

Chapter 5

The Development of Industrial Estates

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Chapter 5

The Development of Industrial Estates

5.1. Industrial Estate Development in Neighbouring Countries

5.1.1. Economic development and industrialisation

Economic development has been deeply connected to industrialisation. Since the industrial revolution in Britain in the 18th century, industrial development has uplifted the living standards of most countries in Europe, the Americas, and East Asia. The Association of Southeast Asian Nations (ASEAN) countries are no exception to this. With Singaporeans leading the way, the people of the ASEAN region have benefitted from their countries' industrialisation.

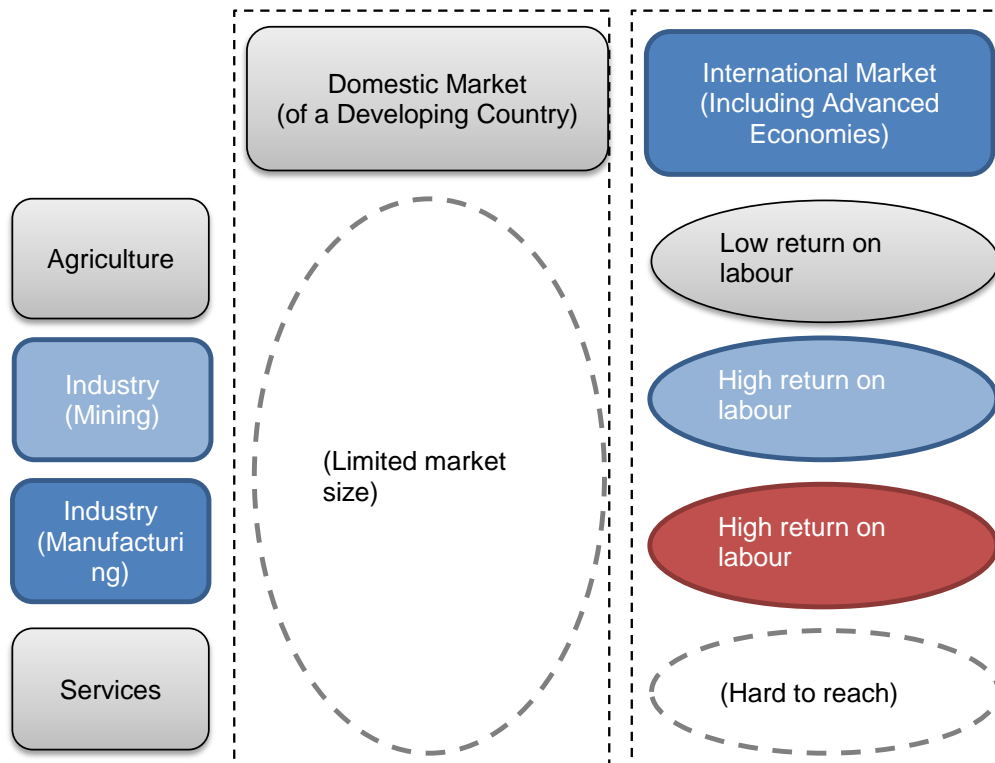
There are drivers of economic development other than industrialisation: improvements in agricultural technology/productivity and/or innovations in the services sector can be the primary drivers of a country's development. But industrial development, particularly in export-oriented manufacturing industries, has been the lynchpin of economic development, as demonstrated by many empirical cases.

A simplified illustration (Figure 5.1) shows a typical situation faced by a developing country. Its domestic market size is limited because of its present income level. Moreover, its pace of expansion cannot exceed by more than its economic growth rate. On the other hand, demand from the international market – especially from advanced economies with higher purchasing power – is virtually unlimited. Thus, exports are deemed essential for rapid economic growth, the so-called process of the economy taking off. In fact, this process can be seen in many Asian economies.

Among the various exporting sectors, manufacturing tends to be the driver of balanced development in the economy. Agricultural products can be a source of income, but labour productivity in the sector is often limited. If a country is resource rich, mining can yield high income but is low in job creation. This leads to the income distribution being skewed and inequitable economic development, unless the

government intervenes and imposes profit redistribution. As for the services sector, most of the market is domestic, as catering to advanced economies is often unfeasible.

Figure 5.1. Drivers of Economic Growth for a Developing Country

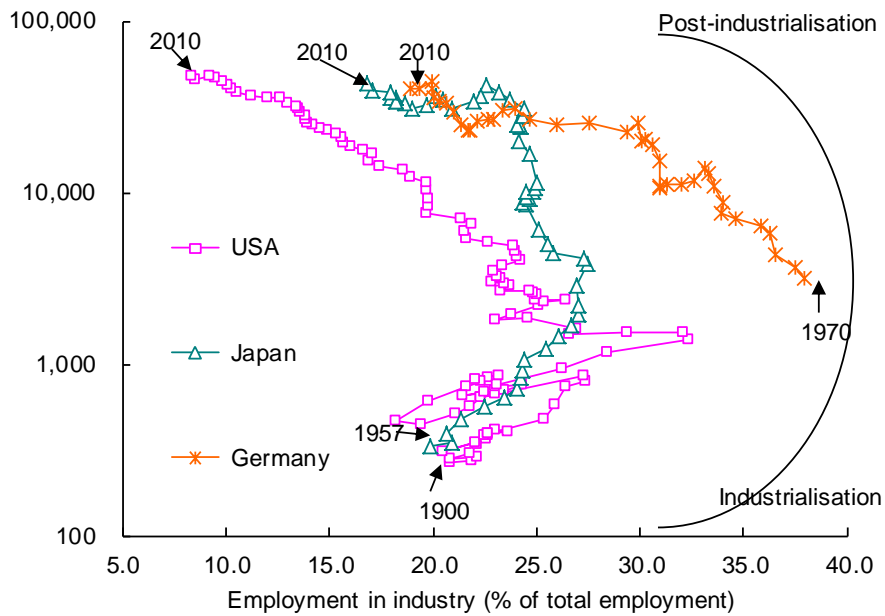


Source: Daiwa Institute of Research Ltd (DIR).

Empirical examples indicate that industry expansion is prominent in the early to middle stages of economic development. Figures 5.2 and 5.3 depict the historical trajectories of economic growth and industrialisation, measured in gross domestic product (GDP) per capita, and industry's share of employment.

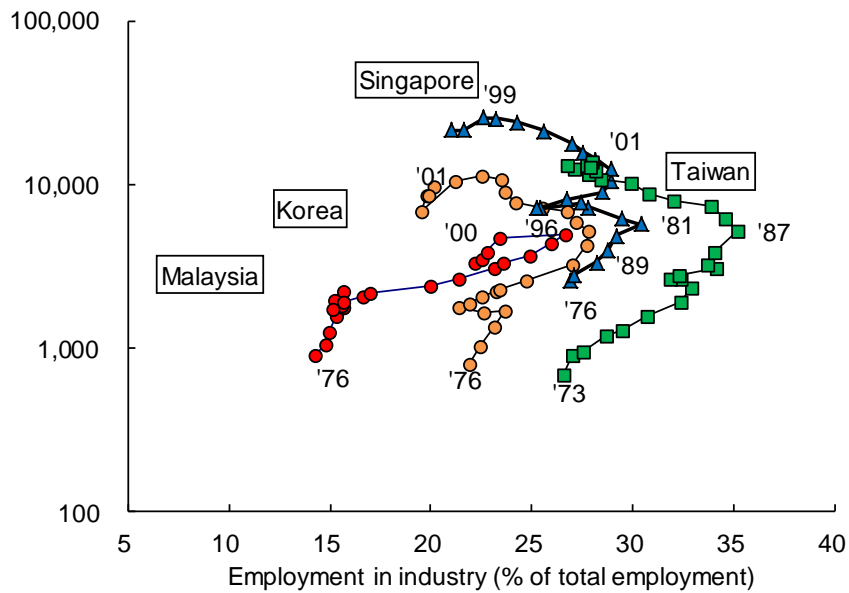
In large economies (e.g. the United States [US], Japan, Germany, and China) and newly industrialised smaller economies (e.g. Singapore, Malaysia, Republic of Korea [henceforth, Korea], and Taiwan), economic growth was accompanied by a rise in the industry's share of employment, with the peak being around 30 percent. In the latter case, the industry's share of employment grew continuously until GDP per capita reached US\$5,000–10,000.

Figure 5.2. GDP per Capita (US\$) and Employment in Industry (%)



GDP = gross domestic product.
 Source: Haver Analytics; compiled by DIR.

Figure 5.3. GDP per Capita (US\$) and Employment in Industry (%)



GDP = gross domestic product.
 Source: World Bank data from *World Development Indicators*; compiled by DIR.

5.1.2 Overview of industrial estate development in neighbouring countries

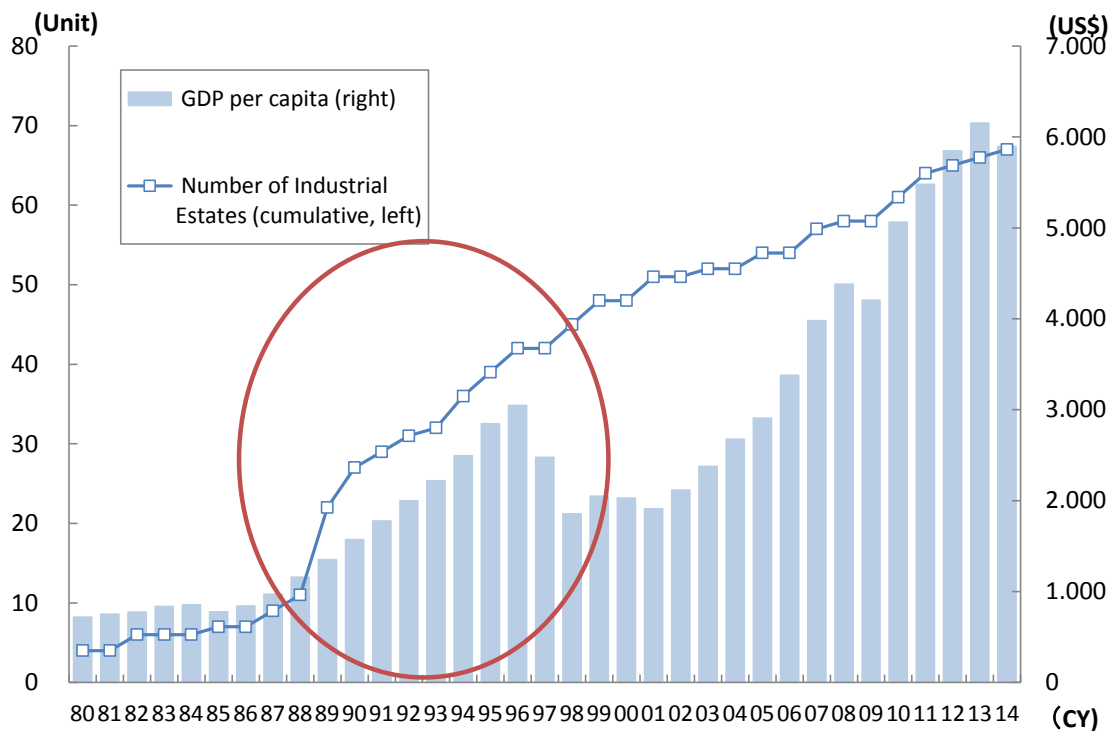
For manufacturing industries to develop in a country, availability of adequate land is an essential precondition. Moreover, the land needs to be equipped with basic infrastructure, such as water, electricity, gas, transportation, and telecommunication. Although individual manufacturers can create infrastructure in some cases, the cost of doing so would be a heavy burden for most and would therefore discourage many potential companies from building new factories. As public infrastructure benefits from economies of scale advantages, land development of multiple industrial plots in a single area, or an 'industrial estate' (IE), has emerged as an effective strategy.

The world's first IE dates back to the 19th century. In 1896, Trafford Park Estates Co., Ltd. was established in Manchester, United Kingdom, as a private real estate business. Three years later in the US, Clearing Industrial Districts were developed in Chicago as another pioneering project. These pioneering IEs gradually attracted attention as desirable locations for investment. In 1911, Ford established its first overseas assembly plant in Trafford Park Estates. However, it was after the Great Depression that IE development became a prominent public policy issue. The British government took the initiative of implementing an industrial estates construction programme to mitigate unemployment in the so-called depressed areas. As the programme succeeded in promoting industrial development, government-led IE development became recognised as an effective policy option.

In the ASEAN region, Singapore's Jurong Industrial Estate was planned as early as 1961, when the Government of Singapore developed an industrialisation programme with the help of a Dutch economic advisor. Its construction started in the following year, and it expanded so rapidly that it laid the foundation for Singapore's economic success. By 1976, as many as 650 factories were in operation within a land area of 12 km² (Singapore Government, National Library Board, n.d) Thailand and the Philippines started IE development in the 1960s, too, although their industrialisation was slower than that of Singapore. Cambodia, Lao PDR, Myanmar, and Viet Nam started their IE development much later, in the 1990s and 2000s. In this report, the cases of Thailand, Cambodia, and Viet Nam are discussed as a reference for IE development in Lao PDR.

Looking at the historical development of IEs, it can be argued that IE development laid the foundation for rapid economic growth in neighbouring countries. In the case of Thailand, several industrial estates were developed from the late 1980s to the early 1990s, which led to it dropping the tag of ‘least developed country.’ In the case of Viet Nam, IE development accelerated after the early 2000s. Compared with its stagnated development from 1995 to the early 2000s, Viet Nam’s economic development has been remarkable since the acceleration of IE development.

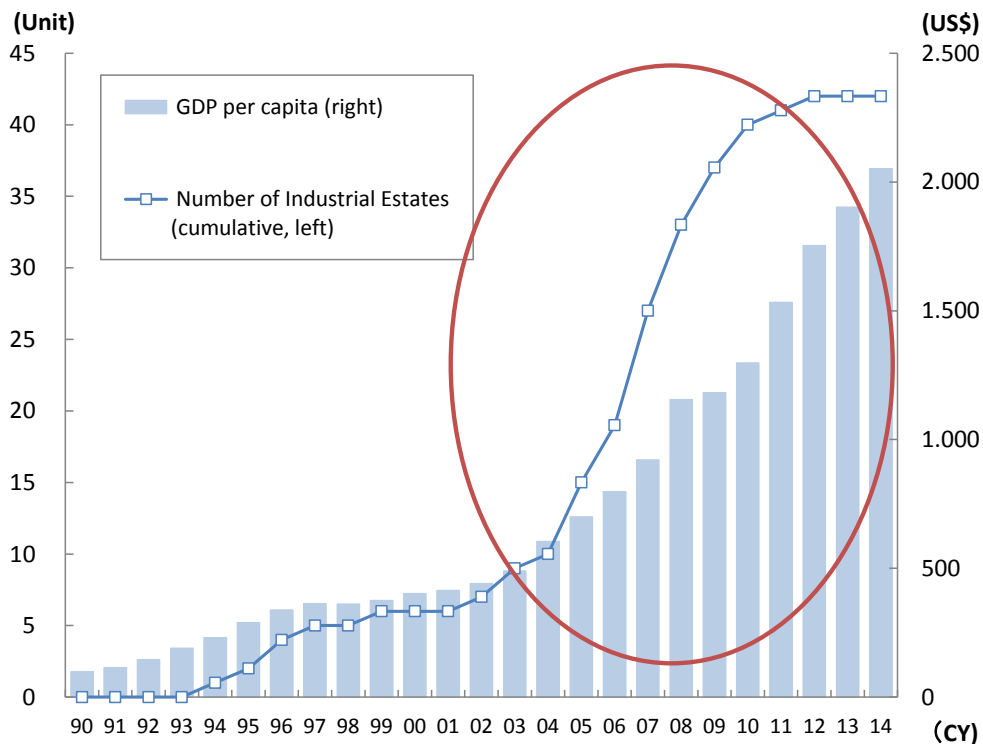
Figure 5.4. Thailand’s GDP per Capita and Number of IEs (historical changes)



GDP = gross domestic product; IE = industrial estate.

Note: For ‘Number of Industrial Estates,’ IEs without establishment year information are excluded.

Source: Compiled by DIR from IMF and various sources (individual IEs’ websites, etc.).

Figure 5.5. Viet Nam's GDP per Capita and Number of IEs (historical changes)

GDP = gross domestic product; IE = industrial estate.

Note: For 'Number of Industrial Estates,' IEs without establishment year information are excluded.

Source: Compiled by DIR from IMF and various sources (individual IEs' websites, etc.).

5.2. The Case of Thailand

5.2.1. Development history

5.2.1.1. FDI-driven and export-oriented economic development

The beginning of Thailand's IE development goes back to the late 1950s, when Thailand initiated its industrialisation programme during the Sarit Administration (1958–1963), on the basis of a policy suggested by the World Bank. Salient features of the Sarit Administration's industrial policy are evident in the following three initiatives: (1) seeking private sector-led industrialisation; (2) utilisation of inward foreign direct investment (FDI); and (3) preparing the first national five-year development plan (National Economic and Social Development Plan). The plan was so sagacious that it recognised the importance of IE development for an FDI-driven and

export-oriented economy. Sarit’s industrial policy not only laid the foundation for Thailand’s IE development plan but also formulated the overall national industrialisation strategy.

Under the second Thanom Administration (1963–1973), Thailand’s IE development plan became a reality. Thailand’s first government-developed IE, named Banchan Industrial Estate, was created in 1969. Furthermore, the first private sector-developed IE named Nava Nakorn Industrial Zone was constructed in 1971 by Nava Nakorn Public Company Limited. All of these frontrunner IEs were located in the Bangkok area.

5.2.1.2. Establishment of the Industrial Estates Authority of Thailand

Another notable development during the second Thanom administration was the establishment of the Industrial Estates Authority of Thailand (IEAT) in 1972 under the Revolutionary Decree No. 399. IEAT is a state enterprise attached to the Ministry of Industry. Since its establishment, it has been playing an important role in the promotion and regulation of IEs throughout the country. The scope of IEAT’s activities is prescribed by the IEAT Act, B.E. 2550, which was enacted in 1979, under the Kriangsak Administration (1977–1980). The act also provided to enable foreign companies located in IEAT’s IEs to take advantage of incentive measures under certain terms and conditions.

Table 5.1. Chronology of Thailand’s IE Development

1958	The Sarit Administration (1958–1963)
1963	The second Thanom Administration (1963–1973)
1969	Banchan Industrial Estate was created as Thailand’s first government-developed IE
1971	Nava Nakorn Industrial Zone was constructed as Thailand’s first private sector-developed IE
1972	Industrial Estates Authority of Thailand (IEAT) was established
1977	The Kriangsak Administration (1977–1980)
1979	IEAT Act, B.E. 2522 which prescribed the scope of IEAT 's activities was enacted

IE = industrial estate.
Source: DIR.

5.2.1.3. Location choice of IE and rural development

a) Concentration of IEs in Bangkok and Surrounding Areas

Thailand's IE development is indicative of its rural–urban gap. However, at the onset of IE development, the gap between the urban core and the rural periphery expanded with the increase in the number of IEs. That was partly because Sarit's development strategy did not pay much attention to regional economic disparities. Seeking private sector–led development resulted in centralisation of IEs in Bangkok and its outskirts. Given the accessibility to Laem Chabang port and Don Mueang international airport, it is not surprising that Bangkok and the surrounding provinces seemed to be the best FDI destinations for foreign investors. In fact, the Banchan Industrial Estate, the first government-owned IE, was created in Bangkok and the Nava Nakorn Industrial Estate was also constructed in Pathum Thani, the northern part of Bangkok Metropolis as the first private IE. Moreover, Lad Krabang Industrial Estate, the second government-developed IE in the country, was also set up in Bangkok. Due to the rapid industrialisation in the late 1980s, major urban problems such as insufficient labour force, burgeoning wages, and congestion in Bangkok and its vicinities became worse.

b) Zoning as a solution for bridging the gap

To tackle these difficulties, the Board of Investment (BOI) devised an investment incentive scheme called 'Zoning' in 1987. This scheme divided the country into three zones on the basis of the level of regions' economic development. Zone 1 comprises Bangkok and the bordering provinces, Zone 2 consists of the provinces around Bangkok, and Zone 3 covers the remaining peripheral provinces with low per capita income. The lower the development in the zone, the higher the incentives available for investors. The aim of the scheme is to attract more investment into less developed areas and to narrow the income gap among regions. However, the scheme did not yield the intended outcome.

Since many of the foreign investors – some of whom are IE developers – have chosen to locate in Bangkok and the surrounding areas for the region's attractive investment climate, over 70 percent of the total 74 IEs in Thailand are located in Zone 1 (14 IEs) and Zone 2 (41 IEs). Zone 3, in spite of offering more generous incentives and larger designated areas, has only 19 IEs (ASEAN–Japan Centre website).

c) Role of the Eastern Seaboard (ESB)

The centralisation of IEs in Bangkok and the surrounding areas, especially in the eastern part, is attributable to the development of the Eastern Seaboard (ESB), which made a significant contribution to Thailand's industrialisation in the 1980s and 1990s. No sooner had a natural gas field been found in the Gulf of Thailand in 1973–1977 than the Thai government laid down the development of the seaboard as the top priority in its industrial policy. In the midst of the first oil shock, the new discovery of natural resources evoked huge demand for infrastructure development projects in the region, resulting in 180 billion yen of Japan's official development assistance (ODA) disbursement during 1982–2000. Since then, ESB has been home to heavy chemical industries. After the opening of Laem Chabang port in 1991, export-oriented manufacturers also started to locate in the area and as the demand for factories with appropriate infrastructure grew, so did the supply. As a result, IEs are numerous in the region. For example, there are as many as 15 IEs in Rayong Province (Zone 2) alone. In 2015, the BOI's zoning scheme was abolished and was replaced by the new incentive scheme, which focuses more on rural development and industrial upgradation to high value-added products.

5.2.1.4. Key success factors of Thailand's IE development: the case of ESB

In general, it is believed that ODA can contribute to recipients' development by financing their capital shortage. This is apparent in the case of Thailand. As stated in the previous section, Japan's ODA played an important role in the development of the ESB, which formed Thailand's deep agglomerations of heavy chemical and automotive industries in the eastern part of the country. It can be said that Japan's ODA was imperative at the initial stage of promoting industrialisation in Thailand.¹³ However, ODA is only assistance in terms of finance and more than that is needed to fully achieve the development goals of the recipient countries.

¹³ The importance of ODA for industrialisation can be also observed in other countries, for example, the recent Thilawa SEZ in Myanmar.

According to Shimomura (2000), who studied the aid effectiveness of Thailand's ESB development as a case, ownership of recipient countries is vital in maximising the effect of financial assistance from donor countries and achieving endogenous development. Shimomura (2000) stated that the essence of Thailand's success of the ESB development project is evident in the following four points: (1) capable technocrats and their independence from politics; (2) Thailand's unique 'checks and balances' system, which kept one strong interest group from taking control; (3) the Prem administration's development regime; and (4) its open and transparent policymaking process that was unintendedly realised by the intervention of mass media.

The implication of the experience of ESB is that it is important not only to have a good political institution and capable technocrats, but also to have a system of checks and balances that is based on the country's social and cultural characteristics for developing countries to make effective decisions that the government commits to, Shimomura (2000) concluded.

Adding to those institutional factors, Thailand's success implies that development of other infrastructure and investor-friendly investment policies are needed to attract foreign investors to IEs. Thailand has also been successful in meeting this challenge. Thailand's IE development strategy included not only construction of IEs but also had a lot to do with construction of other infrastructure – for example, the highway and industrial roads connecting Bangkok and ESB and the deep sea port in Laem Chabang and Map Ta Phut, which provided a gateway to foreign markets and has attracted export-oriented manufacturers.

As for investment policy, BOI's successful zoning scheme induced foreign investors to locate in ESB, which was classified into Zone 2 or 3 (Figure 5.6), where investors can enjoy generous incentives such as tax deductions. Moreover, if the IEs are approved by IEAT, the investors can enjoy IEAT's incentives such as the right to own land and applications can be made at one-stop-service centres located within the estates.

Table 5.2. Key Success Factors of Thailand's IE Development (The Case of ESB)

Official Development Assistance (ODA)	+	Ownership of recipient countries
		(1) Capable technocrats and their independence from politics
		(2) Unique 'checks and balances' system
		(3) Well-designed development regime and leadership
		(4) Open and transparent policymaking process
		Investment policy (tax incentive, etc.)
		Other infrastructure (roads, ports, etc.)

IE = industrial estate; ESB = Eastern Seaboard.

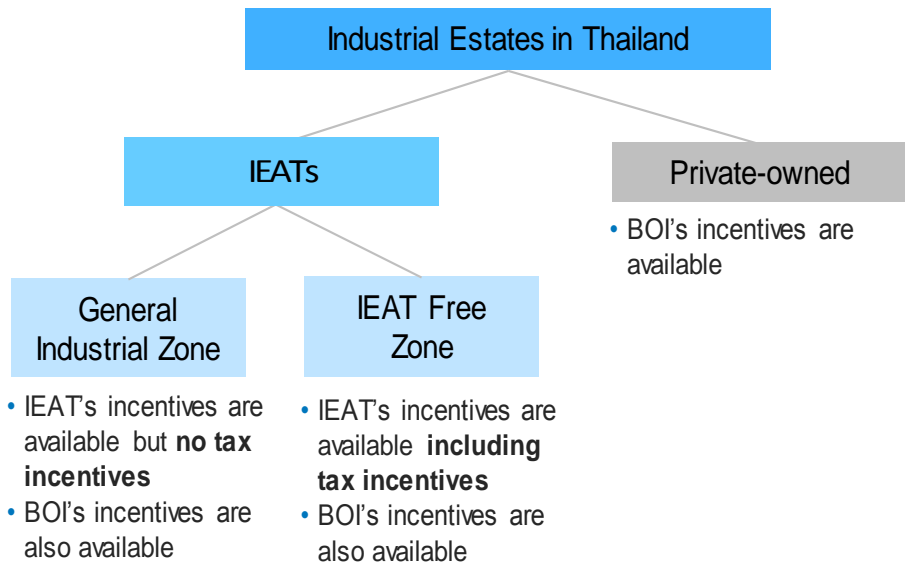
Source: Compiled by DIR based on Shimomura (2000).

5.2.2. Structure and organisation

5.2.2.1. Three types of IEs

The number of IEs in Thailand is reportedly 73 and most of them are developed and/or managed by IEAT, as mentioned in the previous section. IEs in Thailand are categorised into three types according to the management systems: (1) IEs developed and managed by IEAT; (2) IEs co-developed and co-managed by IEAT and a private developer; and (3) IEs fully developed and managed by private developers. The difference is apparent in the names of the IEs. All IEAT IEs, including the ones co-developed with a private developer, are named industrial 'estates,' and IEs that are entirely developed and managed by private developers are named industrial 'parks' or 'zones' because completely private IEs are not allowed to be named industrial 'estates.'

Figure 5.7. Three Types of IEs in Thailand



IE = industrial estate; IEAT = Industrial Estates Authority of Thailand; BOI = Board of Investment.

Source: Various materials compiled by authors.

5.2.2.2. Characteristics of IEAT's IEs

IEAT's IEs can be divided into two types according to the available incentives: one type is located in the General Industrial Zone (GIZ) and the other is in the IEAT Free Zone. In both types of IEs, investors are allowed to own land; to procure visas and work permits of foreign engineers, professionals, and accompanying families; to make overseas remittances in foreign currency; and to avail themselves of the BOI incentives.

Additionally, investors in the IEAT Free Zone are entitled to enjoy tax incentives including exemption from import duty, value-added tax (VAT), and excise tax on machines, apparatus, and other tools used in production, and from export duty and VAT on imported goods for re-export or resale.

Table 5.3. Investment Incentives Available for Different Types of IEs

	IEAT's Free Zone	IEAT's GIZ	Private IE
BOI's incentives	Yes	Yes	Yes
Land ownership	Yes	Yes	No
Visas/work permit	Yes	Yes	No
Remittance	Yes	Yes	No
Import duty	Yes	No	No
Export duty	Yes	No	No
Excise tax	Yes	No	No
VAT	Yes	No	No

IEAT = Industrial Estates Authority of Thailand; BOI = Board of Investment; GIZ = General Industrial Zone; IE = industrial estate; VAT = value-added tax.

Source: IEAT and various materials.

5.2.3 Effects and challenges

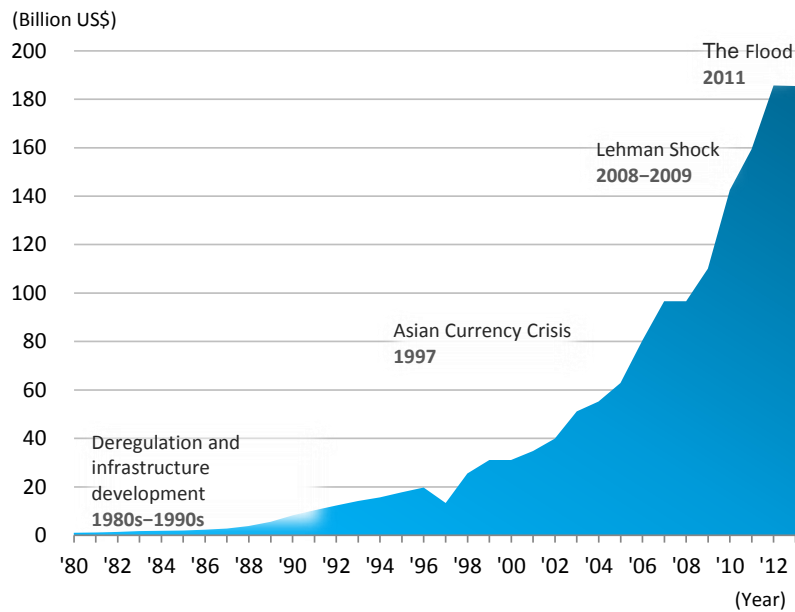
(a) Positive effects

(1) Increasing inward FDI and forming agglomerations

IEs have played a pivotal role in attracting FDI to Thailand. Since most foreign investors in Thailand were manufacturers, well-developed infrastructure was a key determinant of investment.

Thailand's inward FDI in the 1970s amounted to B5,395 million (Thai baht) and 38 percent of total investment was in the textile industry. However, in the 1980s, inflows shot up to B56,742 million, which was over 10 times larger than that in the 1970s. During that period, the fastest-growing investment was in the electrical appliances industry, which increased nearly 12 times. In the 1990s, inflows increased six times and reached B316,296. The fastest-growing industry was the machinery and transport industry, which also grew over 12 times. From 2000 to 2009, total FDI inflows reached B1,287,908 million and investment in the machinery and transport industries comprised 34 percent of the total.

Figure 5.8. Inward FDI Stock in Thailand



FDI = foreign direct investment.
Source: UNCTAD and various materials.

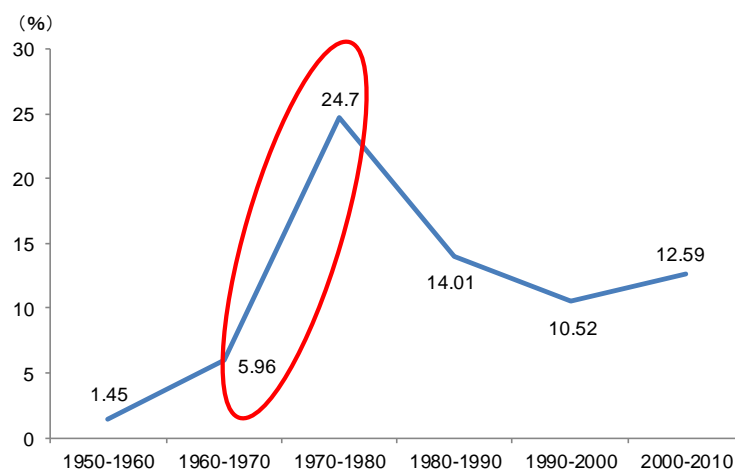
Table 5.9. Inward FDI Flows in Thailand by Sector

(B million)	1970-1979	1980-1989	1990-1999	2000-2009
Industry Total	5,395	56,742	316,296	1,287,908
Food and Sugar	571	4,452	22,142	54,737
Textiles	2,047	3,791	14,387	18,221
Metals and Non Metallic	247	6,543	46,046	96,673
Electrical Appliances	1,148	20,385	88,311	257,150
Machinery & Transport	328	2,901	68,146	431,590
Petroleum Products	216	1,626	4,901	27,151
Chemicals	648	6,819	38,422	111,542
Construction Materials	-68	209	3,369	7,754
Others	258	10,016	30,571	283,090

FDI = foreign direct investment; B = Thai baht.
Source: Bank of Thailand.

(2) High growth of exports

Spurred by the influx of FDI in export-oriented manufacturers, Thai exports saw rapid growth in the 1970s and 1980s. Thailand’s export growth rate was an annual average 1.45 percent in 1950-1960 and 5.96 percent in 1960-1970. The growth rate skyrocketed in 1970-1980, to 24.70 percent, and it was 14.01 percent in 1980-1990, when Thailand started developing IEs.

Figure 5.10. Thailand's 10-Year Average Export Growth Rates

Source: United Nations Conference on Trade and Development (UNCTAD).

(b) Challenges: development gap between Bangkok and other regions

In the process of Thailand's rapid industrialisation, construction of IEs was centralised in Bangkok and the surrounding areas. This could have generated a negative effect as it might have increased development gaps among regions.

Table 5.10. Gross Regional Product (Bangkok and Vicinities 1.0)

	1995		2000		2005		2010	
	B mil.	ratios	B mil.	ratios	B mil.	ratios	B mil.	ratios
Bangkok & Vicinities	2,233,098	1.00	2,541,099	1.00	3,624,645	1.00	4,742,858	1.00
East	497,807	0.22	673,995	0.27	1,250,646	0.35	1,981,686	0.42
South	405,175	0.18	473,642	0.19	715,637	0.20	1,056,530	0.22
Northeast	386,984	0.17	470,381	0.19	654,743	0.18	1,046,815	0.22
Northeast	313,539	0.14	390,473	0.15	591,806	0.16	831,874	0.18
Central	214,081	0.10	311,239	0.12	460,544	0.13	662,066	0.14
West	159,927	0.07	199,189	0.08	288,310	0.08	387,986	0.08

B = Thai baht; mil. = million.

Note: The ratio figures are in proportion to the GRP of Bangkok and Vicinities.

Source: National Economic and Social Development Board (NESDB), Thailand.

In 1995, the gross regional product (GRP) in the East (0.42) was less than half of that in Bangkok and Vicinities (normalised as 1.0). The gaps were even worse in the South (0.18), the Northeast (0.17), the North (0.14), the Central region (0.10), and the West (0.07). But by 2010 the gaps had narrowed. For example, the GRP of the East increased

by 5–8 percentage points every five years from 1995 to 2010, which means that the economy of the East grew more rapidly than that of Bangkok and Vicinities. However, there were still gaps among regions; in particular, the West (0.08) was in desperate circumstances in 2010.

5.3. The Case of Viet Nam

5.3.1 Development history

In 1986, Viet Nam started to introduce a market economy system and attract foreign investment while maintaining a socialist system of governance under the Doi Moi reforms. In 1987, the Law on Foreign Investment was adopted, which was meant to attract investment for industrialisation. The resulting foreign investment was absorbed by industrial areas and they started to develop.

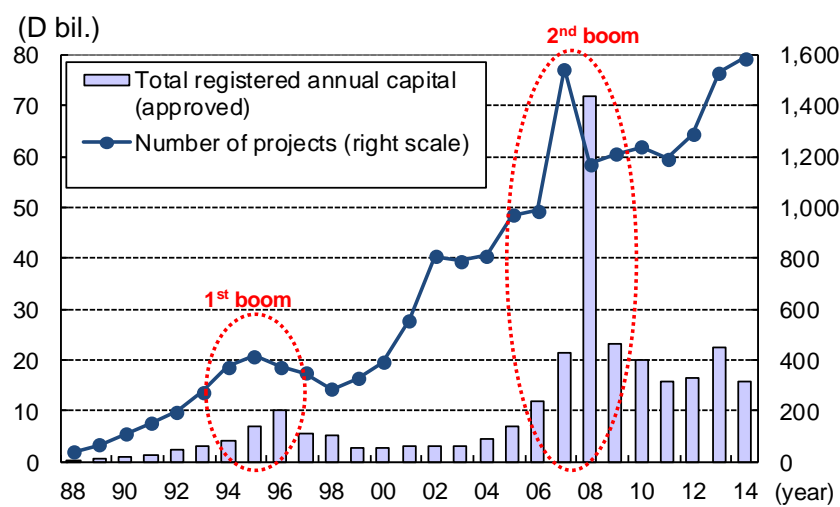
Viet Nam commenced development of export processing zones (EPZs) in 1991, with the aim of clustering export goods-producing companies, and of industrial parks (IPs) in 1994, where export regulations were relaxed. Although IPs did not enjoy tax treatment as favourable as EPZs, it was easy to conduct domestic trade within them. As a result, in 1995 a majority of EPZs transformed themselves into IPs. Moreover, with Viet Nam having joined ASEAN and having normalised relations with the US, the mid-1990s saw the country's first foreign investment boom.

Viet Nam's second foreign investment boom occurred in the mid-2000s. In addition to foreign enterprises' increased focus on Viet Nam from around 2003 as part of their 'China Plus One' investment strategies, the 2006 investment law reforms were instrumental in granting IPs preferential corporation and export taxes. Moreover, Viet Nam's accession to the World Trade Organization (WTO) in 2007 accelerated inward direct investment. The impact of foreign investment on Viet Nam's economy was significant – foreign investment sector exports accounted for over 50 percent of all exports in 2004 and this rose to 68 percent in 2014. The increase in foreign companies in Viet Nam has resulted in clear signs of worker shortage in IPs based in urban areas, leading to the suburbanisation of IPs.

The development of supporting industries has become a major challenge in Viet Nam. In 2012, the government announced its ‘Development Plan for Small- and Medium-Sized Enterprises during 2011–2015 (Decision no. 1231/QĐ–TTg).’ The plan encouraged the establishment of IPs, leased IPs, and industrial zones that are suitable for small and medium-sized enterprises (SMEs). This has led to the setting up of rental factories and the growing popularity of SMEs, which are expected to form the supporting industries.

In July 2015, both the New Law on Investments and the New Law on Enterprises came into effect, intending to promote the establishment of IPs, EPZs, high-tech parks, and economic zones as preferred investment zones. Although there remain many undeveloped provisions in the by-laws, investment approval procedures have been made more transparent, and the business and investment environment in Viet Nam is expected to improve further.

Figure 5.11. Viet Nam – Foreign Direct Investment Inflows



D = Vietnamese dong; bil. = billion.

Source: General Statistics Office of Viet Nam.

5.3.2. Structure and organisation

Each province’s people’s committee has an industrial park management committee, which is responsible for IP development plan preparation, investment promotion, tenant enterprise monitoring, related service proposals, and for issuing investment, import, export, and labour licences to tenant enterprises. The power to issue

investment licences to tenant enterprises was previously held by the Ministry of Planning and Investment, but was later transferred to the industrial park management committees under the 2006 Common Investment Law.

Since the development of IPs is seen as having a significant impact on Viet Nam's social economy, the power to decide IP development policy is held by the Prime Minister.

IP development and administration are conducted by state-owned, local, and foreign enterprises. Although local IPs have cost benefits in terms of rental costs, their tenancy rates in 2006 hovered around 20 percent, whereas foreign-owned IPs enjoyed a tenancy rate of 80 percent.¹⁴ IPs developed by Japan, Singapore, and Thailand provide infrastructure development (including environmental measures) and extensive support, and such IPs have been successful in attracting foreign enterprises.

5.3.3. Effects and challenges

(a) Positive effects

(1) Increased inward FDI and formation of industrial clusters in the North and the South

IE development as well as the enactment and revision of investment laws and policies (e.g. Doi Moi reforms, WTO membership) has opened up Viet Nam to global markets, and has resulted in an increase in FDI. It has also led to industrial clusters with specific characteristics in each region. IPs and EPZs were established early in the southern regions, and hence industry clusters are relatively advanced there. In addition to export-processing enterprises, the southern regions also have many domestic-oriented food processing and consumer electronics enterprises.

The central government has been actively working on infrastructure and institutional development in the northern regions with a view to attracting investment. Efforts made in the early 2000s to develop infrastructure and institutions in the northern regions (centred on Ha Noi), in tandem with Canon (Japanese producer of office automation equipment) as an anchor enterprise, led to the establishment of industrial clusters. Efforts were also made to develop the infrastructure in Bac Ninh Province

¹⁴ 'Fact-finding survey of recent Land Law and Enterprise Law revisions in Viet Nam' conducted by Organization for Small & Medium Enterprises and Regional Innovation (March 2006).

and Thai Nguyen Province to attract Samsung Electronics Viet Nam (SEV) and its suppliers by providing highly preferential corporation tax rates and a prioritised customs clearance system. SEV started the test production of smartphones in 2009, and by 2012 the company's exports accounted for up to 20 percent of Viet Nam's total exports, allowing Viet Nam to escape from its chronic trade deficit.

(2) Optimisation through devolution

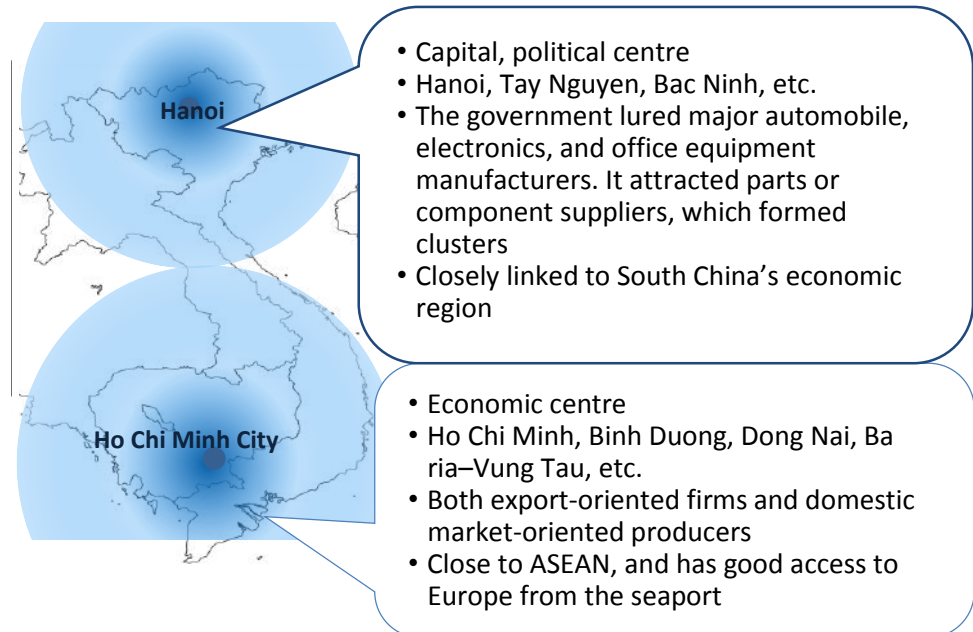
Through devolution, the central government empowered each region's people's committee and industrial park management committee to decide on investment policies for general investment projects, which is expected to optimise the time and efforts needed for investment procedures. This contributed to efficient investment promotion in the urban areas and nearby provinces, where the locations were favourable. However, this devolution did not by itself result in automatic success of IEs in periphery provinces.

(b) Challenges

(1) Development of IPs and increasing tenancy rates

Many local governments and enterprises build IPs to attract foreign investment in the hope of creating jobs and increasing revenue, which leads to unhealthy competition in unfavourable locations. With regard to various IP maintenance standards, some fail to match the needs of foreign enterprises or to satisfactorily take into consideration environmental factors. In other words, they do not provide the basic infrastructure needed to carry out the functions of an IP. This has resulted in IPs having conspicuously low tenancy rates, and hence the idea of shrinking or closing IPs through government policy is currently being considered. In August 2015, Lam Dong Province (located in the central plateau region of Viet Nam) submitted a proposal for an amendment to the IP development plan for 2020; it recommended shrinking the size of IPs and this was approved by the Prime Minister.

Figure 5.12. Characteristics of Two Main Areas



ASEAN = Association of Southeast Asian Nations.
Source: MAPIO and various materials.

As with IPs, the approval of a large number of investment projects without any deliberation has led to an increase in the number of projects that has never started. By 2014, 5,573 units aided by foreign investment (US\$85.5 billion) were approved, but only 57 percent of these (US\$49.9 billion) were operational. IP management companies are looking into ways to reclaim land from enterprises that do not actualise their investments as tenants. In urban areas such as Ho Chi Minh City, IPs have limited the acceptance of low-tech enterprises to increase tenancy rates, as the people's committee and the IP management committee relocate low-tech enterprises to suburban (other provinces) IPs.

(2) Preparing and making the legal framework transparent

The lack of a legal framework and the complexity of its administrative procedures have been the greatest risks in terms of Viet Nam's investment environment. Foreign enterprises and governments have sought reductions in the time it takes to acquire a licence and in the ambiguity caused by differing interpretations and execution of laws by a central government ministry and related provincial agencies. The New Law on Investments and the New Law on Enterprises were enacted in July 2015, and one of the aims of the revision had been to simplify investment procedures. But despite an

increase in the number of licences, even a month after the laws had been enacted no detailed guidance had been provided and approval procedures had been temporarily suspended.

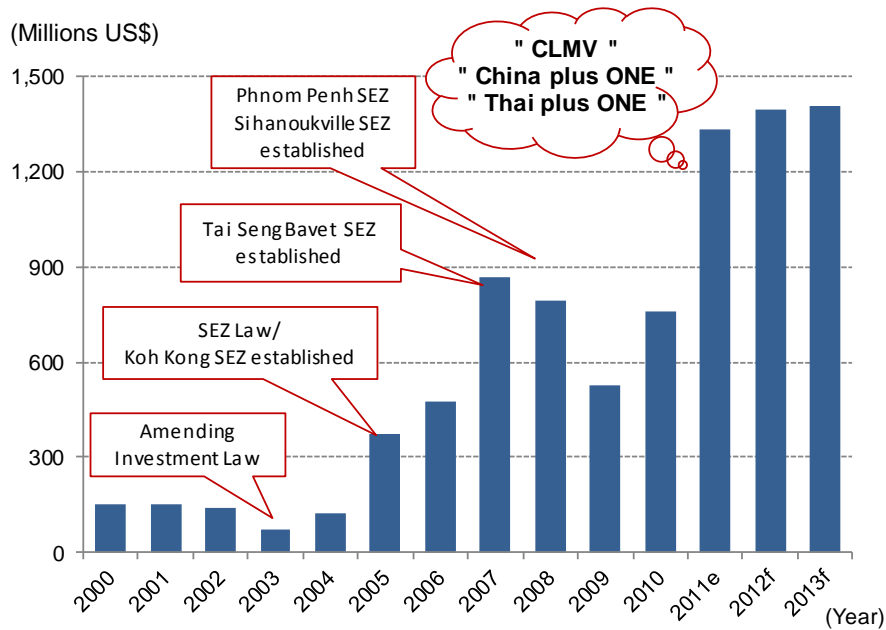
5.4. The Case of Cambodia

5.4.1. Development history

Establishment of IEs is a relatively recent development in Cambodia; it began in 2005. The government of Cambodia, in accordance with the rules of the WTO 2004 Protocols of Accession and those of compliance at the time of accession, has been working to improve the country's business and investment environment. The Council for the Development of Cambodia (CDC), which holds jurisdiction over the country's investments and reconstruction initiatives, was established by the Law on Investment enacted in 1994. Moreover, the 2001 Socio-Economic Development Plan (SEDP), which was intended to serve as an engine for economic growth and to attract foreign investment, was amended by the Law on Investment in 2003. In 2005, a decree was issued regarding Special Economic Zones (SEZs), which assigned responsibility for the development and management of SEZs to the Cambodia Special Economic Zone Board (CSEZB), which operates under the aegis of the CDC. Since 2005, various SEZ-designated areas have been established to attract foreign businesses, primarily in the manufacturing industry.

The SEZ law was enacted to further facilitate foreign investments according to the World Bank; since the establishment of SEZ-designated areas in 2005, investments have increased (Figure 5.13). Following a decrease in investments in 2009 due to the impact of the global economic recession, since 2010 Cambodia has seen high levels of foreign investment, even compared with 2008 and the previous years. In light of wage increases in neighbouring countries such as China and Thailand, Cambodia's abundant labour force and its geographical proximity have been contributing to increased investment. Throughout 2015, amendments to the Law on Investment and the SEZ law have been discussed to resolve any operational discrepancies. Although the amendments have yet to be finalised, they would contribute to a further streamlining of relevant laws and regulations.

Figure 5.13. Cambodia – Foreign Direct Investment Inflows



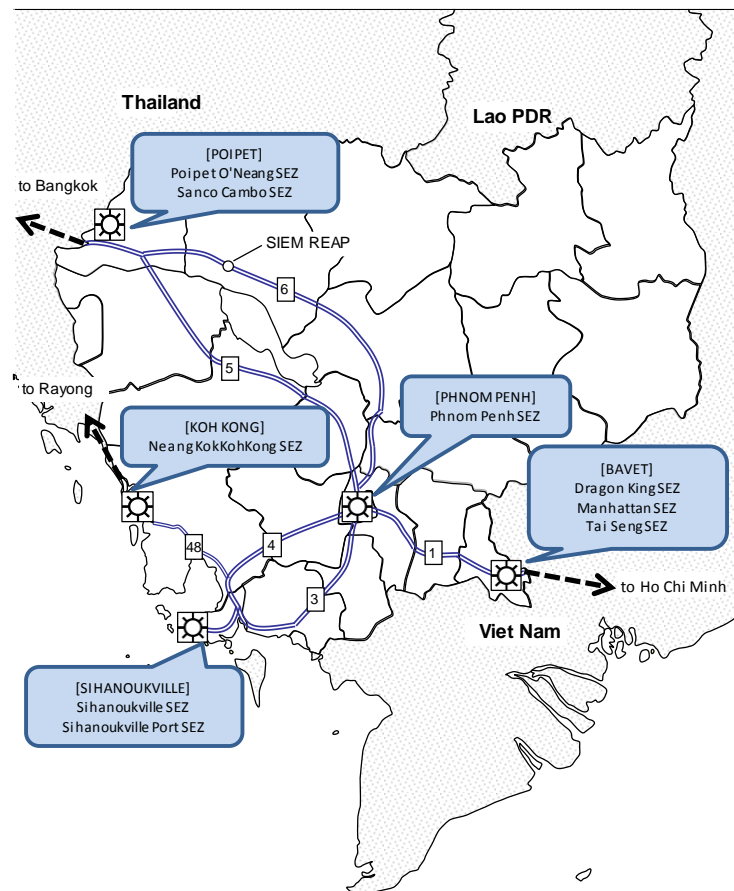
SEZ = Special Economic Zone; CLMV = Cambodia, Lao PDR, Myanmar, and Viet Nam.

Source: World Bank, 'East Asia and Pacific Economic Update Key Indicators.'

The establishment locations and operating policies for SEZs are decided by each SEZ management company. Main SEZ locations can be classified into three categories (Figure 5.14):

- (1) the capital city area (Phnom Penh), which has advantages in securing workforce, living conditions, and relatively well-maintained infrastructure;
- (2) the harbour area (Sihanoukville), which has locational advantage in exporting final products to European and American markets from the seaport; and
- (3) the land border areas (Bavet, Poipet, Koh Kong), which become receiving bases for companies forming regional production networks (with Bangkok and Ho Chi Minh City areas).

Figure 5.14. Primary SEZ Areas of Cambodia

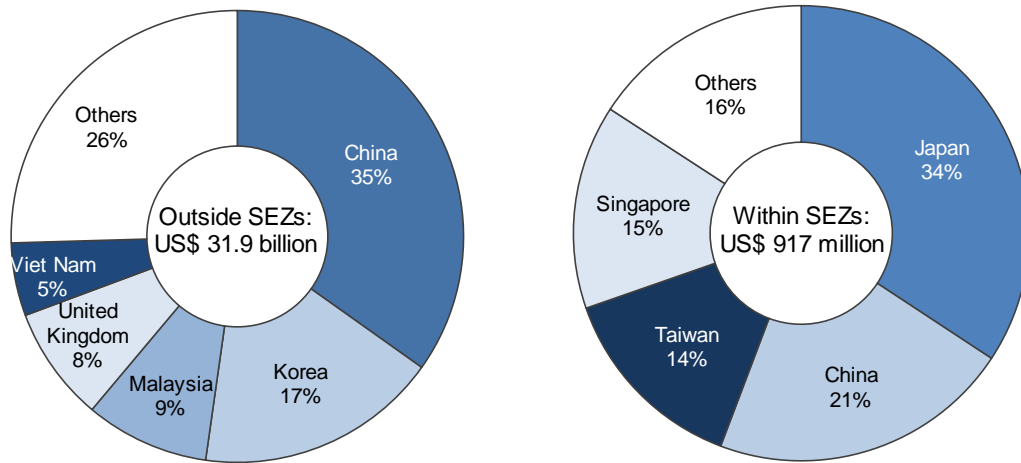


SEZ = Special Economic Zone.

Source: Compiled from various materials.

In terms of investment amounts by country of origin as shown in Figure 5.15, China was the biggest investor outside SEZs from 1994 to 2004, accounting for about 35 percent of total investment, and Japan was the biggest investor within SEZs, accounting for one-third of total investment during the same period. Whereas Chinese investment largely goes into real estate development, Japanese investment mainly focuses on the manufacturing sector, resulting in the latter's higher share inside SEZs. From the manufacturers' point of view, investment incentives and well-developed infrastructure are the main reasons for residing within SEZs.

**Figure 5.15. Foreign Investment in Cambodia
(Outside SEZs and Within SEZs, 1994–2014)**

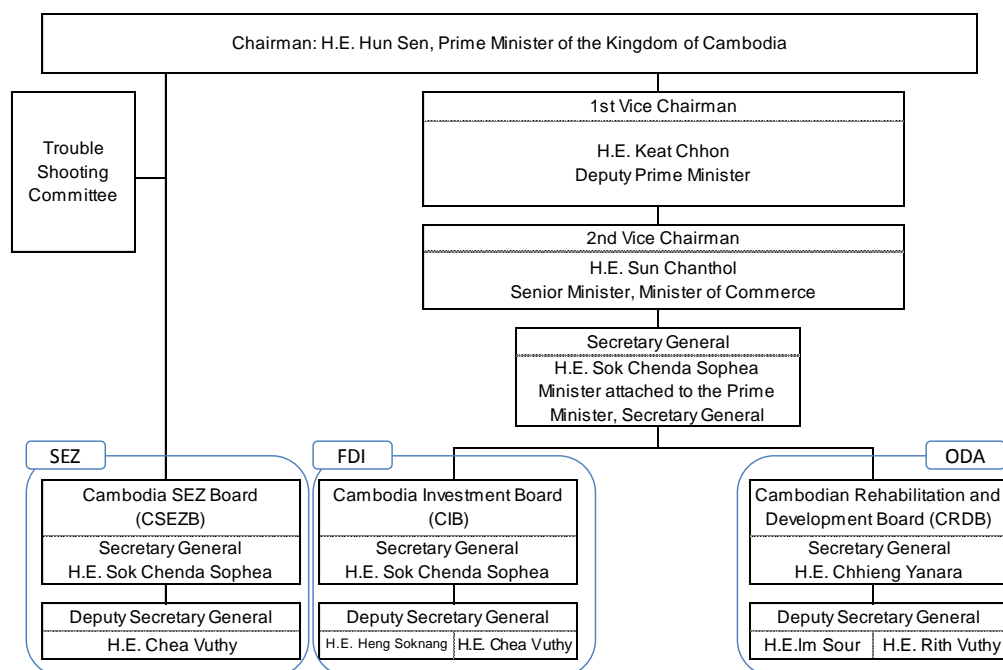


SEZ = Special Economic Zone.
Source: Compiled from CDC materials.

5.4.2. Structure and organisation

The CSEZB, which operates within the CDC, holds jurisdiction over investments in SEZs, and is also in charge of development, operation, and management of SEZs. The CDC, with the Prime Minister as its chairman, operates as the body specifically responsible for investment and reconstruction (support from abroad) activities in Cambodia, and handles the management and operations regarding investments altogether.

The CSEZB is responsible for approving requests for the establishment of SEZs and sending resident staff to the one-stop service office in SEZ areas. Overseeing the investment and reconstruction (support from abroad) activities directly under the Prime Minister allows for a speedy approval process due to a centralised authority and collective management system. It is beneficial for investors that one institution has jurisdiction over investments. It also makes the application procedures relatively simple.

Figure 5.16. Council for the Development of Cambodia (CDC): Organisational Chart

SEZ = Special Economic Zone; FDI = foreign direct investment; ODA = Official Development Assistance.
Source: Retrieved from CDC documents.

5.4.3. Effects and challenges

(a) Positive effects

(1) Attraction of foreign companies and job creation

FDI has been increasing since the establishment of SEZs. In addition, as reported by the Asian Development Bank (ADB), 93.8 percent of the companies within SEZs and 38.4 percent of those outside SEZs are managed by foreign capital (Warr and Menon, 2015). As SEZ development proceeded, Cambodia's secondary industry absorbed a large number of workers. According to World Bank statistics, the number of workers in secondary industries in Cambodia increased from 500,000 in 2000 to 1.6 million in 2012 and the proportion of workers employed by corporate entities rose from 15.2 percent in 2000 to 31.4 percent in 2011. According to Warr and Menon (2015), companies in SEZ-designated areas have relatively large-scale employment.

(2) Development of the export industry and its diversification

In Cambodia, most foreign companies residing in SEZ-designated areas engage in export processing operations. Moreover, some companies have developed region-

wide production networks that cover both Cambodia and its neighbouring countries. For instance, a car parts supplier transports materials from Thailand, then assembles in Cambodia and ships the products back to Thailand, where they are sold. Such participation in regional transactions brought about increased value added in Cambodia. It is hoped that such activities will help eliminate the trade deficit.

Moreover, the establishment of SEZs had resulted in an increase in the number of foreign companies in Cambodia, which eventually led to the entry of previously non-prevalent industries such as automobile parts, precision equipment parts, machines, and machine parts. However, diversification of the manufacturing industry has only just begun. To attract industries that use advanced technology in their manufacturing process, it is necessary to improve the investment environment, including the electricity supply.

(3) Infrastructure development inside and outside SEZs

As Cambodia's overall infrastructure is vulnerable, the SEZ secretariat and SEZ tenant companies have pushed forward infrastructure development and rehabilitation in and around SEZs. Although regional infrastructure issues (such as those relating to regional road networks and electricity grids) are not under the authority of the SEZ secretariat, tenant companies have collectively enjoyed much preferable treatment compared with other locations and companies.

(b) Challenges: disparity in management and operation of SEZs

While CSEZB acts as a centralised authority for investment procedures, daily management and operation are the responsibility of each SEZ management company. Among the authorised SEZs, some management companies exist only on paper and do not have any real operations. Also, there are cases in which the requirements of the SEZ are not met. From the investors' perspective, thorough examination of management quality is necessary prior to investment. Even if an SEZ seems to be in a good location, it may lack an operational SEZ office or properly developed infrastructure.

Generally speaking, the SEZs in the Bavet area are of relatively similar standards. The area has good access from Japan and Taiwan via Ho Chi Minh City, and all SEZs have a similar number of companies. However, the situation is different in other areas, where

SEZ management companies differ in quality. The gap is most significant between the two SEZs in the Sihanoukville district. While the tenant companies of Sihanoukville SEZ have exceeded 40 companies, three tenant companies remain in Sihanoukville Port SEZ. In the Poipet district, the planned establishment of a SEZ management office and operating system has been delayed. Due to the management company's poor performance, some companies are reported to have cancelled their planned investment in Poipet and chosen the Phnom Penh SEZ instead.

5.5. The Current Status of Lao PDR

5.5.1. Development history

IE development is a relatively recent topic in Lao PDR. Even though neighbouring Thailand started IE development in the 1960s, Lao PDR did not follow the same path. It was in 2002 that the Lao PDR government established a SEZ in Savannakhet, after the feasibility study on the Second Lao–Thai Friendship Bridge construction had been presented by the Japan International Cooperation Agency (JICA) (S-NCSEZ, 2012).

In 2002, the Savan–Seno SEZ was planned as an experimental site comprising 677 hectares of land in four zones, aimed at promoting domestic and foreign investment in the area. The Lao PDR government served as the developer for the Savan–Seno SEZ and its IE. The development of Savan–Seno SEZ was based on a specific Prime Ministerial decree (Decree on Special Economic Zone Savan–Seno, No. 148/PM, dated 29 September 2003). The Savan–Seno SEZ was intended to attract investment along Road No. 9 linking Thailand to Viet Nam, but its development did not progress smoothly and the government did not approve any other SEZ for a long time after that.

Figure 5.17. SEZs in Lao PDR



No.	IEs	Name	Year	Area(ha)
1	✓	Savan-Seno Special Economic Zone	2002	1,010
2		Boten Beautiful Land Specific Economic Zone	2003	1,640
3		Golden Triangle Special Economic Zone	2007	827
4	✓	Vientiane Industrial and Trade Area	2011	110
5	✓	Saysetha Development Zone	2010	1,000
6	✓	Phoukhyo Specific Economic Zone	2010	4,850
7		Thatluang Lake Specific Economic Zone	2012	365
8		Longthanh- Vientiane Specific Economic Zone	2012	558
9		Dongposy Specific Economic Zone	2012	54
10		Thakhek Specific Economic Zone	2012	1,035
11	✓	Champasak Specific Economic Zone	2015	995

SEZ = Special Economic Zone or Specific Economic Zone; IE = industrial estate; ha = hectare.
 Source: S–NCSEZ presentation material.

The second SEZ was approved in 2010 in Luangnamtha Province (Boten–Daenkham SEZ). In the same year, a general decree (Decree on Special Economic Zone and Specific Economic Zone in the Lao PDR, No. 443/PM) was issued to clarify general provisions applicable to all existing and prospective SEZs. And in December of the same year, the Secretariat to the Lao National Committee for Special Economic Zone (S–NCSEZ) was set up under the Prime Minister’s Office. The formation of S–NCSEZ was an administrative milestone in promoting SEZ development, as it demonstrated the government’s commitment to and engagement in SEZ planning and development.

As of 2015, there were 11 approved Special Economic Zones or Specific Economic Zones (SEZs) in Lao PDR. IEs, however, are limited to only five SEZs, which are highlighted in red in Figure 5.17. According to information from S–NCSEZ, the Phoukhyo Specific Economic Zone is not ready to start operations. Considering that no significant IEs are available other than existing SEZs, operational IEs are limited to four locations in Lao PDR (Savan–Seno, Vientiane Industrial and Trade Area (VITA Park), Saysetha, and Champasak [Pakse–Japan SEZ]).

5.5.2. Structure and organisation

Lao PDR’s SEZs are governed by the Lao National Committee for SEZ (NCSEZ), chaired by the standing Deputy Prime Minister. Daily administration is the responsibility of its secretariat, which had 112 staff on its rolls as of October 2015. Of these, around 60 were posted at the various SEZs, while the rest worked at the headquarters. The original plan of placing North, Central, and South SEZ Authorities (SEZAs) under the secretariat has not been realised yet.

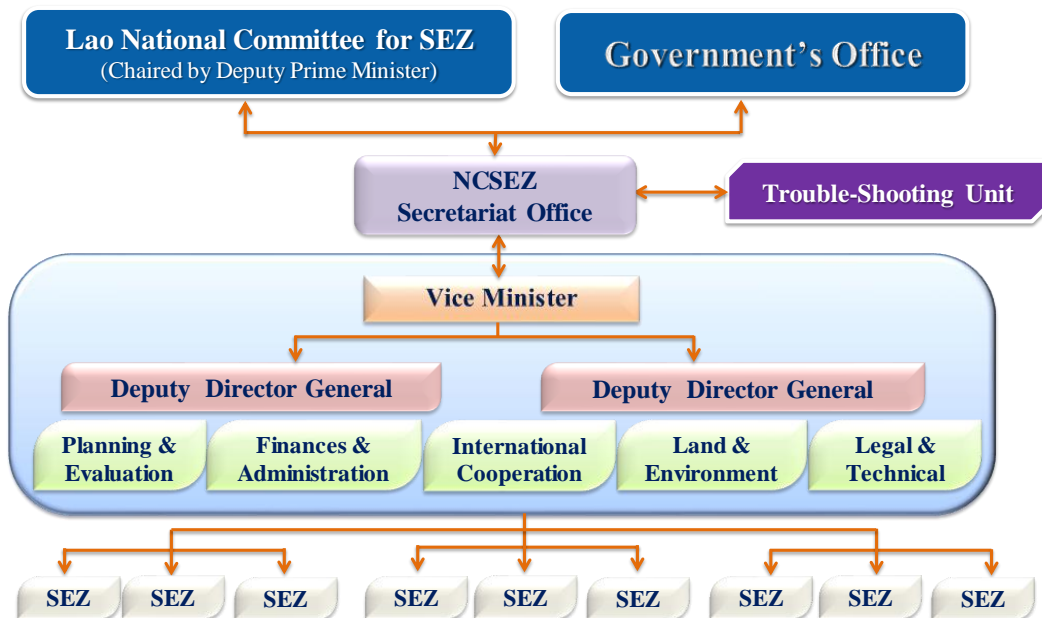
There are two types of SEZs in Lao PDR – ‘Special Economic Zones’ and ‘Specific Economic Zones.’ The Special Economic Zone has greater autonomy in approving investment licences, has multiple objectives, and covers a land area of at least 10,000 hectares. The Specific Economic Zone, on the other hand, should have one or a few specific objectives and must cover less than 10,000 hectares of land area. Following the establishment of this new authority, there have been many proposals from various provinces to establish SEZs. Among the 11 existing SEZs to date, two are Special Economic Zones and nine are Specific Economics Zones approved by the government.

Additionally, many other SEZ development projects are under review by the government.

As for local administration, each SEZ has an economic board for management of the zones, including infrastructure development. The economic board is a joint organisation of public authorities and private developers, and is headed by the majority shareholders of the SEZ; its main role is managerial decision-making. In addition, a management committee has been formed that deals with administrative matters (including licensing) in the case of Special Economic Zones. However, S–NCSEZ plans to abolish management committees in Special Economic Zones to make the management structure simple and coherent in all SEZs.

At each SEZ, the economic board or management committee serves as a window for investment applications. Although they deal with licensing and approval for investment, they are supposed to judge an application in light of the Law on Investment Promotion 2009. Any investor who is unsatisfied with the judgment is entitled to consult S–NCSEZ.

Figure 5.18. Structure of SEZ in Lao PDR



SEZ = Special Economic Zone; NCSEZ = National Committee for Special Economic Zone.
 Source: S–NCSEZ presentation material; edited by DIR based on an interview.

5.5.3. Effects and challenges

SEZs have played a crucial role in attracting FDI, especially non-resource-based FDI, into Lao PDR. As one of the poorest countries in the region, the quality of hard and soft infrastructure is relatively poor. Therefore, the government designates investment-promoted areas such as SEZs, where the quality of infrastructure is generally better and FDI-related regulations are more streamlined. In addition, most of the SEZs are located in strategic locations with easy access to neighbouring countries. Investors who invest inside SEZs can benefit from these advantages. Investors who invest inside SEZs are generally more satisfied with the quality of government administration and infrastructure than those who invest outside these zones.¹⁵

SEZs have facilitated Lao PDR's connectivity with the regional production networks. Most of FDI inflows into Lao PDR has been in the natural resource sectors such as hydroelectricity and mining. Only recently has non-resource FDI linked with regional production networks begun to eye the opportunities in Lao PDR. Unlike other neighbouring countries, these companies decide to invest in Lao PDR mainly to benefit from low wages.¹⁶ Reduction in transportation cost due to the improvement in transport infrastructure between Lao PDR and Thailand, more simplified and more efficient cross-border customs clearance, and a better investment climate have also contributed to a wider and deeper division of labour between Lao PDR and neighbouring countries. Light and labour-intensive manufacturing firms that have their production base in neighbouring countries, particularly Thailand, have begun to expand their activities to SEZs in Lao PDR. These include firms in garments, camera parts assembly, car parts assembly, electronic parts, components assembly, and a few other sectors. All products are then re-exported for further processing in Thailand. Other popular sectors include real estate, logistics, trading, and other services. Tables

¹⁵ Foreign direct investors located inside SEZs give higher ratings for government administration, infrastructure, and other investment related indicators compared with those based outside the zones (Umezaki et al., 2014).

¹⁶ According to Umezaki et al. (2014), 73 percent of the sample responded that their main reasons for investing in Lao PDR is to gain from low wages, whereas 87 percent of the sample in Myanmar and 91 percent of the sample in Viet Nam invest there for the benefits of new market opportunities.

5.11 and 5.12 show major activities of investors in Savan–Seno SEZ and Vientiane Industrial & Trade Area (VITA) Park, which are two of the most active SEZs in Lao PDR.

Table 5.11. Investment in Savan–Seno SEZ, Savannakhet

Investing Country	Committed FDI (%)	Major Sectors
Thailand	29	Developer of site A (80%), services, and manufacturing
Malaysia	23	Real estate, developer (site C), and services
Lao PDR–Japan	13	Developer (site B)
France	13	Manufacturing, real estate, investment consultancy
Japan	11	Manufacturing (80%), logistics, and other services
Lao PDR	6	Service (duty free and logistics, 56%); manufacturing (31%); trading (11%)
China	4	Garment, investment consultancy, trading
Korea	1	Service (factory for rent)
Netherlands	1	Real estate, manufacturing (airplane parts)
Australia	0	Trading and trade consultancy
Lao PDR–Thailand	0	Construction

SEZ = Special Economic Zone.

Source: Data from Lao National Committee for Special Economic Zone, estimated by the authors from NERI.

Table 5.12. Investment in VITA Park, Vientiane Capital

Investing Country	Registered Capital (%)	Major Sectors
China	34	Manufacture computers/telephone parts, welding, used metals, furniture
Japan	33	Manufacture electronic parts and tools
Thailand	21	Manufacture food and non-alcohol beverage products, process agriculture products
Malaysia	6	Real estate, services
Denmark	3	Garment
Lao PDR	3	Construction

VITA = Vientiane Industrial & Trade Area.

Note: Data includes only firms that have realised more than 50 percent of their intended operational capacity and excludes developers.

Source: Data from Lao National Committee for Special Economic Zone were estimated by the authors from NERI.

Despite recent positive developments in establishing SEZs in Lao PDR, several challenges should not be neglected. Following the success of Savan–Seno SEZ, many SEZs have been approved and most of them are in the pipeline. If many more SEZs are

developed, the potential benefits from SEZs might not be maximised. There could be greater competition among SEZs leading to a possible ‘incentive war,’ which will bring limited benefits to the economy. Linkages between foreign investors in the SEZs and local firms should be promoted more, so that there could be more spillover benefits for the rest of the economy. Improving labour skills is crucial for providing a high-quality workforce for these expanding SEZs.

5.6. Lessons and Policy Recommendations for Lao PDR

5.6.1. Lessons from neighbouring countries

The experiences of Lao PDR’s neighbouring countries show that IEs play a key role in forming industrial clusters, which is essential for the industrialisation and economic development of an emerging country. Table 5.13 summarises the comparison of IEs/SEZs in Lao PDR and its three neighbours – Thailand, Viet Nam, and Cambodia.

Table 5.13. Comparison of IEs/SEZs in Lao PDR and its Neighbouring Countries

	Lao PDR	Thailand	Viet Nam	Cambodia
Start of SEZ/ Industrial Estates	1990s	1960s	1990s	Late 2000s
Approx. No. of Industrial Estates	4 (out of 11 SEZs)	80	300	14
Significant Industrial Clusters	(Emerging)	Automobile, electric machinery in/around Bangkok, heavy machinery and chemical in the Eastern Sea Board	Electronics and automobile in/around Ha Noi (e.g. Samsung and its suppliers), broader sectors in/around Ho Chi Minh City	RMG in the east border area, labour-intensive ‘Thailand + 1’ in the west border area, broader sectors in/around Phnom Penh

IE = industrial estate; SEZ = Special Economic Zone; RMG = ready-made garment.
Source: DIR from various materials.

In terms of development locations, lessons can be drawn from the experiences of Thailand, Viet Nam, and Cambodia. In the case of Thailand, IE development concentrated in the Bangkok metropolitan area and its suburbs. Although the country has greatly benefitted from the industrial cluster there, excessive concentration and regional imbalance have been a major concern.

On the other hand, nationwide IE development will not be the best policy either. As the Vietnam's experience shows, it will result in low occupancy in unfavourable locations and inappropriate allocation of the limited funds available. Viet Nam has succeeded in developing two main clusters in Hanoi and Ho Chi Minh City, but IE development in every province did not lead to cluster formation nationwide.

Cambodia's strategy has been reasonable in terms of balanced development without an inappropriate distribution of resources. It has chosen to focus on the Thai and Vietnamese borders and a seaport area, along with the capital city Phnom Penh. The border and the seaport areas have the advantages of lower trade cost compared with foreign industrial clusters (Bangkok is easily accessible from the Thai border, Ho Chi Minh from the Vietnamese border, and advanced economies from the seaport), although their development might be restricted by their population size. Meanwhile, Phnom Penh, being the capital and largest city, has benefitted from its human capital and abundant labour force. Thus far, Cambodia has taken a step forward to relatively balanced development through industrialisation; but many challenges remain.

Table 5.14. Development Locations and Results

	Locations	Positive results	Negative issues
Thailand	Mostly in/around Bangkok	Formation of a significant cluster in Bangkok	Excessive concentration and imbalance
Viet Nam	Many provinces	Formation of clusters in Ha Noi and Ho Chi Minh City	Low occupancy in unfavourable locations with poor infrastructure
Cambodia	(1) Phnom Penh, (2) Near Thai/Vietnamese borders, (3) Near a seaport	Formation of a cluster in Phnom Penh, with increased attention to border areas	

Source: DIR.

5.6.2. Policy recommendations

IEs will clearly not function without being equipped with adequate infrastructure. Both hard and soft infrastructure are indispensable – notably electricity, water, and administrative support. In terms of development locations, the Lao PDR government should consider at least the following factors in the formation of policies.

Population and Existing Economic Activities

As industrialisation cannot be possible without sufficient labour supply and supporting commercial activities, population and existing commercial activities are essential in forming an industrial cluster. Given the small population of Lao PDR, IE development has to locate in relatively big cities of several hundred thousand people. Otherwise, poorly located IEs would suffer from low occupancy or even bankruptcy, incurring a huge loss to the country as a whole. Therefore, policymakers should refrain from constructing more IEs than can be supported by potential demand and the local labour force, and should consider using resources effectively for the operation of IEs.

Access to Larger Industrial Clusters beyond the Border

As exporting manufacturers would be the main drivers of industrial development, the trading costs from domestic IEs should be minimised. Given the geographic location of Lao PDR, the agglomeration in Bangkok should be the prime industrial core to integrate with. Lao PDR would most likely receive the largest benefits from developing IEs that are close to the bridges over the Mekong River.

In this sense, IEs in Vientiane, Thakhek, Savan–Seno, and Pakse are ideally located in Lao PDR. But, in terms of integration with Bangkok, these four SEZs would have to compete with the Cambodian SEZs in Koh Kong in the southwest border area, and Poipet on the southern economic corridor. To successfully compete with Koh Kong and Poipet, Lao PDR needs to develop favourable business circumstances, especially in terms of shortening transport time to Bangkok and reducing logistic costs. To put it concretely, policymakers should consider (1) extending the business hours of customs clearance, (2) simplifying customs procedures, and (3) consolidating logistics services. (The third point will also be discussed in Chapter 6.) Given the limited resources available, for the time being Lao PDR should focus on further developing existing IEs.

In the longer term, agglomerations in Viet Nam may grow following Bangkok. If that happens, Viet Nam's neighbouring countries may benefit from developing IEs in that border area. Compared with Cambodia, Lao PDR has better access to Hanoi. To benefit from the linkage to the agglomeration of Hanoi, Lao PDR would need to improve the road infrastructure between Thakhek and Hanoi first.

Start-up Funding for Infrastructure Projects

In establishing a new IE, essential hard and soft infrastructure, such as electricity, transportation, and management offices, need to be prepared. The problem is that it will take much time and money to develop all types of infrastructure, and the Lao PDR government may find it difficult to properly equip IEs with all they need within a short period. Learning the lessons from early IE development in Thailand, policymakers are well advised to continuously negotiate with donor countries – such as China, Japan, the US, and the European Union as an entity – for future support of IEs and surrounding infrastructure development.

References

- ASEAN–Japan Centre website, *List of Industrial Parks (Thailand)*. Available at: http://www.asean.or.jp/ja/invest/about/country_info/thailand/invest_info/industrialestate.html (accessed on 29 January 2016).
- Shimomura, Y. (2000), 'Economic Development and Institutional Capability: The Case of the Eastern Seaboard Development Program of Thailand', *Hosei University Ningen Kankyo Ronshu*, 1(1), pp.53–71, 31 March (in Japanese).
- Singapore Government, National Library Board website (n.d.), *Singapore infopedia: Jurong*. Available at: http://eresources.nlb.gov.sg/infopedia/articles/SIP_246_2004-12-16.html
- The National Committee for Special and Specific Economic Zone Secretariat Office (S-NCSEZ) (2012), 'Development Strategy for Special and Specific Economic Zone (SEZ) in the Lao PDR, 2011–2020', Vientiane Capital: S-NCSEZ. Available at: http://lao-vita.com/upfiles/20158520517_DevelopmentStrategyeng.pdf
- Umezaki, S., C. Sotharith, V. Nolintha, A. Min, and T.D. Lam (2014), 'Investment Climates for Thai and Multi-National Companies in the CLMV Countries,' presented at Final Reporting Workshop on 'Prospects for Forming Mekong Business Area: Thai Plus One Corporate Strategy and Its Supporting Policies', Bangkok, 6 September.

Warr, P. and J. Menon (2015), 'Cambodia's Special Economic Zones', *ADB Economics Working Paper Series*, No. 459 (October), Manila: ADB. Available at: <http://www.adb.org/publications/cambodia-special-economic-zones>