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## **Local Economic Development to Support Opportunities and Impacts from Special Economic Zones Along the Greater Mekong Subregion Southern Economic Corridor: Case Studies in Kanchanaburi and Trat Provinces**

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### **Abstract**

The main objectives of this study are to examine the sustainable local economic development potential of Kanchanaburi and Trat provinces in the Special Economic Zones along the Greater Mekong Subregion Southern Economic Corridor by taking into account the connection between Thailand and the neighboring countries. In addition, this study evaluates the economic and social opportunities and impacts of the Special Economic Zones along the Greater Mekong Subregion Southern Economic Corridor. The methodology of this research includes local economic analysis based on the Keynesian theory of national income determination. The study finds that major limitations hindering the rapid growth of Kanchanaburi and Trat provinces in Thailand lie in the inefficient use of land, the inability to fully connect the agricultural product to the processed agricultural product supply chain, the inability to manage risk involving agricultural products' prices and production volume, border access limitation between Trat and Koh Kong Special Economic Zones in Cambodia, and delays in the road infrastructure construction projects such as two-lane road in Dawei Special Economic Zones project in Myanmar.

### **Keywords**

Local economic development, Special economic zones, GMS southern economic corridor, Thailand

## **Introduction**

The areas along the Greater Mekong Subregion (GMS) Southern Economic Corridor (SEC) are considered economic corridors with high potentials opportunities as they are connected to the Eastern Economic Corridor (EEC). Because they can be linked to SEZs in Myanmar and Cambodia, both may mutually benefit from existing regional partnership agreements for economic developments, such as the ASEAN Community Agreement, the Greater Mekong Sub Region agreement, future trade and investment agreements. Several studies have been dedicated to economic corridors and countries in the GMS-SEC. The concentration of development along the transport routes boosts economic growth and allows economies of scope and scale (Ishida 2008, Phi 2012, Wiemer 2009). These concentrated local developments contribute to the larger realm of the global value supply chain and promote the tourism industry (Phi 2012, Wiemer 2009). However, major constraints presented problems on the development of GMS-SEC, such as the poor state of physical infrastructure and limited technology equipment (Sisovanna 2012, Min & Kudo 2012). GMS-SEC developments may also cause negative social impacts such as the spread of communicable diseases, human trafficking, environmental problems, and traffic accidents (Sisovanna 2012, Min & Kudo 2012).

Thailand has established 10 Thai provinces Special Economic Zones (SEZs) for the development of the border economy through domestic and international resources. Some factors of production were moved to neighboring countries to solve domestic labor shortages and to gain transport corridor to neighboring countries' markets. Supatn (2012) finds that Thailand maintains the policy of building long term relationships with neighboring countries to enhance the competitive advantages of the region. The connection and development of the local economy to the regional economy increases income and income distribution, which solve poverty and induce inclusive growth.

Local Economic Development (LED) is one of the important guidelines to stimulate economic growth and increase local income. It is a measure to generate microeconomic growth and help promote and support macroeconomic performance of the government (World Bank 2011). Economic development in the border areas linked to the neighboring countries is particularly beneficial, therefore, it helps to achieve the goal of mutual international developments. However, the LED depends on numerous factors, such as natural resources, laborers, investment capitals, local industry components, local entrepreneurs, technologies, transportation, communication, target markets, and the capacity of local organizations and agencies. The LED must consider the international agreement dimension and make use of neighboring countries' lands as a contributing factor in propelling the developments forward.

The main objectives of this study are 1) to analyze the LED potential for the sustainability of the provinces in the GMS-SEC by taking into account the connection between Thailand and the neighboring countries, 2) to evaluate the economic and social opportunities and impacts of the SEZs along the GMS-SEC, and 3) to provide recommendations for the sustainable economic development to support the opportunities and impacts of the SEZs along the GMS-SEC establishments. The contributions of this study may assist the following audiences: 1) agencies related to central and regional LED can use the research results for appropriate planning of the LED in the GMS-SEC for sustainable benefits, 2) entrepreneurs and investors can use the research data and results to determine appropriate investment strategies, and 3) to obtain the final report and policy brief that can be used as guidelines for the policy planning of government agencies and the private sectors.

### **Research Methodology**

The methodology of this research is the local economic analysis based on the Keynesian theory of national income determination model. The scope of this research include 1) analyzing the appropriate LED guidelines in the economic, social, and the GMS-SEC international cooperation contexts while considering its consistency with the development strategies and sustainable developmental measures of the SEZs along the borders of Thailand its neighboring countries; 2) evaluating the LED opportunities and capacities in two provinces (Kanchanaburi & Trat) with the SEZs along the GMS-SEC by analyzing trade and international development capacity; 3) conducting in-depth interviews with representatives from local entrepreneurs, government agencies, and private sectors in Thailand, Myanmar, and Cambodia; and 4) establishing the LED recommendations to support the opportunities and impacts of the establishment of GMS-SEC that covers the dimensions of infrastructure development, investment promotion, tax policy, local management development, human resource development, and international cooperation development.

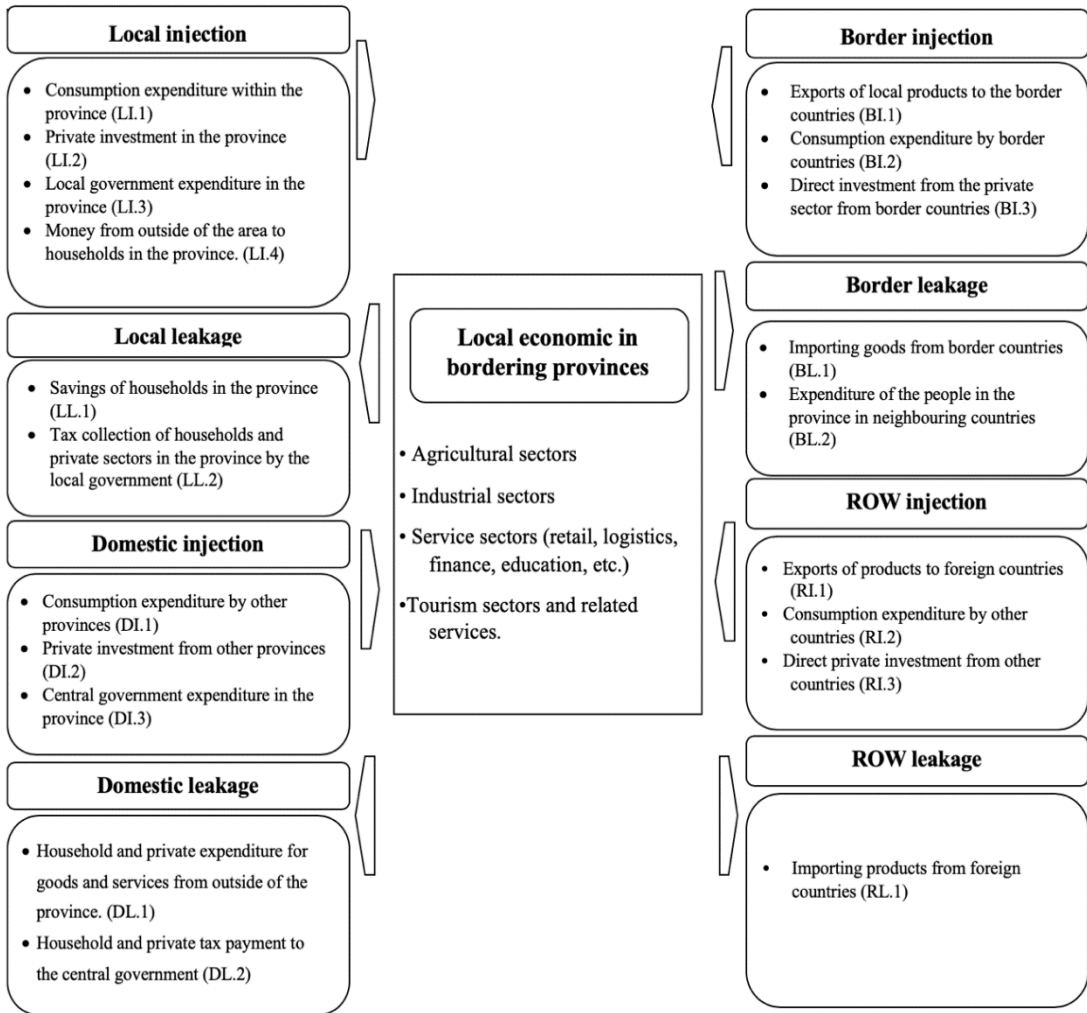
The analytical framework applied in this research is an adapted local economy analysis based on the Keynesian theory of national income determination. The theory suggests that multiple factors contribute to the national income of an economic system, such as household expenditure, private investments, government expenditure, or net imports from outside of the economic system. When applied to local economic analysis, economic outlooks of the provinces in the SEZs along the GMS-SEC, the hypotheses of the model were adjusted as follows:

1. National income or the economic size of the province will be determined by the following factors: household consumption in the province (Consumption: C), private investments in the province (Investment:I), government expenditure in

the province (Government expenditure:G) and trading or selling products with open economy (Net export: NX).

2. Government expenditure consists of expenditures by the central government and local governments.
3. Trading under an open economy can be categorized into three levels: a) the exchanges of goods and services or economic investment in other provinces, b) the exchanges with the border countries which is separated to understand the size and importance of border country trade, and c) exchanges with foreign countries that are not border countries (Rest of the world: ROW).
4. Various economic behaviors occur including expenses that cause money injection into the economy such as the expenditure of various sectors or the export of goods to other economic systems. This also includes leakages that cause money outflow from the economic system such as saving, taxing collection, or import of products from other economies which will decrease money circulation in the province.

From the abovementioned hypotheses, the local economy determinants can be grouped into 20 key variables as shown in Figure 1.



**Figure 1** Local Economy Determinants at Provincial Level

## Results

From the analysis framework, determinants of the local economy in each variable are identified and grouped into injection and leakage of the economic system (Table 1-4). The research team analyzed relevant determinants of the real sectors, such as agricultural, industrial, service, and tourism sector, to examine the current situation for future improvements. These were conducted primarily through the qualitative data obtained from the literature review, interviews, and focus group studies.

### **Analysis and Proposal Development for LED Strategies: Kanchanaburi**

Based on the analysis of opportunities for LED of Kanchanaburi province in the SEZs along the GMS-SEC, the study found that both the local injection factors and local leakage factors are considered low except for the private investment in the province. The economic structure has changed little over the past several years. Domestic injection and leakage factors for agricultural, industrial, service, and tourism sector appeared to be medium to high except for household and private tax payments to the central government.

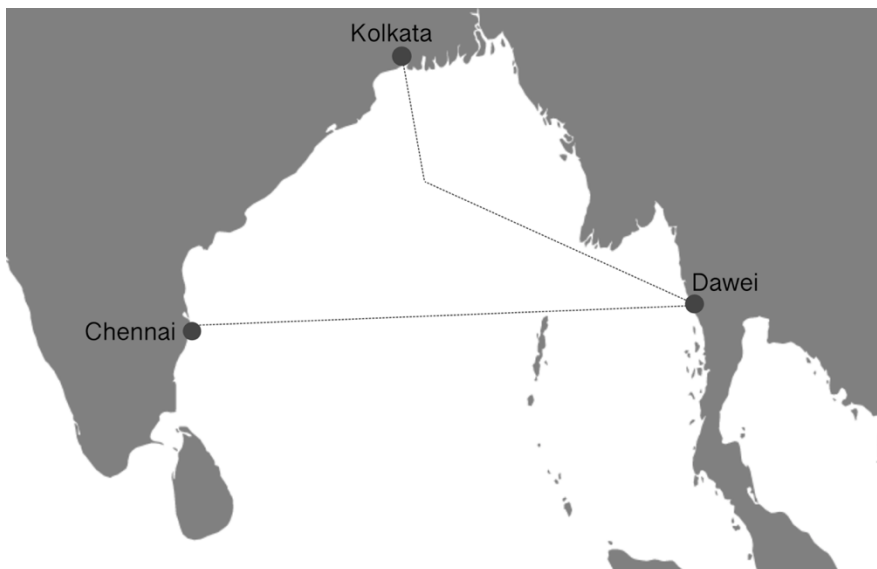
If the road construction to Bang Yai is completed, there will be an increase in opportunities for trade activities in the future. The completion of road construction between Ban Phu Nam Ron and Dawei SEZs will significantly increase border trading. Both border and rest of the world factors are considered for more effective infrastructure. In terms of the connection between Kanchanaburi and Dawei SEZs in Myanmar as shown in figure 2 and 3, a permanent checkpoint has been established by Thailand but still waiting for a similar checkpoint in Myanmar has yet to be established. The cooperation between Thailand and Myanmar may provide an example of an effort to obtain spatial benefits in line with the strategies of both countries during the period when the agreement was reached. To illustrate, there is a mutual benefit between Thailand and Myanmar in Dawei SEZs such as an area increase for a deep-sea port without taking up spatial resources of the country, which is difficult to source and may be opposed by the local community. Building a deep-sea port in the Dawei SEZs has increased the efficiency of Thailand's transportation systems, especially for products from Europe and India that can be shipped to the upcoming deep-sea port and transported through to Kanchanaburi. This can also be connected by road to Laem Chabang port which distributes products to the Pacific. The cooperation also affects the economy throughout the GMS-SEC, resulting in the establishment of investment projects in various sizes to support transportation. This will benefit the area in infrastructure utilization and economic growth.

Based on the analysis above, local economic determinants can be grouped and identify common patterns identified for further development of provincial development strategies. The determinants were grouped based on the potential and importance in the present and the future. The growth-share matrix or BCG Matrix of the Boston Consulting Group (BCG) have been applied during the process and the results are presented in table 1 and figure 4.



**Figure 2** Routes between Ban Phu Nam Ron, Kanchanaburi and Dawei SEZ

**Source:** Research team



**Figure 3** Sea Freight Routes between Dawei SEZ and India

**Source:** Research team

**Table 1** Appropriate LED Strategies Grouped by the Level of Importance to the Local Economy and Trends

(A) Kanchanaburi Local Economy Injection Variables

		Future Importance		
		High	Medium	Low
Present Importance	High	<p><b>Sustaining growth</b></p> <p>The determinants characterized as cash cow are highly important to economic growth and have fairly saturated growth. It should not be neglected but supported by factors conducive to continuous growth.</p> <p><b>Examples: DI.1</b></p>	<p>Mixed strategies</p> <p>should support and prioritize this group of determinants to avoid reducing growth and develop into problem child products in the future.</p>	<p><b>Restructuring &amp; Impact mitigation</b></p> <p>These determinants are comparable to problem child products which question the importance of further development: whether it is worthwhile, should its importance be reduced, and how to mitigate the possible impacts on those involved.</p>
	Medium	<p>Mixed strategies</p> <p>should support and prioritize this group of determinants for further growth and have the chance to become cash cow products in the future.</p> <p><b>Example: LI.1, DI.2</b></p>	<p><b>Business-as-usual</b></p> <p>These determinants have the potential to develop into a cash cow or problem child in the long term; therefore, strategies should prepare to sustain growth.</p> <p><b>Example: DI.3, RI.2</b></p>	<p>Mixed strategies</p> <p>should be taken into consideration and reduce the priority of this group of determinants due to its potential to become dog products in the future.</p>



**Table 1** Appropriate LED Strategies Grouped by the Level of Importance to the Local Economy and Trends (Continued)

(A) Kanchanaburi Local Economy Injection Variables

		Future Importance		
		High	Medium	Low
<b>Present Importance</b>	<b>Low</b>	<p><b>Restructuring &amp; Capacity Building toward Growth</b></p> <p>These are star determinants. Appropriate strategies are to increase the importance and encourage continuous growth rate.</p>	<p>Mixed strategies should support and prioritize this group of determinants to sustain growth and avoid becoming dog products in the future.</p> <p><b>Example: BI.1, BI.2, RI.1, RI.3</b></p>	<p><b>No Intervention</b></p> <p>These determinants are comparable to dog products. In terms of marketing, this group of products has low importance to the development strategy. It grows and changes naturally without demanding resources for strategic intervention.</p> <p><b>Examples: LI.1, LI.3, LI.4, BI.3</b></p>

**Table 1** Appropriate LED Strategies Grouped by the Level of Importance to the Local Economy and Trends (Continued)

(B) Kanchanaburi Local Economy Leakage Variables

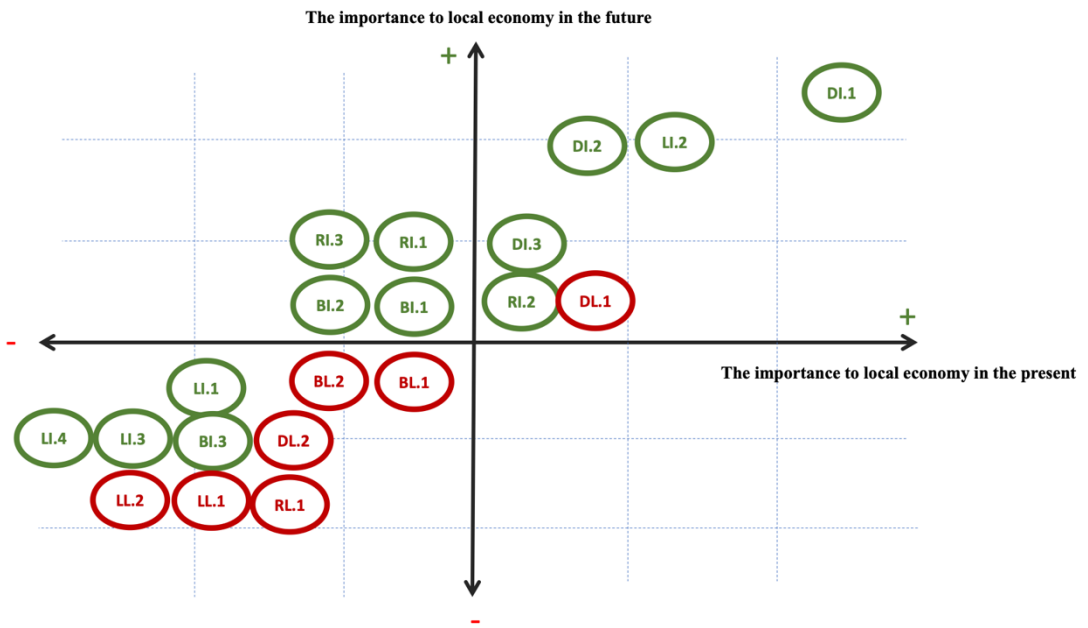
		Future Importance		
		High	Medium	Low
<b>Present Importance</b>	<b>High</b>	<p><b>Control &amp; Alternative Adaptation</b></p> <p>These are problems that encourage and cause leakages in the local economy for a long time and are difficult to avoid. Alternative strategies may be used to reduce the magnitude of the problem.</p>	<p>Mixed strategies should prevent and control leakage factors from developing into serious problems in the future.</p>	<p><b>Withdrawal</b></p> <p>These determinants cause leakage which seriously affected the economy but it will be less strategically important in the future. It grows and changes naturally without demanding resources for strategic intervention.</p>
	<b>Medium</b>	<p>Mixed strategies are challenging factors important to the economy. It is an ongoing problem so priority should be maintained, and strategies should be implemented.</p>	<p><b>Business-as-usual</b></p> <p>Challenging factors with medium importance to the economy. It is an ongoing problem so priority should be maintained, and strategies should be implemented. Importance of strategies are not high.</p> <p><b>Example: DL.1</b></p>	<p>Mixed strategies</p> <p>These determinants are leakages that affected the central economy, but it will be less strategically important in the future. It grows and changes naturally without demanding resources for strategic intervention.</p>

**Table 1** Appropriate LED Strategies Grouped by the Level of Importance to the Local Economy and Trends (Continued)

(B) Kanchanaburi Local Economy Leakage Variables

		Future Importance		
		High	Medium	Low
<b>Present Importance</b>	<b>High</b>	<p><b>Control &amp; Alternative Adaptation</b></p> <p>These are problems that encourage and cause leakages in the local economy for a long time and are difficult to avoid. Alternative strategies may be used to reduce the magnitude of the problem.</p>	<p>Mixed strategies should prevent and control leakage factors from developing into serious problems in the future.</p>	<p><b>Withdrawal</b></p> <p>These determinants cause leakage which seriously affected the economy but it will be less strategically important in the future. It grows and changes naturally without demanding resources for strategic intervention.</p>
	<b>Medium</b>	<p>Mixed strategies are challenging factors important to the economy. It is an ongoing problem so priority should be maintained, and strategies should be implemented.</p>	<p><b>Business-as-usual</b></p> <p>Challenging factors with medium importance to the economy. It is an ongoing problem so priority should be maintained, and strategies should be implemented. Importance of strategies are not high.</p> <p><b>Example: DL.1</b></p>	<p>Mixed strategies</p> <p>These determinants are leakages that affected the central economy, but it will be less strategically important in the future. It grows and changes naturally without demanding resources for strategic intervention.</p>

From (A) and (B) in Table 2, the change in direction of the local economy determinants can be illustrated in the following figure.



**Figure 4** The Local Economic Determinants have Different Levels of Importance to the Local Economy in Kanchanaburi

Based on figure 4 above, each of the 20 local economy determinants has different levels of importance to the local economy in Kanchanaburi. Subsequently, this has led to various local economic development strategy proposals which can be summarized in groups that should receive high priority as follows in table 2.

**Table 2** Kanchanaburi LED Strategy Proposals

<b>Strategic Development Guidelines</b>	<b>Local Economy Determinants</b>	<b>Examples of Development Guidelines</b>
<b>(1) Sustaining growth</b>	Consumption expenditure by other provinces (DI.1)	<ul style="list-style-type: none"> <li>• Promotion, facilitation, and preservation of tourism quality standards for domestic tourists. For example, the development of tourism utilities in roads and harbors. Tourism marketing in promoting tourist routes to Cambodia and Vietnam for Thai tourists with transportation and tour services provided from Kanchanaburi.</li> <li>• Promotion and maintenance of standard quality for agricultural products and local products of Kanchanaburi. For example, the traceability system in the food industry, promote OTOP product marketing, promote GI agricultural product marketing, and promote farm standards certification programs, such as GAP and Organic Thailand.</li> </ul>
<b>(2) Enhancing growth</b>	Private investments in the province (LI.2)	<ul style="list-style-type: none"> <li>• Promoting trade and investment in Trat to entrepreneurs, such as establishing a distribution center, commercial port, central agricultural market, souvenir shops, local product shops, restaurants, and homestay businesses to increase economic opportunities, especially during the low tourist season.</li> </ul>

**Table 2** Kanchanaburi LED Strategy Proposals (Continued)

Strategic Development Guidelines	Local Economy Determinants	Examples of Development Guidelines
<b>(2) Enhancing growth</b>	Private investments in the province (LI.2)	<ul style="list-style-type: none"> <li>• Offering financial incentives, such as tax reductions, for small and medium enterprises (SMEs) in Trat within the Special Economic Zones (SEZs).</li> <li>• Providing opportunities for the private sector to participate and determine strategies for economic and investment development plans in Kanchanaburi.</li> </ul>
	Private investments from other provinces (DI.2)	<ul style="list-style-type: none"> <li>• Making use of the investment opportunities in Kanchanaburi SEZs to maximize the spillover effects on the locals, such as completing the missing value chains in agricultural and tourism industries. This will create mutual benefits for manufacturers or upstream services providers in Kanchanaburi.</li> <li>• Promote filmmaking or television drama shooting in Kanchanaburi to promote tourism.</li> </ul>

**Table 2** Kanchanaburi LED Strategy Proposals (Continued)

<b>Strategic Development Guidelines</b>	<b>Local Economy Determinants</b>	<b>Examples of Development Guidelines</b>
<b>National security</b>	Central government expenditure in the province (DI.3)	<ul style="list-style-type: none"> <li>• Integration of government agencies and private organizations to support large scale projects. The province may raise funds from the government for development in basic infrastructure, human resource, and national security.</li> </ul>
	Consumption expenditure by other countries (RI.2)	<ul style="list-style-type: none"> <li>• Establishing collaboration and public relation for joint tourist routes.</li> <li>• Promotion of health tourism, new style tourism, and high value tourism.</li> </ul>
<b>(3) Preventing growth reductions</b>	Products exported to foreign countries (RI.1, BI.1)	<ul style="list-style-type: none"> <li>• Maintain product standards, especially agricultural products exported from Kanchanaburi to foreign countries, to prevent the growth from slowing down. For example, use of post-harvest technology to reduce fruit loss, reducing the role of intermediaries, and create business matching opportunities for Thai entrepreneurs in the private or public sectors.</li> <li>• Promote Kanchanaburi products to Myanmar markets.</li> <li>• Promote business matching between Kanchanaburi and Myanmar.</li> </ul>

**Table 2** Kanchanaburi LED Strategy Proposals (Continued)

<b>Strategic Development Guidelines</b>	<b>Local Economy Determinants</b>	<b>Examples of Development Guidelines</b>
<b>(3) Preventing growth reductions</b>	Public spending in neighboring countries' provinces (BI.2)	<ul style="list-style-type: none"> <li>• Create convenient environments for Myanmar tourists by shorten screening time at checkpoints, extend checkpoint operating hours, and allowing tourists to visit neighboring provinces.</li> <li>• Establishing cooperation and public relations for tourism.</li> <li>• Promoting high-valued tourism.</li> </ul>
	Direct investment by the private sector from other countries (RI.3)	<ul style="list-style-type: none"> <li>• Investment in tourism and hotels by foreign investors.</li> <li>• Benefits from management by foreign investors such as hotel chain.</li> </ul>
<b>(4) Providing alternatives to reduce economic leakage</b>	Household and private expenditure for goods and services outside of the province (DL.1)	<ul style="list-style-type: none"> <li>• Maintaining product quality, creating effective product distribution system, and reducing processing and transaction costs.</li> <li>• Create campaigns to buy local products.</li> </ul>



In addition, the interview and focus group study found that Kanchanaburi is a province with a high potential as compared to neighboring provinces; however, Kanchanaburi faces structural problems listed as follows: 1) Land ownership rights as the majority of the areas lack land rights documents. Areas in Mueang Kanchanaburi District, Wang Khanai District, Ban Thuan District, and Wang Ka District ( Kanchanaburi 1938) are parts of the restricted area under the Royal Decree. The Royal Decree dissuaded investors from investing in the area and investment projects due to the requirement of land ownership, which takes time while the approval process for land rights documents remains unclear. 2) Delays in the implementation of large projects also lead to delays in area development while provinces with resource potentials are yet to be maximized. An example of a delayed project is the motorway between Bang Yai and Kanchanaburi in which the routes does not meet the needs of the local people. It is believed that the capacity may be increased if the route is reconsidered. 3) A variety of agricultural products and processed agricultural products can be found in Kanchanaburi, but the province still lacks a central market for selling products. 4) Kanchanaburi depends on the agricultural and agricultural processing industry as its main industries, so value-added to it will lead to local economic development. Agricultural product prices often fluctuate depending on environmental factors which cause risks to the farmers. The province may have to implement a mechanism to reduce the effects that cause risks to the products and the prices of agricultural products. Supply chain management will be one of the solutions to reduce risk. 5) Workforce quality, workforce sufficiency, and human resource development are still limited. Although Kanchanaburi has comprehensive educational institutions for all academic levels, employment is mainly found in the agricultural industries. The majority of migrant workers are seasonal workers, less skilled, are from Myanmar migrant workers. Workers' skills also need to be trained before entering the industrial and service sectors. The private sector has to bear the cost and burden of skill development for the workers. 6) The province has a high tourism potential. There is a variety of tourism opportunities offered at different price ranges allowing the province to accommodate different target groups, but the number of high-income tourists remains limited. A possible solution is to develop tour packages with destinations to neighboring countries and provinces.

#### **Analysis and Proposal Development for LED Strategies: Trat**

Based on the analysis of opportunities for LED of Trat province in the SEZs along the GMS-SEC, the study found that both the local injection and leakage factors are considered low except for the private investment in the province. The economic structure has changed over the past several years. Domestic injection and leakage factors for the agricultural, industrial, service, and tourism sector appeared to be medium to high except for central government expenditure in the province. Positive signs for increasing the number of Thai tourists in

the province can be found due to the development of tourist routes, R10 Road of Paradise, among Trat, Cambodia, and Vietnam. This should increase the number of group tours and the amount of expenditure in Trat. In addition, Property Perfect Group has auctioned an area of 895 rai in the SEZ for tourism and real estate. If investment plans are announced, it may be an optimistic sign for an increase in the capital flow in Trat, especially in the form of employment and purchase of agricultural and fishery products within Trat. The border and rest of the world factors are considered for more effective infrastructure. The connection between Trat SEZs and Koh Kong SEZs as shown in figure 5 and 6, Cambodia now has a permanent checkpoint with logistics capacity in Ban Hat Lek. It is an important import channel for products from Cambodia most of which are industrial products produced by entrepreneurs in Koh Kong SEZs, such as automotive wiring sets, rubber in balls, or fresh and processed seafood products segments. The import volume in 2018 was approximately 2,881 million baht; however, this value had a low effect on Trat's local economy as it is a cross-border trade for transportation to other provinces. It also has the potential of the R10 touristic route connecting Thailand, Phnom Penh, and Southern Vietnam in the form of "One Market, Three Destination". The route connects Trat with the Dara Sakor project in Koh Kong and Phu Quoc islands in Vietnam. The tourists, especially wealthy group travelers, can travel by boat to three countries. This group tourism may encourage more tourism spending. The Baan Had Lek permanent checkpoint is small and difficult to access and its two-lane roads are in poor condition. These are obstacles during the high traffic periods. There are also other obstacles such as limited electricity light in certain areas and Cambodians, especially those with travel or trade purposes in Thailand.

Based on the analysis above, local economic determinants can be grouped and identify common patterns for further development of provincial development strategies. The determinants were grouped based on the potential and importance in the present and the future. The growth-share matrix or BCG Matrix of the Boston Consulting Group (BCG) have been applied during the process and the results are presented in table 3 and figure 7.



**Figure 5** Routes between Thailand-Cambodia-Vietnam through the border crossing of Ban Hat Lek, Trat

**Source:** Research team



**Figure 6** Routes Linking Thailand-Cambodia-Vietnam Through the Trade Channel Ban Tha Sen, Trat

**Source:** Research team

**Table 3** Appropriate LED Strategies Grouped by the Level of Importance to Local Economy and Trends

(A) Treat Local Economy Injection Variables

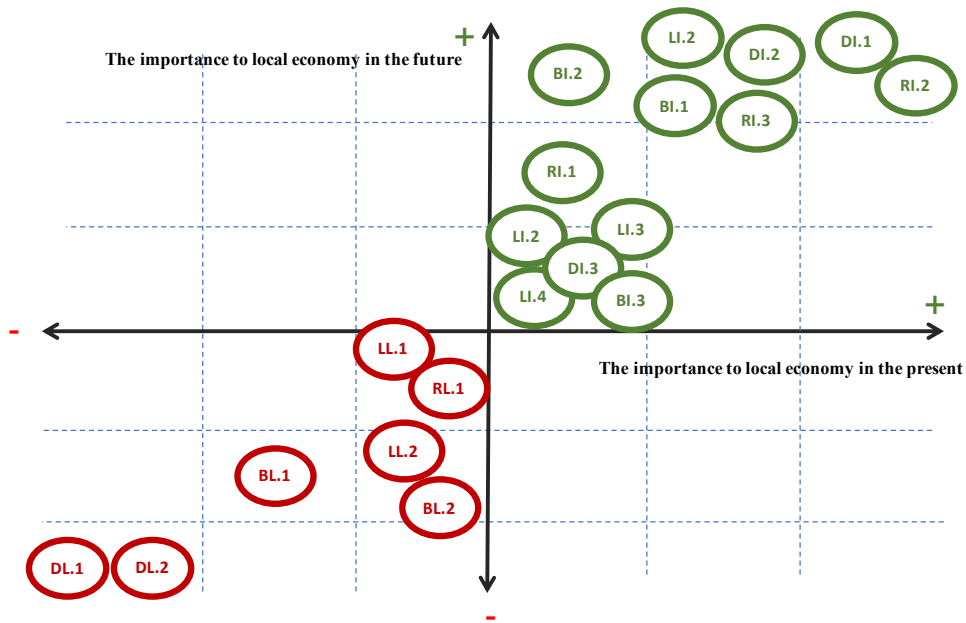
		Future Importance		
		High	Medium	Low
Present Importance	High	<p><b>Sustaining growth</b></p> <p>The determinants characterized as cash cow are highly important to the economic growth and have fairly saturated growth. It should not be neglected but supported by factors conducive to continuous growth.</p> <p><b>Examples: DI.1, RI.2</b></p>	<p>Mixed strategies should support and prioritize this group of determinants to avoid reducing growth and develop into problem child products in the future.</p>	<p><b>Restructuring &amp; Impact mitigation</b></p> <p>These determinants are comparable to problem child products which question the importance of further development: whether it is worthwhile, should its importance be reduced, and how to mitigate the possible impacts on those involved.</p>
	Medium	<p>Mixed strategies should support and prioritize this group of determinants for further growth and have the chance to become cash cow products in the future.</p> <p><b>Example: LI.1, DI.2, BI.1, RI.3</b></p>	<p><b>Business-as-usual</b></p> <p>These determinants have the potential to develop into a cash cow or problem child in the long term; therefore, strategies should prepare to sustain growth.</p> <p><b>Example: DI.3, RI.2</b></p>	<p>Mixed strategies should be taken into consideration and reduce the priority of this group of determinants due to its potential to become dog products in the future.</p>
	Low	<p><b>Restructuring &amp; Capacity Building toward Growth</b></p> <p>These are star determinants. Appropriate strategies are to increase the importance and encourage continuous growth rate.</p> <p><b>Example: BI.2</b></p>	<p>Mixed strategies should support and prioritize this group of determinants to sustain growth and avoid becoming dog products in the future.</p> <p><b>Example: RI.1</b></p>	<p><b>No Intervention</b></p> <p>These determinants are comparable to dog products. In terms of marketing, this group of products has low importance to the development strategy. It grows and changes naturally without demanding resources for strategic intervention.</p> <p><b>Examples: LI.1, LI.3, LI.4, DI.3, BI.3</b></p>

**Table 3** Appropriate LED Strategies Grouped by the Level of Importance to Local Economy and Trends (Continued)

(B) Trat Local Economy Leakage Variables

		Future Importance		
		High	Medium	Low
Present Importance	High	<p><b>Control &amp; Alternative Adaptation</b></p> <p>These are problems that encourage and cause leakages in the local economy for a long time and are difficult to avoid. Alternative strategies may be used to reduce the magnitude of the problem.</p> <p><b>Example: DL.1, DL.2</b></p>	<p>Mixed strategies should prevent and control leakage factors from developing into serious problems in the future.</p>	<p><b>Withdrawal</b></p> <p>These determinants cause leakage which seriously affected the economy but it will be less strategically important in the future. It grows and changes naturally without demanding resources for strategic intervention.</p>
	Medium	<p>Mixed strategies are challenging factors important to the economy. It is an ongoing problem so priority should be maintained, and strategies should be implemented.</p>	<p><b>Business-as-usual</b></p> <p>Challenging factors with medium importance to the economy. It is an ongoing problem so priority should be maintained, and strategies should be implemented. Importance of strategies are not high.</p> <p><b>Example: BL.1</b></p>	<p>Mixed strategies</p> <p>These determinants are leakages that affected the central economy, but it will be less strategically important in the future. It grows and changes naturally without demanding resources for strategic intervention.</p>
	Low	<p><b>Warning Signs</b></p> <p>These determinants are challenging factors with high importance to the economy but lack preparations for adjustments due to its low impact; therefore, strategies should be prepared to deal with these factors.</p>	<p>Mixed strategies should follow up and prevent leakage factors from developing into more problematic leakages in the future.</p> <p><b>Examples: LL.2, BL.2</b></p>	<p><b>No Intervention</b></p> <p>These determinants are leakages with a low impact on strategic development. It grows and changes naturally without demanding resources for strategic intervention.</p> <p><b>Examples: LL.1, RL.1</b></p>

From (a) and (b) in Table 3, the change in direction of the local economy determinants can be illustrated in the following figure.



**Figure 7** The Local Economic Determinants have Different Levels of Importance to the Local Economy in Trat

Based on the figure 7 above, each of the 20 local economy determinants has different levels of importance to the local economy in Trat. Subsequently, this has led to various local economic development strategy proposals which can be summarized into groups that should receive high priority as follows in table 4.

**Table 4** Trat LED Strategy Proposal

<b>Strategic Development Guidelines</b>	<b>Local Economy Determinants</b>	<b>Examples of Development Guideline</b>
(1) <b>Sustaining growth</b>	Consumption expenditure by other provinces (DI.1)	<ul style="list-style-type: none"> <li>• Promotion, facilitation, and preservation of tourism quality standards for domestic tourists. For example, the development of tourism utilities in roads and harbors, Tourism marketing in promoting tourist routes to Cambodia and Vietnam for Thai tourists with transportation and tour services from Trat.</li> <li>• Promotion and maintenance of quality standards for agricultural products and local products of Kanchanaburi. For example, the traceability system in the food industry, promote OTOP product marketing, promote GI agricultural product marketing, and promote farm standards certification programs, such as GAP and Organic Thailand.</li> </ul>
	Consumption expenditure by other countries (RI.2)	<ul style="list-style-type: none"> <li>• Promotion, facilitation, and maintenance of quality standards for foreign tourists such as promoting joint tourist routes from Cambodia and Vietnam for tourists visiting Thailand with transportation and tour services from Trat.</li> <li>• Promote health tourism.</li> </ul>
(2) <b>Enhancing growth</b>	Consumption expenditure by border countries (BI.2)	<ul style="list-style-type: none"> <li>• Promotion and facilitation of border-crossing to purchase goods and travel by Cambodian tourists. For example, issuing border passes, elevating the Tha Sen checkpoint to a permanent checkpoint, extending the checkpoint's operating hours, and enhancing customs capacity to reduce congestion at the checkpoint. The public utility at checkpoints and border markets should be modernized and turned to tourist spots.</li> <li>• Establishing collaboration and public relation for the joint tourism routes.</li> <li>• Promote health tourism for Cambodian patients who seek temporary accommodation in Trat.</li> </ul>

**Table 4** Trat LED Strategy Proposal (Continued)

Strategic Development Guidelines	Local Economy Determinants	Examples of Development Guideline
	Private investment in the province (LI.2)	<ul style="list-style-type: none"> <li>• Promote trade and investment areas for the entrepreneurs in the province, such as establishing a distribution center, commercial port, central agricultural market, and homestays to increase economic opportunities, especially during the low tourist season.</li> <li>• Offering financial incentives such as tax reductions for the small and medium enterprises (SMEs) industry within Trat SEZs.</li> <li>• Providing opportunities for the private sector to participate and determine strategies for economic and investment development plans in Trat.</li> </ul>
	Private investment from other provinces (DI.2)	<ul style="list-style-type: none"> <li>• Making use of the investment opportunities in Trat SEZs to maximize the spillover effects on Trat locals such as completing the missing value chains in agricultural and tourism industries. This creates mutual benefits for manufacturers and upstream services providers in Trat.</li> <li>• Promote filmmaking or television drama shooting in Trat to promote tourism.</li> </ul>
	Exports of local products to the border countries (BI.1)	<ul style="list-style-type: none"> <li>• Promote selling of products produced in Trat to Cambodia, such as agricultural products, meat products, and fishery products. These products are high in demand in Cambodia, particularly by Cambodian middle class demanding high-quality products. If Tha Mai checkpoint opens, further improvements should be made.</li> <li>• Promotion of business matching between entrepreneurs in Trat, Pratabong, Bodhisattva, and Phnom Penh.</li> </ul>
	Direct private investment from other countries (RI.3)	<ul style="list-style-type: none"> <li>• Investment in tourism and hotels sector by foreign investors. For example, forming agreements and collaborating with Chinese investors investing in Koh Kong, Sihanoukville, and Phu Quoc will help distribute benefits and increase the number of tourists.</li> </ul>



**Table 4** Trat LED Strategy Proposal (Continued)

<b>Strategic Development Guidelines</b>	<b>Local Economy Determinants</b>	<b>Examples of Development Guideline</b>
<b>(3) Preventing growth reductions</b>	Exports of products to foreign countries (RI.1)	<ul style="list-style-type: none"> <li>Product standards in agricultural products that are exported from Trat to foreign countries should be maintained to prevent the growth from slowing down. For example, promoting post-harvesting technology to preserve and reduce fruit loss, reducing the role of intermediaries, and creating opportunities for business matching between public and private sectors with Thai workers. Product differentiation should be emphasized, such as Trat brand publicity, niche market for agarwood oil, online commerce channels, development of traceability systems, adding value to a product, and creating a brand.</li> </ul>
<b>(4) Providing alternatives to reduce economic leakage</b>	Household and private expenditure for goods and services outside of the province (DL.1)	<ul style="list-style-type: none"> <li>Products produced in Trat for local consumption, such as meats and vegetables, may reduce income leakage. If a central market is established, it should match with the demands in Trat. This will increase support for more production, especially demands made by business and organizations, such as schools, hotels, and hospitals. This will shorten the supply chain and generate higher revenues in the province.</li> </ul>
	Household and private tax payment to the central government (DL.2)	<ul style="list-style-type: none"> <li>Identifying guidelines with the Ministry of Finance or local administration for appropriate tax incentives proposals. For example, a tax reduction to increase the economic circulation in Trat for farmers with standardized productions and hotel entrepreneurs with satisfying evaluation by tourists.</li> </ul>

In addition, the interview and focus group study found that Trat is a province with a high potential as compared to neighboring provinces; however, Trat faces structural problems listed as follows: 1) Trat SEZ' s limited size and location compared to other SEZs. The industries in Trat have low economic growth and lacks raw materials for a continuous

production. Existing local industries such as processed agricultural product industry are saturated and are consistent with the current production outputs, thus, require no additional investments. For an emerging group of manufacturing industries demanding low-cost labor, entrepreneurs are provided with options nearby Koh Kong Industrial Estate in Cambodia. This industrial estate is located near Trat SEZs, has wage advantages, and a higher number of Generalized System of Preference (GSP). Their exports industry has more industrial estates in the central region and the eastern region, which is advantageous in terms of product distribution and exports. Therefore, Trat SEZs lacks the ability to attract investors.

2) Certain investment conditions can be found, such as agricultural hub businesses must occupy an area of more than 50 rai with a modern distribution system; a registered capital of not less than 10-million-baht, jewelry or precious stone; the industrial estate must occupy an area of no less than 100 rai; and logistics industrial estate must not occupy an area any more than 200 rai. These are all restrictions that hinder local small or medium entrepreneurs from benefiting. Large size entrepreneurs are not attracted to these privileges when comparing the limitations on location and cost.

3) Trat faces labor shortage issues as Cambodian laborers from Koh Kong prefer to work in Koh Kong industrial estates. Investment expansion by Chinese investors also pose problems by increasing employment numbers in the province of Sihanoukville and Kampot.

4) Land and utility system issues as the establishment of SEZs raised land prices of certain areas. Target areas still have no investment in basic public utilities, such as water supply and electricity systems, due to no investors being attracted to the area. If there are comprehensive public utility systems in the area, the investors might be attracted easier for investment.

The establishment of SEZs on the GMS-SEC is one of the regional policies for land utilization in the southern region ranging from Myanmar to Vietnam. A route is formed connecting the Indian Ocean to the Pacific Ocean through a road connection. This allows countries, namely Myanmar, Thailand, Cambodia, and Vietnam, to mutually benefit from their connection within this region. However, there are still many factors involving the development strategy and policy of each country. Therefore, it is an opportunity and a challenge for each country to form bilateral agreements with neighboring countries to create international cooperation. An example of a multilateral agreement made by all four countries was the negotiations for the development of the Dawei SEZs, a cooperation between Thailand and Myanmar, and negotiations for the development of Koh Kong SEZs, a cooperation between Thailand and Cambodia.

## **Conclusions and Policy Recommendations**

This analysis was conducted on international trade and development potentials in the Thai border provinces, Kanchanaburi and Trat, covering international relations and

investments in the agriculture, tourism, and services industry. From the study, recommendations listed below are comprehended for development policies.

First, the analysis of opportunities for LED of the SEZs along the GMS-SEC provinces will be discussed. The factual overview of Kanchanaburi and the potentials of Dawei SEZ, Myanmar has shown economic opportunities for the local people. Economic activities may be conducted in the province ranging from agricultural production to the service sector, such as processing agricultural products, farming, trading, and tourism services. Major limitations that hinder rapid growth and prevent the province from reaching the estimated potential lies in the inefficient use of land, the inability to fully connect agricultural product to the processed agricultural product supply chain caused by lack of a central market and public relations, the inability to manage risk involving agricultural products' prices and production volume, delays in the road infrastructure construction projects, rescheduling of the Dawei SEZs project, and the low added-value of the tourism service sector. Several improvements are to be made in Kanchanaburi as follows:

- Establishing mutual agreements regarding land utilization for efficient uses of land.
- Expediting infrastructure investment projects necessary for the support of the provincial development. For example, the motorway construction from Kanchanaburi to Bang Yai, Nonthaburi, and road improvement to support factor of production in transportation within the processed agricultural products sector.
- Developing tourist attractions and the tourism industry to increase value-added to accommodate high net-worth tourist groups, create more forms of tourism other than natural and historical tourism, and partnering with neighboring countries to induce tourism.
- Developing central market areas as centers for the trading of agricultural products, processed agricultural products, and other local products. They could also operate as information centers such as a one-stop service for relevant economic information of the service sector.
- Future land use plans of Kanchanaburi are more distinctive with the establishment of the SEZs in the area; nevertheless, the distribution of economic benefits between investors and the locals must be fair. The negative impacts on the locals should be taken into consideration.
- Future establishment of the SEZs along the GMS-SEC provides confidence and positive impacts on Kanchanaburi, but the establishment will not be completed in the near future. The province should make preparations when Dawei SEZs are established. For example, emergences of new businesses, material transportation, product transportation, and human mobility. Human resource development includes training and preparing Thai and Myanmar workers for future businesses.

- Specifying development goals should be made with locals' participation and maintain good public relations with the locals.

Second, the relationship between Kanchanaburi and Dawei SEZs, Myanmar will be discussed. Myanmar government's conditions hinder Kanchanaburi from relying on Dawei SEZ's growth as a new market for goods and services in the short-term (1-3 years) and medium-term (3-8 years) from 2019 onwards. The limitations include the initial phase of road construction from Baan Nampu Ron to the Dawei SEZs and the forming right of land agreement. After the right of land was formed, there remains construction difficulties and challenges. It will take at least 10 years for the investors to comprehensively utilize and expand the industrial estate area. During the construction period, numerous risk factors might occur. Social and political factors of both countries and Industry 4.0 transformation may cause current resources to be insufficient. Furthermore, the province still relies on the success of the deep-sea port construction. The project is still pending the demand and feasibility of a worthwhile freight distribution of goods to the port by the industrial estate project. It could be approved and materialized once the condition has been met. The appropriate approach is to develop Dawei SEZs in phases for Kanchanaburi to fully benefit from Dawei SEZs' establishment phases. The approach is listed below:

- Short-term period: the construction of a road route between Baan Nampu Ron, a permanent border checkpoint, to Dawei SEZs at an estimated length of 180 kilometers. The construction is currently waiting for Myanmar's government to select the constructors and is financed by the Neighboring Countries Economic Development Cooperation Agency, a public organization, to study the feasibility and engineering of the road construction. The current gravel road is inconvenient for commute during the rainy season. After construction, the result should provide more convenient transportation. This route also shortens the traveling time from Mae Sot to Kanchanaburi.
- Medium-term period: establishing an industrial estate according to the initial phase plan to obtain the land leasing agreement from the Myanmar government. It is also used as a collateral for fundraising with financial institutions. The construction period will take approximately 8 years for the initial phase to be completed which will induce investments in the establishments. It aims at the light industry and the food processing industry, involving seafood and agricultural products. This creates sufficient trade volume and economic activities to encourage investments in the deep-sea ports and sea freights. In addition, development of local workers' skills should be in place to support upcoming establishments, especially in vocational education, technician education, and development of knowledge related to the local economy.

- Long-term period: when there is a guarantee of increase in economic activities and trade volume, the construction of deep-sea ports can then be carried out. The deep-sea ports enable sea transportation and connection to India's seaport. This connection to India's economic hub gave new opportunities to the Thai economy. The traveling time for sea freight is shortened by connections through the Malacca Strait, the northern region of Myanmar, and the southern part of China.
- The positive impacts for citizens of Myanmar include employment and an active local economy. Dawei SEZs is originally an agricultural area with natural attractions and is able to develop in the light industry and processed agricultural and fishery productions. Regarding labor migration, semi-skilled Myanmar laborers may move back from Thailand. Overall income may be less but working in Myanmar demand lower cost of living. The absence of migration may also be an incentive for laborers to be moved back to Dawei.

Third, the analysis of opportunities for LED among the provinces located in the SEZs along the GMS-SEC will be discussed. The factual overview of Trat and the potential of Koh Kong SEZ, Cambodia has shown economic opportunities for the local people. Economic activities may be conducted in the province ranging from agricultural production to the service sector, such as processing agricultural products, farming, trading, and tourism services. Major limitations that hinder the rapid growth of Trat SEZs are its smaller provincial size and shortages in labor. Its industrial scale is relatively smaller and lacks raw materials for other industries. Local businesses, such as the processed agricultural industry, have become saturated level and are consistent with the current production, therefore, they do not require additional investment. There is a high demand for skilled laborers. Cambodian workers from Koh Kong are more likely to stay and work in Koh Kong and other SEZs. Thai workers from other provinces and Myanmar workers are more likely to work in other industrial zones since wages are not significantly different from other provinces. Several improvements are to be made in Trat as follows:

#### **Strategies of Investment Expansion by Entrepreneurs in the Province**

- Financial incentives such as tax reduction for SMEs in Trat, both in SEZs and non-SEZs; the extension of SEZ's benefits from investing in SEZs area to all areas in Trat; and announce conditions for SMEs for easy access to benefits. Examples of the incentives include investment in agriculture that meets GAP standards and tourism operators or hotels that receive satisfactory reviews from the tourists. Promotion and maintenance of standard quality for agricultural products and local products of Trat province. For example, a traceability system in the food industry,

promote OTOP product marketing, promote GI agricultural product marketing, and promote farm standards certification programs, such as GAP and Organic Thailand.

- Product differentiation such as the Trat brand. Products should be linked with online commerce channels and are traceable through the systems. Value-added for the niche markets such as agarwood oil products.
- Promotion of trade and investment by provincial entrepreneurs to increase the number of economic opportunities during the low tourist season, such as distribution centers, commercial ports, central agricultural markets, souvenir shops, Trat community products, restaurant operators, and homestay operators.
- Maintaining product standards to prevent growth decrease, particularly agricultural products that are exported from Trat to other countries. For example, promoting post-harvest technology to reduce fruit loss, reducing the role of intermediaries, and providing greater roles for Thai entrepreneurs in the private or public sectors.

#### **Growth Strategies from Domestic Factors**

- Promotion, facilitation, and maintenance of tourism standard quality for domestic tourists, such as the development of tourism utilities in roads and harbors or tourism marketing to promote Thai tourists of routes to Cambodia and Vietnam with transportation and tour services provided from Trat.
- Movies or television dramas that use Trat as the filming location.
- Benefiting from the investment opportunities in the Trat SEZs to maximize the spillover effects to the people in Trat. For example, completing the agricultural industry and tourism industry value chains, then distribute the benefits to upstream manufacturers and service providers.

#### **Decentralization Strategies**

- Seeking a joint guideline with the Ministry of Finance or local government organizations for appropriate tax incentive proposals. For example, a tax reduction to increase the economic circulation in Trat for farmers with standardized productions and hotel entrepreneurs with a successful track record among tourists.
- Increasing local tax proportions to be collected creating more resources and investment circulation in Trat.
- Opportunity for the private sector to participate in the formulation of strategies, economic development, and investment plans. This allows the continuity in working as associated parties and prevents problems of work discontinuity from position rotation of government officials in the provinces.

Fourth, the connection of Trat with the Koh Kong SEZs, Cambodia will be discussed as follows: 1) Limitations regarding the access to Thailand through Khlong Yai crossing point

which is narrow and dimly lit at night. Expanding the border crossing channels from a single to two or three channels and installing a lighting system at the crossing point would be helpful. 2) The facilitation of required documents for border crossing. A passport is required for travel as a temporary border pass document is no longer valid. This restricts trade opportunities between Thailand and Cambodia. It is the only nationality for which more complicated paperwork is required as opposed to Laos, Myanmar, and Malaysia. Recommendations to alleviate the limitations include:

- Promotion and facilitation of product purchases and tourism of Cambodian tourists, such as issuing border passes, elevating Tha Sen crossing point status to a permanent crossing point, extending checkpoint operating hours, improving customs to reduce the crossing point congestion, and modernizing the public utility of the crossing point into a tourist spot.
- Promotion, facilitation, and maintenance of tourism standard quality for domestic tourists, such as the development of tourism utilities around roads and harbors or tourism marketing to promote Thai tourists of routes to Cambodia and Vietnam with transportation and tour services provided from Trat.
- Promoting health tourism for Cambodian patients.
- Promoting business activities between Trat and Cambodia, such as trading in agricultural, meat, and fishery products. Tha Mai checkpoint is expected to open in the future.
- Promoting business matching among operators in Trat, Battambang, Pursat, and Phnom Penh. There may be benefits from investment by Chinese tourists. Business cooperation in Koh Kong, Sihanoukville, and Phu Quoc will help diversify the benefits from investment and attract more tourists.

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