SEZs: Subic Bay Management Authority, Clark Development Corporation, Authority of the Freeport Area of Bataan, Aurora Pacific Economic Zone and Freeport Authority, Cagayan Economic Zone Authority, John and Hay Management Corporation, PHIVIDEC, Bases Conversion and Development Authority, Zamboanga Freeport Authority, and Tourism Infrastructure and Enterprise Zone Authority. Each of them has its rules and regulations and, until the Republic Act No. 11534 came into effect in 2021, offered its own fiscal incentives.

In none of the BIMP-EAGA countries does the SEZ regulator report to the highest authority. Yet the zones have been successfully leveraged as a critical tool to achieve the development goals. It could be due to strong government support provided to economic zones as part of the national development strategy. Thus, ensured political support, endorsement from the top level of the government and mainstreaming of the economic zone program into national development strategy appear to be the ultimate critical success factors for economic zones, irrespective of the immediate institutional arrangement (Aggarwal 2019b).

Rules and Regulations

Rules and regulations pertain to the type of permissible activities, fiscal and non-fiscal incentives, labor, land, governance, administration, and infrastructural requirements. They cover various aspects of economic zones' development, management, operations, and monitoring. Some of the major rules and regulations in the economic zones of the three countries are reviewed below.

One-Stop Shop

- **Brunei Darussalam.** DARe runs the Business Support Centre (BSC), which started operations in April 2016 as a single portal for businesses to access and submit applications for licenses, permits, and registrations, as well as pay taxes and apply for industrial land. As many as 17 government agencies provide various business-related services at the BSC. Initially established as a micro, an MSME resource center, the BSC has now been repositioned by DARe as the first point of contact for all local businesses.
- **Indonesia.** In July 2018, Indonesia introduced an online single submission service, a web-based business licensing system that integrates all business licensing services for all economic zones across the board. In KEKs, the zone councils administer the one-stop integrated services by validating the documents submitted for investment in KEKs and issue decisions. The Batam Free Trade Zone Authority is also empowered to offer integrated services to FTZ investors. In 2018, in a progressive move, it has merged with the city administration to debottleneck the licensing system. In addition, a 3-hour investment express service (123J) was introduced on 11 January 2016 for investors looking to invest a minimum of Rp100 billion ($8 million) and/or employ no fewer than 1,000 local workers at designated industrial estates or KEKs. Under

the scheme, eight documents and a letter of land availability are issued within 3 hours to the investor to start a business (BKPM 2016). In a push to set up a single window mechanism in KEKs, the PP 40/2021 provides for a special single window application system. This would also offer exclusive facilities to SEZ tenants once they start operating in KEKs.

- **Malaysia.** Malaysia does not have a distinct concept of a one-stop shop for industrial areas. MIDA provides comprehensive information on investment opportunities in the country and facilitates investors by working in conjunction with state investment boards that act as one-stop agencies at the state level. The zone management authorities provide additional assistance to investors.
- **Philippines.** PEZA establishes a one-stop shop center to provide 24/7 services to SEZ investors. All appropriate government agencies involved in registering, licensing, or issuing permits to investors assign their representatives to the SEZ to attend to investor's requirements. Of the five major Southeast Asian economies (Indonesia, Malaysia, the Philippines, Singapore, and Thailand), the Philippines ranks at the bottom in terms of various governance indicators. However, the regulatory transparency, no red-tape policy, and one-stop shop services for investors in the ecozones by PEZA have created a highly favorable business environment within the SEZs (Pfister 2017).

Foreign Investment

According to the Organisation for Economic Co-operation and Development (OECD) data (OECD 2020), out of 90-odd countries, the foreign direct investment (FDI) regimes in the Philippines and Indonesia have been the most restrictive after Libya, Algeria, and West Bank and Gaza.[8] However, the SEZs are designed to offer relaxed regimes to attract FDI. Malaysia and Brunei Darussalam follow relatively relaxed FDI regimes in the broader economy with no further relaxation in the SEZs.

- **Brunei Darussalam.** The country has an open economy favorable to foreign trade and FDI, which are critical drivers of economic diversification. There is no restriction on foreign ownership of companies incorporated in Brunei Darussalam. Foreign investors can fully own incorporated companies, foreign company branches, or representative offices, but not sole proprietorships or partnerships. The Companies' Act requires locally incorporated companies to have at least one of the two directors—or if more than two directors, at least two of them—to be resident in Brunei Darussalam, but exemptions may be obtained in some circumstances (US Department of State 2020).
- **Indonesia.** Indonesia has a negative list for foreign investment.[9] It is applicable in all types of zones except KEKs. In FTZs, the master list is decided by the one-stop service of *Badan Koordinasi Penanaman Modal* (BKPM) or the Indonesian Investment Coordinating Board. There are also relaxations on foreign equity holding in SEZs and FTZs where foreign nationals can build their own plant and own 100% of their businesses subject to certain conditions.

[8] The index is based on four types of restrictions: foreign equity restrictions, discriminatory screening or approval mechanisms, restrictions on key foreign personnel, and operational restrictions.

[9] The negative investment list has been revoked and replaced by the "Positive Investment List" under the new Law PR 10 of 2021 (PR 10/2021) showing the sectors open to 100 % FDI. However, it has specified three additional categories of sectors where FDI is partially restricted (46 business lines); needs to have compulsory partnership with MSMEs (89); and is totally restricted (112).

- **Malaysia.** Malaysia has been following a liberal policy toward FDI since June 2003. Under the law, foreign investors could hold 100% of the equity in all manufacturing investments in new projects, as well as investments in expansion and/or diversification projects by existing companies irrespective of the level of exports and without excluding any product or activity. However, there are limits on foreign equity in selected services.
- **Philippines.** The Government of the Philippines has a list of business sectors that foreigners are either banned outright from owning equity in[10] or are subject to a cap on permitted ownership levels.[11] But, in export-oriented and priority sectors, 100% foreign equity is allowed, with the right to remit profit, pay obligations, and repatriate investment. PEZA ecozones also enjoy this benefit.[12]

Infrastructure

- **Brunei Darussalam.** In 25 publicly owned, developed, and managed industrial parks, DARe develops key infrastructure based on the needs of investors.
- **Indonesia.** The legal framework for industrial estates in Indonesia requires companies to set aside 30% of land for green spaces and infrastructure. In addition, the estates must adhere to specific infrastructure requirements with criminal and financial penalties applicable for violations. The responsibility of developing industrial infrastructure (energy and electricity, telecommunications, water, and transport networks) and supporting infrastructure (housing, education and training, R&D, health, fire stations, and waste disposal) lies with the government, while the basic infrastructure (roads, sanitation, water treatment, etc.) is to be developed by industrial estate companies (Octavia 2016). In KEKs, the National Council may set its own policies in cooperation with the central, provincial, and local governments, and private parties to construct and maintain the infrastructure in the zone. Bonded zones are encouraged to set up bonded logistics centers within the boundaries of bonded zones to improve logistics efficiency.
- **Malaysia.** Industrial areas are normally developed as traditional industrial zones with on-site industrial and supporting infrastructure. There are also instances of township development within economic zones. Kulim High Tech Park, for instance, is equipped with urban infrastructure. The upcoming SBEZ in Kedah will also have urban infrastructure including factories; shopping complex; housing; hotels; a recreation park; and the new Immigration, Customs, Quarantine and Security facility. However, there are no statutory requirements for infrastructure development in the zones.
- **Philippines.** Under the PEZA Act, the presence of basic infrastructure and utilities in the region surrounding the SEZs is necessary for setting up ecozones. The act initially identified some 37 areas around the country for the promotion of ecozones. These areas had the viability and existence of required infrastructure such as roads, railways, telephones, ports, and airports, and the availability of water sources and electric power supply for the use of the ecozone. To ensure efficient industrial infrastructure within the SEZs, the government offers special tax incentives to economic zones' facilities and utilities provider enterprises.

[10] These include mass media (except for recording and internet businesses), retail trade enterprises with a paid-up capital of less than $2.5 million, and small-scale mining.

[11] Construction of defense-related structures, a 30% foreign equity cap on advertising and a 40% foreign equity cap on ownership of private land and exploration, and development and utilization of natural resources.

[12] The Government of the Philippines is currently pushing for the passage of complementary bills that will open the country for more FDI, among these are the Retail Trade Liberalization Act, which aims to remove barriers to foreign investments in the local retail sector; updating of the existing Foreign Investment Act; and Public Service Act to open more businesses to foreign participation.

Foreign Labor Employment

- **Brunei Darussalam** relies heavily on foreign labor for lower-skill and lower-paying positions, mainly in construction followed by wholesale and retail trade, with approximately 25% of the foreign labor force. Most unskilled laborers in Brunei Darussalam enter the country on renewable 2-year contracts. The skilled labor pool includes foreign workers on short-term visas. Expatriate employment is controlled by a labor quota system administered by the Labor Department, and the issuance of employment passes by the Immigration Department. New companies are allowed to apply for special approval to expedite the recruitment of expatriate workers in select positions, which are approved for up to 6 months.
- **Indonesia.** The government prioritizes the employment of Indonesian citizens (local, to be more precise). There is a restriction on the types of businesses that can employ foreign workers. The law sets requirements to obtain health insurance for expatriate employees and requires companies to appoint local "companion" employees for the transfer of technology and skill development and employers to "facilitate" Indonesian language training for foreign workers (US Department of State 2019a). In KEKs, some relaxations have been offered to skilled foreign workers who will be paying taxes only on their Indonesian income for 4 years (PP 40/2021). Other relaxations include facilitation in their employment terms, permission of a limited stay visa for up to 15 years, and provision of permanent stay visa.
- **Malaysia.** As per the national labor code, foreign workers can be employed subject to certain restrictions. Malaysia's 1.78 million documented and 2 million–4 million undocumented foreign workers make up over 20% of the country's workforce even though the government has been trying to reduce reliance on them (US Department of State 2019b). The employer must first obtain approval from the Local Centre of Approval at the Ministry of Home Affairs to hire foreign workers. For this, the Foreign Worker One-Stop Approval Center has been set up. In the MSC, special services are offered through the eXpats Service Center set up within the Malaysia Digital Economy Corporation as a one-stop shop for foreign knowledge workers.
- **Philippines.** Foreign workers must have work permit and work visa issued by two different authorities: the Department of Labor and Employment and the Bureau of Immigration. However, PEZA offers a single window for foreign workers in economic zones. It issues investors permanent resident status with spouses and dependent children subject to initial investment limits for their free mobility, and working visas renewable every 2 years to foreign executives and other aliens possessing highly technical skills as certified by the Department of Labor and Employment. However, there is a restriction on foreign nationals hired by SEZ enterprises in supervisory, technical, or advisory capacities, which should not exceed 5% of its workforce.

Labor Laws

- **Brunei Darussalam.** Even though trade unions are allowed to operate in the country, the government prohibits strikes, and the law makes no explicit provision for the right to collective bargaining. The law prohibits employers from discriminating against workers in connection with union activities, but it does not provide for reinstatement after dismissal related to union activity. According to the US Department of State (2020), there are no other active unions or worker organizations in the country except in Brunei Shell Petroleum.

- **Indonesia.** The law allows independent labor unions, legal strikes, and collective bargaining in all zones. However, two specialized labor institutions have been set up in KEKs as derogations in national labor laws—Special Tripartite Cooperative Institution for labor administration and dispute prevention and resolution; and Remuneration Council for wage-related issues. Further, companies with more than one labor union may establish an employee labor union forum, the establishment of which is governed by the minister in charge of workforce.
- **Malaysia.** Labor relations in Malaysia are marked by a system of government controls that discourages strikes and restricts the formation of unions. Despite that, territorial federations of unions have emerged. The government protects the electronics and textile sectors, which dominate Malaysia's SEZs, from territorial federations. The electronics sector is limited to forming four regional federations of unions, while the textile sector is limited to state-based federations of unions in those states where the industry exists.
- **Philippines.** Within the framework of the PEZA Act, employees in the SEZ enterprises are to be paid the salaries and benefits and given working conditions not less than those provided under the Labor Code of the Philippines and other relevant laws outside them. However, SEZs have a de facto no-union no-strike policy in place. Further, a tripartite body—composed of one representative each from the Department of Labor and Employment, labor sector, and business and industry sectors—has been created for labor dispute settlements in the SEZs.

Land

- **Brunei Darussalam.** Generally, only Brunei Darussalam citizens may be registered as owners of landed property. Under the Land Code (Amendment) Order, 2016, no noncitizen can purchase or acquire any land or any estate or interest therein except by way of a charge, lease, or sublease. However, foreign individuals can own properties in Brunei Darussalam through a strata title, which allows them to hold property for up to 99 years.
- **Indonesia.** Under the law, only Indonesian citizens can have property rights. The law gives foreigners the right to own land in Indonesia, but only limited to the right to use (up to 80 years), right to build (up to 80 years), and lease rights for buildings (with no upper limit). In KEKs, however, business entities based on government regulation may be granted the land rights (Article 37, Law No. 39 of 2009 concerning SEZs). The business entities are exempted from income tax on the land acquisition transactions for SEZs, sale of land and/or buildings in SEZ; and/or lease of land and/or buildings in SEZ (PP 40/2021). The rules for property ownership by foreign nationals in Batam fall under Decree No. 068/KPTS/KA/III/1999, which allows foreign nationals or companies to 100% own residential or commercial property in the Barelang area (Batam, Rempang, and Galang).
- **Malaysia.** The National Land Code recognizes two types of landownership: freehold and leasehold. Foreigners can legally own freehold land, condos, and houses and can even get a residency permit for 10 years for a fee in the wider economy.
- **Philippines.** The ownership of private land in the Philippines is reserved for the citizens and corporations of the Philippines. Foreign nationals and foreign companies may lease land for 25 years, which may be renewed for another 25 years. However, the PEZA Act allows the lease to foreign investors for a maximum of 50 years, renewable once for not more than 25 years. PEZA intends to extend the lease for PEZA locators for up to 99 years (PEZA 2019).

Table 11: Direct and Indirect Tax Incentives in Brunei Darussalam

Pioneer Status Companies	Expansion of Established Enterprise	Free Trade Zone
Exempt from corporate income tax up to 11 years[a]	Exempt from corporate income tax up to 20 years[b]	No corporate tax[c]
Exempt from import duties on machinery		Import duties 100% exemption (perpetual)
Exempt from import duties on raw materials not available locally intended to produce pioneer products		Excise duties only on local consumption Withholding tax on foreign loan interest

[a] Exemption of 11 years for new companies located in high-tech parks.
[b] Applicable for firms located in high-tech parks.
[c] If the type of industry aligns with Brunei Darussalam's priority sectors.

Source: Website of the Ministry of Primary Resources and Tourism, Brunei Darussalam.

Direct and Indirect Tax Incentives

- **Brunei Darussalam.** Brunei Darussalam has one of the most liberal tax regimes in the region, with its corporate income tax being one of the lowest at 18.5% (Table 11). There are no taxes on personal income, sales, payroll, export, capital gains, or manufacturing. In addition, investor incentives are offered to pioneer industries such as agribusiness (including fertilizers and pesticides), construction, building and heavy equipment, chemicals, petrochemicals and plastics, consumer goods, environmental technologies, food processing, ICT, industrial equipment, marine technology, metal manufacturing, and some services. In the services sector, activities including consultancy and research, automotive and ground transport, education, finance, ICT, media and entertainment, and travel are classified as pioneers. DARe also runs a scheme called Co-Matching, under which it funds 70% (up to B$10,000) of the total cost for starting micro or small enterprises (with fewer than 20 employees) and up to B$20,000 for expanding business. Finally, a flat tax rate of 1% has been introduced to encourage export activities in approved types of export. If the local sales do not exceed 20% of the total turnover, total turnover of the exporter is treated as exports (website of Ministry of Finance and Economy).
- **Indonesia.** Massive investment incentives are being offered to firms on new investment in 18 designated pioneer industries that have a wide range of connections, provide additional value and high externalities, introduce new technologies, and have strategic value for the national economy. KEKs offer the most comprehensive direct tax benefits on investment in target industries (Table 12). The business actors (*pelaku usaha*) are eligible for up to 100% reduction in corporate income tax (CIT) with a minimum investment value of Rp100 billion ($7 million), for a period of 10 years that can be extended up to 20 years with increase in investment thresholds. Business entities (*badan usaha*) are also entitled to income tax holidays of up to 10 years.

Table 12: Direct and Indirect Tax Incentives in Indonesia

Direct Tax Incentives							
Standard tax exemptions applicable to 18 industries			IEs*	Additional tax incentives KEKs for primary activities			Bonded Zone/Logistics KAPET FTZ
Investment (Rp)	**Exemption** (%)	**Years**		**Investment** (Rp)	**Exemption** (%)	**Years**	
100 billion–500 billion	50+25	5+2	Y*	100 billion–500 billion	Discretionary	5–15	No additional direct tax benefits
500 billion–1 trillion	100+50	5+2	Y*	500 billion–1 trillion	20–100	5–15	
1 trillion–5 trillion	100+50	7+2	Y*	1 trillion and above	20–100	10–25	
5 trillion–15 trillion	100+50	10+2	Y*				
15 trillion–30 trillion	100+50	15+2	Y*				
30 trillion and above	100+50	20+2	Y*				
Tax allowance for 145 business fields: 30% of investment value reduction of corporate net income tax for 6 years, 5% each year				TA for non-primary activities of KEKs			
Indirect Tax Incentives							
Non-collection of VAT and local sales tax on certain imports. Exemption or postponement of import duties on capital goods, components, and raw materials. • Non-collection of import duties, tax on the importation, and excise duties on specified dutiable/taxable goods. • Non-collection of VAT and LST on the domestic purchases of certain tangible goods and services. • Exemption of VAT, LST, import duties and on transactions between business actors within the KEKs.							

FTZ = free trade zone, IE = industrial estate, KAPET = Kawasan Pengembangan Ekonomi Terpadu (Integrated Economic Development Zone), KEK = Kawasan Ekonomi Khusus (special economic zone), LST = luxury goods sales tax, TA = tax allowance, VAT = value-added tax.

Note: Y*: All tax incentives are applicable, but the provinces have been divided into four categories for tax incentives: developed industrial development estates (WPI) in Java; developing WPIs in Southern Sulawesi, Eastern Kalimantan, Northern Sumatera (other than Batam, Bintan, and Karimun), and Southern Sumatera; potential WPIs in Northern Sulawesi, Western Kalimantan, Bali, and Nusa Tenggara; and potential WPIs in Papua and West Papua (Amin 2016). Tax and regional incentives for both industrial zone operators and industrial tenants vary depending on the zone category.

Sources: Author; and Amin, K. 2016. New Regulation Aims to Attract Investment to Industrial Zones. *The Jakarta Post*. 7 January.

Business entities and/or business actors investing in main activities that do not receive CIT deduction as in Table 12 or are investing in other activities are eligible to receive several CIT allowances such as a 30% reduction in net income on the total investment; accelerated depreciation and amortization; imposition of 10% income tax on dividends made to non-resident recipients; and tax-loss carried forward for up to 10 years. In addition, there are indirect tax benefits in the form of exemptions from value added and local sales taxes and import duties across all SEZs.

- **Malaysia.** Tax incentives are essentially industry and merit based; special incentives offered to activities in backward regions are independent of the location of the industrial unit within zones or outside them. Companies are eligible for either pioneering status or income tax allowance. The direct tax incentives may be given for up to 10 years, subject to the project's merit (Table 13).
- **Philippines.** Wide-ranging tax benefits have been offered in economic zones of the Philippines since 1994. In 2021, the tax incentives were rationalized and aligned with national development priorities. The Republic Act 11534 or Corporate Recovery and Tax Incentives for Enterprises (CREATE) Act approved and signed into law on 26 March 2021 offers performance and merit-based incentives to encourage investment in industries and sectors aligned with the Philippine development agenda, create higher-value jobs, incentivize upskilling and employee training, and promote investments in less-developed areas and areas recovering from calamities or armed conflict.

Table 13: Direct and Indirect Tax Incentives in Malaysia

Direct Tax Incentives				
	Pioneering Status		Investment Tax Allowance	
Qualifying Industry	Benefit	Year	Benefit	Year
Standard deduction for companies	70% of increased SI	5	60% new QCE against 70% of SI	5
Projects of national and strategic importance involving heavy capital investment and high technology including halal parks, and those in Sabah	100% of SI	10	100% QCE against 100% of SI	10
High-technology companies in areas of new and emerging technologies	100% of SI	5	60% QCE against 100% of SI	5
Companies manufacturing specialized machinery and equipment	100% of SI	10	100% QCE against 100% of SI	10
Existing locally owned companies reinvesting in the production of heavy machinery, specialized machinery, and equipment	70% of increased SI	5	60% new QCE against 70% of SI	5
In addition, there are sector-specific incentives to biotechnology industry, palm oil, halal, and Industry 4.0.				
Indirect Tax Benefits				
Service and sales tax: Manufactured goods for exports are exempted from sales tax. All imports and exports of services are exempt from service tax.				

QCE = qualifying capital expenditure, SI = statutory income.

Source: PricewaterhouseCoopers, Malaysia.

Table 14 presents the highlights of the fiscal incentives provided under the act to both exporters and domestic market-oriented enterprises. One of the most important features of the new tax law is that it has introduced a sunset clause to incentives. Under the previous regime, there was no sunset clause on special 5% corporate tax on gross income enjoyed by exporters after 4–8 years of tax holiday. It is now restricted to 10 years for exporters and critical domestic market-oriented projects, and 5 years for other strategic projects. The registered business activities enjoying the special tax incentive under the previous tax system are allowed the status quo for up to 9 years. The standard corporate tax rate is also reduced from 30% to 25% with immediate effect and will gradually be reduced to 20% by 2027. In Malaysia, Indonesia, and Brunei Darussalam, it is at 24%, 22%, and 18.5%, respectively.

Table 14: Direct and Indirect Tax Incentives in the Philippines

Incentives Package for Exporters (Minimum of 70% Exports)	Operators/Developers/Utility Providers	Standard Tax Incentives
Income tax holiday: 4–7 years		Standard corporate tax: 25% to be reduced to 20% by 2027 Critical domestic projects under Strategic Investment Priority Plan: 4–7 years of income tax holiday Projects in Strategic Investment Priority Plan but not critical: 4–7 years of tax holiday
Five percent special tax on gross income or extended deductions for 10 years (with exemption from all national and local taxes)	Special 5% tax on gross income and exemption from all national and local taxes, except real property tax on land owned by the Economic Zone Developer	Critical domestic projects: 5% special tax on gross income or extended deductions for 10 years (with exemption from all national and local taxes) Projects in Strategic Investment Priority Plan but not critical: 5% special tax or extended deductions for 5 years
Exemption from wharfage dues and export tax, import, or fees		Exemption from wharfage dues and export tax, duty, import, and fees
VAT zero-rating of local purchases	VAT zero-rating of local purchases	
Exemption from expanded withholding tax	Exemption from expanded withholding tax	
Tax and duty-free importation of raw materials, capital equipment, machinery, and spare parts.		
Exemption from payment of all local government imports, fees, licenses, or taxes		

VAT = value-added tax.

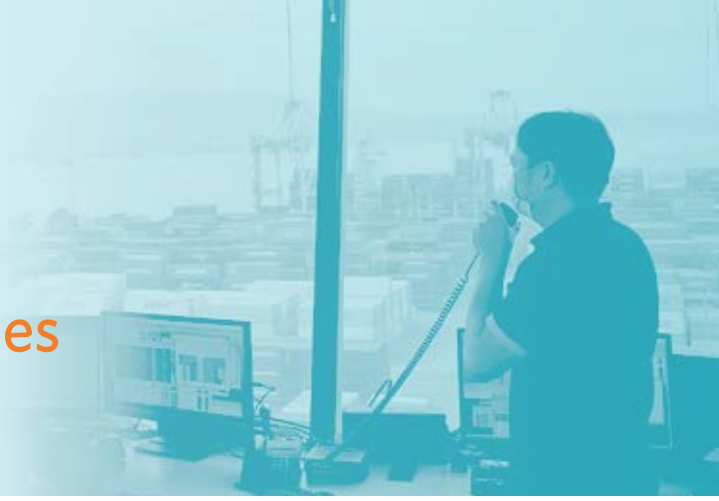
Source: Corporate Recovery and Tax Incentives for Enterprises (CREATE) Act, 2021.

Summary

The analysis shows a clear-cut distinction between the SEZs and GEZs in legal and institutional frameworks. The SEZs are not just about tax benefits; they also address some binding institutional constraints in the wider economy, particularly in Indonesia and the Philippines. In Brunei Darussalam and Malaysia, SEZs have limited applications of preferential treatment. Further, the economic zones are evolving in terms of their legal and institutional frameworks. Along with the provisions of fiscal incentives, the range of facilities, services, and amenities available within zones have also been extended in new ambitious zone programs, particularly in Indonesia. The preferential regulatory contents have been enriched and enlarged in Indonesia and rationalized in the Philippines.

Chapter 5

Special Economic Zones and General Economic Zones in BIMP-EAGA Corridors



The BIMP-EAGA subregion is connected by two priority economic corridors: West Borneo economic corridor and Greater Sulu–Sulawesi economic corridor. West Borneo, an oil and gas corridor, connects major exporters of crude oil and gas in the subregion. The Greater Sulu–Sulawesi is a maritime corridor and constitutes a high concentration of marine biodiversity. It is also the nerve center of barter trade in the subregion. A third economic corridor—East Borneo Economic Corridor—is in the development stage with several infrastructure projects in the pipeline. It will connect four provinces of the Indonesian portion of Borneo: Central Kalimantan, East Kalimantan, North Kalimantan, and South Kalimantan with Sabah in Malaysia. These corridors (Figure 5) ensure connectivity within the subregion and are meant to increase transport services, reduce transport and trade costs, and serve

Figure 5: BIMP-EAGA Economic Corridors

BIMP-EAGA = Brunei Darussalam–Indonesia–Malaysia–Philippines East ASEAN Growth Area.
Source: BIMP-EAGA Vision 2025.

as the basis for clustering economic activities through the development of industrial hubs and SEZs. This chapter takes stock of the existing economic zones along these corridors and identifies the proposed projects in each of the provinces, states, and federal authorities within the BIMP-EAGA subregion. It also provides a brief economic profile of EAGA areas covering (i) the share of agriculture, mining, and manufacturing in the gross regional domestic product (GRDP);[13] (ii) the ratio of GRDP per capita of the EAGA subregion to national gross domestic product (GDP) per capita; and (iii) poverty ratios (% of people below the poverty line).

Brunei Darussalam-EAGA

As stated in Chapter 3, Brunei Darussalam is largely dependent on oil and gas mining, and manufacturing. During 2012–2018, 59.4% of its GDP and over 90% of exports were from the oil and gas sector (Government of Brunei Darussalam 2018). The objective of setting up industrial parks is to promote the non-oil and gas sector. To pursue this objective, the government has set up industrial parks in all four districts of the country: Brunei-Muara, Tutong, Belait, and Temburong. Most of the industrial parks are in Brunei-Muara. The Eleventh National Development Plan (2018–2023) focuses attention on the development of five major clusters in the industrial estates: halal products and services, innovative technologies and creative industries, business services, tourism, and downstream industry of oil and gas. The following provide a brief description of these industrial estates.

Brunei-Muara is the smallest district (571 km^2) but accounts for 70% of the total population of 459,500. It hosts the capital city and the largest number of industrial estates. As many as 16 industrial parks are in Brunei-Muara. Most parks attract light to medium industries. There are also specialized parks (Table 15) such as the following:

- **Pulau Muara Besar.** It spreads over 1,057 ha of land and focuses on oil and gas industries, petrochemicals, ship maintenance, repair and overhaul, and marine supplies. It is an island at Brunei Bay, close to the Port of Muara, which is connected to the mainland by a bridge constructed by DARe. It currently houses Hengyi Industries Sdn. Bhd. (Hengyi), a joint venture between the PRC Zhejiang Hengyi Group (70%) and Damai Holdings (30%), a wholly owned subsidiary under the government. Hengyi remains one of the PRC's largest investments in petrochemical plants in Brunei Darussalam.
- **Salambigar.** It is another ambitious project. It hosts the first halal pharmaceutical and nutraceutical manufacturing plant in Brunei Darussalam. Set up by Simpor Pharma Sdn. Bhd., a joint venture between a Canadian firm Viva Pharmaceutical Inc. and a group of local investors, it is GMP (Good Manufacturing Practice) certified. It focuses on exporting halal-certified, over-the-counter natural health products and prescription drugs to the regional markets in Asia and the Pacific, the Middle East, Western Europe, and the US.

[13] GRDP measures the size of a region's economy. It is the aggregate of gross value added of all resident producer units in the region, and analogous to national GDP.

Table 15: Brunei Darussalam's Profile of Economic Zones

	Mixed Industrial Parks	ICT	Specialized	Free Trade Zone
Brunei-Muara[a]	11	2	2	1
Tutong[b]	3			
Belait[c]	4		1	
Temburong[d]	1			
Total	**19**	**2**	**3**	**1**

ICT = information and communication technology.

[a] Pulau Muara Besar, Salambigar, Digital Junction, Bio-Innovation, Anggerek Desa Tech Park, Terunjing Free Trade Zone, Lambak Kanan, Lambak, Tanjong Kajar, Salar, Lumapass, Bengkurong, Kuala Lurah, Mulaut, Beribi, and Serasa.
[b] Bukit Panggal, Telisai, and Serambangun.
[c] Sungai Liang, Pekan Belait, Mumong, Sungai Duhon, and Sungai Bera. Recently, Pekan Belait and Sungai Duhon are integrated. Belait now has four industrial sites.
[d] Batu Apoi.

Source: Author.

- **Terunjing Industrial Park.** Spread over 95 ha, it is the first FTZ of Brunei Darussalam and is expected to attract light and medium industries. The objective is to reduce the procedures required for unloading, manufacturing, and exportation, and promote the non-oil and gas economy in the country.

Belait. It is an oil and gas hub, which occupies the largest area (2,728 km^2) with 6% of the population. Established in 2007, SPARK is the most ambitious industrial park in Belait.

- **SPARK Industrial Park.** It specializes in the petrochemical industry and hosts methanol (land area of 24 ha), ammonia and urea (90 ha), and methanol derivative (8 ha) plants, and other downstream projects. In addition to industrial infrastructure, there is social infrastructure with a "zone village," which comprises an administrative unit called the SPARK Centre and a multipurpose hall. The SPARK Centre offers the tenants various amenities and services such as a discovery center, mini theater, exhibition hall, conference and meeting rooms, offices, canteens, retail outlets, large events, and sports hall and indoor badminton court (Omar 2014).

Tutong. It hosts the largest industrial park in Brunei Darussalam: Telisai Industrial Park (2,808 ha), which is under development and is expected to attract investment in light to heavy industries.

Temburong. It is the second-largest district after Belait but accounts for only 2.5% of the total population. It is mostly covered by pristine forests and is known for ecotourism. However, a small industrial estate on 5.4 ha of land—Batu Apoi—was created to promote light industries.

There are no new industrial estates proposed in the ongoing national development plan. Instead, it proposes to develop infrastructure facilities (especially roads) and services at the existing industrial sites.

Indonesia-EAGA

Indonesia-EAGA (I-EAGA) covers 15 of 34 total provinces in Indonesia, spread across three of five main islands (Kalimantan, Sulawesi, and Papua) and one of four archipelagoes (Maluku). These provinces constitute 64.4% of the total area and 66% of 16,046 islands. However, the population of 40 million accounts for only 15% of the total population in Indonesia and contributes 17% of the GDP. Table 16 presents an economic profile of each of these provinces. It shows that mining, forestry, agriculture, and fisheries are the main economic activities and are prioritized for development by the government. Food processing, wood, coal refining, and metals are the dominant contributors to manufacturing GRDP. The metal processing industries, construction of smelters, and refineries have been given a push by the Indonesian Mining Law (Law No. 4 of 2009 on Mineral and Coal Mining) to prohibit the export of unprocessed minerals. The RPJMN (National Medium-Term Development Plan) 2020–2024 targets 31 smelters throughout the country, giving thrust to metal processing.

Kalimantan. This is the largest and most prosperous island in I-EAGA. It accounts for 39.5% of the total area, 40.3% of the population, and over 48.0% of the GRDP of the I-EAGA (8.2% of Indonesian GDP). It enjoys the highest GRDP per capita with the lowest poverty rates in the I-EAGA area (Table 16). All five provinces of the island have poverty rates lower than the national average. The island has 23 economic zones of a different variety, out of which 11 are in East Kalimantan, the most developed province of Kalimantan. It is a leading producer of coal, oil, and gas and is the most ready among the provinces in terms of FDI. The government has plans to move the capital city from Java to East Kalimantan. This will have a major growth-enhancing impact on this island and the subregion.

Table 17 identifies the economic zones in each province and their target sectors. What follows is a brief description of the three major projects on the island.

- **Maloy Batuta Trans Kalimantan Special Economic Zone.** Located in East Kalimantan, it is Kalimantan's first SEZ. It is set up to leverage its crude palm oil port, the first in Indonesia. Established on 557 ha of land, the zone is strategically situated in Indonesian Archipelago Sea Channel, the international trading route connecting Kalimantan and Sulawesi islands.

- **Jorong Industrial Estate.** It is a part of Jorong Borneo Integrated City, which is being developed with a seaport by PT Jorong Port Development. The city comprises 1,088 ha, with the industrial estate spread over 968 ha. It is expected to promote value-added activity in mineral-based industries, fisheries, livestock, and agro-processing.

- **Kaltim Petrochemical Industrial Estate.** Located in Bontang in East Kalimantan, it is the first cluster of petrochemical factories in Indonesia. As of 24 September 2018, it had five petrochemical factories producing various products including ammonia, urea fertilizer, methanol, and ammonium nitrate (*Antara News* 2018).

Sulawesi. Sulawesi is the second most prosperous island in I-EAGA after Kalimantan and contributed 35% of the subregion's GRDP in 2019. South and Central Sulawesi are the most advanced provinces and account for five of six industrial estates on the island, two *Kawasan Pengembangan Ekonomi Terpadu* (KAPETs), and one SEZ. However, none of the provinces have GRDP

Table 16: Distribution of Economic Zones and Economic Profile of Indonesia-EAGA, by Province

	Economic Zones				Share in GRDP			Economic Well-Being	
	IEs	KAPETs	SEZs	KB	Agriculture (%)	Mining (%)	Manufacturing (%)	GRDP per Capita as Ratio of National Average	Poverty Ratio (%)
KALIMANTAN									
West	2	1		2	23.4	4.8	16.1	0.66	7.28
Central	1	1			21.1	15.6	15.3	0.90	4.81
South	2	1			14.0	25.1	12.7	0.77	4.47
East	3	1	1	6	6.9	48.0	20.0	3.21	5.91
North	3				17.1	27.3	9.2	2.04	6.49
Total	11	4	1	8					5.8
SULAWESI									
North		1	2	3	19.5	5.3	9.4	0.86	7.51
Central	1	1	1		27.0	16.1	13.2	0.87	13.18
South	3	1			20.2	5.2	13.6	0.89	8.56
Southeast	1	1			22.9	21.3	6.3	0.84	11.04
Gorontalo					37.5	1.2	4.1	0.57	15.31
West					38.6	2.3	10.7	0.58	10.95
Total	5	4	3	3					11.1
Maluku		1		2	23.3	2.4	5.3	0.42	17.65
North Maluku	1		1		20.8	10.1	7.6	0.51	6.91
West Papua	1		1		10.1	18.5	30.4	1.63	21.51
Papua		1			12.8	23.6	2.3	1.21	26.55
Total	2	2	2	2					
Grand Total	18	10	6	13					

EAGA = East Association of Southeast Asian Nations (ASEAN) Growth Area, GRDP = gross regional domestic product, IE = industrial estate, KAPET = Kawasan Pengembangan Ekonomi Terpadu (Integrated Economic Development Zone), KB = bonded zone, SEZ = special economic zone.

Sources: Various sources; Badan Pusat Statistik (BPS-Statistics Indonesia). 2019. *Statistik Indonesia 2019*. Jakarta.

per capita above the national average, and poverty rates are higher than the national average in all provinces except for South Sulawesi. West Sulawesi and Gorontalo are less developed areas despite having abundant natural resources. West Sulawesi, with 193 mountains and eight rivers, has a huge potential for renewable energy in eastern Indonesia. Gorontalo has large reserves of gold, ore, and copper. These two provinces have no existing or proposed industrial estates. Two of the most successful industrial estates on Sulawesi Island are Makassar and Palu.

Table 17: Economic Zones and Target Sectors in Indonesia-EAGA, by Province

	IEs	Target Sectors	SEZs	Target Sectors	KAPETs
West Kalimantan	Ketapang*	Agricultural forestry			Kapet Sanggau /Khatulistiwa
	Landak*	Palm oil			
Central Kalimantan	Surya Borneo	Halal			Das Kakab
South Kalimantan	Batulicin* Jorong*	Metal mixed			Batulicin
East Kalimantan	Karangi	Coal, oil, and gas Aquaculture	Maloy Batuta Trans Kalimantan*	Palm oil, wood, logistics	Sasamba
	Kaltim	Petrochemical and chemical industries			
	Buluminung	To be developed			
	Muara Wahau	Coal			
North Kalimantan	Delma Mandiri				
	Mangkupadi	Mineral processing			
	Tanah Kuning*	Ferronickel			
North Sulawesi			Bitung SEZ*	Fishery, coconut processing, and pharmaceuticals	Minado-Bintung
			Likupang SEZ	Tourism	
Central Sulawesi	Morowali*	Nickel processing	Palu SEZ*	Cacao, rubber, seaweed, rattan, and minerals	Batui
				(nickel, steel, and gold)	
South Sulawesi	Makkasar	Mixed			
	Takalar Integrated	Port and township development, agribusiness, petrochemicals, and nonferrous metals			Pare-Pare
	Bantaeng*	Metallurgical, smelter, cement			
Southeast Sulawesi	Konawe *	Nickel processing			Bukari/Bank Sejahtera Sultra
Maluku					Seram
North Maluku	Buli Halmahera Timur*	Nickel processing	Morotai SEZ*	Fishery processing and tourism	
West Papua	Teluk Bintuni*	Petrochemical	Sorong SEZ*	Nickel, shipbuilding, agriculture, and forestry	
Papua					Biak Area

IE = industrial estate, KAPET = Kawasan Pengembangan Ekonomi Terpadu (Integrated Economic Development Zone), SEZ = special economic zone.

Note: * National strategic projects.

Source: Author.

- **Makassar.** The industrial estate in South Sulawesi, covering 330 ha of land, is one of the most successful industrial estates in the region. Since its establishment in 1990, it has experienced rapid development and, as of July 2019, hosted 435 tenants including foreign enterprises (such as Malindo, Snickers, M&M, and Mars). It is ISO 9001 certified for quality management and has received national recognition as the best public sector-managed industrial area by the Ministry of State Owned Enterprises in 2013. It offers elaborate infrastructure including container yard, warehouse, utilities, clubhouse, power systems, telecommunication facilities, and water treatment plan. The supporting services include service charge, logistics and warehousing, water supply, heavy equipment transport, and clinic and health services.
- **Palu Special Economic Zone.** The Palu City government manages Palu SEZ as the center of the integrated logistics and mining processing industry in South Sulawesi along the Sulawesi Economic Corridor. It is connected with Pantoloan Port and is near the busy Indonesian Archipelagic Sea Lane 2, which makes it strategically accessible to various areas of BIMP-EAGA, including Kalimantan, Sulawesi, Maluku, Papua, Malaysia, and the Philippines. Palu SEZ offers an industrial zone, a commercial zone, and a supporting facilities zone. The SEZ has attracted companies engaged in the asphalt industry, pine resin, coco peat and fiber made from coconut, moringa leaves, rattan products, rubber, and essential oil. There are others in the pipeline to process manganese, copper and active carbon, and wood pellet. However, at the time of the field trip in July 2019, it had generated employment of only 100 workers and was still looking for an anchor company.

Maluku. Maluku has great potential to be the country's biggest seafood supplier. Fisheries is one of the main activities, followed by aquaculture. In the tourism sector, Maluku holds potential for having numerous eco- and marine-related tourism sites. Morotai, a tourism SEZ, has been set up to leverage these competitive advantages. There are also efforts to promote mineral processing-based industries.

- **Morotai Special Economic Zone.** Established in 2014 by government order, Morotai SEZ is known as the "Pearl at the Pacific Lips," based on its natural beauty. It served as the base for the US and Australian forces to fight the battle of liberation of the Philippines from the Japanese forces during World War II. It is, therefore, ideal for historical and heritage tourism. Key tourist attractions include World War II historical tours, snorkeling, diving, cultural festivals, and cuisines.

- **Bulli Industrial Estate.** The industrial estate in East Halmahera regency—the regency with the highest number of poor people—is one of the industrial areas prioritized for development and included in the National Strategic Projects. It is set up to accommodate investors in the nickel processing industry including its supporting industries such as the chemical and metal industry, stainless steel, and power plants to improve the area's economic status.
- **Weda Bay Industrial Park.** Being developed in Central Halmahera Regency, Weda Bay Industrial Park is Indonesia's first integrated industrial area to facilitate mineral smelting and produce components of electric vehicle batteries. Its construction started in 2018. It is included in the RPJMN 2020–2024 as one of the nine priority projects.

Papua. Papua, the poorest region despite having above-average national GRDP per capita, has abundant copper and gold resources that push up the GRDP per capita. The world's largest gold and third-largest copper mines are in Papua. However, the spillover effect is missing, and poverty is widespread. To promote high value-added activities on the island, the government proposes to develop two economic zones in West Papua, both of which are national strategic projects.

- **Sorong Special Economic Zone.** It is projected to absorb 15,024 workers in various industries including nickel, palm oil and sago, and logistical warehouses (*The Insider Stories* 2019).
- **Teluk Bintuni Petrochemical Industrial Zone.** It was declared a priority industrial estate in the RPJMN 2015–2019 and included in the National Strategic Projects. It is expected to attract a methanol plant as an anchor company and absorb 3,500 workers (*IDN Financials* 2019).

Of the nine priority projects in the RPJMN 2020–2024, five are in I-EAGA: Ketapang, Palu, Teluk Weda, Surya Borneo, and Teluk Bintuni. In addition, out of 18 other industrial estates that will be developed, five : Batanjung, Takalar, Batulicin, Jorong, and Tanah Kuning; and of the 28 zones listed as national strategic projects 15 are in I-EAGA.

Malaysia-EAGA

Malaysia-EAGA (M-EAGA) or Malaysian Borneo consists of the Malaysian states of Sabah, Sarawak, and the Federal Territory of Labuan, covering an area of 198,173 km^2, which is 60% of Malaysia's total land area. Sarawak and Sabah are the largest states in Malaysia, accounting for most of the M-EAGA area and 21% of the national population. Table 18 presents the economic profile of these states and the federal territory of Labuan in M-EAGA.

Sarawak. It is the third-largest contributor to Malaysia's national GDP and enjoys the fifth-highest GRDP per capita among Malaysian states. However, the Household Income and Basic Amenities Survey Report 2019 shows that the mean household expenditure in Sarawak is RM1,086, which is below the national average and is close to Kedah, Perlis, and Kelantan (Department of Statistics Malaysia 2019). The incidence of families below the poverty line income of Sarawak is 9%; for the whole nation, it is 5.6%. The economy is heavily dependent on mining and manufacturing of petroleum, chemicals, and petrochemicals. To diversify the economy, four agencies have been assigned the task of developing industrial estates. The Ministry of Industrial Development has set up nine of the 24 industrial parks and one free industrial zone (FIZ). Sarawak Economic Development Corporation, Sarawak Timber Industry Development Corporation, and the Bintulu Development Authority are other agencies developing their own industrial parks. In 2009, Sarawak's central regions were designated as Sarawak Corridor of Renewable Energy (SCORE), which was extended in 2018 to cover the northern regions as well. The state government established three additional development agencies under the Regional Corridor Development Authority.

There is, thus, an extensive institutional structure to promote industrial infrastructure in the state. Of the total 24 zones, four zones are prominent.

Table 18: Distribution of Economic Zones and Economic Profile of Malaysia-EAGA, by State

	Economic Zones			Share in GRDP			Economic Well-Being	
	IZs	SEZs	Target Sectors	Agriculture (%)	Mining (%)	Manufacturing (%)	GRDP per Capita to National GDP per Capita	Poverty Rates (%)
Sarawak[a]	24	1	Energy, petrochemical, halal, automotive, aerospace, palm oil, wood	12.1	21.7	26.9	1.1	9.0
Sabah[b]	4			16.1	26.4	7.6	0.5	19.5
Labuan		1		1.8		18.2	1.7	

EAGA = East Association of Southeast Asian Nations (ASEAN) Growth Area, GDP = gross domestic product, GRDP = gross regional domestic product, IZ = industrial zone, SEZ = special economic zone.

[a] **Sarawak:** Kota Samarahan, Tebedu, Kota Samarahan (Extension), Sarikei, Upper Lanang, Kuala Baram, Piasau Bekenu, Kapit, Bintulu, Tanjung Kidurong, Jepak, Tanjung Manis Halal Park, Kidurong, Mukah, Kapit Kuala Baram, Piasau, Bekenu, Samalaju, Lawas, Hulu Lanang, Rantau Panjang Ship Building, Bintulu, Kemena Industrial Estates, and Samajaya Free Industrial Zone.

[b] **Sabah:** Kota Kinabalu, Sipitang Oil and Gas Industrial Park, Palm Oil Industrial Cluster (POIC) Lahad Datu, and POIC Sandakan.

Source: Author.

- **Samalaju Industrial Park.** The industrial park, spread over 7,000 ha area, is dedicated to energy-intensive heavy industry. It has been developed to attract companies engaged in aluminum smelting, steel, oil refining, silica-based industries, marine engineering, and a wide range of industrial and commercial activities. It is supported by the Samalaju Industrial Port, which covers 450 ha and forms a logistics hub for importing raw materials and exports of finished products for the companies in the industrial park. The state government is supplementing the federal government's incentives by offering concessions on power, water, and land.
- **Tanjung Manis.** It is on its way to becoming a major industrial port city and a key element in Malaysia's global halal hub strategy. The 77,000 ha Tanjung Manis Halal Hub project involves businesses in upstream and downstream halal food production and export.
- **Samajaya Free Industrial Zone in 2021.** It was established in 1991 to develop an integrated electronics manufacturing zone in Sarawak. It had created 11,800 jobs by 24 January 2019. Cumulative investment by foreign companies has been RM12 billion, mostly in electronics products including the components for electric vehicles. However, the zone could not succeed in promoting a hub of electronics industries in Sarawak even in its 30 years of existence.
- **Matadeng Industrial Park.** It is being developed as part of the SCORE. It will focus on R&D, especially on bio-specific industries including food and palm oil applications. It is an integrated industrial estate that caters to both, large companies and SMEs. It is supported by Mukah airport operationalized, Mukah education hub that includes an R&D center to ensure the supply of skilled and semiskilled workers, and Mukah Science Park in its proximity.

Sabah. The share of manufacturing centering around oil and gas remains as small as 7.6%. Sabah recorded the highest poverty rate at 19.5% in 2019 (Department of Statistics Malaysia 2019). The Sabah Development Corridor was launched on 29 January 2008 to leverage Sabah's inherent strengths: strategic location, rich resources, as well as cultural and biological diversity. The objectives are to expand and grow high potential economic activities and ensure balanced and sustainable development of the state. In line with the state government's direction, the promoted sectors under the Sabah Development Corridor initiative are agriculture, tourism and logistic services, and manufacturing. For the effective implementation of the programs and projects, the Sabah Economic Development and Investment Authority was established in 2009. There are four industrial parks in the state: Kota Kinabalu Industrial Park, Sipitang Oil and Gas Industrial Park, Palm Oil Industrial Cluster (POIC) Lahad Datu, and POIC Sandakan. Of these industrial parks, Kota Kinabalu is the most successful one.

- **Kota Kinabalu Industrial Park.** Established in 1994 by K.K.I.P. Sdn. Bhd., a wholly owned company of the Sabah State Government, it is the largest and most successful industrial cluster in Sabah. Occupying 3,679 ha, Kota Kinabalu Industrial Park is an integrated park comprising industrial areas and commercial centers integrated with residential complexes. Sepangar Bay Container Port Terminal supports the park and has been in operation since 2007. According to the statistics of September 2018, 663 companies had set up their businesses at Kota Kinabalu Industrial Park, with investments worth RM3.1 billion, and created 9,479 jobs in the manufacturing sector (*The Borneo Post* 2018). The park falls within the Knowledge Corridor of Sabah, where two universities and a host of training and research institutions are located. To leverage these advantages, the park is targeting high value-added industries including automotive and a halal hub. In addition, an aerospace training center has been set up, which will collaborate with big companies for aircraft maintenance training to promote the state's aerospace industry.

- **Palm Oil Industrial Cluster Sdn Bhd.** The Sabah State Government set up POIC Lahad Datu in 2005 to spearhead the development of palm oil downstream processing mainly to add value to its 1.55 million ha of oil palm plantations. POIC Lahad Datu, which owns and operates POIC Port Lahad Datu with comprehensive port facilities in the Lombok-Makassar Straits, is also poised to attract investments in port and logistics, biomass, biorefineries, oil and gas, and related SMEs. POIC Lahad Datu is incorporated within the Sabah Development Corridor. To date, 2,000 acres in POIC Lahad Datu have been developed with infrastructure and utilities. The industrial park plans to cover more than 4,400 acres of an integrated industrial complex designed to cater to light, medium, and heavy industries.

Labuan. Labuan is an offshore Malaysian island, which has the benefit of a low tax regime. It was designated as an FTZ in 1990 and is referred to as Labuan International Business Financial Centre. It is an offshore financial center for regional companies looking to expand internationally as well as for global companies entering Asian markets. Though prominently a financial hub, Labuan has five main industries: financial services, oil and gas, tourism, halal products, and fishing. The Government of Malaysia has declared Labuan as one of the country's petrochemical hubs. Petrochemicals account for more than 70% of Labuan's total exports and manufacturing.

Philippines-EAGA

The Philippines-EAGA (P-EAGA) encompasses the Mindanao Island and Palawan, which account for 25% of the national population but more than half of the geographic area of the Philippines. Mindanao is the second-largest island in the Philippines after Luzon. It is divided into six administrative regions: the Zamboanga Peninsula, Northern Mindanao, the Davao Region, SOCCSKSARGEN,[14] the Caraga Region, and the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM). Of the six regions of Mindanao, population and area are distributed fairly equally except BARMM, which is the largest in terms of area albeit not in population. Despite being the breadbasket of the Philippines, Mindanao's GRDP per capita falls 45% short of the national average. None of the regions on the island enjoy higher than the average national GDP per capita. Its contribution to national GDP is around 14%. Davao is the fastest-growing region, followed by North Mindanao. These two are the most advanced regions in GRDP per capita terms and have lower than the national average poverty rates. BARMM is the poorest region, with more than 54% of the population being below the poverty line and per capita income falling 80% short of the national average. The distribution of economic zones matches the economic profile of the regions (Table 19) because the criteria laid down in Chapter 6

Table 19: Distribution of Economic Zones and Economic Profile of Philippines-EAGA, by Province

	Economic Zones					Share in GRDP			Economic Well-Being	
	Manufac-turing	Agro-Industrial	Tourism	IT	Free Ports	Agri-culture (%)	Mining (%)	Manufac-turing (%)	GRDP to GDP per Capita Ratio	Poverty Ratio (%)
Palawan	1	1	2							
Zamboanga Peninsula (Region IX)		1			1	16.8	0.3	25.1	0.52	25.4
Northern Mindanao (Region X)	4	3	1	2		20.0	0.5	20.1	0.81	17.3
Davao (Region XI)	2	3		11		10.6	1.0	22.9	0.88	13.9
SOCCSKSARGEN (Region XII)	1	6		1		22.0	0.2	24.9	0.58	22.4
Caraga (Region XIII)	1					16.2	16.8	2.0	0.42	24.1
BARMM					1	56.0	1.0	1.0	0.17	54.2

BARMM = Bangsamoro Autonomous Region in Muslim Mindanao; EAGA = East Association of Southeast Asian Nations (ASEAN) Growth Area; GDP = gross domestic product; GRDP = gross regional domestic product; IT = information technology; SOCCSKSARGEN = South Cotabato, Cotabato, Sultan Kudarat, Sarangani, and General Santos.

Source: Author.

[14] It is composed of South Cotabato, Cotabato, Sultan Kudarat, Sarangani, and General Santos.

of the PEZA Act require the establishment of an SEZ with well-developed transport infrastructure, utilities (power and water), and human capital.

As of June 2019, only 40 of 396 PEZA SEZs were in EAGA areas. Davao, the most well-off area, hosts 16 SEZs (40%) and accounts for 41% of the total SEZ employment in P-EAGA. It is followed by North Mindanao (10) and SOCCSKSARGEN (8). Sector-wise, 14 are agro-economic zones, forming 64% of the country's 22 agro-industrial parks. Table 20 indicates that the agro-industrial parks turned out to be instrumental in generating employment to Filipinos with lesser educational attainment in the remote provinces and account for 40% of total SEZ employment in the region. Further, the region hosts as many as 14 IT centers and parks—mostly concentrated in Davao (11)—generating 16,000 jobs. In contrast, manufacturing SEZs are mostly in North Mindanao. Palawan is sparsely populated and is endowed with forests, and marine and mineral resources. It hosts two out of the three tourism zones in P-EAGA. In addition to PEZA zones, two integrated free ports and SEZs are also operational in the region. Table 20 shows an overview of selected SEZs in Mindanao.

Table 20: Economic Zones and Target Sectors in Philippines-EAGA, by Province

	Manufacturing	Agro-Industrial	Tourism	IT Parks and Centers	Free Port and SEZ
Palawan	Barangay Rio Tuba, Bataraza (1)	Brooke's Point (1)	El Nido (1) Cuyo (1)		
Zamboanga Peninsula (Region IX)		Zamboanga del Norte (1)			Zamboanga City Special Economic Zone Authority and Freeport
Northern Mindanao (Region X)	Misamis Oriental (3) Lanao Del Norte (1)	Misamis Oriental (1) Lanao Del Norte (1) Bukidnon (1)	Cagayan de Oro City (1)	Misamis Oriental (2)	
Davao (Region XI)	Davao City (1) Davao Del Norte (1)	Davao City (2) Davao del Sur (1)		Davao City (11)	
SOCCSKSARGEN (Region XII)	General Santos City (1)	South Cotabato (4) Sarangani (2)		South Cotabato (1)	
Caraga (Region XIII)	Surigao del Norte (1)				
BARMM					Polloc Freeport and Ecozone
Employment	5,885	26,944	731	16,095	

BARMM = Bangsamoro Autonomous Region in Muslim Mindanao; EAGA = East Association of Southeast Asian Nations (ASEAN) Growth Area; IT = information technology; SEZ = special economic zone; SOCCSKSARGEN = South Cotabato, Cotabato, Sultan Kudarat, Sarangani, and General Santos.

Note: Parentheses indicate the number of zones.

Source: Cortero, E. D. 2019. *Policy Guidelines and Procedures on Special Economic Zone Development*. Presentation shared with the ADB study team in July.

Davao Region. It is the most prosperous region in P-EAGA (Table 19) and a major center of IT, business process outsourcing (BPO), software and applications, ICT-enabled creative services, and IT services. It hosts as many as 11 IT zones (as of June 2019), all owned 100% by Filipinos. Two manufacturing SEZs in the region are in the growth stage, with Anflo being a prominent one.

- **Anflo Industrial Estate.** It is spread over 63 ha of land and focuses on food processing. It has a fully developed infrastructure with standard-designed factories, warehouses, and industrial plots. As of July 2020, it had 15 locators from five different nationalities (Anflo Industrial Estate 2020). It is also open for packaging materials, in addition to food processing.

North Mindanao. It is the second most prosperous region in P-EAGA, hosting 10 SEZs concentrated mostly in Misamis Oriental. It is the only region with nearly all types of economic zones except free port and SEZ (Table 20). The first industrial estate of PHIVIDEC was set up here in the early 1970s. It is now registered with PEZA. Covering 3,000 ha of land, it is the largest and perhaps the most successful economic zone in the region.

- **PHIVIDEC Industrial Estate.** The objectives of PHIVIDEC are to (i) harness the full potential and capabilities of veterans and the Armed Forces of the Philippines retirees in the industrial development of the country, and (ii) promote planned industrial estates. Spread over 13 barangays in Northern Mindanao, it had eight locators that employed over 1,000 workers as of June 2019. The country's biggest integrated steel mill with Chinese investment is planned to be set up within this industrial estate.

SOCCSKSARGEN. It is endowed with fertile agricultural lands and vast fishery and aquatic resources and is well-known for its river systems. It is also among the country's leading producers of rice, corn, coffee, banana, pineapple, and palm oil, and accounts for 80% of the tuna industry in the country. The priority industries in this corridor are high-value commercial crops, corn, and other agri- and fishery-based products, along with ICT. These priorities are manifested in four agro-industrial zones and an IT zone. Agro-industrial zones focus on fruit-based products, packaging, and coconut oil production.

- **Sarangani Agro-Industrial Zone.** It is the largest employer, employing over 15,000 people. Owned and operated by Dole Philippines or Dole Asia Company Limited, it is a pineapple plantation in Polomolok, South Cotabato, producing fresh pineapple and pineapple juice concentrate, solids, juice, mixed fruit products, tropical fruit cocktail, and nata de coco (coconut gel).

Zamboanga. Strategically situated near Sabah, Malaysia; Brunei Darussalam; and Indonesia, it is the Philippines' gateway to BIMP-EAGA, with abundant tuna, sardines, banana, coconut, fruits, and poultry and livestock products. To leverage these benefits, the government has set up an integrated free port and SEZ in the province.

- **Zamboanga Peninsular Ecozone.** In 1995, the Zamboanga City Special Economic Zone and Freeport was created to be developed and managed by the Zamboanga City Special Economic Zone Authority to develop it into a self-sustaining agro-industrial, commercial, and financial investment and tourism center and free port with sustainable retirement and residential areas. In 1997, 15,391 ha of area was transferred to the zone to promote

agroforestry, agri-industrial, and ecotourism projects. According to its website, only 64.56 ha of area has been developed with available amenities and housing facilities for lease. It consists of four key investment areas: the San Ramon Newport, West Corporate Center, the Asian Halal Centre, and the La Paz Biotech Farms. The Zamboanga City Special Economic Zone Authority envisions it to be the halal hub of the Philippines and is developing "Asian Halal Center" over 100 ha of land as home of export-quality halal products (NEDA 2019). At present, there are only five manufacturing companies and six agro-industrial units operating in the zone.

Caraga. Caraga is known for its large nickel and iron and ore deposits. However, processing activity in the region is underdeveloped, with only one manufacturing zone in Surigao del Norte, a mineral processing ecozone with a nickel refinery, and other processing plants. The Caraga Regional Development Plan, 2017–2022 sets the target of promoting 19 SEZs covering fishery, agro-processing, gold processing, other minerals products processing, ecotourism, wood, and IT sectors. But little progress has been made in this direction.

BARMM. The poorest region of P-EAGA, BARMM area is outside the jurisdiction of PEZA. Ecozone establishment and development in BARMM is under the oversight of the Bangsamoro Economic Zone Authority.[15] Therefore, there is no PEZA zone in this area yet. In 2010, in the province of Maguindanao in BARMM, Polloc Port was declared as a "free port" and "free zone" (Mallo 2010). It was expected that the development of Polloc Port would significantly reduce the transport cost of products, spur economic activities, and promote direct links for international trading for this area to create conditions for more economic zones. However, the gains were slow to come. In 2017, to give it a big push, the government declared it a halal hub. In addition, Mindanao Development Authority (MinDA) and PEZA, along with other government agencies, signed an agreement to create and develop regional economic zone initiatives in Mindanao (Francisco 2017). Currently, Polloc is the major industrial infrastructure in BARMM.

- **Polloc Freeport and Economic Zone.** This halal hub is expected to serve as a gateway to the multi-trillion-dollar halal industry for the Philippines. Currently the port is being managed by BARMM through the BARMM Regional Economic Zone Authority. It envisions to fully operationalize the Polloc Port to stimulate the flow of business activity and utilize the Polloc Special Economic Zone as BARMM's socioeconomic and investment hub.

Within the framework of the Mindanao Peace and Development Framework Plan or "Mindanao 2020," the MinDA has proposed several locations for agro-industrial ecozones based on a criteria of poverty incidence in the proposed location, proximity to port of entry, and availability of labor pool. These are Agusan del Sur, Basilan, Lanao del Sur, Tawi-Tawi, Maguindanao, Zamboanga del Norte, Zamboanga del Sur, and Zamboanga Sibugay. Most of these projects are still in the feasibility study stage. In addition, there are several locations that are under review for SEZs, including Sulu, Zamboanga del Norte (Misamis Occidental, Bukidnon, Davao del Norte, Surigao del Sur, Sultan Kudarat, and North Cotabato). The ongoing Philippine Development Plan, 2017–2022 includes the development of the Tawi-Tawi and Basilan ecozones and the creation of halal hubs in BARMM to improve the access of micro, small, and medium-sized enterprises (MSMEs) to production

[15] In 2003, the Regional Economic Zone Authority (REZA) was set up under the Autonomous Region in Muslim Mindanao (ARMM). When BARMM was created, the office of ARMM-REZA came to be called the Bangsamoro Economic Zone Authority.

networks. The "Mindanao Speaks Up" Summit held in Davao City, Philippines on 10 February 2021, adopted the following projects as priority projects: Nasipit Agusan del Norte Industrial Estate, Tubay Agricultural Processing Cente, Basilan Agro-Processing Economic Zone in Lamitan, Tawi Tawi Freeport and Special Economic Zone, Magsaysay Agro-Industrial Ecozone, and Butuan IT Business. It also adopted a resolution requesting the Office of the President to declare identified idle public lands in each region in Mindanao as public SEZs. MinDA, thus, continues lobbying for economic zone projects to be prioritized in national development plans to attain budget allocation.

Economic Zones in the BIMP-EAGA: An Overall View

The analysis reveals that the BIMP-EAGA subregion hosts 144 economic zones (both in operation and under development), which are almost evenly distributed across the four EAGA areas. There are also projects in the pipeline. Of the 144 economic zones, 64 are SEZs, mostly in the Philippines and Indonesia. In 2003, the number of SEZs was 25 (Dent and Richter 2011).

Table 21: Distribution of Economic Zones in BIMP-EAGA

	Brunei Darussalam	Indonesia-EAGA	Malaysia-EAGA	Philippines-EAGA	Total
Industrial Zones	24	28	28		80
SEZs	1	19	2	42*	64
Total	25	47	30	42	144

BIMP-EAGA = Brunei Darussalam–Indonesia–Malaysia–Philippines East ASEAN Growth Area, SEZ = special economic zone.

* Includes Zamboanga City Special Economic Zone and Polloc Freeport and Ecozone.

Source: Author.

Agriculture, energy, and mining are the pillars of the BIMP-EAGA economies, while manufacturing capabilities are limited to agro- and mineral processing. Most zones in the subregion conform to the region's comparative advantages and are resource-based. Indonesia and the Philippines, in particular, focus on upgrading the industrial structure by moving up from exports of raw materials to value-added products. However, in M-EAGA and oil-reliant Brunei Darussalam, the focus has been on diversifying the industrial structure by moving away from resource-based products to diversified industrial activities. Economic zones are thus viewed as a strategic tool to induce industrial dynamism in all four subregional economies using different strategies.

Chapter 6

Assessing the Performance of BIMP-EAGA Economic Corridors and Economic Zones

The industrial estates and SEZs have played an important role in the economic transformation of three of the four BIMP-EAGA countries and put them on a high growth trajectory. In Malaysia, FIZs became instrumental in plugging the country into the value chains of the electronics industry in the early 1970s, which became the main engine of growth, accounting for approximately one-third of Malaysia's total exports in 2018 (Rasiah 2018) and providing jobs to 575,000 workers in 2019 (Statista n.d.). There are over 200 plants of multinational enterprises in Penang alone, directly employing over 250,000 workers (Athukorala and Narayanan 2018). There have also been regional spillover effects of industrial clustering in Penang. For instance, Kulim High-Tech Park, which benefited from the relocation of activities from Penang, created 30,000 high-income jobs by 2015 in Kedah, an industrially backward state (Athukorala and Narayanan 2018). The regional economic corridors that have created 1.87 million jobs since inception have been reinforcing these gains (Aziz 2018).

In Indonesia, the bonded zones and industrial estates established the country as a hub for the production of automobile, electronics products, oil and gas, and for shipbuilding industries. While some studies do not find evidence of the significant contribution of Indonesia's spatial policies of promoting SEZs to economic growth or regional development (Rothenberg et al. 2017; Wicaksono, Mangunsong, and Anas 2019), available statistics indicate that the bonded zones and the Import Facilities for Export Purpose contributed 37.76% of national exports and 3.59% of GDP in 2016; attracted investment of Rp168 trillion; absorbed 2.1 million workers equivalent to 13.5% of the national industrial labor; and increased state revenues significantly (Sulistyawati, Sulistiyono, and Imanullah 2019).

In the Philippines, SEZs have been the key in attracting FDI and promoting foreign exchange earnings. Even in the first phase of their development during 1980–1995, SEZs contributed to closing the foreign exchange gap in the wider economy through a positive trade balance (Remedio 1996). In the second phase since 1995, they have significantly grown in importance. In 2018, the contribution of the PEZA zones to GDP through exports was 16.3%. They have also made a major contribution to employment generation. The direct employment grew from 22,000 workers in 1980 to over 86,000 workers in 1995 then stood at 11.5 million workers in 2018. When combined with the indirect employment of over 7.5 million, they have affected 1 in every 5 Filipinos positively (PEZA 2019). More importantly, the IT parks and centers have contributed to the country's transformation into a highly competitive outsourcing destination. Davao in Mindanao is one of the IT hubs of the country, hosting 11 IT parks and hubs. Economic zones have, thus, been highly successful in BIMP countries in attracting foreign investment and promoting trade, which in turn, introduced industrial transformation in these economies, generated employment, and contributed to poverty reduction. The critical question is, how far have economic zones been successful in the subregion comprising lagging and geographically remote economies?

There is strong empirical evidence that the success of economic zones in the lagging and peripheral regions remains limited.[16] However, the creation of a transborder subregion is based on the premise that it would overcome the locational disadvantages and turn these national peripheries into cross-border growth centers through a collaborative approach, which could promote regional development and economic growth by strengthening local specificities; empowering local actors; creating connectivity among them; facilitating the mobility of goods, people, and factors of production; and promoting cross-border production networks (Ortiz-Guerrero 2013). The economic zones are, therefore, expected to contribute substantially to the development of the subregional economies. Two pertinent questions arise: (i) What is meant by the collaborative approach? (ii) How can this approach unlock the potential of the BIMP-EAGA and turn it into a core region? This chapter begins by addressing these questions and, while doing so, discusses the theoretical underpinnings of the subregional initiative. It is followed by an assessment of the BIMP-EAGA economic corridors and zones.

Understanding the Links between BIMP-EAGA Subregional Economic Zones and Shared Economic Development

The imperative of the collaborative approach is to view the subregion as a transborder hybrid zone, the potential of which can be unlocked by establishing a single market and production base in the subregion. The subregion offers opportunities to exploit complementarities in resources and industrial ecosystems, augment resources, expand markets through shared strategies, and in turn, generate shared prosperity for the subregion through the following underlying channels.

- **Opportunities for cross-border aggregation of resources and complementing them.** While the economic structures of BIMP-EAGA economies are fairly similar, offering opportunities for resource aggregation, there are indeed complementarities in resources as well. As discussed, each EAGA region has special resources to contribute. Brunei Darussalam is rich in energy resources and has built significant production capabilities in oil and gas processing. It also has significant financial resources. M-EAGA contributes to EAGA's oil and gas economy. Sarawak and Sabah complement Brunei Darussalam in energy resources and are also rich in palm oil and timbers. There have also been efforts to promote high value-added industries including renewable energy, halal products, biotechnology, R&D in Sarawak, and automotive and aerospace in Sabah. Labuan complements Brunei Darussalam in financial services. I-EAGA, on the other hand, is rich in agricultural, fisheries, forestry, and mineral resources (including oil and gas, aluminum, nickel, gold, and copper). P-EAGA mostly specialized in and is a top exporter of fisheries and several high value-added plantation crops including coffee, coconuts, and fruits. Davao has been developed as an IT hub, while Caraga has abundant mineral resources.

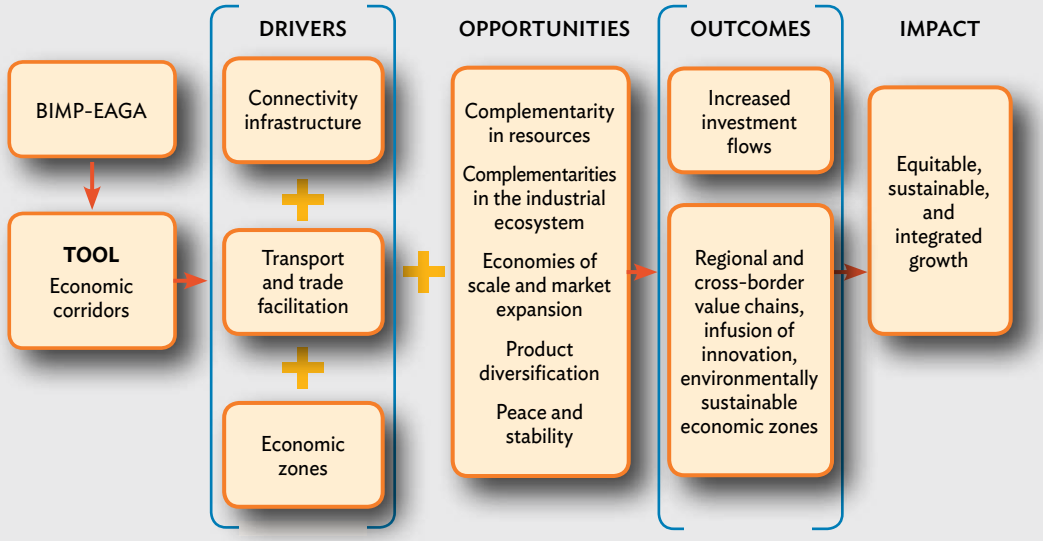
[16] According to the "new economic geography," firms locate where they incur lower transport costs through economies of scale, i.e., in the largest market. In this larger market, workers face lower prices for manufacturing goods and, thus, earn higher real wages. This economic dynamic leads to a migration of workers from the periphery region to the core region, which in turn enlarges the core region's market. As a result, more firms decide to locate close to the core market, leading to the agglomeration of all industrial activities in the economic core (Krugman 1991, Ottaviano and Puga 1998).

There is thus a wide diversity of primary resources in the region, which is also supported by IT skills. The subregion is rich in energy, water, mineral, agricultural, and fisheries resources. However, these economies are somewhat trapped in their specialization. They can benefit from synergizing their resources if (i) economic corridors are effectively implemented, ensuring the mobility of capital, people, and goods; and (ii) economic zones are promoted through coordinated and concerted efforts.

- **Complementing the industrial ecosystems.** Industrial performance hinges on the evolution of an industry ecosystem that supports the full realization of its potential. This includes some supporting industries such as logistics, financial, transport and communication services; power and other utilities; certifications, quality control, training and R&D centers; and packaging and labeling. Leveraging the cross-border infrastructure by SEZ companies can fill the gaps in the presence of such ecosystems in the host region. Sarawak, for instance, has quite a few universities including branches of Australian universities. Sabah is also developing a knowledge corridor, as mentioned. Brunei Darussalam and Labuan have well-developed financial services. Indonesia is promoting logistics infrastructure and energy resources. The Philippines has been successful in processing and packaging agriproducts. These facilities may be leveraged to reinforce the ecosystem within the subregion.
- **Promoting scale economies.** Economic zones along the corridors also benefit from expanded market access and economies of scale. The subregional economic zones have easy access to new cross-border markets, thus, creating new opportunities for companies to expand their activities beyond their national borders, as well as providing consumers with a wider range of products and services.
- **Political cooperation.** Economic cross-border cooperation may spill over into political cooperation, leading to peace and stability in these areas, which are conducive to growth. As industrial development takes place, economic dynamism further spurs growth and expansion of the clusters through spin-offs and suppliers of both the clustered industry and related industries initiating the cumulative causative processes (Myrdal 1957). Figure 6 summarizes these channels.

The next pertinent question that arises then is this: How far have the subregional economic zones leveraged the benefits of economic corridors to address the development challenges of these lagging and remote areas?

Figure 6: Links between BIMP-EAGA Subregion, Economic Corridors, and Sustainable and Integrated Development



BIMP-EAGA = Brunei Darussalam–Indonesia–Malaysia–Philippines East ASEAN Growth Area.
Source: Author.

BIMP-EAGA Corridors and Economic Zones: Performance Assessment

There are no systematic data available on the performance of economic zones in the region. Therefore, this study assesses the performance of economic corridors and economic zones based on the regional data using a set of indicators drawn from the vision, outcomes, and targets set out by BIMP-EAGA Vision 2025. Table 22 lists these indicators.

The findings are presented in Figures 7–12.

(i) **The average subregional gross regional domestic product per capita as a ratio to the national average has been greater than 1 in M-EAGA, close to 1 in I-EAGA, and below 0.6 in P-EAGA** (Figure 7). The regions of M-EAGA and I-EAGA, which are blessed with mineral oil and other mineral products, generate substantial resource rent affecting the GDP favorably. Thus, in M-EAGA, oil-rich Sarawak and a free port of Labuan push the GRDP above the national average; the ratio for Sabah is between 0.5 and 0.6. In I-EAGA, mineral-rich East and South Kalimantan and Papua are the only regions with above national average GRDP per capita. Maluku and Maluku Uttara, on the other hand, fall 60% and 50% short of the national average, respectively. The economy of P-EAGA areas depends mainly on agricultural resources, with GRDP per capita falling short of the national average by more than 40%. However, resource abundance is not associated with higher economic growth in the subregion. The ratio of GRDP per capita in EAGA areas to national average shows a marginal movement—essentially southward in almost all three countries: Indonesia, Malaysia, and the Philippines.

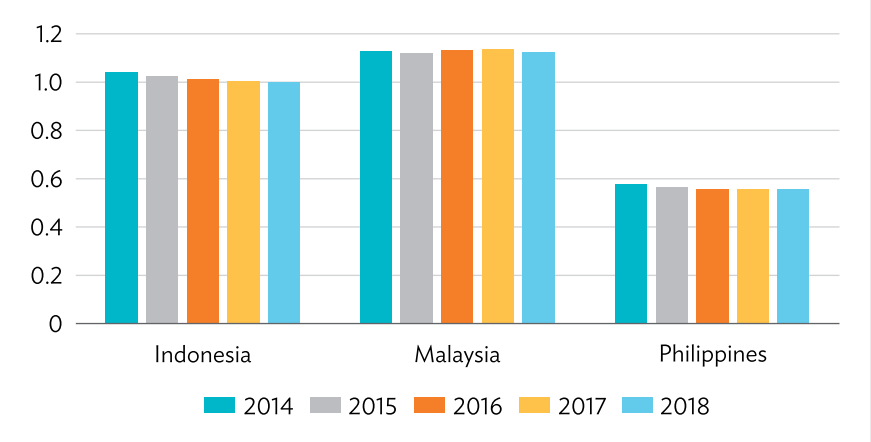
Table 22: Performance Indicators

BIMP-EAGA Vision 2025	Description	Indicators
Vision	Resilient, inclusive, sustainable, and economically competitive (RISE) BIMP-EAGA to narrow the development gap	• Average GRDP per capita of the EAGA areas as a ratio to the national average • Poverty ratios in the EAGA region relative to the national average
Outcomes	Competitive and manufacturing aiming to transition from resource extraction into higher levels of processing and value-added production	Share of manufacturing in GRDP
Targets	• BIMP-EAGA represents 20% of the BIMP economy • Intra-EAGA trade increases to 10% of total trade • FDI in BIMP-EAGA increases to $66 billion	• The contribution of each EAGA region to the respective economy • Intra-EAGA trade as % to total trade • FDI inflows in EAGA areas

BIMP-EAGA = Brunei Darussalam–Indonesia–Malaysia–Philippines East ASEAN Growth Area, FDI = foreign direct investment, GRDP = gross regional domestic product.

Source: Author.

Figure 7: Average Gross Regional Domestic Product per Capita of the BIMP-EAGA Areas as a Ratio to the National Average: 2014–2018



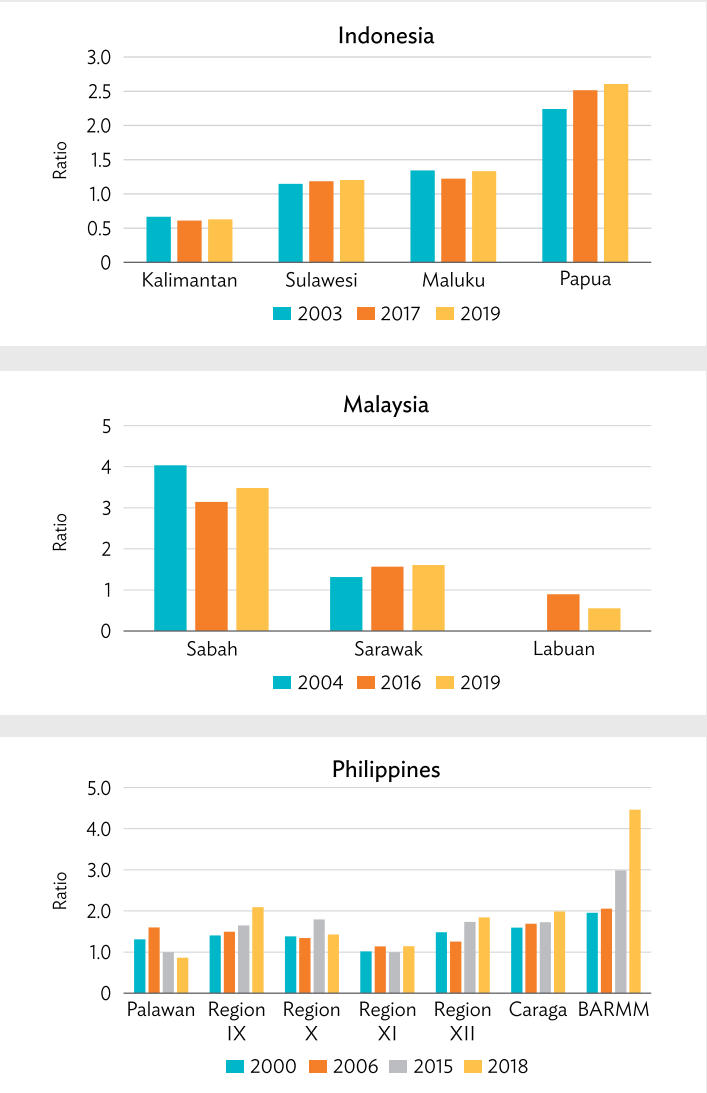
BIMP-EAGA = Brunei Darussalam–Indonesia–Malaysia–Philippines East ASEAN Growth Area.

Source: National accounts data of three of four BIMP countries.

(ii) **Poverty in EAGA areas as a ratio to national poverty rates.** It is widely recognized that the GDP per capita is not an adequate measure of economic well-being. It is an average of gross value added by transactions of all resources and economic activities generated in an economy. It does not capture the distribution of this wealth, which is typically manifested in expenditures

or disposable income per capita. People below a threshold level of expenditure or disposable income are called poor. Figure 8 shows that the ratio of poverty rates of the EAGA areas to the national average has been greater than one in all areas in the subregion with a few exceptions (Labuan in Malaysia, Kalimantan in Indonesia, and since 2015, Palawan in the Philippines). Despite a high level of GRDP per capita, Sarawak and Papua remain poor with lower than the national average expenditures and higher incidence of poverty.

Figure 8: Ratio of Poverty Rates in EAGA Areas to National Rates



BARMM = Bangsamoro Autonomous Region in Muslim Mindanao, EAGA = East Association of Southeast Asian Nations (ASEAN) Growth Area.

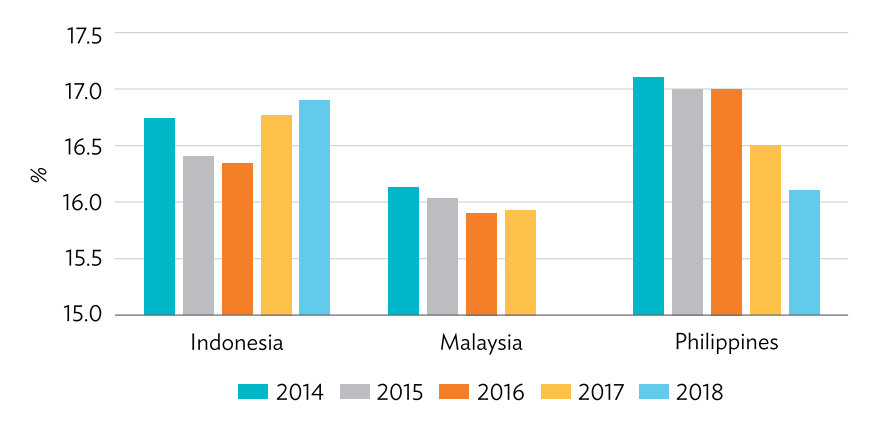
Notes: Region IX: Zamboanga Peninsula; Region X: Northern Mindanao; Region XI: Davao Region; Region XII: SOCCSKSARGEN.

Sources: Indonesia *Statistical Yearbook 2020*; Household Income and Basic Amenities Survey Report 2019 for Sarawak, Sabah, and Labuan; Open Stat by Philippines Statistical Authority.

(iii) **The share of manufacturing in GRDP**, a crucial indicator of structural transformation from primary to manufacturing sector, is presented for each province and state in Tables 16, 18, and 19. It reveals that these economies are still dependent on agriculture and mining activities, with a few exceptions. Even Sarawak, one of the most industrialized states in the subregion, has the competitive advantages in mainly natural gas, vegetable oils, and crude oil, which constituted almost 70% of the total exports in 2018 (Department of Statistics Malaysia 2019).

(iv) **The contribution of each EAGA area to the respective economy** has been declining in Malaysia and the Philippines (Figure 9). It is only Indonesia where the GDP contribution of I-EAGA has shown improvement in recent years.

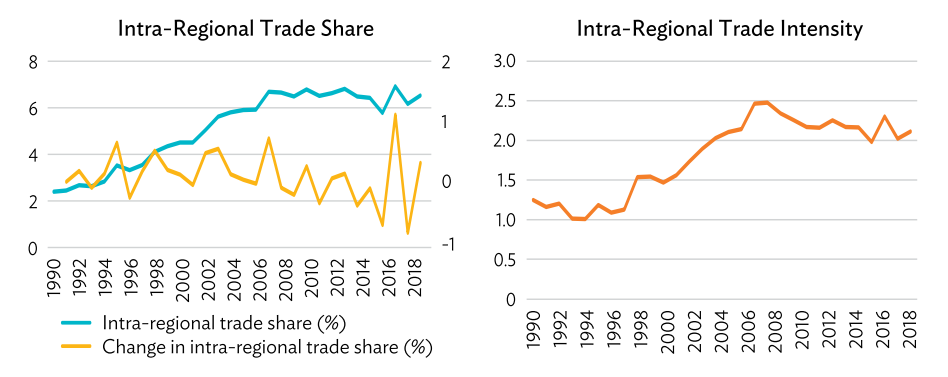
Figure 9: Contribution of EAGA Areas to National Gross Domestic Product, by Country
(%)



EAGA = East Association of Southeast Asian Nations (ASEAN) Growth Area.
Source: National accounts data.

(v) **Intra-EAGA trade.** The target set by the Vision 2025 document is to increase intra-EAGA trade to 10% of total trade. According to the data provided by ADB's Asia Regional Integration Center, intra-subregional trade as a percentage of the subregion's total trade grew by 4 percentage points between 1990 and 2007 from 2.4% to 6.7%. Thereafter, it became almost stagnant. Since 2003, the annual growth in intra-regional trade share has shown a downward trend, with each peak lower than the previous one (Figure 10). Further, intra-subregional trade intensity index, the ratio of intra-subregional trade share to the share of world trade with the region, increased until 2007 and has declined almost continuously since then. The Statistical Information Brief published by the BIMP-EAGA Facilitation Center (BIMP-FC) reveals that intra-EAGA exports varied from 3.4% for P-EAGA to 10.0% for I-EAGA. M-EAGA (6.4%) and Brunei Darussalam-EAGA (B-EAGA) (8.6%) are in the middle (BIMP-EAGA 2019). Imports shares are relatively higher, varying between 7.5% for M-EAGA and 17.0% for B-EAGA.

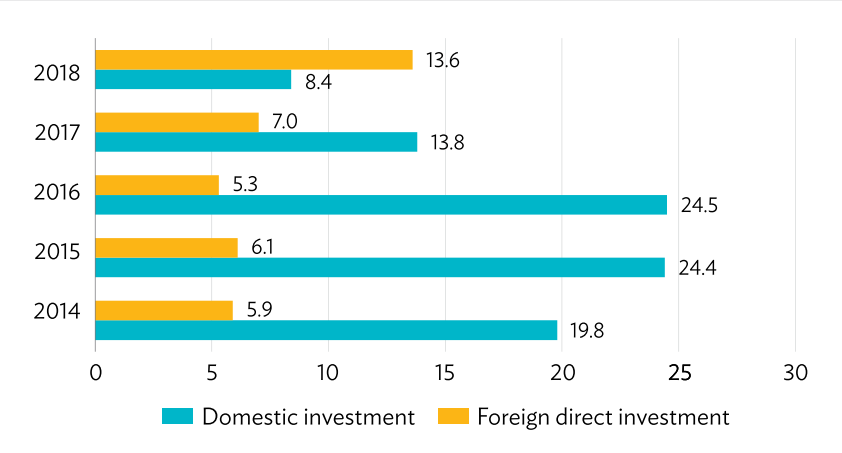
Figure 10: Intra-BIMP-EAGA Trade Patterns, 1990–2017



BIMP-EAGA = Brunei Darussalam–Indonesia–Malaysia–Philippines East ASEAN Growth Area.
Source: Regional Integration Center, Asian Development Bank.

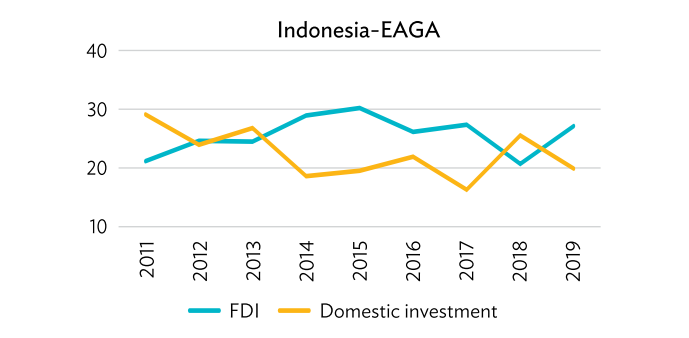
(vi) **FDI in BIMP-EAGA.** The FDI inflows to EAGA are targeted to reach $66 billion by 2025. However, the BIMP-EAGA (2019) shows that the FDI inflows reached the peak of $24.5 billion in 2016 (Figure 11). Subsequently, it declined by $8.4 billion in 2018. Even the total investment in the EAGA areas never exceeded $30.5 billion during 2014–2018. Further, Figure 12 reveals that since 2011, the share of EAGA areas in their national FDI inflows has been around 10% in

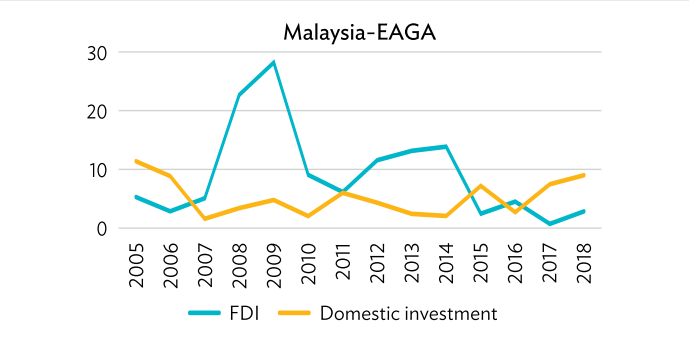
Figure 11: Foreign Direct Investment Inflows and Domestic Investments Attracted by EAGA Areas, 2014–2018
($ billion)

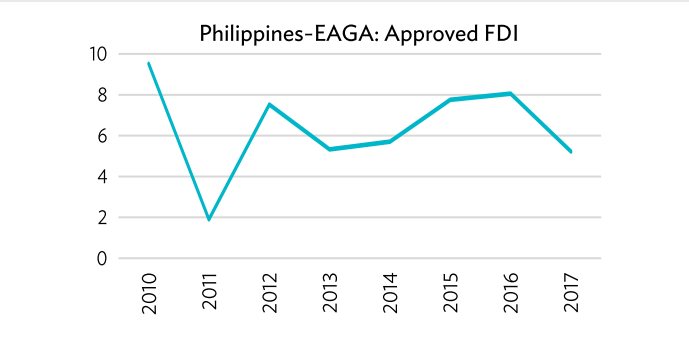


EAGA = East Association of Southeast Asian Nations (ASEAN) Growth Area.
Source: BIMP-EAGA at a Glance: A Statistical Information Brief, 2019.

Figure 12: Foreign Direct Investment Inflows to EAGA Regions by Member Country, 2014–2018
(%)







EAGA = East Association of Southeast Asian Nations (ASEAN) Growth Area, FDI = foreign direct investment.
Sources: Statistical Yearbook 2020 Indonesia; Department of Statistics Malaysia; The Philippine Statistics Authority.

M-EAGA, 20%–30% in I-EAGA, and less than 8% in P-EAGA.[17] On average, it is 15% of the total BIMP FDI (excluding Brunei Darussalam). More importantly, it has not accelerated over the years. Rather, the trends depict a somewhat downward movement. Even in Brunei Darussalam, the FDI inflows declined sharply from $0.5 billion in 2017 to $0.3 billion in 2019.

[17] For the Philippines, the FDI data are available only for "approved investment" and not "realized investment."

Overall, contrary to expectations, the BIMP-EAGA corridors and the proliferation of economic zones are not seen to have made the subregion better off compared with other regions. One may argue that the simple analysis of trends conducted here is not eligible to make a definitive conclusion and that it would be important to know the counterfactual, i.e., what would have happened in the absence of these initiatives. However, even though the possibility that these regions would have further marginalized in the process of globalization cannot be ruled out, one can conclude that the catching-up process has not set in as envisaged in the BIMP-EAGA Vision 2025. Although EPZs and industrial estates together have contributed significantly to industrial diversification in all these countries by creating production capabilities in diverse sectors, their role in rejuvenating the BIMP-EAGA economies is not so evident.

Chapter 7

Assessing the Alignment of Broader National Policies and Strategies with BIMP-EAGA Approaches

There is growing recognition that the success of spatial policies (economic corridors and SEZs) crucially depends on their integration into national plans and policies as a strategic tool (Aggarwal 2019b, Zeng 2016). It becomes even more important for the transborder subregional strategy, which presents difficult choices for the member countries. This chapter assesses whether the broader national and subnational policies are aligned with the BIMP-EAGA agenda. Before exploring the key issue, it addresses a pertinent question: Why is it relevant to integrate the subregional strategy into the national development strategies?

The Need to Integrate the Subregional Program into Broader Development Strategies

As discussed in Chapter 6, the spatial approach adopted by the BIMP-EAGA member countries is founded on the premise that a joint, integrated strategy for the promotion of cross-border value chains through economic zones equips the subregional economies to attract investment and promote trade and economic activity while maintaining social and environmental standards. It offers opportunities to address the growth bottlenecks that cannot be addressed by the governments acting alone and adds value to SEZ interventions through cross-border cooperation. However, its success is contingent upon the recognition of the program as an important policy instrument, which, in turn requires its integration into development agendas. Some intrinsic characteristics of a subregional program may hinder its implementation unless it is given support in the national development strategy.

The Changing Global Context of International Trade and Investment and the Growing Importance of the Subregional Strategy as a Development Tool

Typically, the SEZs are propelled by global value chains (GVCs), the expansion of which has been dominating the world trade and investment since the early 1970s. However, evidence suggests that since 2011, the expansion of GVCs has stopped and that they are becoming shorter against the background of

- increasing protectionist sentiments across the developed world,
- the PRC–US trade war, and
- the rise of digital technologies that may lead to re-shoring of production within the borders of the developed parts of the world (Wijeratne, Plumridge, and Raj 2019).

Indicators measuring the length of value chains confirm that even before the pandemic, GVCs had become shorter, i.e., for each dollar of output, there had been less trade in intermediate goods and services (Miroudot and Nordström 2019). In contrast, cross-border and regional value chains, which are based on regional cooperation, are growing in importance.

Further, inserting into GVCs has also become increasingly difficult due to intensified competition for GVC-linked FDI from new centers emerging in Africa and Asia. The coronavirus disease (COVID-19) pandemic has further underscored the relevance of the subregional agenda. The measures designed to contain the pandemic have disrupted the GVCs by curbing economic activity; restricting the mobility of people, goods, and services; dampening global demand; and deteriorating the financial environment. As a result, international trade, 70% of which involves GVCs, fell substantially (WTO 2020). The Institute of International Finance capital flows tracker observed that in March 2020 alone, capital outflows from emerging markets amounted to $83 billion (IIF 2020). UNCTAD (2021) reveals that the global FDI flows plummeted by as much as 35% in 2020. The major brunt of the drastic fall in trade and investment is borne by SEZs, which rely heavily on exports (Barbieri et al. 2020 for literature survey). A survey conducted by the Kiel Institute for the World Economy in partnership with the World Free Zones Organization showed that 91% of the zones reported limitations to their production due to lockdown restrictions (Gern and Mösle 2020).

COVID-19 has reignited the old debate on the risks associated with GVCs. Some argue that the new normal would be to renationalize GVCs to insulate countries from the economic consequences of the pandemic (OECD 2020). Others dismiss this argument as uncompetitive and infeasible since it would require economic restructuring of the home countries of multinational corporations. They argue that the companies may diversify their supplier base by establishing shorter cross-border or regional value chains (Javorcik 2020), which will be facilitated by deep integration initiatives at the subregional levels. From this perspective, transborder subregional programs are assuming greater relevance in the contemporary world. During this pandemic, for instance, the food industry has emerged as a critical industry. The BIMP-EAGA subregion, which has a competitive advantage in food and palm oil, can leverage its advantages by fostering cross-border aggregation through cross-border cooperation and become a global supplier of food.

Intrinsic Characteristics of a Subregional Strategy and Implementation Issues

- **Implementation issues.** In principle, the subregional programs are informal because they are not supported by international law or agreements. They are not binding and cannot be enforced. Their success depends on a long-term vision, strong political will, and collective ownership, all of which should be backed by generous financial resources. But this, in turn, requires integration of subregional agendas into national development planning because normally, development strategies are locked in structural interdependencies in terms of shared resources, workforce, and organizational and bureaucratic capacities. Thus, unless the subregional initiatives are integrated into national development agendas, they may lose out to other plan priorities and may not receive wide government support beyond specific line ministries and resource commitments for the program. The alignment of the subregional economic zone programs with the national strategy means that the objectives, targets, and strategic approaches (including economic zones) of the subregional program should

be mainstreamed into national development plans and priorities. This can help leverage synergies across different programs and development agencies.

- **Institutional structure of BIMP-EAGA.** One of the limitations of the subregion's institutional arrangement is that the national secretariats and senior officials are designated to be facilitators and coordinators. They do not have political influence and mandate to manage the involvement of the sectors and line ministries represented at working groups and clusters (ADB 2019b). Integrating subregional targets and projects into national development plans would assign greater accountability to various line ministries in implementing the subregional agenda.
- **Inconsistencies between the objectives of economic zones and regional cooperation.** Typically, the economic zones are set up as a competitive tool to attract foreign investment and technologies (Aggarwal 2019a). The domestic political and economic dynamics can affect national preferences for regional cooperation on SEZs adversely. Tension among different state agencies over the cooperative approach to SEZs can impede the implementation of the subregional strategy. To strengthen the awareness of the regional aspect of the economic zones and the linkages among subregional economic corridors, economic zones, and national development, the governments need to incorporate the subregional agenda of regional integration into development planning.
- **High degree of complementarity in public investment.** A high degree of complementarity in public investment in the development of economic zones in a lagging region requires concentrated packages of large investment and involvement of several government ministries both horizontally and vertically (Duranton and Venables 2018). For instance, having good roads but no electric power can leave the place unattractive for private investors. Thus, despite massive efforts by the governments in establishing the subregional program, the response from the private sector may be lukewarm. The deepening of cross-border cooperation can address some of the bottlenecks in SEZ development due to complementarities and generate expectations about the future development of a place to attract private investors. Integration of the subregional agenda into the development agenda has a signaling effect of the political commitment to the program and can minimize the failures.

Mainstreaming the BIMP-EAGA Agenda into National and Subnational Development Agendas: An Assessment

Forms of Mainstreaming Subregional Agenda into National Development Agenda in BIMP Countries

The linkages between the BIMP-EAGA and national development agendas are assessed using a four-layered analysis of (i) alignment between the long-term vision and objectives of the two agendas, (ii) mainstreaming of the BIMP-EAGA strategic framework into national and subnational development strategies, (iii) mainstreaming of BIMP-EAGA projects, and (iv) alignment of economic zones with the regional agenda of BIMP-EAGA. Each of these layers is assessed using qualitative tools (Figure 13). National development planning has been a guiding force in the process of economic development in the BIMP-EAGA countries. The development agenda in each of

Figure 13: Forms of Mainstreaming Subregional Agenda into National Development Agenda

BIMP-EAGA = Brunei Darussalam–Indonesia–Malaysia–Philippines East ASEAN Growth Area.
Source: Conceptualized by the author.

these countries has been set out in a series of long-term, medium-term, and annual plans. All these countries follow an "indicative planning framework," which sets out the broad directions that are operationalized through legislative, fiscal, and other policy measures. It signals the investment priorities of the government and opportunities to the private sector. Other supporting plans and policies, whether at the center or state (or provincial) levels, need to be framed within the broad framework of the national plan document. The analysis will draw on the national development plan documents. For Mindanao, Sarawak, and Sabah, the development plans formulated by the local governments are also reviewed. The discussion begins with a brief overview of the development plans in BIMP member countries.

- **Brunei Darussalam.** Brunei Darussalam embarked on a planned economic development in 1953 when it launched its first 5-year development plan, 1953–1958. However, it is only since 1975 that it has been issuing them regularly. In 2007, Brunei Darussalam launched the first long-term national development plan known as Wawasan Brunei 2035 to support the five yearly medium-term plans. The Ninth National Development Plan, 2007–2012 was the first 5-year plan under Wawasan Brunei 2035. Currently, the Eleventh National Development Plan, 2018–2023 is being implemented.
- **Indonesia.** As stated in Chapter 3, Indonesia draws up two interrelated development plans at the national level: National Long-Term Development Plan (RPJPN) and National Medium-Term Development Plan (RPJMN). The former, which spans over 20 years, is hierarchically the most important and is implemented through four RPJMN of 5 years each. These two plans serve as the reference document for all subnational development plans: long- and medium-term plans. The current long-term plan spans from 2005 to 2025. Under this, the fourth RPJMN 2020–2024 has just started.

- **Malaysia.** Malaysia has been following long-term plans of various durations since 1971, with five yearly medium-term plans published regularly. The long-term plans such as the New Economic Policy (1971–1990), Vision 2020 (1991–2020), National Development Policy (1991–2000), National Vision Policy (2001–2010), National Transformation Policy (2011–2020), and Shared Prosperity Vision (2021-2030) or Wawasan Kemakmuran Bersama 2030 form the long-term vision and benchmark for medium-term plans and policies to follow. The Twelfth Malaysia Plan, 2021-2025 launched in September 2021 is the start of the *Wawasan Kemakmuran Bersama* 2030.
- **Philippines.** The Medium-Term Philippine Development Plan (MTPDP) is the government's most important planning document, which it has been publishing since 1950. In 1986, MTPDPs were aligned with the presidential terms, replacing the 4-year and 5-year MTPDPs. In 2017, the government launched a long-term plan: AmBisyon Natin 2040, which represents the vision for *matatag, maginhawa, at panatag na buhay* (strongly rooted, comfortable, and secure life) in the next 25 years. The Philippine Development Plan, 2017–2022 is the first medium-term plan anchored on this national long-term vision (NEDA 2017).

Assessment of the Linkages between the BIMP-EAGA and National Development Agendas

Linkages between the Long- and Medium-Term Objectives of BIMP-EAGA and National Development Agendas

The BIMP-EAGA vision is to create a resilient, inclusive, sustainable, and economically competitive BIMP-EAGA by 2025 to narrow the development gaps. At the substantive dimension, there are no contradictions between the BIMP-EAGA vision and the long- and medium-term development objectives of the member countries (Table 23). These countries have long emphasized the objectives of robust economic growth, regional (subnational) equity, and competitiveness, which are in line with the BIMP-EAGA vision of resilient, inclusive, and competitive subregion. In recent years, sustainable development has also been mainstreamed into national planning. The fourth RPJMN 2020–2024 in Indonesia has internalized the Sustainable Development Goals with the 17 goals and indicators accommodated in seven development agendas. The 12th Malaysia Plan also sets the goals of achieving a prosperous, inclusive and sustainable Malaysia (Government of Malaysia 2021). Notwithstanding, there is a crucial territorial perspective missing in the national development agendas. While the underlying premise of the BIMP-EAGA vision is to promote the existence of a common "soft" identity and a sense of belonging to a common territory in a geographical, cultural, and economic sense through cross-border integration, the goal of "regionally integrated development" is not yet mainstreamed into the national plan objectives, as seen in Table 23.

Table 23: Mapping of Long- and Medium-Term Objectives of National Plans with Those of BIMP-EAGA

	BIMP-EAGA	Brunei Darussalam	Indonesia	Malaysia	Philippines
Vision	Resilient, inclusive, sustainable, and economically competitive (RISE). BIMP-EAGA to narrow the development gap.	Vision 2035 Educated, highly skilled, and accomplished population. High quality of life A dynamic and sustainable economy.	Long-term 2005–2025	Shared Prosperity Vision 2030 (2021–2030)	Vision 2040 (2017–2040)
			Developed and self-reliant, just, democratic, and peaceful and united society.	Transform Malaysia into a united, prosperous and dignified nation.	Strongly rooted, comfortable, and secure life in the next 25 years.
Medium-term plan objectives			RPJMN–2019 Creating a developed, balanced, democratic, and competitive nation.	Twelfth Malaysia Plan 2021–2025 A prosperous, inclusive and sustainable Malaysia.	MTPDP (2017–2022) Inclusive growth, a high-trust and resilient society, and a globally competitive knowledge economy.

BIMP-EAGA = Brunei Darussalam–Indonesia–Malaysia–Philippines East ASEAN Growth Area, MTPDP = Medium-Term Philippine Development Plan, RPJMN = Rencana Pembangunan Jangka Menengah Nasional (National Medium-Term Development Plan).

Source: Author.

Mainstreaming of BIMP-EAGA Approach as a Strategic Pillar in National and Subnational Strategies

Brunei Darussalam. The long-term vision identifies 13 strategic areas to ensure all aspects of development, including education, economy, health, religion, institutional reforms, infrastructure, security, social security, land use, ICT, and local business development. The medium-term national development plans reaffirm the government's commitment to involving and developing the private sector; developing a healthy, educated, and skilled workforce; and diversifying the economy (Yunos and Milojević 2016). In the continuity of these broad objectives, the Eleventh National Development Plan is based on six strategic thrusts, which are divided into three groups:

- diversifying and widening the economic base for sustainable development,
- strengthening public sector governance to provide a conducive business environment to grow the private sector and attract FDI, and
- emphasizing the development of human capital that will support economic growth.

The strategic importance of regional or subregional cooperation in achieving the objectives of economic diversification finds little mention in national development strategies.

Indonesia. The RPJMN 2020–2024 is notable for mainstreaming the Sustainable Development Goals. In addition, it has mainstreamed gender, social, cultural, and digital reforms. It has identified eight strategic pillars for economic growth, focusing on improving the management of economic resources and upgrading the economic value added. One of the plan's key strategic pillars is to increase high value-added exports and strengthen domestic component levels, which is to be achieved by some strategic actions including increasing diversification, value added, and competitiveness of exports and service products; improving access and deepening of export markets; increasing the local content; improving the image and diversification of tourism marketing; and enhancing the effectiveness of the preferential trade agreements and free trade agreements. In that context, RPJMN 2020–2024 identifies the importance of strengthening the role of global, regional, and subregional cooperation in the strategic framework. It notes,

> "...various strategies are supported by the optimization of economic cooperation and economic diplomacy, both bilaterally, multilaterally and regionally. One of the concrete steps is through strengthening the representation of tourism, trade and investment abroad, integrated promotion, and expanding Indonesia's active participation in international organizations and initiatives such as the Association of Southeast Asian Nations (ASEAN), World Trade Organization (WTO), Asia-Pacific Economic Cooperation (APEC), Belt Road Initiative (BRI), Organization for Economic Co-operation and Development (OECD) [*sic*], as well as other regional/sub-regional cooperation" (Government of Indonesia 2020: p II.32).

This reference to the role of global, regional, and subregional cooperation is not accompanied by any specific strategy or action plan to leverage the benefits of BIMP-EAGA or its effective implementation. The document does not even recognize the role of regional or subregional cooperation in achieving the ambitious goals of sustainable development.

In the absence of any strategic focus on the subregional program, subnational development strategies outlined in the RPJMN 2020–2024 for I-EAGA areas—Kalimantan, Sulawesi, Papua, and Maluku—find little mention of the subregional program and its strategic importance in robust, inclusive, and sustainable development of I-EAGA areas.

Malaysia. Until the Tenth Development Plan (2012–2016), there had been little mention of BIMP-EAGA and IMT-GT subregions in Malaysia's plan documents. As part of the strategic focus on accelerating regional (subnational) growth for better geographic balance, the 11th Malaysia Plan proposed the Border Economic Transformation Program to bring about inclusive development and prosperity to Malaysia's border regions. However, the link between the BIMP-EAGA subregional program and border transformation was not recognized.

The *Mid-Term Review of the Eleventh Malaysia Plan, 2016–2020* (Government of Malaysia 2018), which embarked on new priorities and outlined revised socioeconomic targets for 2018–2020, taking into consideration the aspirations of the new government, saw a link between the border area transformation on the one hand and IMT-GT and BIMP-EAGA agendas on the other. It recognized that the subregional cooperation platforms had not been utilized to accelerate and facilitate economic development, particularly in border areas, and explicitly committed to intensifying the ASEAN subregional programs to stimulate economic activities in bordering areas. Toward that goal, the government had set out subregional cooperation as a

strategic pillar for achieving the objective of balanced regional development. It committed to intensifying efforts through BIMP-EAGA to enhance border trade development by upgrading the Tebedu (Sarawak) and Entikong (West Kalimantan) border posts into an international gateway. The 12th plan (2021-2025) carried it forward and incorporated enhancing cooperation under IMT-GT and BIMP-EAGA as a strategic pillar not only for improving regional balance and inclusion but also for promoting green and resilient urban development through the implementation of the Green City Action Plan under the two subregional platforms. Further, while the 11th plan largely ignored the role of BIMP-EAGA in the subnational development strategy of "Accelerating the development in Sabah and Sarawak," the 12th plan recognized the development linkages of these two border states with the BIMP-EAGA agenda. It pledges to explore special fiscal and non-fiscal incentive schemes to attract investment originated from BIMP-EAGA and improve transport connectivity with Kalimantan in the subregion.

The Sarawak Socio-Economic Transformation Plan 2030, a long-term development plan of the Sarawak government, underscores the importance of regional economic cooperation for the state's socioeconomic transformation. It identifies projects and programs to promote cooperation between Sarawak on the one hand and Kalimantan and Brunei Darussalam on the other. It calls for the promotion of the Sarawak–Brunei Darussalam bilateral economic cooperation established in 2009 in telecommunication, tourism, energy, and agriculture (Sarawak State Planning Unit 2018). It outlines the initiatives to accelerate economic development around Tebedu–Entikong border region through Sarawak–Kalimantan cooperation in power, telecommunication, and environmental conservation; and the Tebedu–Entikong cross-border zone. It also proposes to foster Sarawak–West Kalimantan collaboration in SME development, particularly in food and halal products industries.

Similarly, the Sabah Maju Jaya development plan (2020–2025) based on the three main thrusts—development of agriculture, industry, and tourism; human capital and the well-being of the people; and green infrastructure and sustainability networks—has identified a potential area for economic growth at the Sabah-Kalimantan border through the development of Serudong (Kalabakan, Sabah) and Simanggaris (North Kalimantan, Indonesia).

Philippines. The Philippines introduced a chapter on "Securing Peace and Development in Mindanao" in its MTPDP (2001–2004), recognizing Mindanao's high prospects in agri-industrial development (NEDA 2001). It noted Mindanao's contribution to the country's agricultural outputs and outlined the factors that hamper agriculture production in the region, such as limited access to efficient product markets, the lack of appropriate technology, poor infrastructure, and the absence of other support facilities. The role of BIMP-EAGA was also recognized in invigorating Mindanao's development by forging regional economic cooperation in the areas of trade, transport, and communication. The development of airports, ports, and highways was prioritized to boost trade, investments, and tourism. The strategic framework supported implementing the ARMM Special Economic Zone Act of 2003 to create the Regional Economic Zone Authority for overseeing the establishment and operations of SEZs, industrial estates, and export processing and FTZs in the ARMM. Subsequently, the MTPDP (2004–2010) also emphasized BIMP-EAGA as an important strategy complementing ASEAN initiatives to achieve the ASEAN Economic Community (AEC) by 2015 (NEDA 2004). In this regard, it sets out the strategies to promote intra- and extra-EAGA trade and investments in agro-industry and natural

resources; tourism; and transport, infrastructure, and ICT, emphasizing SME development in these sectors. In 2010, MinDA Act, 2010 came into force, which assigned MinDA[18] the responsibility of formulating an integrated development framework for Mindanao. In response to this, MinDA launched Mindanao 2020 Peace and Development Framework (2011–2030).[19] Since then, the MTPDPs have focused on the implementation of national development programs in Mindanao; the island's development strategy is the responsibility of MinDA.

The Mindanao 2020 Peace and Development Framework Plan identifies BIMP-EAGA as a critical element of the strategy for widening the industrial base and promoting the services sector in Mindanao. Some of the major strategic elements in the framework are to

- develop more active external economic linkages with BIMP-EAGA partner countries, the rest of Asia (especially the PRC), and the Middle East (especially for halal industries);
- pursue the ASEAN roll-on/roll-off initiative to further ease transport of people and goods across regional neighbors, and other initiatives aimed at invigorating cross-border trade and investment within the BIMP-EAGA subregion;
- position Mindanao as a logistics hub to service the surrounding ASEAN subregion including BIMP-EAGA and Timor-Leste; and
- promote forward-looking investments in upgrading shipping, ports, and airports, especially in Zamboanga City, General Santos City, and Davao City.

As stated in Chapter 4, the local governments in the Philippines remain highly and persistently dependent on central resource transfers for implementing the strategies. However, the Organic Law for the BARMM 2018 ensures the regional government relatively greater administrative, legislative, judiciary, and fiscal autonomy for its political, economic, social, and cultural development with preferential treatment in the national budgetary allocation. This may have a favorable impact on the execution of proposed development projects of BARMM in the future.

Mainstreaming BIMP-EAGA Projects in National Planning Documents

The BIMP-EAGA Vision 2025 has adopted a project-centric approach to implement priority economic corridors effectively to ensure region-wide physical integration and regulatory reforms aiming at attracting private investors. The target to implement 72 projects valued at $23.27 billion has been set. The projects encompass construction and upgrading of roads and bridges; seaports and airports; customs, immigration, and quarantine facilities; ICT infrastructure; and technical administrative and regulatory reforms to improve the mobility of resources, persons, goods, and services. At this point, this study assesses whether these projects are integrated into the national development agendas of the member countries, since it is crucial to link them with the budget cycle to ensure that they receive annual budgetary allocations to fund their implementation. Typically, the BIMP-EAGA projects are national projects with regional implications, even though

[18] MinDA was set up by the Mindanao Development Authority (MinDA) Act of 2010. It shall cover all the provinces and cities of Regions IX, X, XI, XII, Caraga, and ARMM. The province of Palawan shall be included in its coverage only as it pertains to its involvement in the BIMP-EAGA.

[19] MinDA. Mindanao 2020 Peace and Development Framework. https://minda.gov.ph/planning/mindanao-2020-peace-and-development-framework.

there may be exceptions. These projects are mostly included in the national plans. However, it must be noted that the national and BIMP-EAGA agendas originate from two different perspectives: national and regional. Even if the projects overlap, the underlying principle could be different, and it is the latter that needs to be mainstreamed. This assessment, therefore, largely focuses on whether the regional dimension of these projects has been recognized in the plan documents.

- **Brunei Darussalam.** The Eleventh National Development Plan lists many projects including the two EAGA projects with Brunei Darussalam in the lead: Temburong Bridge (already completed) and Pavement Rehabilitation of Brunei Darussalam International Airport Runway. However, the plan document carries no reference to EAGA.
- **Indonesia.** The country has identified 247 projects of national strategic importance, of which 64 are in BIMP-EAGA areas. In addition, the RPJMN, 2020–2024 has identified 41 priority projects. Many of these projects overlap with BIMP-EAGA priority projects, which have Indonesia in the lead. However, the strategic importance of these projects from the perspective of subregional connectivity finds little mention, i.e., their regional dimension remains obscured. The BIMP-EAGA proposal of the Entikong–Tebedu cross-border zone (proposed purely from the regional perspective) is yet to be adopted in the national development agendas of the two countries.
- **Malaysia.** The *Mid-Term Review of the Eleventh Malaysia Plan, 2016–2020* explicitly states that Malaysia would focus on seven BIMP-EAGA priority infrastructure projects to increase trade and connectivity with member countries. These included a subregional aviation hub in Kota Kinabalu, Mukah Airport in Sarawak, the roll-on/roll-off ferry service between Sabah and Palawan in the Philippines, the expansion of the Sepangar Bay Container Port in Sabah, and the construction of the Pan-Borneo Highway (Government of Malaysia 2017). The twelfth plan reconfirms its commitment to expedite the implementation of the existing priority connectivity projects in IMT-GT and priority infrastructure projects in BIMP-EAGA. It explicitly refers to upgrading the bridge connecting Rantau Panjang, Kelantan and Sungai Golok, Narathiwat, and the completion of more segments of the Pan Borneo Highway project. The development plan of the Sarawak government, Sarawak Socio-Economic Transformation Plan 2030, also outlines some projects to promote cross-border trade, including Tebedu Inland Port, Tebedu Light Industrial Park, and Tebedu–Entikong SEZ. However, these need to be mainstreamed into the national agenda for funding.
- **Philippines.** The *Philippine Development Plan, 2017–2022* identifies the largest number of programs and projects for BARMM, which stand at 1,352 of 4,745 region-specific programs and projects (with infrastructure projects accounting for 80% of all projects). Overall, Mindanao constitutes 2,066 (43.5%) region-specific projects of national priority but accounts for just around one-fifth of the targeted investment for 43.5% of projects. Although many of these projects overlap with those included in the BIMP-EAGA Vision 2025, with the Philippines in the lead, there is no reference made to their regional importance.

Alignment between the Economic Zone Policies and BIMP-EAGA Approach of Promoting Regional or Cross-Border Value Chains

Economic zones are a critical tool in the BIMP-EAGA spatial approach of subregional cooperation. In line with this approach, as seen in Chapter 5, the subregion hosts several economic zones: operational, under development, and proposed. Thus, there seems to be a convergence between the national policy of creating economic zones in the subregion and the BIMP-EAGA strategic approach of economic corridors. However, a critical question is whether the development of SEZs and other industrial zones is based on the collaborative approach as proposed in the BIMP- EAGA Vision, which requires stimulating cross-border cooperation to augment resources and the opportunities to foster cross-border and regional value chains with economic zones as a tool.

A review of the evolution of economic zones in the four member countries in Chapter 3 reveals that the economic zones have been profoundly linked with the evolution in national development goals and policies in the BIMP countries. They were introduced to kick-start the process of industrial diversification in all these countries. While the general economic zones were created to provide subsidized industrial infrastructure to domestic investors and promote import-substituting industries, SEZs aimed at attracting export-oriented FDI by offering relaxed regulatory regimes along with a host of financial incentives. Over time, as regional equity became a development concern, economic zones were spread out spatially to generate economic activity and employment in the backward regions. In the 1990s and early 2000s, when industrial upgrading became a development objective, economic zones were upgraded to promote high-tech industries and new high-tech parks were launched. The proliferation of economic zones in BIMP-EAGA areas has also been a part of this broader national development agenda, however, it is not quite in line with the BIMP-EAGA spatial approach of promoting cross border value chains. The development plans carry little mention of the role of cross-border value chains in industrial development or diversification in border areas.

Thus, the SEZs in EAGA areas remain internally connected with domestic factor and product markets and compete regionally. The twelfth plan of Malaysia (Government of Malaysia 2021) addresses this gap and incorporates acceleration of cross-border value chains as an element of balanced regional (subnational) development strategy. In addition to adopting the digital platform, promoting micro, small, and medium-sized enterprises (MSMEs), and developing talent through upskilling and reskilling, it also proposes to identify at least 30 catalytic projects with a strong focus on enhancing local economic activities. In the Philippines, the Mindanao development framework 2020 calls for conducting an economic intelligence and strategic analysis to identify industrial complementarities within the subregion, thereby proposing to develop a unified industrial policy for BIMP-EAGA. There is, thus, an increasing realization of the need for cooperation in industrial development at the subregional level, but it is yet to be fully appreciated.

To sum up, the role of the BIMP-EAGA spatial approach, particularly that of economic corridors and zones, in unlocking subregional potential is recognized in national development plan agendas of the member countries in varying degrees, with the Philippines and Malaysia taking the lead, followed by Indonesia and Brunei Darussalam. In the Philippines and Malaysia, where the EAGA areas enjoy administrative autonomy, the subregional local governments underscore the importance of cross-border cooperation in their development strategies under the BIMP-EAGA framework.

However, since the local governments do not enjoy financial autonomy and are dependent on the central government for budgetary funding, the mainstreaming of BIMP-EAGA programs and projects into development planning depends on the negotiating power of the local governments and BIMP-EAGA institutional stakeholders.[20] There is an urgent need to mainstream the subregional agenda in the national development plans to ensure the inclusion in the plan documents of the objectives, strategies, and projects of BIMP-EAGA on the one hand and traction, commitment, and resources on the other. Mainstreaming of EAGA agenda into national plans of all partner countries would ensure greater negotiating powers of EAGA officials with planning authorities.

[20] The planning process in these countries adopts a bottom-up and multistakeholder consultative approach (ADB 2019b).

Chapter 8

Challenges to BIMP-EAGA Corridors and Economic Zones

The underlying principle of the BIMP-EAGA spatial approach of economic corridors and zones is to ensure connectivity between regional markets and factor markets fostering agglomeration economies through cross-border value chains to debottleneck the growth potential of these regions and turn the lagging and remote border areas into growth centers (Gordon and McCann 2000). However, the subregional zones face several challenges of achieving these objectives due to subregional and domestic factors.

Subregional Factors

- **Gaps in physical connectivity and transport facilitation.** Since the BIMP-EAGA subregion is geographically fragmented, the prerequisite for the collaborative approach of economic zones within the subregion is restoring the natural economic spatiality and mobilizing the resources and markets between different areas across member countries. Thus, one of the major achievements of the BIMP-EAGA initiative is improved subregional connectivity. In the early stages, the member countries of BIMP-EAGA launched several initiatives to improve the memorandums of understanding (MOUs) on air, sea, and land transport linkages. As a result, from only five prior to the initiative, air links grew to 12 by 2005. Further, these agreements provided the full exchange of third and fourth freedom traffic rights, which were subsequently extended to grant full fifth freedom traffic rights. Originally, each BIMP-EAGA transport minister designated two entry points to be granted fifth freedom rights (Trace, Frielink, and Hew 2009). Eventually, the number rose. In addition, there has been improvement in air services with Royal Brunei Airlines and Garuda opening new air routes covering BIMP-EAGA cities. The traditional sea routes between Zamboanga, Labuan, Manado, Cotabato, Ujung Pandang, and Bitung have also been complemented by the new ones. Recognizing the importance of the movement of goods and people through land transport in promoting cross-value chains, the member countries signed MOUs on (i) cross-border movement of commercial buses and coaches in 2007, and (ii) transit and interstate transport of goods (MOU on trucks) in 2009. These MOUs were implemented to pilot test the ASEAN framework agreements on the facilitation of goods and passenger movements. Individual member countries put in significant effort to streamline and simplify their respective domestic policies, regulations, and procedures to facilitate the implementation of the MOUs. Besides, with 88 projects valued at $24.23 billion, the pipeline infrastructure projects serve as the cornerstone of the subregional cooperation. By October 2021, 27 (31%) projects were completed, 8 (9%) large-scale infrastructure projects with phases completed, 10 (11%) were nearing completion, and 43 (49%) were in various stages of implementation (BIMP-EAGA Ministerial Meeting 2019). In 2021 alone, eight projects

were completed: one in Brunei Darussalam, four in Indonesia, one in Malaysia and two in the Philippines. Most of these projects are of national strategic importance.

Notwithstanding these achievements, challenges remain. In a survey of the investment climate of BIMP-EAGA, companies reported the costs of transport and logistics services to be the most constraining factor (ADB 2017). In a review of the transport MOUs signed by the member countries, ADB (2015b) found the following major challenges affecting cross-border mobility: (i) the absence of an EAGA-wide vehicle permit scheme, (ii) the absence of an EAGA-wide third-party vehicle insurance coverage, (iii) weak implementation guidelines and a lack of standard operating procedures, (iv) low cargo and passenger volume, and (v) inadequate infrastructure. In a review of air connectivity, Trace, Frielink and Hew (2009) found demand for passenger and freight services usually insufficient to support frequent airline services in the subregion. Our field interviews corroborated this. Despite the open skies policy introduced in ASEAN on 1 January 2015, the problem of seamless air connectivity in BIMP-EAGA persists, which needs to be addressed by improving trade and investment flows within the subregion.

- **Nontariff trade barriers and customs facilitation.** Significant progress has been made in reducing tariff barriers within the ASEAN region. However, nontariff impediments to trade increased in the region from 1,634 to 5,975 during 2000–2015 (Menon 2018). Further, according to the 2017 data from the Economic and Social Commission for Asia and the Pacific–World Bank International Trade Cost Database, the overall cost of trading goods (both transport and regulatory) among ASEAN members is equivalent to a 76% average tariff on the value of goods traded. It means that trade facilitation can bring higher trade gains than a lessening of trade barriers (e.g., Anderson and van Wincoop 2004, Hoekman and Nicita 2010, Hoekman and Nicita 2011, Arvis et al. 2016, Hummels 2007).

  Progress has been slow in simplifying customs procedures for intra-ASEAN movement of goods, removing nontariff barriers to trade, and harmonizing standards and regulations. Trade costs remain high in BIMP-EAGA member countries because of indirect costs at the border and behind the border. In the abovementioned survey of the business climate in BIMP-EAGA, companies reported trade costs to be the most constraining factor after logistics costs (ADB 2017). These costs include domestic, regional, or international regulations and standards; and the costs of complying with a myriad of licenses, permits, and certificates associated with moving goods across borders. Concerns have also been reported about border taxes and duties as well as logistics costs (Mindanao), value-added taxes and customs procedures (North Sulawesi), border taxes and customs procedures (Sabah and Sarawak), and inconsistent application of harmonized system codes on products that impact on trade tax levies (Brunei Darussalam) (ADB 2017).

- **Uncertainties in trade regimes.** The unpredictability of trade regimes on account of various economic and political factors can hinder the subregional agenda of shared prosperity. For example, since international trade between Entikong and Tebedu has been ongoing under the 1970 Border Trade Agreement, which permits border area residents to import RM600 worth of goods per month, the volume of trade remains low and movement of certain goods restricted. In recent years, the governments of Indonesia and Malaysia have mutually agreed and continued to strive to normalize export and import trade through the Entikong–Tebedu gate. The Government of Indonesia has also made investments to improve access to the border area by upgrading the status of the Entikong port and constructing roads to connect to gateways. However significant progress toward normalization of trade is elusive. Another example of an uncertain trade regime is that

of Sabah suspending barter trade in all trade posts in 2016 for 3 years, following the abduction of residents by armed men in Ligitan waters. Eventually, the ban was lifted so as not to affect the livelihoods of the barter traders, but it had already caused a cataclysmic economic impact on the businesses (Aralas, Abu Bakar, and Lian 2017). The countries do recognize the need to maximize the benefits of cross-border trade by curbing protectionist tendencies. Yet, there are challenges of reconciling between conflicting objectives of development policy making.

- **Heterogeneity in cross-border policies, rules, and regulations.** Knowledge gaps about economic processes and sales opportunities on the other side of a border, along with different rules, technical standards, structures, and proceedings, hamper the initiatives by regional companies to form cross-border regional value chains.
- **Non-differential treatment to economic zones in the subregion.** Lagging regions face several structural challenges including adverse sector structures, poor business environment, skill deficits, and absence of support services. Therefore, the development of economic zones in the lagging border areas needs special and differential treatment to overcome these areas' disadvantages with provisions of a customized package of infrastructure, incentives, management, governance, and relaxed immigration rules. However, at present, their treatment is essentially at par with other national zones in these countries. This may affect the incentives to invest in subregional zones due to competition with the zones proliferating in core areas.
- **Social and environmental challenges.** Border areas often face multiple social and environmental challenges in addition to economic disadvantages. Social challenges pertain to a lack of skill development, industrial culture, and basic social amenities including health and education. Border areas are also often home to ethnic minorities who face very specific challenges. They may view any transformative process of capitalist development as a threat to their existence and identity. Any large-scale intervention not organically grown in these areas can, therefore, shock the local communities, who often feel marginalized in the process and approach such an issue with strong emotions and opinions. Further, the construction of economic zones may pose severe environmental threats by destroying the biodiversity, flora and fauna, and natural ecosystems of the marine waters of BIMP-EAGA, which form a large marine ecosystem (UNEP 2005).
- **Border security issues.** Borders are frequently associated with a continuous tension that exists between the need to prevent illicit people and goods (humans, wild animals, timber, drugs, and arms) from crossing borders and the economic vitality that a country gains through trade and movement of people (Gerstein et al. 2018). This tension is heightened along the BIMP-EAGA economic corridors due to a range of threats at the borders of the member countries—land, maritime, and airports of entry. The Sulu–Sulawesi seas that border Indonesia, the Philippines, and Malaysia (Sabah) are important for international navigation. But they are also gateways for terrorists, separatists, smugglers, drug traffickers, and other criminals traveling from one part of the region to another. Border security can, thus, provoke significant anxieties for the member countries (Febrica 2014; Henkin, Boyd, and Martin 2020). This, in turn, has serious implications for the effective implementation of economic corridor and SEZ policies in the subregion.

Domestic Factors

- **Domestic constraints on regional cooperation.** Political and economic dynamics shape the national preferences for regional cooperation. Tension among different state agencies over regional policy making undermines the coherence of member states' behavior toward their regional commitments (Gómez-Mera 2009). Reconciling the interests of various stakeholders and sovereignty tradeoffs, budgetary issues, and domestic priorities pose further challenges. The preferences of the member countries are not purely based on the calculations of economic prosperity or an ideological convergence.
- **Proliferation of economic zones and competition.** The proliferation of economic zones in the region has intensified regional competition for global value chain (GVC)-linked investment affecting the performance of these zones . A growing number of zones also affect the quality of infrastructure provisions in new zones. Often governments tend to locate SEZs in suboptimal locations, entailing heavy capital expenditures in setting them up.
- **Regional disparities.** Regional disparities continue to persist in these countries, hampering the performance of economic zones in economic peripheries. The centripetal forces—such as proximity to harbor, river, or central location; market size; availability of resources; and knowledge-generating institutions—tend to attract investment to the national cores (Krugman 1991). But there is a threshold level beyond which growth slows down even in the core, and increasing returns, which are vital for growth, are undermined due to diseconomies of agglomerations. This requires a rise of new growth centers, which means that the marginalized areas must take off.
- **Limited spillover effects.** All four countries aspire to upgrade their industrial structure and have accelerated their efforts to promote economic zones. However, a major challenge is the lack of spillover effects of investment in these zones. Indeed, Malaysia has experienced remarkable growth in the electrical and electronics industry, with electrical and electronics exports accounting for over 34.4% of total exports in 2018. Yet, it could not shift to a high-value trajectory along the lines of its East Asian predecessors. The upgrading success remained limited to Penang. According to Rasiah, Crinis, and Lee (2015), the electronics sector contributed 27% to the country's manufacturing output, 49% to exports, and 32.5% to overall employment in 2010, yet almost all related investments were foreign. In 2011, a staggering 93.23% (almost $6 billion) of investment in the Malaysian electronics sector was foreign. In the Philippines, Aldaba (2013) finds no evidence of productivity or employment spillovers between foreign and domestic firms either through backward linkages (where domestic firms supply intermediate inputs to foreign firms) or through forward linkages (where foreign firms supply intermediate inputs to domestic firms and/or final products in the domestic markets). Similarly, Indonesia's involvement in GVCs has increasingly relied on providing primary and raw materials to other economies despite rapid growth in the number and types of economic zones (ADB 2019c). Brunei Darussalam also is no exception. This implies that the FDI attracted by these countries could not create spillovers that would generate significant multiplier effects in the same and/or other industries within the local economy. There remains huge potential for strengthening linkages among sectors for the benefits of specialization to trickle down.

Chapter 9

Proposed Strategic Approach to Subregional Economic Zones: Coopetition Approach

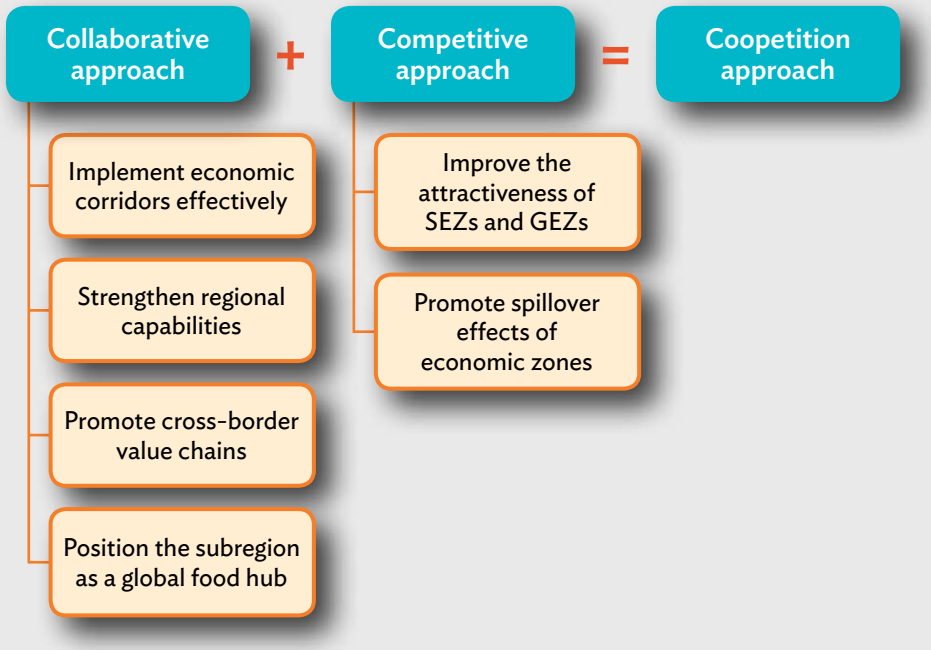
Typically, economic zones (SEZs, in particular) are a tool of competitive strategy to attract GVC-linked FDI. But competition between regional partners may constrain the potential of economic zones in attracting investment due to limits posed by domestic comparative advantages, factor endowments, and market size. Moreover, the possibility of competition leading to a race to the bottom in fiscal incentives cannot be ruled out. The subregional agenda views the economic zones in economic corridors as a means of a collaborative approach to counter these challenges. The collaborative approach involves acquiring access to subregional resources and markets and forming regional and cross-border value chains. It can maximize mutual gains by maximizing the positive externalities generated by industrial complementarity, economies of scale, and large market size. Nonetheless, full cooperation may pose challenges if some member countries are relatively less benefited, given that the member countries are at different development levels. Further, there are social, political, and security issues that can hinder full cooperation. Thus, of the two alternative approaches to economic zones development in the subregion—collaborative and competitive—both have their downsides.

This study proposes to combine the elements of the collaborative approach with those of the competitive approach to synergize the pros of both approaches and address the cons. This proposed action is called the coopetition strategic approach. Coopetition is defined as a situation where the subregional countries simultaneously cooperate and compete in promoting their SEZs (Figure 11). This is a strategy through which the economic agents jointly create added value while competing to capture a part of that value. The central idea is that the coopetition approach enables countries to augment their capabilities by having access to subregional resources and markets, which they can use to compete for more investment in SEZs within national boundaries. As Brandenburger and Nalebuff (1996) noted, coopetition is a game where different players increase the business "pie" (markets) by cooperating in making markets and then competing for dividing up the markets. The two pillars, cooperation and competition, reinforce each other despite being contradictory.

Indeed, there are paradoxes and tensions of the coexistence of two contradictory forces of competition and cooperation, and the challenges of managing them (Peng, Yen, and Bourne 2018; Fernandez, Le Roy, and Gnyawali 2014; Raza-Ullah, Bengtsson, and Kock 2014; Gnyawali, He, and Madhavan 2008). Yet, coopetition has been widely used as a win-win strategy by economic agents. This study emphasizes that the coopetition strategy toward subregional economic zones can present a sustainable alternative to either full collaboration or competition in the subregion.

The following discusses the strategic elements of the cooperative and competitive approaches, as shown in Figure 14. The two approaches consist of strategies broken down into strategic interventions, which are further divided into enabling actions. The policy recommendations are

Figure 14: Coopetition Strategic Approach



GEZ = general economic zone, SEZ = special economic zone.
Source: Author.

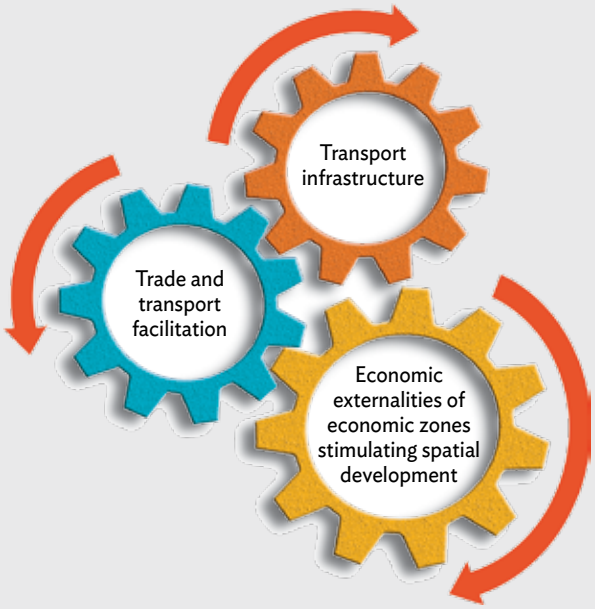
organized into a three-layered framework: strategies, strategic interventions, and enabling actions. Serial numbers are assigned to each strategic intervention and enabling action, which is later used in Tables 26–28.

Collaborative Approach: Strategies, Strategic Interventions, and Enabling Actions

Strategy: Implement Subregional Economic Corridors Effectively

The two prerequisites for the collaborative approach to SEZs are (i) seamless connectivity through transport infrastructure; and (ii) transport and trade facilitation for the uninhibited mobility of people, goods, materials, and services. The purpose of subregional economic corridors is to meet these prerequisites. They reduce the cost of transport and journey time, reduce the transaction cost of trade, and influence both the factor and product markets through the mobility of labor, people, capital (location and/or relocation of firms), and freight (trade), leading finally to acceleration in the growth of cross-border production networks and economic growth (see ADB et al. 2018, Abdul Quium 2019, Berg et al. 2017, and Regmi and Hanaoka 2012 for a rich literature review).

Figure 15: Synergies Among Various Elements of the Economic Corridor



Source: Author.

Thus, one of the most critical elements of the collaborative approach of the BIMP-EAGA economic zones is the effective implementation of the priority economic corridors, which calls for a set of systematic strategic interventions. These policy prescriptions are generic and applicable not only to manufacturing SEZs but also to the ones specialized in tourism and IT.

Strategic Intervention 1: Mainstream the BIMP-EAGA Vision Agenda, Objectives, and Strategic Approaches into National Plans and Programs

1.1 **BIMP-EAGA Vision agenda.** Member countries have launched BIMP-EAGA to accelerate the socioeconomic development of the less developed and geographically remote areas (Vision 2025). Shared development strategy is the basic principle of transborder spatial policies, which, as discussed, requires mainstreaming of regional integration into the long- and medium-term national development plans as a critical element of the national development strategy.

1.2 **Objectives and spatial approach of BIMP-EAGA.** The success of subregional economic zones requires a long-term vision and collective efforts backed by generous financial resources. For that purpose, it is important that the BIMP- EAGA spatial approach of promoting cross-border production networks is integrated into national development agendas and that it receives wide government support beyond specific line ministries (UNESCAP 2017). For this, the long-term objectives of BIMP-EAGA need to be mainstreamed in the long-term plan, which needs to be broken down into medium-term targets to be integrated into the medium-term plans.

Strategic Intervention 2: Address High Logistics Costs by Ensuring Seamless Mobility

As discussed, despite significant initiatives to improve connectivity within the subregion, high logistics costs remain one of the top bottlenecks for trade and investment. Logistics costs comprise transport costs (those related to transport infrastructure); transaction costs (related to transport services, processing of permits, customs, standards); financial costs (inventory, storage, security); and nonfinancial costs (insurance). Each of these elements needs to be addressed in a comprehensive strategic framework of an efficient logistics system.

2.1 **Form a technical group to study the logistics system and develop a pipeline of transport infrastructure projects.** Mitigating high logistics costs requires an integrated approach, with a focus on better infrastructure planning aligned with planned investment areas along the corridors. The relevance of infrastructure in logistics costs is enormous. It is observed that the sector and/or line ministries lack the capacity to identify and formulate sound projects for BIMP-EAGA. Sound project proposals, especially bottom-up proposals originating from the provincial or state governments, are even more difficult and fewer (ADB 2019b). This study proposes to constitute a study group, which may comprise independent technical and economic experts and private sector representatives, along with representatives from transport and trade and investment clusters with clear agendas to (i) develop a set of indicators for the performance assessment of economic corridors in relation to connectivity, (ii) survey these corridors, and (iii) offer recommendations to

- close gaps in physical integration to ensure connectivity within the subregion, which can improve transport efficiency; reduce cargo damage, transport costs, and highway congestion; and promote energy savings and emissions reduction (SteadieSeifi et al. 2014, as quoted in Chen et al. 2019);
- bring the corridors up to the required quality and capacity standards and meet future projections;
- align infrastructure planning with proposed economic zones of the member countries;
- develop the feeder network to spread local socioeconomic benefits of corridors; and
- develop transport nodes and access links.

The transport cluster needs to work closely with the trade and investment facilitation cluster in this process.

2.2 **Develop techno-analytic criteria for project assessment.** The techno-analytic criteria involve an objective assessment of technological, social, and environmental feasibilities and certainties, and potential economic effects for assessing and evaluating the projects. The current approach of project selection is open and subjective. There are a few specific guidelines for the assessors and assessment. Besides, it is not clear who the assessors are and how they reach a particular conclusion. An objective set of criteria based on the elements of sustainability by approved agencies is important, at least for large connectivity projects, to ensure that the projects are technically feasible, economically sound, socially impactful, and environmentally safe.

2.3 **Enhance transport facilitation.** Transport facilitation means the removal of nonphysical hindrances that make the movement of people, vehicles, and goods across national borders onerous, time-consuming, and expensive to ensure efficient, safe, seamless, and sustainable movement of people and freight (UNESCAP 2018). It requires (i) harmonizing technical and

operational standards of the modes of transport across borders; and (ii) implementing uniform commercial and legal framework involving harmonized regulatory framework, transport documents, safety rules, and inspection procedures; and (iii) streamlining border crossing procedures to facilitate international traffic.

There is a need to identify the most critical impediments in mobility in the product and factors markets and address them. In a review of transport MOUs in BIMP-EAGA, ADB (2017) highlighted the need to

- create a common permit scheme that stipulates a simplified and cost-effective vehicle permit application process with standardized permit validity periods,
- establish a subregional third-party vehicle insurance scheme, and
- explore the feasibility of having a simplified customs transit mechanism for BIMP-EAGA as a pilot test of the ASEAN framework (ADB 2015b).

Working toward these recommendations in consultation with the ministries of finance and private parties is a step in the right direction.

2.4 **Relax labor mobility.** Southeast Asia is a highly dynamic region in terms of population mobility, as manifested in large-scale migrant workers from within the region. However, over the years, the laissez-faire policy has become a state-managed migration policy involving high costs, long duration, and considerable complexity in navigating the existing channels for migration (Cirera and Lakshman 2017). Immigration is regulated through elaborate administrative frameworks that are focused on border control. Relaxations in cross-border labor mobility are likely to offer a few advantages to subregional economic zones by allowing a more efficient matching of workers' skills with job requirements. For instance, the easing of restrictive practices by Malaysia and Indonesia toward the cross-border movement of Indonesian plantation workers can address the acute shortage of workers in Sarawak's oil palm sector and, at the same time, create employment for Indonesian workers (Teo 2017). Further, relaxations in barriers to regular migration may improve the status of many intra-ASEAN member country migrants who are precariously employed and often face exploitation and abuse.

There is a need to have a regional framework for the migration of unskilled labor. The nonbinding 2007 ASEAN Declaration on the Protection and Promotion of the Rights of Migrant Workers was a landmark (UNESCAP 2020), but the proposed follow-up ASEAN framework instrument has not made any progress. There are other declarations directly and indirectly addressing migrants.[21] However, the ASEAN approach to migration is nonbinding in nature. The existing conventions and declarations may be leveraged to develop a regional framework for non-skilled migrant workers. At the same time, the scope of the mutual recognition agreements established in ASEAN to facilitate the mobility of professionals or skilled labor needs to be extended. At present, it covers only eight occupational categories, ranging from engineering and architecture services to nursing and tourism professionals.

2.5 **Promote logistics zones.** For commodity-dependent regions, a commodity development strategy addressing supply chain issues is vital. Logistics parks are a major element in this strategy. Even though the BIMP-EAGA subregion is specialized in commodities production and

[21] These include the 2004 Declaration Against Trafficking in Persons, Particularly Women and Children; the 2013 Declaration on Social Protection recognizing the right of migrant workers to social security; the 2017 Consensus on the Protection and Promotion of the Rights of Migrant Workers; and the ASEAN Agreement on Movement of Natural Persons of 2012. In addition, the ASEAN Forum on Migrant Labor was established in 2008.

trade, logistics zones are few within the subregion. It is suggested that the trade and investment facilitation cluster work together with relevant government authorities to promote the setting up of logistics zones equipped with storage and transport services, public facilities (for industry and commerce, taxation, customs, commodity inspection, banking, insurance, and other service facilities); and related facilities (with the office, accommodation, catering, and other services facilities). A logistics park can have a significant impact not only on economic efficiency in the movement of goods and commodities but also on the environment by reducing, for instance, carbon dioxide emissions, and air pollution through combining multiple distribution centers and logistic operators into a single park (Zhang et al. 2017).

Strategic Intervention 3: Mitigate Trade Costs

3.1 **Streamline cross-border trade rules, regulations, and procedures.** High trade costs are another major bottleneck in the investment climate of the region. One of the challenges facing BIMP-EAGA is streamlining the rules, regulations, and procedures. Although there have been two major trade facilitation initiatives within the ASEAN framework, these have not been fully implemented or ratified. These are the ASEAN Single Window launched in 2018 and the ASEAN Customs Transit System developed for end-to-end computerization of transit operations with a single electronic customs transit declaration. There is a need to expedite the implementation of these measures in view of the changing global trade and investment scenario. The subregion can be used as a test lab to move forward. The member countries may enter into an agreement along the lines of transport MOUs to pilot test the ASEAN framework of trade facilitation in the subregion.

3.2 **Introduce inclusive and sustainable trade facilitation.** While the overall implementation rate of trade facilitation in BIMP countries is above 70%, measures targeting the MSMEs and food sector are low (UNESCAP 2016). Substantial effort is required to customize trade facilitation measures for MSMEs and food items.

- **For MSMEs**, (i) introduce trade-related information measures, (ii) ensure their representation in National Trade Facilitation Committees, and (iii) adopt additional measures such as providing deferred duty payment or developing a specific action plan dedicated to trade facilitation measures.
- **For food items**, promote the measures of (i) electronic application and issuance of sanitary and phytosanitary certificates, (ii) special treatment to perishable items at border crossings, and (iii) testing facilities.

Strategy: Augment Regional Capabilities through Cooperative Strategies

The second critical condition for the collaborative approach of economic zones is to augment subregional capabilities to attract investment. The BIMP-EAGA countries have had a long experience of building economic zones. However, the most successful economic zones in these countries are geographically concentrated in one or two strategically most attractive locations: Brunei-Muara in Brunei Darussalam, Jakarta and Batam in Indonesia, West Coast in Malaysia, and Metro Manila and CALABARZON in the Philippines. They all benefit from their proximity to the capital city and/or international shipping routes. Evidence suggests that SEZs are successful only if sufficient industrial capacity and organizational skills in the area exist in terms of networks of specialized

firms, service providers, human skills, start-ups, and consortia that create an ecosystem for industry development and upgrading (Kim and Zhang 2008). Therefore, to unlock the potential of these areas, the governments need to adopt a transformative approach that would collectively address the institutional and infrastructural challenges facing the zones. Cross-border cooperation can overcome the locational disadvantages of these peripheries by pooling cross-border resources, capacities, ecosystems, and markets. However, this requires strategic interventions.

Strategic Intervention 4: Promote Cross-Border Cooperation Programs to Build Production Capabilities of Micro, Small, and Medium-Sized Enterprises

MSMEs dominate the BIMP-EAGA subregion. Their development is the key to regional development. Thus, the BIMP-EAGA Vision 2025 targets the participation of 200 SMEs in cross-border value chains by 2025 (BIMP-EAGA website). This requires a direct interventionist approach.

4.1 **Map the business ecosystems in each of the economies.** The first step toward cross-border chains is a broad understanding of the economic, institutional, and social forces shaping business ecosystems in each country and the hindrances facing MSMEs. This requires commissioned studies covering various sectors, activities, actors, and service suppliers; availability of finance, skills availability, factor availability; and R&D institutions and markets. These will help in identifying the areas where cross-border cooperation can be leveraged.

4.2 **Encourage the formation of cross-border consortia** of industry associations, academic institutions, and research organizations in prominent industries. The consortia will work closely with the governments of the member countries for creating favorable conditions for the development of industrial ecosystem in the subregion. Engage MSMEs associations in these consortia. They may identify cross-cutting constraints encountered across various sectors in the region with an agenda of addressing them.

4.3 **Leverage digital revolution for encouraging the formation of cross-border industry consortia.** Digital platforms can be used for hosting the proposed industry consortia to share information regarding the rules and regulations, environment, technical standards and phytosanitary measures, markets, and technological developments with MSMEs across the region. Efforts should also be made to mobilize institutional support for cross-border cooperation between national standards bodies to establish multi-stakeholder dialogue forums and awareness campaigns for the MSMEs in the subregion.

4.4 **Mandate industry consortia to develop strategic plans** for priority industries in collaboration with the relevant national and subnational bodies. The joint strategic master plans for targeted industries must include a business-friendly policy environment; harmonization of policies, regulations, and standards to create a single production and market base; sustainability issues; skills and training; R&D agreements; technology licensing; bilateral or unilateral flows of technology financing mechanism; and marketing and distribution mechanisms. The policies should be developed to leverage cross-border competitive advantages and complementarities.

4.5 **Initiate industry-specific programs to upgrade MSMEs.** The industry consortia involving local governments, industry associations, and other development partners may initiate projects to target and develop the capacity of MSMEs through industry-specific projects. Large regional firms may be engaged to organize training in quality control, client-centric services, and compliance with domestic and internationally recognized standards and

certifications for MSMEs to develop a business ecosystem in the region. Such projects may be spearheaded with funding committed by the local governments. These efforts may also be encouraged as part of corporate social responsibility.

It is useful to draw on the European Union (EU) experience in strengthening the MSME sector in the cross-border macro regions where the locally formulated and funded programs positively affect the performance of these enterprises (Raposo, Ferreira, and Fernandes 2014). A case in point is the halal industry, which is one of the priority subregional industries. Box 1 highlights the importance of upgrading the MSMEs, which are the key actors in the industry, to compete in the world markets. The proposed consortia of the halal industry in the subregion may initiate specific programs physically or online to build the capacity of MSMEs in the sector.

Box 1: Halal Food Industry in the Subregion

Globally, the halal food industry is expected to reach $1.9 trillion by 2023, according to the State of the Global Islamic Economy Report 2018/2019. The export data of 2017 show that the share of Malaysia in world exports stood at 0.7% while that of Indonesia was 0.3%. In an interview given to Food Navigator Asia, the chief executive officer of the Malaysia External Trade Development Corporation attributed it to the dominance of MSMEs in this sector, which have limited skills, knowledge of marketing, branding, and capacity to scale up. About 98% of firms in the industry are MSMEs, which cannot leverage the elaborate ecosystem that the country has developed along with certification facilities. Indonesia, which has been mainly exporting raw materials due to the absence of certification facilities, has recently enforced a Halal Law (17 October 2019), making the certification of all halal products mandatory by the established Halal Products Certification Agency. However, this means that the capacity of MSMEs needs to be upgraded to be eligible to get the certification. Cross-border cooperation projects within the subregion synergize the existing capabilities and build on them.

MSMEs = micro, small, and medium-sized enterprises.

Source: Neo, P. 2019. Massive Potential: Why Are ASEAN Halal Food Exports Growing at a Slower Rate than Global Demand. *Food Navigator Asia*. 10 September. https://www.foodnavigator-asia.com/Article/2019/09/10/Massive-potential-Why-are-ASEAN-halal-food-exports-growing-at-a-slower-rate-than-global-demand?utm_source=copyright&utm_medium=OnSite&utm_campaign=copyright.

4.6 **Mainstream the joint strategic plans in national plans and programs.** It is crucial for the budgetary support and implementation of the joint mechanisms, as discussed in Chapter 7.

4.7 **Initiate pilot projects in the subregion for digital transformation.** Digital transformation is driven by digital technologies, e-commerce, social media, big data, Internet of Things, AI, augmented reality, chat box, smartphones, cloud computing, 3D printers, blockchains, etc. Digital technologies enable MSMEs to (i) improve production processes, market intelligence, access to distant markets, and knowledge networks at relatively low cost; and (ii) participate in international activity. These technologies also allow them to scale up their activities without increasing fixed costs, improve their processes, and link them with networks and open innovation systems to improve their competitiveness (OECD 2018). Integration of the MSMEs into the process of digital transformation requires a multipronged strategy that needs to be drafted, including education and training, financial support, consultations, technological infrastructure, and policies and regulations. The DFTZs are a forward-looking tool in this

direction, but they need to be associated with building capabilities of MSMEs to have far-reaching effects. Box 2 shows an example of the EU's digital transformation project.

Box 2: DigitaliseSME Program of the European Union

DigitaliseSME, a pilot project (2018-2020) funded by the European Commission supported the digitization of small and medium-sized enterprises (SMEs) across Europe. The project relied on digital experts or "digital enablers." These were information technology organizations that registered on the project's website in a database. A company that approached the project for support was matched with the digital enabler registered in this network that could support the company for a month, with 2 weeks of desk work and a visit on its premises for 2 weeks. For their services, the digital enablers were paid a fixed lump sum fee by the project, which was instituted with the joint funding of the members. The company paid for the expenses related to the visits. The funding support combined with technical support from digital enablers assigned by DigitaliseSME benefited a large number of SMEs across Europe.

Sources: Annual Report on European SMEs 2020/2021: Digitalisation of SMEs. Background document SME Performance Review 2020/2021 European Commission, Brussels.

Strategic Intervention 5: Promote Cross-Border Cooperation Programs to Build a Strong Technological Base for the Development of Sustainable Economic Zones

The region is highly biodiverse with rich terrestrial and marine ecosystems, abundant water resources, and dense forests. But it is exposed to environmental threats due to unsustainable agricultural, fishing, and manufacturing practices, and rapid infrastructure development. This calls for the use of green technologies in economic zones. However, one of the challenges the subregion faces is the low levels of technological development. Rising research costs have made it increasingly difficult for individual developing countries and firms to conduct original research. To overcome the financial constraints, the governments may launch joint efforts to promote green technologies in food, energy, and minerals.

5.1 **Intensify efforts to build research and development alliances to promote green technologies.** Promote regional research alliances at the private, public, and international levels. Research alliances can take various forms including joint research agreements, technology sharing, bilateral technology flows, unilateral technology flows, or technology licensing. International research alliances may also be promoted for international exchange of knowledge and technology transfers. Extra-regional cooperation positively impacts the firms' performance in border areas due to limited technological capabilities within these areas (Barzotto et al. 2019).

5.2 **Establish a BIMP-EAGA research fund with contributions from the four governments and private sector.** The research institutions, universities, and the private sector may be invited to apply for collaborative research projects each for 3–4 years, focusing on green technologies. Project appraisal may be based on established criteria. These projects may focus on, among others, improving the productivity of palm plantations; greening of food, energy, and mineral-based sectors; developing downstream products; and diversifying the plantations. Super Fruit Project, SurathRed Goat, and other projects are designated as IMT-GT projects. These efforts need to be adopted, upscaled, and institutionalized within the BIMP-EAGA

framework (see Box 3 for EU research funding). One of the most important success factors of the SEZs in the PRC was that the government emphasized building R&D and innovation capabilities at an early stage by increasing investment and building R&D infrastructure while offering special incentives to attract high-tech companies. The SEZ companies have been induced to fund skill and higher education programs in the region in lieu of the incentives offered to them. As a result of these efforts, SEZs made a significant contribution to R&D funding in the PRC.

Box 3: Horizon 2020: The Research Fund of the European Commission

The European Commission initiated Horizon 2020 in 2014, committing an unprecedented amount of financial resources to the joint promotion of research and innovation. Nearly €80 billion of funding is made available over 7 years (2014–2020). The objective is to promote technological solutions to the societal challenge of promoting economic growth and job creation. From time to time, there are calls for proposals from universities, research organizations, and private sector entities. A panel of independent specialists evaluates each proposal against a list of criteria to see if it should receive funding. Selection procedures are determined solely according to the criteria of quality and capability, without considering geographical distribution. Small and medium-sized enterprises (SMEs) are encouraged to participate in collaborative projects as part of a consortium and benefit from support via a dedicated SME instrument designed specifically for highly innovative smaller companies. A minimum amount of €8.33 billion is allocated for SMEs for enabling industrial technologies. The emphasis is on the simplification and streamlining of the application and granting procedures. The procedures are even simpler for SMEs. With a high priority placed on science and technology through this and other such programs, the European Union has overperformed the United States with respect to the performance of the science system (Frietsch, Rammer, and Schubert 2015). There are promising advancements in high-tech sectors of aerospace, biotechnology, computer hardware and services, healthcare equipment and services, internet, pharmaceuticals, semiconductors, software, telecom equipment, raw materials, added value manufacturing, and food4future.

Sources: European Commission. Horizon 2020. What Is Horizon 2020? https://ec.europa.eu/programmes/horizon2020/en/what-horizon-2020; Frietsch, R., C. Rammer, and T. Schubert. 2015. Heterogeneity of Innovation Systems in Europe and Horizon 2020. *Forum*. 50 (1).

5.3 **Strengthen knowledge transfers through faculty exchange and internship programs.** International internships are a very effective way to gain skills. It is proposed to institutionalize internship programs as a part of the research fund proposed above to fund internships of prominent students or early-stage skilled professionals in the target industries. Applications may be invited every year to shortlist the most prominent ones for studies in some of the most research-oriented universities in the region and the world.

5.4 **Position BIMP-EAGA areas as a sustainable global food hub.** It can be done by attracting food techies and food start-ups through joint efforts. Food technologies draw on various disciplines including cellular agriculture, genetic engineering, bioinformatics, microbiome analysis, Internet of Things, digital technologies, modern applications like 3D printing, bacterial sensors in food packaging, electronic noses for food authentication, and AI to promote climate-smart farming, sustainable supply chains, high-quality food, and safe packaging practices. According to a study of food start-ups by StartUs Insights Platform, North America

alone accounts for 46% of global activity in the food tech sector with several large food tech hubs (New York, Boston, and Silicon Valley), followed by Europe, Israel (Tel Aviv), and Singapore. BIMP-EAGA may be repositioned as a hub of food techies in Southeast Asia. This requires the promotion of high-tech food parks equipped with incubators and other facilities to improve the quantity, quality, and variety of food products in a sustainable manner and cross-border cooperation in R&D, resources, and markets.

Strategic Intervention 6: Engage Local Governments and Private Sector to Strengthen Social Capital

6.1 **Institute small funds for building social capital.** Social capital is a critical success factor for building cross-border production networks. Social capital means cross-border networks and trust relationships between people (Mirwaldt 2012). According to Woolcock (1998), social capital precedes economic development and is important as a condition in stimulating economic cooperation. Realizing the importance of social networks, BIMP-EAGA has also taken some initiatives, including annual BIMP-EAGA trade fairs and creating a BIMP-EAGA Business Council. However, these should be complemented by more concrete initiatives. This study proposes to establish small funds at the local government level. These funds may be used by local companies and organizations for projects that bring people, businesses, and local governments together. They can be used to fund business seminars, conferences, cross-border market surveys by small firms, and travels to attend important cross-border business meets. One can learn from the EU countries that encourage the regional governments to maintain small projects funds as part of cross-border programs for promoting cross-border people-to-people contacts. Its administration is devolved to local governments with simplified application procedures. The project managers apply for funding and, before receiving the final payment, write the final report, which is submitted to the local governments. There is evidence, albeit sparse, that contribution of the small funds to fostering cross-border social networks has been impressive (Mirwaldt 2012).

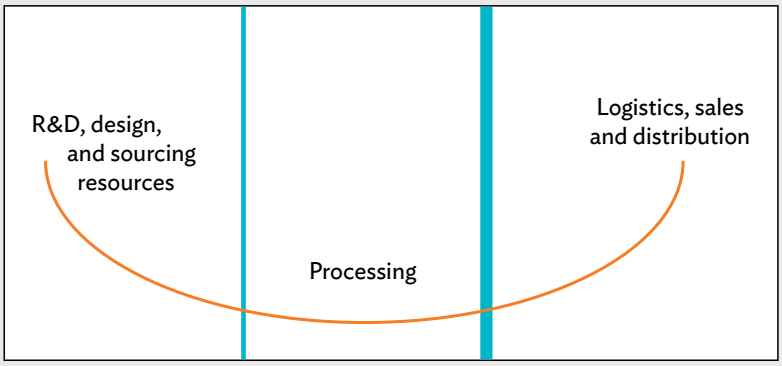
Strategy: Promote Cross-Border Value Chains

Strategic Intervention 7: Identify the Scope of Cross-Border Cooperation and Create Basic Conditions

7.1 **Focus on the possibilities of engaging in the relevant stages of value chains.** The structure of all these economies has been dominated by agriculture, energy, and mining sectors. The share of the manufacturing sector is small, with a large share of resource-intensive low technology industries, particularly in food, wood, and mineral processing. Industrial activities are conducted mostly by MSMEs with limited production capabilities. Since the broad economic structure of the regional economies is similar, the scope of the development of cross-border production networks in the processing stage is limited (Figure 16). Yet, there are complementarities in resources (including labor) and possibilities of resource and market aggregation and upgrading.

The cross-border value chains can still be promoted in three segments of the value chains: (i) R&D, (ii) aggregation of resources and logistics, and (ii) marketing and distribution linkages. Even though the sectors predominant in the region are termed low-tech, disruptive technologies are changing these sectors, particularly the food sector. Cross-border value chains can help build formidable industries through aggregation, R&D cooperation, branding, packaging, storage and logistics facilities, and marketing in the region. The Business Perception Survey in BIMP-EAGA

Figure 16: Prospects of Cooperation in Cross-Border Value Chains in BIMP-EAGA



BIMP-EAGA = Brunei Darussalam–Indonesia–Malaysia–Philippines East ASEAN Growth Area, R&D = research and development.

Source: Author.

also indicates that the possibility of entering cross-border value chains are prominent in sourcing, distribution, and sales (Lord and Tangtrongjita 2016). Economic corridors can be instrumental in promoting these value chains by ensuring seamless mobility of resources and products.

7.2 **Adopt a systematic approach to building capabilities of regional firms to participate in cross-border and regional value chains.** Initiate projects to target the local firms and build their capacities for cross-border transactions. Partnerships may be developed between large and small firms, and regional and international organizations (or development partners) to create capacities that look beyond the national borders.

Strategic Intervention 8: Tailor Trade and Investment Policies to Generate Cross-Border Economic and Institutional Synergies

8.1 **Map and harmonize product standards and rules and regulations.** The proposed industry-specific consortia along with the BIMP-FC may institute a project for compiling information on the industry-specific rules and regulations across the subregion to pursue their harmonization. The focus should be on creating a single market and production base with a free flow of goods, services, investment, skilled labor, and capital, which is recognized by the ASEAN Economic Community (AEC) as one of the four pillars of integration. Pilot testing of this aspiration in the subregion will have a major impact on cross-border investment in manufacturing and services and relocation of activities.

8.2 **Harmonize the data on relevant policies and standards.** Since harmonization of the policies, rules, and standards may take a long time frame, the focus in the medium-term may be on harmonization of data on industrial policies, technical standards, and rules and regulations and make that available on the website of BIMP-EAGA and the digital platforms of MSME associations consortia. A good example is set by the US Department of State's Investment Climate Statements, which provide information on the global investment climate of more than 170 economies for its investors in a standard format to facilitate their location decision.

Strategic Intervention 9: Establish a BIMP-EAGA Cross-Border Unified Digital Marketplace

9.1 **Initiate a joint project for creating a cross-border digital single market.** The global economy is undergoing a digital revolution. With e-commerce growing by leaps and bounds, this study proposes a joint project that sets up a cross-border digital single market stretched across the BIMP-EAGA subregion as a pilot project. There are several factors favorable for the success of this project, such as geographical proximity, close cultural and historical ties, the predominance of small businesses, the autonomy that the EAGA states and provinces enjoy, rapidly growing e-commerce transactions in the member countries, the DFTZ experience of Malaysia, the AEC vision of a single production and market base, and, above all, the ASEAN agreement on e-commerce, which will provide the broader framework for a unified digital market.

ASEAN is the first region to have an e-ASEAN Framework Agreement adopted in 2000 to facilitate cross-border e-commerce. It comprises mechanisms such as paperless trading between businesses and authorities, the acknowledgment of legal validity of electronic authentication and electronic signatures, and the recognition of cross-border transfer of information by electronic means. Along with the Framework Agreement, 5-year ASEAN ICT, master plans have also been launched since 2010 to develop an integrated digital economy. However, there is no legal superstructure to establish a unified regime supporting regional e-commerce (Sengpunya 2019). The BIMP-EAGA may create a platform as a pilot to initiate regional e-commerce. It will forge digital cross-border value chains and promote economies of scale by providing a platform for business-to-business (B2B) and business-to-consumer (B2C) e-markets across EAGA areas and will be a step toward ASEAN regional digital market as has been envisaged by the AEC. What follows are the enabling actions to achieve this objective.

9.2 **Create a joint digital market council.** It may be represented by the ICT cluster of BIMP-EAGA, the ICT Forum of BIMP-EAGA, and the relevant bodies at the national and subnational levels, with a mandate to prepare the master plan and modalities and set the context for its implementation. Several issues need to be addressed for establishing the digital market. Where will it be anchored? Should there be a joint autonomous body with rotating chairmanship? What should be the role of this body? How will it operate? What should be the administrative and financial structures of this body? How can it be instrumental in bringing prosperity to the subregional farmers, MSMEs, and traders?

9.3 **Harmonize e-transaction laws.** The BIMP-EAGA member countries already have laws on e-transactions and have considered the requirements under the United Nations Commission on International Trade Law model. These laws may be mapped and harmonized using the common reference framework provided by the ASEAN agreement. The laws on consumer protection and data security also need to be strengthened.

9.4 **Create a fully open, nondiscriminatory investment space for ICT infrastructure development.** The ICT infrastructure include telecommunication, user-friendly online payment systems, good internet connectivity, and efficient distribution networks for both B2B and B2C transactions. The IT infrastructure should receive priority alongside physical infrastructure.

9.5 **Bolster efforts to increase tech literacy.** Increasing tech literacy in the region and at the local and national government levels addresses the demand-side bottlenecks.

9.6 **Complement the digital market with free trade zones.** The logistics issues can be sorted out by setting up logistics hubs at airports and seaports. This will increase the cross-border movement of goods from and within the region and generate employment and income.

9.7 **Establish an online dispute resolution mechanism.** Recognizing the importance of consumer protection for developing a single market, ASEAN included an online dispute resolution (ODR) mechanism as one of the important elements of the ASEAN Work Program on Electronic Commerce, 2017–2025. It would have three elements: national ODR systems, ASEAN ODR network, and ASEAN mechanism for cross-border complaints and investigations. However, the complex institutional and regulatory regimes can undermine regional ODR implementation and enforcement across ASEAN (Sengpunya 2020). This study proposes to use BIMP-EAGA as a testing laboratory for this mechanism.

Strategy: Strengthen Branding and Marketing of the Region

In today's competitive world, branding is important to make a significant impact and to gain and sustain a sizable market share. It should, therefore, be a priority to position BIMP-EAGA as an attractive investment destination in selected industries through joint marketing initiatives.

Strategic Intervention 10: Brand the BIMP-EAGA Economic Zones as Investment Destinations in Food, Energy, and Minerals

10.1 **Strengthen the BIMP-EAGA website.** The BIMP-EAGA website needs to be upgraded to provide more data and information regarding markets, production, and investment opportunities in the subregion. It is a powerful tool for branding and reaching out to regional and global investors. Member countries may commission research papers and policy briefs on market and production trends, and blogs on the latest developments in the regional industries featuring entrepreneurs, their R&D, and other achievements. These may be uploaded to the BIMP-EAGA website to make the subregion visible. The proposed industry consortia may also provide this information on their digital platforms.

10.2 **Engage investment promotion agencies.** Each member state's investment promotion agencies should develop a national web page on BIMP-EAGA subregional economic zones. The information on economic zones should be updated regularly.

10.3 **Develop an integrated information portal.** Link the national web pages with the BIMP-EAGA website, which serves as an integrated information portal for the subregion. It can also be done on the digital platform of industry consortia. To promote the subregional zones, the governments may adopt public relations activities, press releases, and research notes as instruments.

To sum up, a collaborative approach is critical for the success of economic zones in the subregion because investors in the economic zones assess the scale advantages to economize production; for this, they look beyond national borders to leverage the regional capabilities. According to the EU-ASEAN Business Sentiment Survey (EU-ASEAN 2019), European firms view ASEAN as the region of best economic opportunity. However, the slow progress in regional integration, according to them, has dulled enthusiasm among them for the AEC, and they are now downscaling their business strategy according to local environments rather than regional synergies. There is, thus, a need for proactive approaches to capture the positive sentiments of these investors in the BIMP-EAGA subregion as an opportunity.

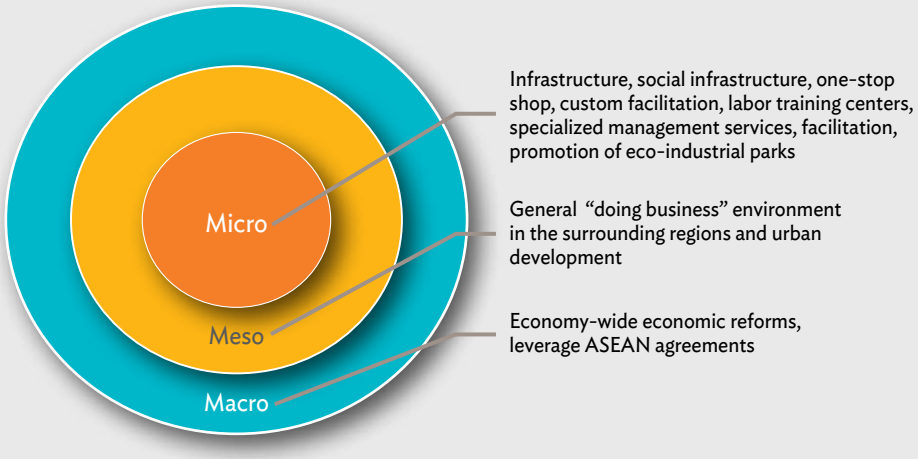
Competitive Approach: Strategies, Strategic Interventions, and Enabling Actions

Competition generates pressures and challenges of attracting investment and can benefit economic zones by driving their investment climate, growth, and efficiency. Thus, the collaborative approach should be combined with competitive strategies to expand and strengthen the SEZs and GEZs within national borders. A two-pronged competitive strategy is recommended here to improve the attractiveness of national SEZs and maximize the spillover effects.

Strategy: Improve the Attractiveness of Special Economic Zones and Industrial Zones

There are three elements of the SEZ investment climate: micro, meso, and macro. These dimensions must be addressed simultaneously to build competitive SEZs and other economic zones (Figure 17). These policy prescriptions are relevant not only for manufacturing SEZs but also for those specialized in tourism and IT.

Figure 17. Enabling Conditions for Improving the Attractiveness of Economic Zones



ASEAN = Association of Southeast Asian Nations.

Source: Author.

Microclimatic Factors

Microclimate refers to the investment climate prevailing in the SEZs and GEZs. This depends on two sets of factors: (i) structural, and (ii) rules and regulations. As noted earlier, structural factors constitute the objectives, size, location, composition of economic activity, and the development level. The rules and regulations comprise infrastructure, governance, incentives, facilities, and

services offered to investors. Strategic intervention 11 captures the study's recommendations for upgrading structural characteristics; the rest focus on policies and practices, and facilities.

Strategic Intervention 11: Promote Sustainable Economic Zones

11.1 **Incorporate sustainability criteria in site selection.** In border areas, the proliferation of zones may cause irreversible destruction of ecosystems and biodiversity and cause environmental degradation and pollution. It is, therefore, important that sustainability issues are incorporated into site selection (Ahmed et al. 2020). Further, their establishment should be restricted to ideal locations with a high probability of success. One of the major reasons for the failure of SEZs is setting them up in less-than-ideal locations in the hope of attracting investment in those areas. Furthermore, there should be an assessment of land availability in the existing zones before planning the new ones in less-than-ideal locations.

11.2 **Promote environment-friendly infrastructure in the existing zones.** The economic zones need to have infrastructure focusing on the green conveyance, treatment, recycling, and reuse of wastewater; the management of sewage and waste; energy conservation building; solar-powered vehicles and buildings within the zones; and the use of environment-certified equipment and appliances. The best global practices include the PRC's green SEZs, India's green SEZ guidelines, and Thailand's eco-industrial towns. These measures are needed to be complemented by training and skills development, as well as the exchange of best practice technologies on virtual platforms.

11.3 **Promote eco-industrial parks.** Adopt the principles of clean production, industrial symbiosis, and centralized pollution abatement principles to save resources and minimize waste generation and pollution in the key sectors of iron and steel, nonferrous metals, coal, electricity, chemicals, building materials, and food industries. The industrial symbiosis or circular approach means that the industries and organizations within eco-industrial parks are open to sharing by-products generated in processing with other industries, which develop niche business potential using these waste products. Box 4 illustrates industrial symbiosis in selected industries.

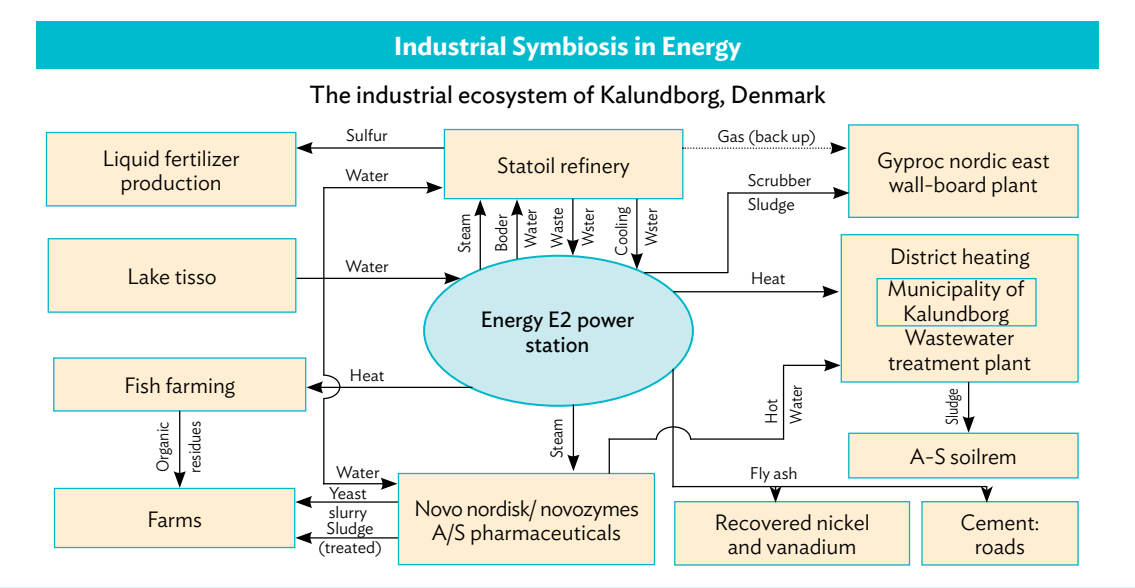
Strategic Intervention 12: Compensate the Locational Disadvantages through Strategic Master Planning of the Economic Zones

12.1 **Location-specific, innovative on-site infrastructure solutions may be critical in attracting investors.** The physical infrastructure provided within economic zones must be able to compensate for what the location lacks. A variety of infrastructure, including plug-and-play factories; transport, logistics, and financial infrastructure; common facilities; and connections to utilities need to be designed in the master plans.

12.2 **For specialized zones, the master plan needs to cater to the target investor.** A case in point is food parks, which benefit from livestock and food testing, certification facilities, quality controls, warehousing, logistics, and R&D facilities. Similarly, other specialized zones have their own requirements related to facilities and infrastructure. For instance, the One-North Innovation District of Singapore, which caters to the biomedical science and high-tech industries, is designed to create an atmosphere of casual vibrancy, which stimulates creativity and imagination (Cheong 2018). The Jurong Island petrochemical complex has common utilities such as water and gas supplied centrally to various investors in the complex. In India,

Box 4: Industrial Symbiosis: Some Illustrations

Energy sector. An eco-industrial park (EIP) is the industrial symbiosis among companies. One of the most successful EIPs that exchange wastes and heat in the energy-producing sector is in the town of Kalundborg, Denmark (Figure). The Kalundborg Symbiosis was not planned but has gradually evolved since the early 1960s (Ehrenfeld and Gertler 1997).



Source: M. Chertow and M. Portlock. 2002. Developing Industrial Ecosystems: Approaches, Cases, and Tools. *Yale School of Forestry & Environmental Studies Bulletin Series*. 95. New Haven, CT: Yale University.

To promote an industrial symbiosis, the governments should conduct feasibility studies, which are essential to classify the type and amount of waste and to identify which industrial sector and activity may transform and use them. Several conditions for success have been identified: a clear vision of the park's values and performance objectives; careful screening of new companies, methods, and information to support companies in seeking by-product trades; and assurance of continuing support. Currently, there are examples of several such parks developed by universities, professionals, and organizations across the world.

Food processing. There is considerable scope for industrial symbiosis for both materials and utilities in the food industry to optimize value extraction from them. The functional compounds extracted from food waste, for instance, can be used as high value-added ingredients in the pharmaceutical and cosmetic industries.

Mineral industry. A significant avenue for sustainable mineral processing through regional synergies is mostly in three broad areas: water, energy, and inorganic by-product reuse. Australia's major heavy industrial regions, Kwinana (Western Australia) and Gladstone (Queensland), offer two examples of industrial symbiosis for sustainable production (Van Beers et al. 2008).

Immense guidance, tool kits, and expertise are available for industrial symbiosis in food energy, renewable energy, and mineral products, which can be accessed and leveraged to design EIPs.

Sources: J. Ehrenfeld and N. Gertler. 1997. Industrial Ecology in Practice: The Evolution of Interdependence at Kalundborg. *Journal of Industrial Ecology*. 1(1). pp. 67–79; F. Duchin and S. H. Levine. 2008. Industrial Ecology. In S.E. Jorgensen and Brian Fath, eds., Human Ecology, vol. 3 of *Encyclopedia of Ecology*. Elsevier. pp. 1968–1975; R. Poynton. 2009. Step Change towards Net Zero Environmental Impact in Food Processing: The Closed-Loop Approach. In K. Waldron, ed. *Handbook of Waste Management and Co-Product Recovery in Food Processing*, Volume 2. Cambridge, UK: Woodhead Publishing Limited; F. den Hond. 2001. International Ecology. In N. J. Smelser and P. B. Baltes. *International Encyclopedia of the Social & Behavioral Sciences*. Elsevier Ltd.; D. Van Beers, A. Bossikov, and R. V. Berkel. 2008. Industrial Symbiosis in the Australian Minerals Industry: The Cases of Kwinana and Gladstone, Journal of Industrial Ecology, 11(1) pp. 55–72; N. Mirabella, V. Castellani, and S. Serenella. 2013. Closing the Loop: Feasibility of Industrial Symbiosis from Food Processing Waste. The 6th International Conference on Life Cycle Management in Gothenburg.

the presence of environment-related infrastructure in pharmaceutical SEZs is a success factor in attracting foreign investors (Aggarwal 2012).

12.3 **Social infrastructure.** The master plan of SEZs must compensate for the deficiencies in social amenities such as food outlets and food courts, supermarkets, gymnasium, sports complex, housing, schools, and healthcare facilities in the border areas. Most economic zones in the subregion are typical industrial estates away from the cities. The presence of on-site and off-site social amenities may enhance their attractiveness.

12.4 **Training centers for the labor.** It is crucial for the zones to acquire a sufficient workforce. One of the structural constraints in border areas is the lack of relevant skilled or semiskilled workers and necessary technology support. A critical success factor is having well-equipped skills training centers, which work closely with technical and vocational schools, colleges, and universities to provide relevant skills training and technology support for the firms in the zones. Zones may also have incubators to nurture new start-ups with certain seeds money.

Strategic Intervention 13: Provide Investor-Friendly One-Stop Shop Services

13.1 **One-stop shop and customs facilitation.** Brunei Darussalam, Indonesia, and the Philippines ensure one-stop shop services in their economic zones. In Malaysia also, investors are facilitated by government investment agencies and state governments. Upgrading these services may further add value to economic zones in the subregion. For instance, the Hawassa Industrial Park (SEZ) in Ethiopia, a successful venture, offers a one-stop shop institutional service center with banking, visa and immigration facilities, import and export licenses, work permits, and customs clearance, all in one building within the zone to help speed up decision making and reduce set-up costs. This practice may cut transaction costs for the firms undertaking investment in the economic zones in BIMP-EAGA.

13.2 **Provide specialized management services.** Several zones provide value-added management services beyond the regular ones. Jabel Ali in Dubai, one of the most successful zones in the world, offers ready-to-use, fully furnished and equipped offices with no set-up cost, retail showrooms, and fully equipped business centers. Further, it offers its services as a development management consultant, whereby it assists the customer in developing the facility. It can also build and deliver the facility as per customer specifications and budget. These value-added services that enhance the zone's attractiveness may be identified and offered by the zone authorities within the zone.

13.3 **Digitization of services and transactions.** The COVID-19 pandemic and the lockdowns to contain it have posed a challenge to policy makers in attracting foreign capital, funding current activities, and expanding the free zones. It means that competition among free zones is likely to increase and that there is a need to go digital in all services and transactions with companies, assess long-term strategic plans, and explore new methods of facilitating the management of economic zones.

13.4 **Offer customized incentives in the core and peripheral areas.** While in the core areas, fiscal incentives may be offered to high value-added industries, within the subregion, labor- or resource-intensive industries may be granted preferential tax treatment. The differential tax incentive structure may address competition for investment between the core and peripheral areas.

Mesoclimatic Factors

Strategic Intervention 14: Improve General Investment Climate in the Economic Zones

14.1 **Improve regulatory institutions in the border regions.** Border areas have their own institutional disadvantages due to low-quality development. The key is to enhance the economic climate in these regions. Table 24 presents highlights from the regional enterprise surveys of the World Bank for Indonesia and Malaysia, covering several dimensions of investment climate, including infrastructure, governance, regulatory environment, and finance. In each country, two subnational regions are selected—the capital region and a part of the BIMP-EAGA subregion. Jakarta and South Sulawesi in Indonesia and the northern and eastern regions of Malaysia are represented here. It shows that debottlenecking is required in the

Table 24: Doing Business Environment in Subregional Economies vs. National Capitals: Indonesia and Malaysia

	Indonesia		Malaysia	
Doing Business Indicator	DKI Jakarta	South Sulawesi	North	East
Senior management time spent dealing with the requirements of government regulation (%)	1.6			
% of firms visited or required to meet with tax officials	14.4		11.5	37.3
% of firms identifying tax rates as a major constraint	0.4	19.6	6.4	7.0
% of firms identifying tax administration as a major constraint	0.2	28.6	8.3	7.9
% of firms identifying business licensing and permits as a major constraint	0.4	27.8	0.5	7.7
% of firms identifying electricity as a major constraint	7.6	44.7	3.2	7.3
% of firms experiencing water insufficiencies	0.5		23.0	37.9
% of firms identifying transportat as a major constraint	7.6	57.8	0.9	7.7
% of firms identifying customs and trade regulations as a major constraint	2.0	24.6	1.7	0.8
% of firms identifying an inadequately educated workforce as a major constraint	3.3	57.7	0.7	1.0
% of firms identifying access to finance as a major constraint	3.8	16.4	0.7	13.3
% of firms identifying corruption as a major constraint	12.3	28.3	7.3	1.0
Bribery incidence (% of firms experiencing at least one bribe payment request)	49.3	94.1	47.8	2.2

Sources: World Bank. Enterprise Surveys: Indonesia. https://www.enterprisesurveys.org/en/data/exploreeconomies/2015/indonesia (accessed 1 September 2021); World Bank. Enterprise Surveys: Malaysia. https://www.enterprisesurveys.org/en/data/exploreeconomies/2015/Malaysia (accessed 1 September 2021).

BIMP-EAGA areas to attract investors. Zones cannot be fully insulated from the contexts in which they are located. International experience suggests that if SEZs are in backward areas with poor social and economic infrastructure, their performance is likely to be below expectation.

14.2 **Off-site logistics and connecting infrastructure.** While the focus is on on-site infrastructure, the development of off-site infrastructure is often neglected. Investors sometimes face huge bottlenecks in accessing ports, highways, and airports due to poor roads and logistics. Off-site connecting and logistics infrastructure and services are crucial for the success of zones. There is evidence that privately managed industrial estates prefer to operate in or around Greater Jakarta despite higher wages due to access to Jakarta's superior infrastructure (Octavia 2016).

14.3 **Off-site social infrastructure in surrounding economic zones.** Urban centers near the economic zones are an important factor critical to their success. This ensures more accessible and uninterrupted utilities, better services, availability of skilled labor, and quality of life for investors. A good practice is to develop the zones as part of the urban development program with integration between zones and cities in terms of infrastructure and social services (Zeng 2016). The spatial policy of concentrated decentralization adopted by Malaysia is a good illustration of this practice. The PEZA has also set out the criteria for building economic zones in locations with well-developed infrastructure, ensuring the conducive mesoclimate, and with some very successful SEZs.

Macroclimatic Factors

Strategic Intervention 15: Expedite Global and Regional Integration Efforts for the Smooth Operation of Global Value Chains, Particularly in These Uncertain Times of COVID-19 Pandemic

15.1 **Establish the ASEAN Economic Community.** A major push to the subregion may come from achieving the AEC itself. While the subregion is a building block and a testing lab for the AEC, it will benefit from progress in ASEAN integration. Macro regionalism leads to more trust among the parties on both sides of the borders so that cross-border cooperation to address common policy challenges or manage shared resources becomes more likely (Schiff and Winters 2002). Macro-regions promote cross-border micro-regionalism in a top-down fashion through particular policies and incentives that target the border areas (De Lombaerde 2010). ASEAN and BIMP-EAGA should, thus, be viewed as mutually reinforcing. While ASEAN has had phenomenal success in establishing the ASEAN Free Trade Area, it fell short of realizing the AEC. The AEC agenda is largely unfinished (Menon and Melendez 2017). As discussed above, nontariff measures and barriers to trade in service, labor mobility, and harmonization of rules persist. It is also observed that although the number of regional agreements has proliferated, many of them have not been fully ratified, implemented, or observed (Phan 2014). Thus, efforts should be expedited to implement the AEC.

15.2 **Introduce broader economic reforms.** Even though SEZs are designed to overcome the institutional deficiency in the wider economy, in practice, their success is linked with the extent to which the host economies are globally integrated. Thus, acceleration in economic reforms at the macro level opens possibilities for trade and investment and has a catalyzing effect on SEZs.

15.3 **Decentralize administrative and financial powers for greater autonomy to local governments.** SEZs are more likely to succeed in a decentralized political system because the local governments better understand the local contexts. Further, the decentralization of financial powers can link the success of SEZs with the local government's revenue, incentivizing them to provide good investment in SEZs to attract investment (Moberg 2018). The PRC is a classic example of success with the decentralized model of SEZs. While the regulatory powers have been centralized in the PRC, administrative and financial powers have been decentralized to incentivize the local governments. All three major economies of BIMP-EAGA also have decentralization of powers on their agenda. They can test pilot the policy to decentralize administrative and financial powers in the subregional areas.

Strategy: Improve Spillovers through Horizontal and Vertical Policies

To maximize spillovers from economic zones within the national economy, the government may adopt two complementary approaches: vertical and horizontal. .

Strategic Intervention 16: Adopt a Vertical Approach to Maximize Spillover Effects

The vertical approach means focusing on capacity building of domestic firms in those sectors that cater to SEZs by improving their market access, sales, product and services offerings, quality controls, financial management, and productivity. The alignment of the production activities in the wider economy with those inside SEZs mutually reinforces investment within and outside the SEZs.

The following enabling actions are proposed to adopt the vertical approach:

16.1 **Identify and promote the production of goods and services required by SEZs.** The SEZ residents require a range of goods and services available at competitive prices and quality. The government needs to be proactive in promoting domestic enterprises to produce them in the wider economy and supply to SEZ firms to generate backward linkages, driving the diversification of technological capabilities and skills base in the wider economy. The textile industry in an SEZ, for instance, needs dress materials, buttons, embellishments, and machines and equipment; human skills in cutting, designing, tailoring, and marketing; and a network of institutions supporting logistics services, financial services, testing and certification services, and R&D. Policy makers need to carefully assess these opportunities and build capabilities among MSMEs to cater to the requirements in SEZs. Taipei,China adopted this strategy successfully and became a powerhouse of MSMEs (Hidalgo et al. 2007).

16.2 **Target subregional companies and link them with SEZ companies.** In the initial stages, selected subregional companies may be targeted to be promoted through direct interventions. As firms are upgraded, a more general approach may be adopted. Taipei,China, for instance, insists on the localization of components and raw materials by multinational corporations to promote spillovers and offers non-fiscal incentives to domestic SMEs to help them grow with them. One strategy to upgrading SMEs is to link them with large domestic or foreign firms within the region. This way, MSMEs can leverage the benefits of the large players to upgrade themselves and get inserted indirectly into cross-border chains with financial, technological, and training and skill development support.

16.3 **Develop skills required in special economic zones.** To bridge the demand–supply gap in skills, map the demand for a skilled workforce with supply, identify skills gap, and develop skills required in the SEZs. The zone companies, which are offered huge tax benefits, may be encouraged to invest in skill development. The tax benefits may be conditional to companies' investing a part of their revenue in research and skill promotion.

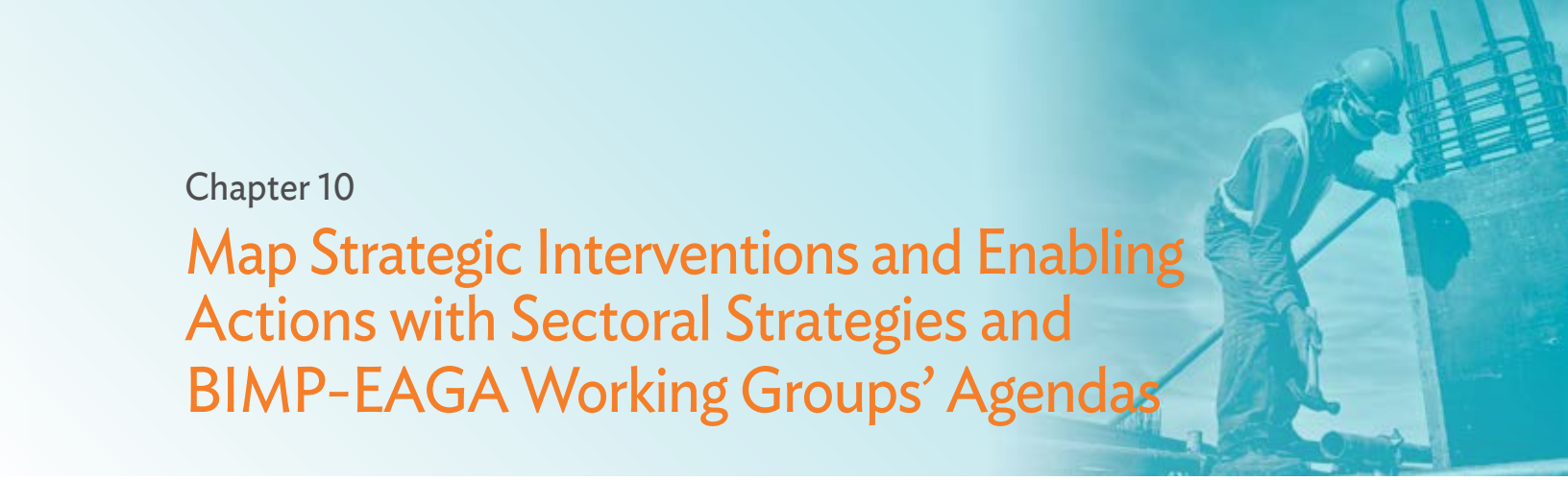
16.4 **Lower the transaction barriers between special economic zones and domestic firms.** This strategy promotes backward and forward linkages between the SEZs and domestic firms to help build capacity outside the zones. In countries where government policy allows local entrepreneurs to supply SEZ producers with duty-free materials, significant backward linkages may be created. Similarly, the government policy of allowing companies to sell a part of the goods produced in SEZs to domestic tariff areas may lead to the creation of forward linkages.

The vertical approach, thus, requires the government to focus on capacity building of domestic firms in those sectors that cater to SEZs by improving their market access, sales, product and services offerings, quality controls, skills, financial management, and productivity.

Strategic Intervention 17: Complement the Vertical Approach of Promoting Targeted Sectors with a Horizontal Approach

17.1 **Promote structural capabilities of the wider economy through strategic interventions.** Policy makers should complement the vertical approach with horizontal policies to create conditions for cluster development by promoting entrepreneurship, subsidizing venture or other early-stage finance, building workforce skills and management capacity, and helping firms forge international links (Bresnahan and Gambardella 2004, Nathan and Overman 2013). Governments should also promote investment in skills, technologies, R&D, and infrastructure in the wider economy to create conditions for spillovers from the SEZs. It must be noted that SEZs build on existing capabilities; they do not build these capabilities.

17.2 **Link the subregional companies with extra-regional firms, particularly those participating in global value chains.** Lagging regions lack production and technological capabilities. They can benefit from extra-regional collaborations with efforts to build cooperative networks. It may be achieved by setting up virtual or physical knowledge networks. These can help in setting up contacts between the subregional and extra subregional firms. The European Commission, for instance, supports projects that involve the extra-regional collaboration of firms in the lagging regions through, for instance, the EU's H2020 and Interreg programs. There are similar programs at the national levels via initiatives such as the United Kingdom's Knowledge Transfer Network. In BIMP-EAGA, such linkages may strengthen the capabilities of the firms in the subregion but, at the same time, can strengthen spillover effects within the subregion.



Chapter 10

Map Strategic Interventions and Enabling Actions with Sectoral Strategies and BIMP-EAGA Working Groups' Agendas

Adopt a Holistic Approach: Complement Mainstreaming with a Targeted Approach

As previously discussed, the economic zones policy is cross-cutting. The success of subregional economic zones, in particular, hinges on many different forms of cross-sector and cross-border interventions, which go beyond ensuring a favorable business climate in them. The coopetition strategic framework proposed in Chapter 9, which combines the collaborative approach with the competitive approach, complicates the economic zones policy further. A wide-ranging cross-sector and border strategies are proposed, which are further broken down into strategic interventions and enabling actions. This chapter focuses on the adoption of these policy prescriptions into the national development agendas. Its contention is fourfold.

- **Adopt a holistic and integrated approach.** It contends that the BIMP-EAGA member countries need to adopt a holistic and integrated approach that requires the adoption of all broad strategic interventions simultaneously as a package. A piecemeal approach cannot be effective.
- **Break down the strategic interventions into three time frames: short, medium, and long term.** Short-term programs are incremental actions that do not require an extensive preparatory effort. Medium-term interventions focus on the existing pipeline projects and/or programs that do not require consensus before implementation. Both short- and medium-term actions are easier to achieve. Long-term actions require a long process of negotiation and consensus-building before they can be implemented.
- **Mainstream the subregional strategies:** Use a cross-sector approach and mainstream all proposed strategic interventions and enabling actions for economic zones into the relevant sectoral and/or thematic strategies of the development plans.
- **Design special programs and initiatives** to be effectively implemented in the subregion—i.e., complement mainstreaming with a targeted approach.

Map Strategic Interventions and Enabling Actions with Sectoral Strategies and BIMP-EAGA Working Groups' Agendas

This strategy of mainstreaming with a targeted approach requires mapping of strategic interventions and enabling actions with sectoral strategies in the development plans on the one hand and working group agendas on the other, as a first step.

- **Sectoral and thematic areas in development plans.** The member countries adopt different planning frameworks depending on their strategic thrusts. Notwithstanding this, there are three basic development themes covered by all: economic, social, and environmental, which are elaborated through macroeconomic goals and strategies on the one hand, and sectoral development planning on the other. The latter cover agriculture, industry, infrastructure, transport, finance, trade, services, research and innovation, human resources, regional equity, and environment.
- **BIMP-EAGA working groups.** There are eight clusters of working groups as follows:

  (i) agribusiness (with working groups on agro-industry and fisheries);
  (ii) transport (land, air, and sea);
  (iii) power and energy infrastructure;
  (iv) ICT;
  (v) tourism;
  (vi) trade and investment facilitation (customs, immigration, quarantine, and security; SMEs development; and statistics and database);
  (vii) environment; and
  (viii) sociocultural and education (human resources development and sociocultural development).

  There are four stand-alone clusters (ICT, power and energy, tourism, and environment). The remaining four clusters comprise 10 working groups: agro-industry; fisheries; land transport; air linkages; sea linkages; customs, immigration, quarantine, and security; SME development; statistics and database; human resources development; and sociocultural development.

Tables 25 and 26 map the collaborative and competitive strategic interventions and enabling actions proposed above with sectoral and thematic areas in the development plans on the one hand, and working groups agenda on the other. It also provides tentative time frames for the implementation of the strategy. The serial numbers given to strategic interventions and enabling actions in the tables match those given in Chapter 9. The mapping should be followed by targeted programs and initiatives for the subregion in each thematic area as the second step.

Table 25: Mapping of the Collaborative Strategies of Economic Zones with Thematic or Sectoral Areas of the National Plan Agendas and BIMP-EAGA Working Groups

Strategy	Strategic Intervention	Enabling Actions	BIMP-EAGA Institutions	National Plans	Time
Effective implementation of the sub-regional economic corridors	1. Mainstream the BIMP-EAGA Vision agenda, objectives, and strategic approaches into national plans and programs	1.1 BIMP-EAGA Vision agenda 1.2 Objectives and spatial approach of BIMP-EAGA	TIFC	Macro-economic objectives	MT to LT
	2. Address high logistics costs by ensuring seamless mobility	2.1 Establish a technical group to study the logistics system and develop a pipeline of transport infrastructure projects 2.2 Develop techno-analytic criteria for project assessment 2.3 Enhance transport facilitation 2.4 Relax labor mobility 2.5 Promote logistics zones	Transport cluster, TIFC	Transport and infrastructure	MT to LT
	3. Mitigate trade costs	3.1 Streamline cross-border trade rules, regulations, and procedures 3.2 Introduce inclusive and sustainable trade facilitation abilities through cooperative strategies	TIFC, (CIQSWG, SMEDWG)	Transport and trade	ST to MT
Augment regional capabilities through cooperative strategies	4. Promote cross-border cooperation programs to build the production capabilities of MSMEs	4.1 Map the business ecosystems in each of the economies 4.2 Encourage the formation of cross-border consortia of industry associations, academic institutions, and research organizations in prominent industries 4.3 Leverage digital revolution for encouraging the formation of cross-border consortia of MSMEs 4.4 Consortia may be mandated to develop strategic plans for priority industries in collaboration with national and subnational bodies 4.5 Initiate industry-specific programs to upgrade MSMEs 4.6 Mainstream the joint strategic plans in national plans and programs 4.7 Initiate pilot projects in the subregion for digital transformation	SMEDWG, AIWG, FWG, HRDWG, ICTC, tourism cluster, PEIC, BIMP-FC, BEBC, LGF	SMEs development	MT to LT

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Table 25 *continued*

Strategy	Strategic Intervention	Enabling Actions	BIMP-EAGA Institutions	National Plans	Time
	5. Promote cross-border cooperation programs to build a strong technological base for the development of sustainable economic zones	5.1 Intensify efforts to build R&D alliances to promote green technologies 5.2 Institute a BIMP-EAGA research fund with contributions from the four governments and private sector 5.3 Strengthen knowledge transfers through faculty exchange and internship programs 5.4 Position BIMP-EAGA areas as a sustainable global food hub	SMEDWG, AIWG, FWG, HRDWG, ICTC, LGF, BEBC	Agriculture industry research and development	MT to LT
	6. Engage local governments and the private sector to strengthen social capital	6.1 Institute small funds for building social capital	SCDWG, LGF, BEBC	Human capital	ST to MT
Promote cross-border value chains	7. Identify the scope of cross-border cooperation and create basic conditions	7.1 Focus on the possibilities of engaging in the relevant stages of value chains 7.2 Adopt a systematic approach to building capabilities of regional firms to participate in cross-border and regional value chains	SMEDWG, AIWG, FWG, TIFC, BEBC, LGF, tourism cluster	Industry	MT to LT
	8. Tailor trade and investment policies in the subregion to generate cross-border economic and institutional synergies	8.1 Tailor trade and investment policies to generate cross-border economic and institutional synergies 8.2 Map and harmonize product standards and rules and regulations 8.3 Harmonize the data on relevant policies and standards	TIFC, SMEDWG, AIWG, FWG,	Industry Industrial policies	ST to MT
	9. Establish a BIMP-EAGA cross-border digital marketplace	9.1 Initiate a joint project for creating a cross-border digital single market 9.2 Create a joint digital market council 9.3 Harmonize e-transaction laws 9.4 Create a fully open, nondiscriminatory investment space for ICT infrastructure	ICT, SMEDWG, AIWG, HRDWG, BEBC	Industry, ICT, SMEs, Industrial policies	MT to LT

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Table 25 *continued*

Strategy	Strategic Intervention	Enabling Actions	BIMP-EAGA Institutions	National Plans	Time
		9.5 Bolster efforts to increase tech literacy 9.6 Complement the digital market with free trade zones 9.7 Institute an online dispute resolution mechanism			
Branding and marketing of the region	10. Brand the BIMP-EAGA economic zones as an investment destination in food, energy, and minerals	10.1 Strengthen the BIMP-EAGA website 10.2 Engage investment promotion agencies 10.3 Develop an integrated information portal	ICTC, BIMP-FC, SCDWG	Industry and industrial policies	ST to MT

AIWG = agro-industry working group; BIMP-EAGA = Brunei Darussalam–Indonesia–Malaysia–Philippines East ASEAN Growth Area; BEBC = BIMP-EAGA Business Council; BIMP-FC = BIMP-EAGA Facilitation Center; CIQSWG = customs, immigration, quarantine, and security working group; FWG = fisheries working group; HRDWG = human resources development working group; ICTC = information and communication technology cluster; LGF = local government forum; LT = long term; MSMEs= micro, small, and medium-sized enterprises; MT = medium term; PEIC = power and energy infrastructure cluster; R&D = research and development; SCDWG = sociocultural development working group; SMEDWG = small and medium-sized enterprise development working group; ST = short term; TIFC = trade and investment facilitation cluster.

Source: Author.

Table 26: Mapping of the Competitive Strategies of Economic Zones with Thematic and Sectoral Areas of the National Plan Agendas and BIMP-EAGA Working Groups

Strategy	Strategic Intervention	Enabling Actions	Cluster/ Working Group	Thematic Area in Plans	Time
Improve the attractiveness of SEZs and industrial zones	11. Promote sustainable economic zones	11.1 Incorporate sustainability criteria in site selection 11.2 Promote environment-friendly infrastructure in the existing zones 11.3 Promote eco-industrial parks	SMEDWG Environment cluster Tourism cluster	Environment/ sustainable development	MT to LT
(Micro-climate)	12. Compensate the locational disadvantages through strategic master planning of the economic zones	12.1 Location-specific, innovative on-site infrastructure solutions may be critical in attracting investors 12.2 For specialized zones, the master plan needs to cater to the target investor 12.3 On-site social infrastructure 12.4 Training centers for the labor	SMEDWG Tourism cluster LTWG SLWG HRDWG	Industry services Industry and industrial policies	MT to LT

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Table 26 *continued*

Strategy	Strategic Intervention	Enabling Actions	Cluster/ Working Group	Thematic Area in Plans	Time
	13. Provide investor-friendly one-stop services	13.1 One-stop shop and custom facilitation 13.2 Provide specialized management services 13.3 Digitization of services and transactions 13.4 Offer customized incentives in the core and peripheral areas	SMEDWG ICTC	Industry services Industry and industrial policies	ST to MT
	14. Improve general investment climate in the economic zones	14.1 Improve regulatory institutions in the border regions 14.2 Off-site logistics and connecting infrastructure 14.3 Off-site social infrastructure in surrounding economic zones	SMEDWG LTWG	Industry services Regional development Industry	MT to LT
	15. Expedite global and regional integration efforts for the smooth operation of GVCs, particularly in these uncertain times of the COVID-19 pandemic	15.1 Establish ASEAN Economic Community 15.2 Introduce broader economic reforms 15.3 Decentralize administrative and financial powers for greater autonomy to local governments	TIFC	Trade	ST to LT
Improve spillovers through horizontal and vertical policies	16. Adopt a vertical approach to maximize spillover effects	16.1 Identify and promote the production of goods and services required by SEZs 16.2 Target subregional companies and link them with SEZ companies 16.3 Develop skills required in SEZs 16.4 Lower the transaction barriers between SEZs and domestic firms	SMEDWG LGF BEBC	Industry	MT to LT
	17. Complement the vertical approach of promoting targeted sectors with a horizontal approach	17.1 Build structural capabilities in the location surrounding economic zones through strategic interventions 17.2 Link the subregional companies with extra-regional firms, particularly those participating in GVCs	SMEDWG BEBC	Industry	MT to LT

BIMP-EAGA = Brunei Darussalam–Indonesia–Malaysia–Philippines East ASEAN Growth Area, BEBC = BIMP-EAGA Business Council, COVID-19 = coronavirus disease, GVC = global value chain, HRDWG = human resources development working group, ICTC = information and communication technology cluster, LGF = local government forum, LT = long term, LTWG = land transport working group, MT = medium term, SEZ = special economic zone, SLWG = sea linkages working group, SMEDWG = small and medium-sized enterprises development working group, ST = short term, TIFC = trade and investment facilitation cluster.

Source: Author.

Chapter 11

The Implementation Strategy

Implementation is the process that turns strategies and plans into actions to accomplish strategic objectives and goals. Strategic recommendations presented in Chapters 9 and 10 can be translated into reality only through effective implementation strategies of the four member countries. The strategic framework requires building the capacity needed to achieve the expected outcomes. However, capacity building is complex and needs to be approached by overcoming multidimensional obstacles involving various economic actors and elements of the system. The focus should be on overcoming structural and institutional barriers and human resources constraints, increasing the pace of implementation, and reducing implementation costs.

Orchestrate Enabling Conditions for Effective Implementation of the Strategy

Institutional Approach

Strategic Intervention 18: Introduce Transformative Changes in the Institutional Framework for Subregional Economic Zones

18.1 **Set up a working group for economic zones within the trade and investment facilitation cluster.** The trade and investment facilitation cluster has been mandated to implement three priority strategies: (i) improve logistics services by reducing trade transaction costs (promoting customs, immigration, quarantine, and security facilities); (ii) promote MSMEs; and (iii) support and maintain the subregional database. However, economic zones are a complex topic, involving almost every aspect of economic activity. The economic zone strategy needs coordination across all clusters and working groups. This study, therefore, proposes that a working group on economic zones be formed which would focus on the business conditions and regulatory reforms. It would work in coordination with all other working groups to promote sustainable economic zones within the subregion and ensure effective implementation of the strategies. MinDA has already passed a joint resolution on 10 February 2021, together with PEZA, the government of the BARMM, Southern Philippines Development Authority, and the various regional development councils in Mindanao, which proposes the creation of a BIMP-EAGA cluster and/or working group on economic zones development to maximize the various business opportunities of the BIMP-EAGA cooperation and the wider AEC.

Strategic Intervention 19: Broad-Based Stakeholders' Participation in Decision-Making Process

19.1 **Engage the local governments and the private sector more effectively.** Typically, the underlying principle of a subregional program is to promote bottom-up processes in contrast with macro-regional programs (such as ASEAN), which require a top-down approach. However, the institutional structure of BIMP-EAGA has been modeled after that of ASEAN—multitiered and hierarchical with the dominant presence of national agencies (BIMP-EAGA Vision 2025). Even though it allows more effective participation of local governments (at ministerial meeting level) and the BIMP-EAGA Business Council (BEBC) (at the senior officials' meeting level) than that of IMT-GT, there is still a need to make their participation outcome-oriented (as revealed during field interviews, BIMP-FC 2017). There has already been progress in this direction. In the Philippines, MinDA, a local governmental agency for promoting, facilitating, and accelerating Mindanao's socioeconomic growth, has been designated as the National Secretariat. In Malaysia, tourism, transport, and power clusters are instituted with the state governments. However, in the absence of decentralization of financial powers, much depends on the negotiating powers of these agencies at the national level. The BIMP-FC plays the role of a coordinator. However, it is endowed with a small budget and has a limited role to play. The best practice for the institutional structure of the subregion will be to delegate greater powers to the local governments and widen private sector participation. It is in line with the government's commitment to revive the spirits of decentralization in Malaysia (Government of Malaysia 2017) and promote the decentralization of powers in Indonesia and the Philippines.

19.2 **Mainstream the local governments and private sector in all three stages of project cycle: design, implementation, and monitoring.** In contradiction to the bottom-up approach for project selection as emphasized by the BIMP-EAGA, the framework for project selection, design, implementation, and monitoring and evaluation shows the dominance of the national agencies in the process. While this approach offers some benefits in terms of autonomy and flexibility, it is time-consuming and costly and can produce suboptimal outcomes (UNESCAP 2019). It is further complicated because these countries are part of a multitude of bilateral, regional, and multilateral arrangements that have placed a heavy burden on scarce technical, human, and bureaucratic resources at the national level. It is proposed here that the role of local government should be broad-based. Their capacity and involvement can be strengthened through direct participation in the subregional processes. One of the reasons for the lack of capacity of local governments is the lack of capacity-building opportunities, which may be an outcome of the lack of empowerment. There is, thus, a vicious circle created that can be overcome by making their role more effective at the subregional level. There is a need for structured trainings of local governments, such as in areas of developing project proposals for submission to relevant BIMP-EAGA forums and national government.

19.3 **Adopt a targeted approach for encouraging private sector participation.** At present, the BEBC represents the private sector in BIMP-EAGA and is granted a "fifth country" status at senior officials' meetings, with its chair having the same rank as other senior officials during policy discussions. However, challenges remain due to poor coordination, narrow representation, and weak voice in final decision-making. These challenges can be addressed by promoting industry consortia as suggested above and their active engagement in cluster and working groups' meetings. The BIMP-EAGA ICT CEO forum has, for instance, set an

example of a targeted approach for industry participation in the promotion of the BIMP-EAGA subregion. Heads of businesses participate in cluster meetings to discuss BIMP-EAGA vision and projects for promoting ICT in BIMP-EAGA. It can be replicated in other sectors as well.

19.4 **Strengthen the BIMP-FC.** Incorporate a research and information division into BIMP-FC. Research outputs of the division can inform the secretariat's inputs. It can also advise on projects and continuously analyze the data to produce research outputs. The research wing can invite interns and visiting scholars from different member countries based on well-established selection criteria. It can also have experts who work to strengthen and continuously update the website to make it more substantive and informative, which investors can use for investment in the subregional economic zones (Strategic Intervention 10.1). Finally, the BIMP-FC needs to work closely with the BEBC and development partners to engage them in implementing the proposed strategic interventions.

Human Resource Management Approach

Strategic Intervention 20: Capacity Building Initiatives for Bureaucrats

It is difficult to implement cross-national policies because the implementing officials are trained and shaped to view the policies from the national perspective. They need to have a greater understanding of the philosophy and prerequisites underlying regional policies and projects. The implementation of regional policies, therefore, requires tremendous managerial and technical skills, bringing the concept of learning, training, and incentive structures to the center of implementation. For addressing this gap, a systematic human resource management approach is needed.

20.1 **Training programs for upgrading bureaucratic capabilities.** Training programs should be organized to build institutional capabilities and develop competencies and capabilities to create a conducive culture to implement the subregional programs and economic zones within them. An evaluation study of the ADB training programs makes several recommendations to improve the effectiveness of these programs (Independent Evaluation Department 2011). These recommendations include (i) developing better mechanisms for needs assessment, (ii) establishing better control over the selection of participants (they must satisfy the minimum standards set by ADB), (iii) using various instructional tools, (iv) developing post-training participants' networking and knowledge exchange, and (v) developing follow-up sessions. It is generally assumed that the training programs offered to participants contribute to broader organizational and institutional capacity development in their home countries (Independent Evaluation Department 2011). However, there are no automatic knowledge spillovers. Follow-up actions must be taken for knowledge dissemination and to build institutional capabilities. For instance, virtual or physical presentations by the participants may be organized at the institutional level with invitees not only from the SEZ implementing authority but also from other departments.

20.2 **Autonomy.** Implementing agencies (e.g., national secretariats) must be given the means including the necessary authority, autonomy, and resources to achieve the specified objectives. There is robust evidence that granting bureaucrats more autonomy is positively associated with the effectiveness of bureaucracies (Rasul, Rogger, and Williams 2017).

20.3 **Accountability.** All participants in the implementation process should be accountable to the implementing agencies. Their roles and relationships with implementing agencies must

be clearly understood. They should know to whom and for what they are accountable. Moreover, they should know the key activities that must be undertaken, the processes to organize them, the time frame to deliver, and the criteria for evaluating their performance.

Cost Management Approach

Strategic Intervention 21: Risks Management Strategy for Economic Zones

21.1 **Develop mechanisms to manage social and environmental costs.** With economic zones getting bigger, their establishment may have wide-ranging social costs such as land dispossession, unfair compensation, inadequate resettlement and rehabilitation packages to the affected people, and aggravation of poverty (Regondi, George, and Pillay 2013; McMichael and Healy 2017). It is also widely acknowledged that the border zones may inflict direct costs on the environment, such as depletion of natural resources, deforestation, biodiversity loss, and ecosystem degradation. The implementation of these projects needs to be supported by legal instruments and impact assessments to minimize the social and environmental costs.

21.2 **Strengthen border security measures.** As discussed in Chapter 7, the BIMP-EAGA economic corridors may be associated with heightened security concerns in the subregion due to the facilitation of mobility of people and goods. However, the other perspective contends that subregional cooperation can offer a better opportunity for collaborative border management. The competent national bodies, along with the subregional governments and private sector, may develop comprehensive border-management strategies and action plans that must incorporate counter-terrorism measures. Security arrangements require reorganization of border protection agencies, strict enforcement of the law, and enhanced intergovernmental cooperation to promote awareness, knowledge, and capacity to deal with organized crimes and extremism. It also requires implementing border community policing programs and remote border area surveillance programs (Gerstein et al. 2018). It must be noted that peace and stability are two crucial determinants of investment in SEZs.

21.3 **Develop mechanisms to deal with special economic zone-related fraud, tax avoidance, and money laundering.** There is a possibility of misuse of SEZs for money laundering, tax avoidance, trafficking of counterfeit and piracy products, narcotics, smuggling, and financing of terrorism. These risks arise due to inadequate anti-money laundering mechanisms; relaxed oversight by competent domestic authorities; weak procedures to inspect goods and register legal entities, including inadequate record keeping and ICT systems; and inadequate coordination and cooperation between the zone and customs authorities. The risks are more prominent in border economic zones. Thus, awareness should be created in the private sector and relevant competent authorities such as SEZ administrators, customs authorities, and bank regulators to better identify the cases of SEZs misuse by criminals. A stronger focus on training programs on these issues is essential to raise awareness of the potential misuse of SEZs. There is also a clear need to improve cooperation between competent authorities at the national and international levels, as the exchange of information is a key element in identifying illicit activities (e.g., fraud schemes) in SEZs. Finally, several organizations have developed reference tools for addressing some of these issues, including the Caribbean Financial Action Task Force guidelines (2001) and the World Customs Organization instruments and standards. These may be used as a guide for building measures to counter these risks (Financial Action Task Force 2010).

21.4 **Macro management.** Unsound monetary or fiscal policies can lead to a bloated fiscal deficit, which can cause inflation, affecting the producer in terms of higher local costs, difficulty in planning, and currency depreciation. The success of economic zones depends on the prudent macro management of the economy.

21.5 **External shocks management.** Business cycles and alternating periods of recession and recovery are integral to all free-market economies. During downturns, exports and investments slow down, affecting SEZs. Currently, the COVID-19 pandemic has disrupted GVCs and affected the zones rather adversely. There should be strategies to manage these external shocks, which should include the following:

- diversification of economic activities, export destinations, and foreign direct investment (FDI) source countries within the SEZs,
- promotion of the clustering of both domestic and foreign firms within SEZs,
- provision of flexibility in the rules regarding domestic market sales during crises to provide support to SEZ tenants,
- a focus on improving the business climate in SEZs during a crisis,
- vigorous marketing of SEZs, and
- flexibility in the criteria for approving economic activity in the zones during the crisis.

The COVID-19 pandemic, for instance, has led to a sharp increase in the demand for food, medicines, vaccine, testing kits, scientific and laboratory equipment, rubber gloves, and personal protective equipment. Promoting such activities in the zones may have favorable economic and social impacts. Malaysia, the Philippines, and Indonesia, which already have their respective competitive advantages in such products, can leverage them by forming an alliance. The provision of operational flexibilities in managing the external risks may thus pay off.

Establish an Effective Monitoring and Evaluation Framework

The BIMP-EAGA Vision 2025 has mandated result-based monitoring and evaluation and offered a framework to capture the outputs, outcomes, and impact of the BIMP-EAGA projects and programs. However, some gaps need to be addressed. This study proposes to institute a framework for evaluating and monitoring economic zones, particularly for the subregional economic zones, to continuously assess their performance.

Strategic Intervention 22: Generate Relevant Databases

22.1 **Strengthen database management.** The most critical element of a monitoring and evaluation (M&E) framework is collecting and analyzing data to generate insights for policy makers about the program's success. This requires the availability of data in a standardized format. However, the data published by the national statistical systems do not ensure the consistency and comparability of statistics. The cross-country data are not strictly comparable due to the use of different variable definitions, concepts, units, and classifications, as well as differences in collection and processing approaches. This study proposes to develop a harmonized (preferably homogenized) system of definitions and classification systems to have meaningful data. It is also necessary

for the countries to adopt standard classifications such as the System of National Accounts 2008, International Standard Industrial Classification, Harmonized System, etc., which would ensure that data across borders can be aligned and compared.

22.2 **Institutionalize mechanisms.** The BIMP-EAGA's statistical working group comprises national statistics organizations from the member countries (with subnational and national representation). These organizations are in charge of (i) compiling the aggregate subregional data, (ii) managing the sustainable time-series databases for the two subregions, and (iii) producing the annual statistical brochures. ADB provided technical and capacity building support to the national statistics organizations and the BIMP-FC for database and brochures development. As a result, in 2017, a brochure titled BIMP-EAGA at a Glance: A Statistical Information Brief was prepared. The statistical information briefs from 2018 to 2021 are available on the BIMP-EAGA website. While it provides useful information, it may be supplemented with raw time series data and metadata, which summarize basic information. These data should be available on demand from the BIMP-FC.

22.3 **Create an economic zones database.** There are several economic zones in the BIMP-EAGA subregion and other border and backward areas. However, no systematic database exists on the number of SEZs or GEZs, their size, and their location. There are indeed some exceptions such as data on industrial estates and KEKs in Indonesia, industrial estates in Brunei Darussalam, and PEZA SEZs in the Philippines. MIDA has also posted data of 247 economic zones in Malaysia. However, the available databases are not regularly updated by the agencies. Further, there is no single point of getting access to information on different types of zones. Finally, the data are almost completely missing for key structural and performance indicators such as size, job creation (direct and indirect), revenues growth, and exports. As suggested, the presence of these databases can offer policy makers important insights on what works and what does not and help in better planning them. Currently, much of the information pertains to expected gains. There are little data on the actual performance. Thus, this study proposes to

- consolidate information on SEZs and other industrial zones at the national level (size, year of establishment, location);
- update information on their current status of the operation (approved, under construction, operational);
- generate data on performance indicators of these zones with clarity of their measurement and update this information regularly (land occupancy, sectoral composition, FDI, total investment, origin of investment, employment, exports, production, and so on); and
- provide links on the BIMP-EAGA website as suggested above.

Strategic Intervention 23: Develop a Monitoring and Evaluation Framework for Economic Zones

23.1 **Monitoring and evaluation framework for economic zones.** Each member country may institute its own M&E framework to gauge the impact and success of the economic zone programs. There should be an evaluation of the investment in industrial areas from time to time. This requires a database covering various aspects of the zone functioning as suggested above and an institutional mechanism to monitor them regularly. The data should be made public for greater transparency. A range of methodologies are available for evaluation, and

there is no best model for economic zones. Much depends on the availability of information, M&E objectives, indicators identified for evaluation, data availability, and human resources.

23.2 **Reorient the perspective toward monitoring and evaluation framework.** One of the problems is that the M&E process is designed as a mechanical exercise aimed at funders or senior management. Its role in providing policy insights on the roadblocks and possible solutions is less appreciated. There is a need to change this perspective. It should be seen as a means to learn from experiences; improve the design, implementation, planning, and allocation of resources; and demonstrate results as part of accountability to key stakeholders. Its importance in improving the project implementation must be made clear to all those engaged in this exercise.

23.3 **Dissemination of results.** It is necessary to engage different layers of stakeholders, not just funders and senior management, in dissemination of results. It may serve as a tool to mainstream various stakeholders into the program and motivate them. The findings must become a regular part of planning rather than a one-off exercise.

23.4 **Follow-up actions.** M&E is worthwhile only to the extent that BIMP-EAGA decision makers use it for follow-up actions. To ensure this, the governments must mandate the monitoring and updating of the status of evaluation follow-up actions.

Adopt the Implementation Strategy into Planning

Table 27 summarizes the implementation of strategic approaches alongside strategic interventions and enabling actions needed for the desired outcomes. The strategic interventions and enabling actions are represented by the same serial numbers in Chapter 9. The table maps the working groups, and the government agencies need to collaborate closely to adopt these strategies into policies and deliver the desired results.

Table 27: Mapping of the Competitive Strategies of Economic Zones with Thematic and/or Sectoral Areas of the National Plan Agendas and BIMP-EAGA Working Groups

Strategic Approach	Strategic Interventions	Enabling Actions	BIMP-EAGA Setup	Government Agencies
Institutional approach	18. Introduce evolutionary changes in the institutional framework for subregional economic zones	18.1 Set up a working group for economic zones within the TIFC	SMEDWG and national secretariats	Nodal ministries
	19. Broad-based stakeholders' participation in decision-making process	19.1 Engage the local governments and private sector more effectively 19.2 Mainstream the local governments and private sector in all three stages of the project cycle: design, implementation, and monitoring 19.3 Adopt a targeted approach for encouraging the private sector's participation 19.4 Strengthen the BIMP-FC		
Human resource management approach	20. Capacity building initiatives for bureaucrats	20.1 Training programs for upgrading bureaucratic capabilities 20.2 Autonomy 20.3 Accountability	SMEDWG HRDWG	Economic zones regulatory bodies and relevant department/ ministries
Cost management approach	21. Risks management strategy	21.1 Develop mechanisms to manage social and environmental costs 21.2 Strengthen border security measures 21.3 Develop mechanisms to deal with SEZ-related fraud, tax avoidance, and money laundering 21.4 Macro management 21.5 External shocks management	SMEDWG CIQSWG	Ministries/departments of environment Law enforcing agencies Finance ministries Economic zone authorities and the planning bodies
M&E framework for economic zones	22. Generate relevant databases	22.1 Strengthen database management 22.2 Institutionalize mechanisms 22.3 Create economic zones database	SMEDWG BIMP-FC SDWG	Badan Pusat Statistik Indonesia, Department of Statistics Malaysia, and Philippine Statistics Authority
	23. Develop an M&E framework for economic zones	23.1 M&E framework for economic zones 23.2 Reorient the perspective toward M&E framework Dissemination of the results 23.3 Follow-up actions	SMEDWG BIMP-FC SDWG	SEZ and GEZ regulatory bodies and the relevant ministries

BIMP-EAGA = Brunei Darussalam–Indonesia–Malaysia–Philippines East ASEAN Growth Area; BIMP-FC = BIMP-EAGA Facilitation Center; CIQSWG = customs, immigration, quarantine, and security working group; GEZ = general economic zone; HRDWG = human resources development working group; M&E = monitoring and evaluation; SDWG = statistics and database working group; SEZ = special economic zone; SMEDWG = small and medium-sized enterprise development working group , TIFC = trade and investment facilitation cluster.

Source: Author.

Chapter 12

Conclusion

Since the early stage of development, the BIMP-EAGA member countries have been following the objective of balanced regional development alongside that of accelerating national economic growth, with manufacturing being the central element of their development strategy. The aim has been to promote industrial development and equally distribute economic prosperity across the provinces and states through an active policy of developing industrial estates and SEZs supported with wide-ranging investment policies. The top-down development strategy with SEZs and other industrial estates as the linchpin has led to a proliferation of economic zones of different types and facilitated the insertion of these countries into global value chains, which resulted in rapid economic growth and development, transforming their economic base from agriculture to export-oriented manufacturing. However, in this development process, some of the distant and most lagging backward areas were further marginalized, with most investment and economic activity getting attracted to a few economic cores, e.g., Brunei-Muara in Brunei Darussalam; Jakarta and Batam in Indonesia; West Coast in Malaysia; and Metro Manila and CALABARZON in the Philippines.

In the early 1990s, these countries initiated the BIMP-EAGA subregional program as a potentially effective mechanism to stimulate economic activities and employment generation in some of the most peripheral and remote areas by deepening subregional cooperation. This approach is based on three premises. First, globalization processes have made development more localized and complex, with the increasing importance of local specificities and competitive advantages. Therefore, the spatial approach to subregional programs, which can turn the national peripheries into cross-border growth centers by strengthening local specificities, empowering local actors, creating connectivity among them, and facilitating the creation of cross-border production networks through regional integration, can be a potent tool for developing these areas. Second, political borders disrupt economic spatiality. The subregional priority economic corridors restore cross-border economic spatiality and create conditions for the success of economic zones by providing the companies easy access to new cross-border factors and consumer markets as well as consumers with a wider range of products and services, thus, enhancing the capacity of the clusters. Third, the top-down approach of augmenting regional capabilities has not proven to be effective. The subregional programs set the contexts in which local governments and the private sector can play an important role in designing and shaping the policies at the local level itself by strengthening the capabilities of the local actors and fostering local partnerships of organizations to design their own programs.

Based on the spatial approach that accords a high priority to the development of regional and cross-border production networks using economic corridors, and SEZs and other production sites as the key tools, the subregional strategy signals an in-principle shift from the nationally oriented old approach to a new one based on cross-border economic cooperation through economic corridors and

zones. Notwithstanding the strong theoretical underpinnings, this study finds that the proliferation of economic zones over time in the BIMP-EAGA economic corridors did not yield the expected results.

While exploring the underlying reasons for the subregion's suboptimal performance, the study argues that subregional programs are essentially informal; they are not binding and cannot be enforced. Their success depends on a long-term vision, strong political will, and collective ownership, all of which should be backed by generous financial resources. This, in turn, requires the integration of subregional agendas into national development planning. Unless the subregional initiatives are integrated into national development agendas, they may lose out to other plan priorities and may not receive wide government support beyond specific line ministries and resource commitments for the program.

The alignment of the subregional economic zone program with the national strategy can help leverage synergies across different programs and development agencies. The results of this study indicate that the subregional agenda of regional and cross border integration is yet to be fully mainstreamed into national development agendas. Even while the subregional local governments that enjoy administrative autonomy integrate the tenets of BIMP-EAGA in their development strategies, this is essentially indicative because they are heavily dependent upon the national governments for financial resources. The study argues that a renewed thrust on zone programs from the perspective of regional integration can infuse a new dynamism to economic growth by debottlenecking these regions' growth potential, which the national government cannot achieve alone.

There is a need for transformative changes in the approach toward the BIMP-EAGA SEZs. Challenges arise due to trade-offs between cross-border cooperation gains on the one hand and national development goals, national sovereignty, border security, and social and environmental concerns on the other. However, these challenges may be overcome by adopting a comprehensive strategy that incorporates the elements of both collaboration and competition.

The study proposes to generate and augment regional synergies by adopting the collaborative approach through (i) the promotion of cross-border connectivity and mobility of people, goods, and freight; (ii) the development of regional capabilities with a broader policy package, which covers competitiveness issues like innovation, networking, quality of human capital, knowledge infrastructure, finance, and entrepreneurship, and is inclusive of the policies for SMEs; (iii) a targeted approach in promoting cross-border production networks; and (iv) branding and marketing of the subregion. It is based on the premise that the subregion is a transborder hybrid zone of special and general economic zones, the success of which depends on the local capabilities and competitiveness and not just the facilities and incentives provided within these economic zones.

The four major highlights of the proposed strategic interventions are as follows:

- First, although production capabilities are limited across the region, cross-border value chains can help build formidable industries through the aggregation of resources and markets; R&D cooperation; branding, packaging, storage, and logistics facilities; and distribution and marketing in the region if economic corridors are implemented effectively.
- Second, the focus should be on leveraging the digital revolution in promoting MSMEs and MSME alliances and industry consortia across the subregion.

- Third, it is proposed to initiate a joint subregional project of creating a unified digital BIMP-EAGA market for business-to-business (B2B) and business-to-consumer (B2C) transactions.
- Finally, the local governments and private sector need to be assigned a pivotal role in developing strategies and their implementation in the subregion.

The study also proposes adopting a multipronged competitive strategy comprising of micro, meso, and macro investment climate elements to improve the zones' attractiveness and spillovers in each EAGA area. A key recommendation is to incorporate sustainability principles into site selection and master planning of economic zones within the subregion. Further, a piecemeal approach may not work for incentivizing the private sector to invest in the lagging regions; a holistic approach is needed.

While addressing the adoption of the strategic intervention into planning, the study recommends mainstreaming all proposed strategic interventions and enabling actions for economic zones into the relevant sectoral or thematic strategies of the development plans and agendas of various working groups. It proposes an implementation strategy that creates conditions for effective implementation of the policies with thrusts on institution building, human resource management, cost and risk management, and continuous monitoring and evaluation processes. In sum, a shift to new growth paradigms requires integrating the subregional agenda into national and subnational plans and translating the goals into reality with a sequence of strategic actions based on joint initiatives to achieve them.

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Special Economic Zones for Shared Prosperity

Brunei Darussalam–Indonesia–Malaysia–Philippines East ASEAN Growth Area

Brunei Darussalam, Indonesia, Malaysia, and the Philippines need to bolster cooperation in their special economic zones (SEZ) to spur sustainable growth. This publication maps out and assesses the economic performance of SEZs across the Brunei Darussalam-Indonesia-Malaysia-Philippines East ASEAN Growth Area. It highlights challenges the SEZs face including growing competition for foreign investment, international trade disputes, and digital transformation that will reshape the global trade and investment landscape.

The publication emphasizes the need for policy makers and stakeholders to intensify strategic collaboration to make their SEZs more competitive. Against the backdrop of COVID-19, it outlines practical steps to increase the role of SEZs in boosting trade, creating jobs, and building economic resilience across the four countries.

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