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To cite this article: Choen Krainara & Jayant K. Routray (2015) Cross-Border Trades and Commerce between Thailand and Neighboring Countries: Policy Implications for Establishing Special Border Economic Zones, Journal of Borderlands Studies, 30:3, 345-363, DOI: [10.1080/08865655.2015.1068209](https://doi.org/10.1080/08865655.2015.1068209)

To link to this article: <http://dx.doi.org/10.1080/08865655.2015.1068209>



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Cross-Border Trades and Commerce between Thailand and Neighboring Countries: Policy Implications for Establishing Special Border Economic Zones

Choen Krainara* and Jayant K. Routray

Abstract

Regional economic integration leads to closer interdependence within the Greater Mekong sub-region (GMS) especially for trade and commerce. Contributing factors to cross-border trade expansion between Thailand and four neighboring countries, Cambodia, Lao PDR, Malaysia and Myanmar (CLMM) have been studied, as well as an analysis of its pattern and trend utilizing time series data from 1996–2012. This study found a rapid increase of local and regional cross-border trade, cross-border shopping and mobility of people. Cross-border traded goods are mainly produced in Bangkok and its vicinity and the eastern region of Thailand. Thai border cities currently play major roles as distribution centers; while industrial development along Thai border regions has not progressed enough to capture the full potential of this trade. The development of emerging border economic zones (BEZs) could be a means as well as a strategy not only to minimize interregional and intra-regional disparities within Thailand but also to foster integrated borderland development with less developed countries surrounding Thailand. Therefore, this study aimed to identify prospective locations for joint border economic zones across Thailand to suggest an enabling policy in realizing BEZs.

1. Introduction

Rapid globalization, which has primarily resulted from trade liberalization in recent decades, has driven the process of regionalization through the formation of trade blocs, notably the Association of Southeast Asian Nations (ASEAN) in order to foster economic complementarities and enhance regional competitiveness. As the progress of development among ASEAN member countries is quite diverse, the programs consisting of the Greater Mekong sub-region (GMS) Development Cooperation and Initiative for ASEAN Integration (IAI) have been created in order to speed up the regional integration towards the goal of the ASEAN Community (AC) by the year 2015 (ASEAN Secretariat 2009). The potential benefits from the GMS cooperation are large; nevertheless, different levels of development may slow down the growth and full benefits of this sub-regional cooperation (Krongkaew 2004). It is apparent that economic interdependence between Thailand and her less developed neighboring countries has increasingly become much closer over the last few decades due to the advancement of regional cooperation. Yet, considerable development gaps seem to be widening due to stark differences in stages of development causing persistently “asymmetric relations.” For example, labor cost in Thailand is higher than Myanmar, Lao PDR and Cambodia by 3.7–5.2 times (Chalamwong et al. 2013). Thus, Thailand has attracted an estimated 6 million unskilled immigrant labor force and family members from these bordering countries, which has accounted for 9.39% of the total national population, to work and live in the country (*Manager Weekly* 2010). Meanwhile, a study conducted by Prince of Song Khla University, found that approximately 0.20 million southern Thai nationals had out-migrated to Malaysia for jobs (*Manager online* 2008).

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The illegal influx phenomenon of immigrants obviously prompts concerns over national security in particular and subsequent multi-faceted impacts on Thai economy and society in general. To complement the GMS, Thailand, which is located at the strategic intersection of the mainland of the South East Asian region, initiated the Ayeyawady-Chao Phraya-Mekong Economic Cooperation Strategy (ACMECS) in 2003 in order to bridge development gaps with bordering countries—Cambodia, Lao PDR, Myanmar and Vietnam (CLMV)—by promoting integrated cross-border development based on the border economic zone (BEZ) concept (Ministry of Foreign Affairs of Thailand 2008). The GMS spatially adopts a corridor development approach with a total of nine transborder economic corridors so as to spearhead cross-border regional development linking both intra-GMS and South Asian and East Asian regions (ADB 2007). Out of nine, six GMS corridors are trans-Thai territory (Figure 1). Importantly, it strengthens the locational advantage of cross-border regions towards emerging production and trade zones. This sort of BEZ was pioneered by the Maquiladora or export manufacturing sector, which has been developed to promote employment along the 2,000 mile-long Mexico–United States border since 1965 (Weiler and Zerlentes 2003). In the Asian region, this concept has been proliferating during recent decades. Such zones have been implemented, e.g. between the Guangdong province of China and Hong Kong; between Indonesia and Singapore; between the Johor Bahru state of Malaysia and Singapore and between North Korea and South Korea. Other existing BEZs along the GMS corridors are between China and Myanmar; between China and Vietnam; between Vietnam and Cambodia and between Vietnam and Lao PDR. A few BEZs are still under the planning and evolution process, i.e. between North Korea and China; between China and Russia and between India and Pakistan. Likewise, Thailand is selecting a few cross-border regions to be advocated as BEZs linking with bordering countries. However, there is hardly any clear documented information available for explaining the underlying rationale for developing BEZs. The available scattered documents and reports do not provide any insight into the contributing factors for supporting growth and development of cross-border trade and people's mobility. The partial understanding without proper analysis about the progress of regional development and border industrialization for BEZs is inconclusive.

2. Objectives

The prime objective of this study was to investigate the prospect of cross-border trade between Thailand and neighboring countries and associated development potentials closer to the border regions. Specifically, this paper attempts to study the cross-border trade flows, patterns, trends, and contributing factors explaining the growth, impacts and significance of emerging border regions. The paper intends to examine the state of cross-border mobility and shopping, regional and BEZs development and identify potential border regions with enabling policies.

3. Theoretical Framework and Evolution of Cross-border Economic Zones/Regions

This section presents a comprehensive overview of the theoretical background and empirical evidences through an analysis of the literature. David Ricardo initially grounds classical international trade theory as so-called comparative advantage in 1817. He states that, other things being equal, a country tends to specialize in and exports those commodities of which it has maximum comparative cost advantage. Similarly the country's imports will be of goods having relatively less comparative cost advantage (Sumitir and Worabuntoon 2004). Since then the international trade model has been evolving over time influenced by increasing complex factors and technological changes, which have given rise to emergent neo-classical international trade theories. Among others, Ohlin (1933) proposes resources and trade theory, in which trade occurs from the differences of resources between two countries. He states that a country will export goods that use its abundant factors intensively, and import goods that use its scarce factors intensively. In the two-factor case, he states a capital-abundant country will export the capital-intensive goods, while the labor-abundant country will export the labour-intensive goods. Tinbergen (1962) rationalizes the gravity

Figure 1. GMS Corridors Network



Source: Asian Development Bank (2007). GMS Transport Sector Strategy, Coast to Coast and Mountain to Sea: Towards Integrated Mekong Transport Systems

model that bilateral trade between any two countries is positively related to their economic sizes and negatively related to the relative trade costs between them. Krugman (1980) further conceives a home market effect, which is the tendency for large countries to be net exporters of goods with high transport

costs and strong scale of production. Hanson and Xiang (2004) conducted empirical research on the home market effect and bilateral trade patterns. They found that in industries with very high transport costs the national market size determines national exports. For industries with moderately high transport costs, it is neighborhood market size that matters. In this instance, national market size plus market size in nearby countries determine national exports. To deepen insight on trade for development, Krugman, Obstfeld, and Melitz (2010) suggest a trade model on specific factors and income distribution focusing on three factors namely labor, capital, and territory. They state that a country having capital abundance and less land tends to produce more manufactured products, while a country with territory abundance tends to produce more food. Products and services to be traded are obtained from industries, which use different factors and resources in the production enhancing income distribution.

In the present day, economic globalization has driven growing interdependence between countries shaping development in various levels. At the global scale, there is the existence of uneven global patterns of economic and social development. Wallerstein (1974) classifies the world into areas and nations ranging from core states, semi-peripheral and peripheral areas, so-called world system theory, which is applicable to hierarchically spatial levels. Globalization steers regional economic integration into six stages, namely the preferential trading area, the free-trade area, the customs union, the common market, economic and monetary union, and complete economic integration (Carbaugh 2009). Globalization also affects national development, which is stimulated by emerging new international divisions of labor in the regional production networks coordinated by transnational companies (Yeung 2001). Regionalization propels cross-border development. Perkmann and Sum (2002) describe a cross border region (CBR) as a territorial unit that comprises contiguous sub-national units from two or more nation-states. Jessop (2002, 25–49) describes that there are at least nine ways in which CBRs have emerged. There are two broad classifications of CBRs. Martinez (1994) cited by Yang (2006) categorizes four paradigms of cross-border interactions, namely alienated borderlands, co-existent borderlands, interdependent borderlands, and integrated borderlands. Meanwhile Krätke (2002, 125–147) discerned three types of cross-border cooperation based on different geographical scales of cross-border linkages between regional economies. These are Type A: long-distance international cooperation; Type B: supra-regional structured cooperation; and Type C: regionally integrated cooperation.

Several studies conceive borders from a spatial perspective, which are derived from international trade, location and central place theories. For instance, Alegria (1989) as cited by Peña (2005) categorizes two central premises that determine the inter-urban hierarchy of border space: (1) The origin, destination and intensity of the flows (capital, goods and labor) are the key to differentiate the interaction of simultaneous processes in one space-national, transborder and transnational, and (2) the geographical adjacency of structural differences (price, quality of goods and choices, etc.) intensifies transborder processes. Krugman and Livas (1992) differentiate between the dynamic and static comparative advantages of regions. Dynamic advantages are those variables that differ across regions and that are directly related to productivity such as human capital and physical capital. Static advantages are those attributes that are fixed and unique to a specific region such as access to the sea or being located at the border. Hanson (1996) supports that static locational advantages lower transport costs; therefore, borders and ports are natural sites to locate production and natural centers for international trade. Recently, greater cross-border economic integration in many regions in the world has led the field of border economics to expand rapidly (Fullerton 2003). Some of the areas, in which extensive research efforts being investigated, include population, business cycle transmission, exchange rates, industrial development, labor markets and natural resources. In practice, border industrialization programs are primarily referred to the aforementioned Maquiladoras. Several studies have commented on impressive economic advantages as the key economic driver and attractor of workforce. As a result, interdependence between Mexico and the United States has intensified rapidly through local and regional cross-border trade, which has concertedly helped fuel the growth of binational urban economies (Scott 2002, 191–211). Nevertheless, there are certain disadvantages in terms of social, environmental and institutional impacts (Brannon et al. 1994).

4. Research Methods

This research has employed data from both secondary and primary sources. The secondary data covers time series statistics on formal cross-border trade between Thailand and neighboring countries for a period of 17 years from 1996–2012. Statistics on cross-border people's mobility are collected from responsible government agencies. Relevant data are gathered from reports of public, private and international organizations. Primary data sources are obtained through non-participant observation of cross-border trade environment at major border checkpoints in association with key informant interviews of cross-border traders and shoppers, border industrialists and local customs officials. Therefore, all used data collection methods form parts of a triangulation. Data analysis techniques used were: (1) quantitative—drawn on locational and trend analyses, and (2) qualitative—that is focused on content and policy analyses.

5. Factors Contributing to Expanding Cross-border Trade

Cross-border trade has been inter-generationally carried out by local inhabitants gradually evolving from a very informal manner to become the more formal system as perceived today. The Department of Foreign Trade (2011) defines cross-border trade as all forms of trade or exchange of goods transacted through border checkpoints by both sides of local people or traders, who reside in provinces or communities along the border. Currently, there are a total of 71 border checkpoints across Thailand. Its specific locations are presented in Figure 2. There are broadly three factors contributing to dynamic cross-border trade in the context of Thailand consisting of cross-border and regional infrastructure linkages, bilateral and regional trade agreements, and regional trade facilitation initiatives.

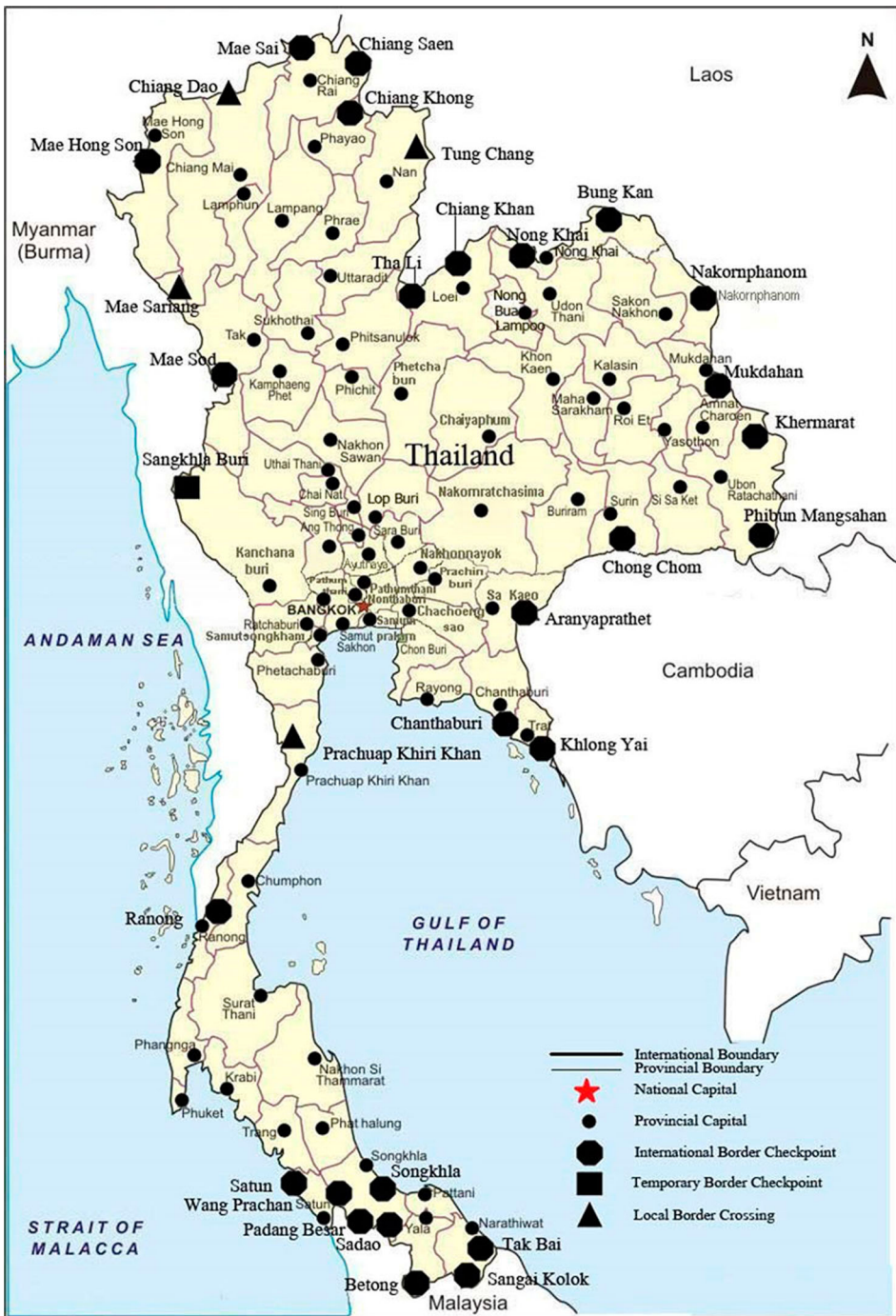
5.1. Cross-border and Regional Infrastructure Linkages

Out of the 77 provinces in Thailand, 32 provinces share a common border with four-neighboring countries (a river border with Lao PDR and a land border with Cambodia, Malaysia and Myanmar) with a total length of 5,582 km, which are distributed in ten provinces next to Myanmar with a length of 2,400 km, 11 provinces next to Lao PDR with 1,810 km, seven provinces next to Cambodia with 725 km and four southern provinces next to Malaysia with the shortest length of 647 km. Extensive cross-border infrastructure linkages have been developed over the years. As an emerging donor country, during 2005–2009, Thailand has extended cumulative grants to Cambodia, Lao PDR and Myanmar (CLM) with a total of 201.87 million US\$ to develop cross-border rail links, interprovincial roads and airports towards sub-regional transport integration and multimodal linkages (Neighbouring Countries Economic Development Cooperation Agency [NEDA] 2011). The major railway links with neighboring countries currently in operation are from Bangkok to Vientiane, capital city of Lao PDR, and Bangkok to Penang state in Malaysia. Chiangsaen river port in Chiangrai province, which has been in operation since 2003, plays a vital role in connecting the northern region of Thailand with the southern region of China. And a second Chiangsaen river port was constructed just about 10 km further downstream (Office of National Economic and Social Development Board [NESDB] 2008). Thailand participates in the GMS Information Superhighway Network (ISN), which strengthens the GMS-wide network so as to support regional integration (Asian Development Bank [ADB] 2007). In addition, Thailand has taken part with another two overlapping regional highway networks notably the ASEAN Highway Network signed in 1999 and the Asian Highway Network signed in 2005, which have been extended over the country along 12 routes with a total road length of 3,430 km (Department of Highways of Thailand 2011).

5.2. Bilateral and Regional Trade Agreements

Thailand has signed bilateral trade agreements with neighboring countries (Lao PDR: 1978, Malaysia: 2000, Cambodia: 2000, and Myanmar: 2010) in order to forge economic relations and trade facilitation (Department of Trade Negotiations of Thailand 2000). Regarding the regional trade agreement, the pertinent pacts are: (1) the ASEAN Free Trade Area (AFTA), which has a large market size at 590 million people. The old six member countries of ASEAN have reduced import duties of the Inclusion List (IL)

Figure 2. Geographical Distributions of Border Checkpoints in Thailand



Source: Prepared using the data from the Customs Department of Thailand (2012).

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within the Common Effective Preferential Tariff Scheme (CEPT) to 0–5% since 2003, and have become 0% since 2010. Whereas the new member countries have lowered import duties of IL within CEPT to 0–5% in 2006 by Vietnam, Lao PDR and Myanmar in 2008, Cambodia in 2010, and all four countries to become 0% in 2015. The total commodities under CEPT cover 105,123 items (ASEAN Secretariat 2008). Secondly, the ASEAN-China Free Trade Area was signed on November 29, 2004 leading to a gradual process of trade liberalization for two categories namely: (1) The Early Harvest program consisting of specific agricultural products. China and old ASEAN member countries started reducing import tariffs from January 1, 2004, and have lowered them to 0% since January 1, 2006. New ASEAN member countries have reduced tariffs to 0% since 2010 (Department of Trade Negotiations of Thailand 2000). (2) The Tariff Reduction for General Commodity's program was divided into three tracks. The Normal Track, which was higher than 20%, has become 20% since January 1, 2005. The Sensitive Track has been reduced to 20% since 2012, and the final tariff will be set at 0–5% by 2018; and the Highly Sensitive Track tariff should be lowered to become 50% by 2015.

5.3. Regional Trade Facilitation Initiatives

The Regional Trade Facilitation Initiatives encourage the promotion of cross-border free flows of goods and people's mobility comprising of: (1) the ASEAN Integration System of Preferences (AISP) that focuses on granting unilateral free trade treatment from old members to new members (CLMV) in order to narrow down stages of development among ASEAN member countries. The time frame for implementing this scheme was from January 1, 2002 until December 31, 2009. In 2005, Thailand granted cumulative AISP to CLMV for 340, 300, 850 and 63 commodities, respectively. (2) ACMECS strives to reduce trade barriers, improves transport linkages and upgrades major border checkpoints. In 2004, Thailand implemented a contract farming initiative in order to improve livelihood conditions along the border areas with Cambodia, Lao PDR and Myanmar by adopting unilateral free trade to exporters from CLM into Thailand including 11 agricultural products. These products can be utilized as raw materials for border industries in Thailand. (3) Through regional transport facilitation initiatives, Thailand has been extensively involved in the promotion of integrated cross-border transport facilitation efforts right from the Transport Agreement on the Carrying of Perishable Goods between Thailand and Singapore through Malaysia, which has been in effect since 1979. Thailand has already signed an ASEAN Framework Agreement on the Facilitation of Goods in Transit in 1998, and this became effective in 2000. Furthermore, a common navigation rule for facilitating transport on the Mekong river linking Yunnan province of China, Lao PDR, and Chiangrai province in the northern region of Thailand has been effective since 2001 (Ministry of Transport of Thailand 2011). By 25 March, 2013, Thailand had partially ratified the Cross-Border Transport Agreement (CBTA) aiming to promote speedy facilitation of customs and immigration procedures at the border-crossing points along the GMS corridors, thus easing out the trade flows (NESDB 2013).

6. National Policies Upholding Cross-border Trade

Cross-border trade between Thailand and CLM had been periodically affected by political problems during the Cold War era (TDRI 1997). After the end of the Cold War, Thailand proclaimed a policy of turning "Indochina battlefields into a marketplace" in order to foster closer economic interdependence since 1988 (Chandoevrit et al. 2005). The Royal Thai Government persistently reaffirms policies to support regional cooperation particularly on international trade at different levels as follows (Royal Thai Government Statement 2009):

6.1. At the ASEAN Level

It is a vital trading bloc placing significant emphasis on harvesting full advantage of AFTA through "ASEAN Hub" policy so as to sustain trading and investment base particularly in CLMV. It is

implemented by means of establishment of Thailand's distribution centers and trading firms (Department of Foreign Trade of Thailand 2009).

6.2. At the GMS Level

It is very meaningful for Thailand to be located at the strategic crossroads of the GMS. Thailand has directed policies to foster greater flows in order to increase volume and value of cross-border trade, as well as facilitating both intra-GMS and extra-GMS trade, investment and tourism. Thailand establishes border economic zones along GMS corridors and forges labor cooperation with neighboring countries, as well as seriously negotiating transit trade regime with adjoining neighboring countries in order to facilitate free flow of goods to nearby and farther countries in South East Asian, South Asian and East Asian regions.

6.3. At the Bilateral Level

The cross-border trade patterns are considerably varied, resulting from different stages of development and diverse political and economic systems. As a result, the common bilateral cross-border trade policies towards neighboring countries center around trade facilitation through development of regional transport networks (international highways, Mekong river bridges and ports), improvement of logistic systems along major economic corridors, as well as upgrading facilities at key border checkpoints at international standards.

7. State of Cross-border Trade with Neighboring Countries

Cross-border trade is one of the key indicators of closer economic interdependence between Thailand and neighboring countries. It expanded rapidly following the relaxation of border restrictions stemming from occasional political conflicts (TDRI 1997). Thailand possesses strategic geographical advantages at the junction of the mainland South East Asian region allowing businesses to conduct both cross-border trade and transit trade to a combined total of 2.90 billion people in nine countries, which is divided into two groups of countries. Adjacent neighboring country markets can be transacted through cross-border trade with total prospective consumers of 96.69 million people in four countries comprising of CLMM. And nearby neighboring country markets can be transacted through cross-border transit trade with total prospective consumers at 2.80 billion people in five countries consisting of Vietnam, India, Bangladesh, China, and Singapore. However, there is a dichotomy of border trade activities, which is classified into formal and informal cross-border trade.

7.1. Formal Cross-border Trade

The following analyses primarily focus on formal cross-border trade between Thailand and neighboring countries using available time series data of 17 years from 1996–2012. Fostered by both geographical adjacency of structural differences and the above-mentioned contributing factors, coupled with advancement of information technology, particularly the Internet and mobile phones, local and regional cross-border trade has shown a rising trend. The cumulative cross-border trade value between Thailand and neighboring countries significantly reached 170.33 billion US\$ with a share of 57.69% of total international trade value with neighboring countries. The cumulative share of cross-border export to these neighbors was as high at 59.16%. The cumulative share of cross-border import was at 40.84%, contributed by Malaysia (55.73%), Myanmar (35.92%), Lao PDR (6.89%), and Cambodia (1.44%). As a result, Thailand gained a significant cumulative balance of cross-border trade at 31.23 billion US\$. The annual average growth of cross-border trade from 1996–2001 was 16.98% despite the fact that Thailand had faced severe financial crisis during 1998–2001. During enforcement of AFTA from 2002–2012, it significantly kept increasing to 24.28% per year (Table 1). Above all, when the specified AFTA tariffs became 0% in 2010, its annual cross-border trade growth considerably increased to 32.08% compared with 2009. This growth could partly sustain national macroeconomic stability. With the increasing trend

Table 1. International Trade Value of Thailand

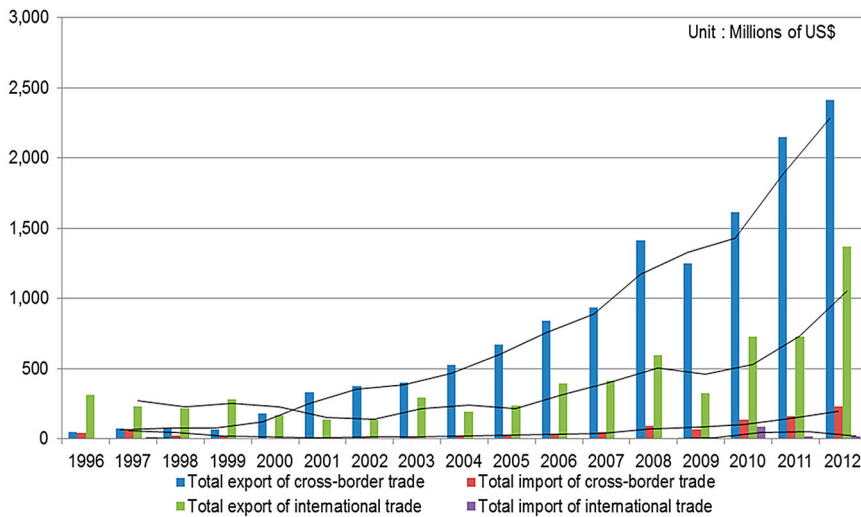
Regional trade	1996–2001		2002–2012	
	Total (billions of US\$)	Average growth per year (%)	Total (billions of US\$)	Average growth per year (%)
1. Extra-ASEAN	584.30	0.82	2,547.98	9.04
2. Intra-ASEAN	123.55	1.74	636.73	13.58
2.1 Cross-border trade	11.49	16.98	158.83	24.28
2.2 Cross-border transit trade	0.30	23.50	17.49	39.00
Total international trade	710.85	0.60	3,184.72	13.28

Source: Trades statistics for a period of 1996–2012, The Department of Customs, Thailand.

of international trade of Thailand, the intra-ASEAN trade and cross-border trade are also gradually rising though the proportion of their share is low. Cross-border trade during 2008–2012 reached a significant level sharing an average of 30.97% to intra-ASEAN trade reflecting the convergent effects of bilateral and regional trade agreements and regional trade facilitation initiatives. Similarly, the share of cross-border trade to Thailand's aggregate international trade with the world significantly rose from 1.02% in 1996 to 6.48% in 2011 or the equivalent of 8.53% of Gross Domestic Product. Cross-border trade growth may somehow contribute to regional development as both urban and rural people including the poor along border regions between Thailand and neighboring countries can also benefit from trade, as well as accessing a variety of products. This will result in better quality of life. However, cross-border traded goods are mainly produced in Bangkok, the national capital city, and its vicinity like the eastern region and regional growth centers. At present, Thai border cities and towns play a distribution role.

The bilateral cross-border trades of goods with reference to neighboring countries are discussed below. It is revealed that the pattern of cross-border trade and commerce greatly varies depending on respective comparative advantages.

(1) *Cambodia*: During 1996–2012, the bilateral cumulative cross-border trade value was at 14.37 billion US\$. The aggregate cross-border export increased substantially from 50 million US\$ in 1996 to 2.41 billion US\$ in 2012 with annual average growth at 30.17% (Figure 3). In 2012, the aggregate bilateral cross-border trade accounted for 9.01% of aggregate cross-border trade value with four-neighboring countries. Aranyaprathet border checkpoint was the most important gateway accountable for 60% of total cross-border trade exports value. Aranyaprathet district is also the host site of Rong Kleua integrated border wholesale market, the largest second-hand cloth market in Asia (*Daily Newspaper* 2010). In this area there is cross-border out-sourcing of production especially for ready-to-wear garments from Aranyaprathet district to bordering Poi Pet city in Cambodia. Finished clothes are re-exported to sell at Rong Kleua market. Therefore, this market plays a crucial role in distributing goods locally and regionally to garment clusters in Bangkok and other regional markets in Thailand. Klongyai border checkpoint stands out as second with a 33% share. The rest is contributed by five other border checkpoints. The major exported goods through Aranyaprathet border checkpoint are motorcycles and parts, cement, engines, livestock feed and chemical fertilizers, cars, liquefied petroleum gas and printed textiles (Department of Customs of Thailand 2012a). The total cross-border imports from Cambodia steadily grew from 41 million US\$ in 1996 to 231 million US\$ in 2012. During the last 17 years, the annual average growth of cross-border imports was at 25%. In 2012, Aranyaprathet border checkpoint share was still as high as 43.70%, followed by Chantaburi border checkpoint with 15%, and Klongyai border checkpoint with 6.90% and the rest shared by four other border checkpoints. The major imported goods from Cambodia through Aranyaprathet border checkpoint are agricultural produce, recycled products, second-hand clothes and ready-to-wear clothes (Department of Customs of Thailand 2012a).

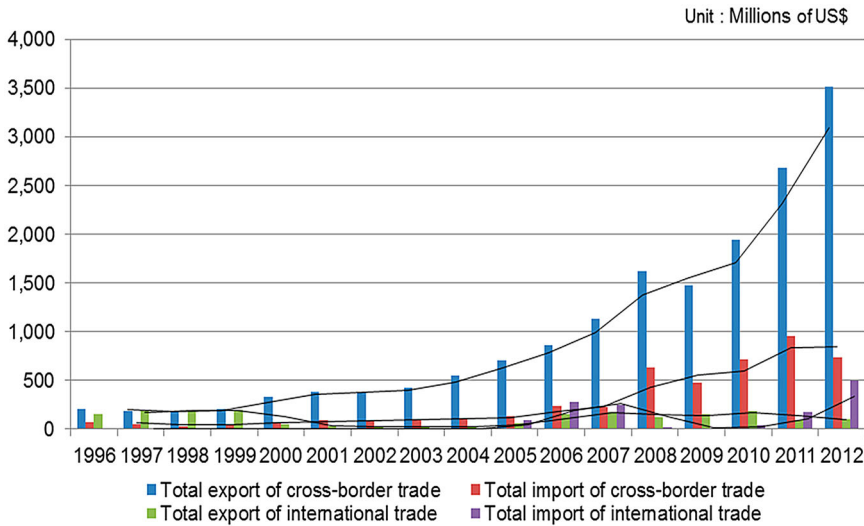
Figure 3. Cross-Border Trades between Thailand and Cambodia

Source: Data from the Department of Customs, Thailand

(2) *Lao PDR*: During the last 17 years, the bilateral cumulative cross-border trade value was 21.57 billion US\$. Thailand gained a favorable cumulative balance of cross-border trade of 11.99 billion US\$. In 2012, the share of bilateral cross-border trade accounted for 14.50% of aggregate cross-border trade value with four-neighboring countries. The aggregate cross-border export gradually increased from 205 million US\$ in 1996 to 3.50 billion US\$ in 2012 (Figure 4). During the last 17 years, the annual average growth of cross-border export was at 19.82%. In 2012, Nongkhai border checkpoint was the most important gateway with the highest share of 56.25% of total cross-border export value, followed by Mukdahan border checkpoint with 11.00%, and the rest contributed by six other border checkpoints. The major exported goods through Mukdahan border checkpoint were oil products, cars, pellet cement, woven fabrics, medical equipment, diggers, polymers of ethylene, tiles, and tires (Department of Customs of Thailand 2012a). Cross-border exports from Thailand approximately serve half of Lao PDR's national population especially those residing along border regions. The aggregate cross-border imports from Lao PDR rose from 68 million US\$ in 1996 to 739 million US\$ in 2012. During almost 2 decades, the annual average growth of cross-border imports is 25%. In 2012, Mukdahan border checkpoint became the most important entry way with 72.53%, followed by Nongkhai border checkpoint (8.60%), and the rest by other checkpoints. The major imported goods through Mukdahan border checkpoint were processed wood, parquet, electrical parts, underwear and cloth for men and boys, zinc ore, and working uniforms (Department of Customs of Thailand 2012a). In terms of production linkages, outsourcing from Thailand to make working uniform clothes in Lao PDR is important.

(3) *Malaysia*: It is the most advanced developing market economy among bordering countries. During the last 17 years, the bilateral cumulative cross-border trade value was 97.94 billion US\$. The aggregate bilateral cross-border trade value expanded from 0.82 billion US\$ in 1996 to 16.60 billion US\$ in 2012, which represents 56.66% of the aggregate cross-border trade value with four-neighboring countries (Figure 5). As a result, Thailand gained a favorable cumulative balance of cross-border trade of 20.37 billion US\$. The aggregate cross-border trade export sharply escalated from 0.54 billion US\$ in 1996 to 9.75 billion US\$ in 2012. In almost 2 decades, the annual average growth of cross-border exports is 22%. In 2012, Padang Besar border checkpoint was the key export platform facilitating a high share of 50.18%,

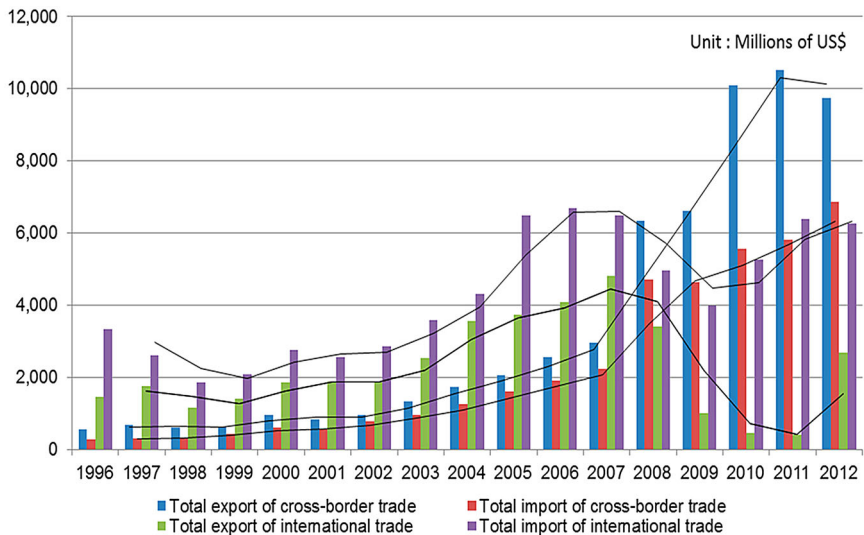
Figure 4. Cross-Border Trades between Thailand and Lao PDR



Source: Data from the Department of Customs, Thailand

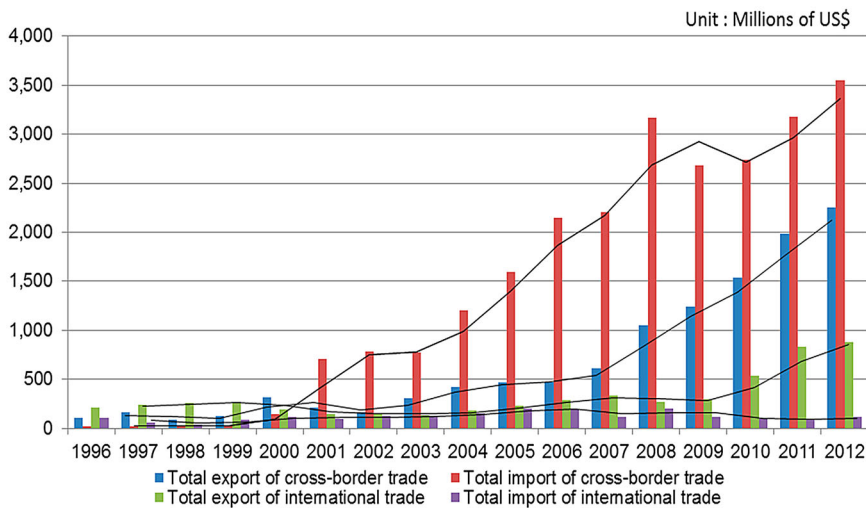
followed by Sadao border checkpoint (47.60%), Betong (1.73%) and Sungai-Golok (0.33%). The rest was contributed by four other checkpoints. The major exported goods through Sadao border checkpoint were natural rubber, parts and accessories of machinery, electrical parts, processed parawood, particle board, rubber hand gloves and print circuit board (Department of Customs of Thailand 2012a). The aggregate cross-border import also sharply increased from 0.28 billion US\$ in 1996 to 6.85 billion US\$ in 2012. In almost 2 decades, the annual average growth of cross-border imports is 22%. Sadao border

Figure 5. Cross-Border Trades between Thailand and Malaysia



Source: Data from the Department of Customs, Thailand

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Figure 6. Cross-Border Trades between Thailand and Myanmar

Source: Data from the Department of Customs, Thailand

checkpoint turned to dominate with 77.88% share, followed by Padang Besar border checkpoint (20.04%), and Sungai-Golok border checkpoint (1.13%) and the rest shared by four other border checkpoints. The major imported goods through Sadao border checkpoint were electrical parts, parts and accessories of machinery, auto processors, plastic products, synthetic rubber and chemical fertilizers (Department of Customs of Thailand 2012a).

(4) *Myanmar*: It has been facing economic sanctions by the West since 1997. As a result, Myanmar has heavily relied on cross-border trade of goods with bordering countries mostly with Thailand, China and India (Aung 2009). During the last 17 years, the bilateral cumulative cross-border trade was at 36.48 billion US\$. The aggregate cross-border trade with Myanmar gradually increased from 125 million US\$ in 1996 to 5.80 billion US\$ in 2012 (Figure 6). Its annual average growth of cross-border exports is 22%. In 2012, the aggregate bilateral cross-border trade accounted for 19.81% of aggregate border trade value with four-bordering countries. Maesod, located in the west end of Thailand's section of the East-West Economic Corridor, facilitated as high as 54% of total cross-border export value, followed by Ranong (22.93%), Maesai (14%), and the rest contributed by five other border checkpoints. The major exported goods through Maesod border checkpoint were diesel and Benzene oils, vegetable oil, motorcycles, woven cloth, fishing net, human drugs and consumer goods (Department of Customs of Thailand 2012a). The aggregate cross-border import value sharply increased from 21 million US\$ in 1996 to 3.55 billion US\$ in 2012 mainly resulting from importation of mainly natural gas utilized for generating electricity in Thailand. As a result, Thailand faced a deficit cumulative balance of cross-border trade with Myanmar at 13.48 billion US\$. Sangklaburi temporary border checkpoint alone was the most important gate for largely importing natural gas that contributed 96.93% of total cross-border import value. Ranong is ranked as second with 2%, followed by Maesod (1%), Maesai (0.50%), and the rest by 5 others. The major imported commodities through Maesod border checkpoint were wood, sea aquatic products, live cattle, and agricultural produces (Department of Customs of Thailand 2012a).

7.2. Informal Cross-border Trade

Local border wholesalers play an important role in cross-border supply chains as being either indirect exporters or importers of goods. Despite permitted local border retailing functions at border crossing

points, there are still illegal cross-border trades, which are carried out by both local people and outsiders. According to a local customs official, the value of illegal cross-border trade between Thailand and bordering countries is estimated at 10% of the total formal cross-border trade value (Anusit Kanchanapol, pers.comm.). Its trend is likely to decline as a consequence of tariff reductions and continuing efforts to formalize cross-border trading. In 2011, the leading illegal cross-border trade commodities with respective countries were from Myanmar (narcotics, personal cars, counterfeit bank notes, cameras and batteries); from Lao PDR (game boxes, clothes, fruits, garlic and narcotics); from Cambodia (personal cars, dry chili, paddy, cassava, frozen prawns, second-hand clothes and cigars); and from Malaysia (personal cars, narcotics, motorcycle parts, compact discs and tractors) (Department of Customs of Thailand 2012b).

8. Cross-border Social Interaction with Bordering Countries

8.1. Cross-border People's Mobility and Shopping

Border checkpoints play a crucial role as gateways for facilitating people's mobility. There are 33 border checkpoints across Thailand that process immigration formalities (Thailand Immigration Office 2012). The aggregate people's movement of all nationals using passports and border passes through all border checkpoints increased from 5.19 million persons in 2002 to 19.20 million persons in 2011, which accounts for 36.88% of the total people's movement. During 2002–2011, the annual average growth rate was 10.96%. Particularly between 2009 and 2010, it surged to 37%. This growth partly helps uphold national tourism goals to become a gateway to Asia (Ministry of Tourism and Sports of Thailand 2008). Hence, the trend of cross-border people movement seems to be prominent. The total Thai nationals' movement expanded from 1.92 million persons in 2002 to 8.16 million persons in 2011 with an annual average growth rate of 15.90%. This implies that out-flows of Thai tourists/business persons to neighboring country destinations are rather significant. The majority of Thai tourists' cross the border to visit casinos in neighboring countries as casinos are legally prohibited from operating in Thailand (*Matichon Newspaper* 2010). The passage seems to increase as a result of progressive facilitation of cross-border people's movement under various schemes (Ministry of Foreign Affairs of Thailand 2011). While total foreign nationals' movements, which applies to immediate bordering nationals, grew from 3.27 million persons in 2002 to 11.06 million persons in 2011. These constituted migrant workers, shoppers, tourists, business persons, medical and educational seekers with an annual average growth rate of 11.02%. Likewise, cross-border shopping is growing, in which people in adjacent cities cross the border on either a daily or weekly basis for shopping and dining in Thai key border cities particularly in Aranyaprathet, Mukdahan, Nongkhai, Maesod, Maesai, and Sadao. Goods are mainly bought for their own consumption and to some extent for resale. Shoppers from bordering countries generally purchase consumer goods, foods, fruits, electric appliances, and clothes etc. while Thai shoppers mostly buy duty free goods from border cities ranging from liquors, cigar, snacks, clothes, purses, watches, jewelry, and foods, etc.

8.2. Impacts Associated with Cross-border Trade and People's Mobility

The impressive growth of cross-border trade and people's mobility have brought about an increased degree of interdependency and economic integration. Nevertheless, there exists a multi-faceted impact on Thai economy and society. Firstly, the growth signifies a higher degree of border openness as a large number of urban and rural people along the border gain benefits from trade, as well as acquiring wider access to consumer products and essentials for daily consumption. However, the question arises to what extent the benefits of cross-border trade growth will contribute to local and regional economic development as traded goods are customarily produced in Bangkok, its vicinity, and the Eastern Seaboard region. Accordingly, new border cities have not developed towards their full production potentials. Secondly, an increasing magnitude of people's mobility of both Thai and foreign nationals crossing border checkpoints bring closer economic and social ties. This enhances the positive role that migrant workers play in the Thai economy as they contribute approximately 0.50% of total GDP per year (World Bank 2006). However, the influx of illegal immigrant labor causes various problems ranging from national security, public health,

social and economic consequences (Ratmanee et al. 2004). Therefore, it is currently prompting a national agenda for finding the means to systematically manage migrant labor in order to bring balanced economic growth and national security. Lastly, there is an increasing awareness of inadequate urban infrastructure and traffic jams due to rapid urbanization in several border cities, as well as lacking cross-border logistics provision.

9. Linkages to Regional Development

Thailand has a strong core but a weak periphery development pattern. Bangkok and its vicinity represents the core region. In 1993, imbalanced spatial development provoked the Royal Thai Government to implement policies on investment promotion by dividing the country into three investment zones with distinctive tax incentives (Board of Investment [BOI] 2013). Zone 1 consists of the central provinces including Bangkok and five neighboring provinces. Zone 2 comprises 12 provinces in the semi-peripheral region, and Zone 3 includes the remaining 58 peripheral provinces. In 2012, approximately 63.98% of foreign capital investments were evenly distributed in Zone 1 and Zone 2. As a result, investment in the border regions has been persistently lagging behind causing out-migration of both Thai and immigrant labour to the main growth centers. These core regions are still facing a shortage of labor. Border regions are home to 22.59 million or 35.18% of the whole country's population, who are mainly engaged in the agricultural sector. Border regions have eight out of the ten poorest provinces across Thailand (NESDB 2008). Therefore, the Board of Investment (BOI) has recently abolished zone-based incentives and turned to promote new industrial clusters in each region or border area in order to spearhead the decentralization of industrial concentration (BOI 2013).

10. Progress of BEZs Development

In 2004, Thailand designated the Maesod district of Tak province as a pilot BEZ. However, the implementation of this plan was delayed due to a lack of understanding about BEZ among the stakeholders. Concerning the issue of border industrialization, about 65% of provincial factories were located in the Maesod district, and mostly engaged in out-outsourcing production in the form of Original Equipment Manufacturer (OEM) for contractors from Bangkok and its vicinity. Those factories have employed almost 80,000 cheap Myanmar migrant workers particularly for textile, apparel and agro-processing industries (Tak Provincial Industrial Office 2010). Recently, Thailand has set up a national mechanism to oversee proposals for developing BEZs across the country. Economically, the current structure of outputs in all border regions are timely responses to the new investment policies as they are moving towards greater reliance on the non-agriculture sector, particularly on trade and industries.

11. Policy Implications for Establishing Special Border Economic Zones in Thailand

The preceding analyses particularly on cross-border trade growth coupled with contributing factors, international trade and investment policies were strongly favorable towards the establishment of BEZs in Thailand. In practice, there are gaps, which should be addressed in order to translate joint BEZ concept into real implementation. Thus, enabling policies encompass five interrelated dimensions, which can to some extent be applicable to other developing countries as follows:

- **Economic Aspect:** This employs BEZ as a means to reduce internally imbalanced spatial development. Establishing co-production and supply chain networks will promote cross-border spillover effects towards integrated borderlands development.
- **Social Aspect:** This enhances sharing of regional human capital together with cross-border human development through provisions of social infrastructures, and jointly

utilized with sister cities along the border regions. It should also strengthen cross-border social and cultural ties towards the ASEAN community.

- **Infrastructural Aspect:** This provides adequate urban infrastructure including land use planning in response to rapid urbanization in potential border cities. This also promotes cross-border utilization of key physical facilities e.g. airports and river ports, as well as sustaining cross-border trade of energy supplies.
- **Environmental Aspect:** This develops cross-border integrated environmental and natural resources protection plans for potential border regions by actively promoting broad-based public participation. This provides local capacity building for managing natural resources by local stakeholders, as well as maintaining livelihood opportunities particularly for the rural poor.
- **Institutional Aspect:** This strengthens institutional capacity building for advancing cross-border regional development via BEZs. This will cover issues needed to support cross-border flows of goods, people, capital and technology ranging from standard financial system and regulation harmonization, cross-border coordination including investment and trade policies, public-private partnerships, logistics management and cross-border planning and implementation particularly for BEZs.

12. Conclusions and Recommendations

Thailand has been intensifying economic interdependency with bordering countries substantiated by a robust increase of local and regional cross-border trade, people's mobility and shopping. The geographical adjacency of structural differences intensifies these flows. Border regions/nodes, which locate along the GMS corridors and main transport arteries, are now emerging new growth centers. By combining conducive factors with locational advantages, there are 10 border regions across Thailand that have high potential towards establishment as BEZs with promising industries and cross-border trade, tourism, logistics, distribution and cross-border shopping activities. The prospective locations are: (1) Cambodia (the priority locations such as Aranyaprathet district in Sakaeo province has links with Poi Pet city in Banteay Meanchey province of Cambodia, and Trat province has links with Koh Kong province of Cambodia), (2) Lao PDR (the priority locations are Mukdahan province which has links with Savannakhet province of Lao PDR, and Muang district in Nongkhai province which has links with Vientiane, capital city of Lao PDR), (3) Malaysia (the priority locations are Sadao, Hat Yai and Muang districts in Song Khla province that link with Bukit Kayu Hitam in Kedah state of Malaysia, and Sungai Kolok district in Narathiwat province that links with Kelantan state of Malaysia), and (4) Myanmar (the priority locations are Maesod district in Tak province that connects with Myawaddy district in Kayin state of Myanmar; Chiang Rai province consists of Maesai, Chiangsaen and Chiang Khong districts, which connect to Tachilek province in Myanmar; Ranong province that connects with Koh Song province in Myanmar, and Kanchanaburi province connecting with Dawei province in Myanmar).

Following the discussions in the preceding paragraphs, a few suggestions are made for realizing special border economic zones in Thailand. The recommendations are:

- (1) It is strongly recommended to control and overcome the illegal cross-border trades and facilitate the tradable goods to bring them under formal trade, which would then control the large scale import of low quality agricultural products into Thailand and recover the loss of revenue to both countries along the border.
- (2) The creation of a new set of regulations only for cross-border trades independent of the broader regulation of international trades is required. As observed from the country cases, the trade types between Thailand and neighboring countries are somewhat

different; it is necessary to design such regulations in response to the changing cross-border trade environment.

- (3) An inter-ministry coordination and integration mechanism is very much desired for bringing the responsible agencies and stakeholders associated with cross-border trade promotion and facilitation, such as the Ministry of Commerce, the Ministry of Industry, the Ministry of Finance and the Thailand Immigration Bureau, etc.
- (4) An integrated mechanism for managing BEZs at different administrative levels should be set up and carried out by the Office of the National Economic and Social Development Board (NESDB) as a central planning agency.
- (5) It is necessary to sustain the local backward linkages, and the Ministry of Industry and Federation of Industry should promote industrial production clusters in line with respective country needs focusing on the interests of the local communities and cities along the border.
- (6) It is important to promote local direct investments in providing cross-border logistics services to be competitive with multinational logistics providers. In addition, collective efforts for nurturing entrepreneurship of all types of traders should be initiated by the Ministry of Commerce and the Thai Chamber of Commerce.
- (7) Cooperation to arrange daily cross-border movement of labor in particular BEZS should be put in place. The Ministry of Labor and the Thailand Immigration Bureau should coordinate this task.
- (8) Institutional capacity building for prospective BEZs should be promoted. As the border economic zone concept is newly adopted in Thailand, a wide range of capacity building schemes should be provided by NESDB and other relevant agencies in order to efficiently deal with multifaceted issues on BEZ development. An array of aid for trade programs through the Ministry of Foreign Affairs should also be extended to CLM in order to address common issues.

Acknowledgements

The authors are thankful to the anonymous reviewers of this paper for their comments and suggestions for improving the quality of the paper. Mr Viroj Naosuwan's support in formatting the paper is also acknowledged.

Funding

The authors are grateful to the Royal Thai Government and Mekong Institute [grant number 06/2009] for granting financial supports to carry out this research.

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