



# CORRIDOR PERFORMANCE ASSESSMENT

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A TRADE DEVELOPMENT REPORT



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A Trade Development Report

**Cambodia Trade Corridor Performance  
Assessment**

# Table of Contents

Acknowledgements .....	IV
Acronyms and Abbreviations.....	V
Executive Summary .....	VI
1 Introduction.....	1
2 Regional Cooperation and Regulatory Context.....	4
3 Core Logistics Infrastructure and Services .....	9
3.1 Road Infrastructure and Transport .....	11
3.2 Railways.....	13
3.3 Ports and Shipping Services.....	14
3.4 Customs and Border Management .....	17
3.5 Clearing and Forwarding Services .....	18
3.6 Informal Payments in Logistics in Cambodia .....	18
4 Trade Corridors .....	21
4.1 Phnom Penh – Sihanoukville Corridor.....	23
4.2 Bangkok - Phnom Penh Corridor.....	25
4.3 Phnom Penh – Ho Chi Minh City Corridor.....	30
4.4 Phnom Penh-Ho Chi Minh Waterway Transport Corridor .....	34
5 Comparative Assessment of Corridor Performance .....	38
6 Framework for Improving Corridor Performance .....	41
References .....	44

## List of Figures

- Figure 1.** Cambodia freight transport market (2010)
- Figure 2.** Distribution of trucking fleet sizes (Phnom Penh operators)
- Figure 3.** PAS cargo throughput, 2003-10
- Figure 4.** Number of vessels calling at Cambodia ports
- Figure 5.** Distribution of vessel sizes calling at Cambodia ports
- Figure 6.** Container volumes at Cambodia's main ports
- Figure 7.** Relationship between draft and vessel capacity
- Figure 8.** Process map for imports through Sihanoukville Port
- Figure 9.** Major trade corridors for Cambodia
- Figure 10.** Top 10 origins of imports
- Figure 11.** Top 10 destinations of exports
- Figure 12.** Diagram of both sides of the Aranyaprathet/Poipet border
- Figure 13.** Cambodia's trade balance with Thailand, 2008-11
- Figure 14.** Breakdown of goods imported through the Poipet border crossing (in terms of value)
- Figure 15.** Type of imports through Poipet
- Figure 16.** Type of exports through Poipet
- Figure 17.** Diagram of both sides of the Bavet/Moc Bai border
- Figure 18.** Types of imports through Bavet
- Figure 19.** Types of exports through Bavet
- Figure 20.** Traffic routing options out of Phnom Penh
- Figure 21.** Containerized traffic handled at Phnom Penh Port (TEUs)
- Figure 22.** Type of container movement in Phnom Penh Port (TEUs)
- Figure 23.** Breakdown of transit times on the road corridors

## List of Tables

- Table 1.** Bilateral agreements between Cambodia and neighboring countries
- Table 2.** Axle weight comparison among neighboring countries
- Table 3.** Number of empty containers exported to regional countries, first half of 2011
- Table 4.** Cost of diesel fuel (November 2010)
- Table 5.** Trade volumes on Cambodia's main trade corridors
- Table 6.** Cambodia's total import/export value and trade balance with Thailand
- Table 7.** Import and export volume between Cambodia and Thailand per Custom House
- Table 8.** Trade value through Aranyaprathet-Poipet border
- Table 9.** Total value of goods imported to Cambodia through Poipet, July 2011.
- Table 10.** Total import/export value and trade balance with Vietnam
- Table 11.** Cambodia-Vietnam trucking companies granted permits
- Table 12.** Comparison of corridor performances
- Table 13.** Transloading procedures per route

## List of Boxes

- Box 1:** Integrated regional logistics operations: The case of Minebea

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# Acronyms and Abbreviations

<b>AFAFGT</b>	ASEAN Framework Agreement on the Facilitation of Goods in Transit
<b>APEC</b>	Asia-Pacific Economic Cooperation
<b>ASEAN</b>	Association of Southeast Asian Nations
<b>CAMFFA</b>	Cambodia Freight Forwarder Association
<b>CAMTA</b>	Cambodia Trucking Association
<b>CDBTA</b>	Cross-Border Transit Agreement
<b>CDC</b>	Council on the Development of Cambodia
<b>DTIS</b>	Diagnostic for Trade Integration Strategy
<b>FDI</b>	Foreign Direct Investment
<b>FCL</b>	Full Container Load
<b>FTA</b>	Free Trade Agreement
<b>GDP</b>	Gross Domestic Product
<b>GMS</b>	Greater Mekong Sub-region
<b>G-PSF</b>	Government-Private Sector Forum
<b>HCMC</b>	Ho Chi Minh City
<b>JICA</b>	Japan International Cooperation Agency
<b>KAMSAB</b>	Kampuchea Shipping Agency and Brokers
<b>LCL</b>	Less Container Load
<b>LPI</b>	Logistics Performance Index
<b>MOC</b>	Ministry of Commerce
<b>MOL</b>	Ministry of Labor
<b>PAS</b>	Port Autonomous Sihanoukville
<b>PPAP</b>	Phnom Penh Autonomous Port
<b>RGC</b>	Royal Government of Cambodia
<b>SEZ</b>	Special Economic Zone
<b>SWAp</b>	Sector Wide Approach
<b>TEU</b>	Twenty-foot Equivalent Unit
<b>VMMI</b>	Vietnam Marketing and Management Institute
<b>UNCTAD</b>	United Nations Conference on Trade and Development
<b>USD</b>	U.S. Dollar
<b>WB</b>	World Bank
<b>WTO</b>	World Trade Organization

# Executive Summary

**The study found that logistics costs are high due to transshipment costs and various forms of payments.** Many of these payments are imposed by the private sector with little or no transparency on how or where the costs are incurred. International trade corridors in Cambodia therefore perform well in terms of time but not cost. However, the corridors with transshipment have higher costs than the national corridor between Phnom Penh and Sihanoukville or the river corridor to the port of Cai Mep in Vietnam.

**Large shippers and international firms prefer to use several sub-contractors to make logistics arrangements so they do not have to coordinate what can be fairly complex and challenging arrangements for shipments.** Intermediation in logistics is largely carried out by local agencies, leading to high intermediation costs. The main reason for the high intermediation cost is the prevalence and wide acceptance of facilitation fees as inducements for fast clearance and processing. Facilitation fees, largely informal, contribute to the high costs of logistics. Intermediaries, mostly forwarders and brokers, play a key role in collecting these payments. However, payment of such fees is clouded by lack of transparency. One of the main challenges is how to deal with informal payments in logistics in Cambodia.

**Another contributor to high costs is private sector capacity in the provision of logistics services, which is still low.** Most of the truck fleet is operated by family-run businesses owning a few trucks. Trucks are generally old which contributes also to the lack of appetite to operate across borders and at the same time compromises the feasibility of developing an effective transit system.

**Furthermore, corridors with interrupted movement of traffic have higher costs than those with seamless movement.** Though some restrictions have been lifted between pairs of countries, operations are governed by bilateral agreements that have quotas for trucks allowed to operate in other countries. The Cross-Border Transit Agreement (CBTA) provides for gradual liberalization of the quotas, yet there are many practical bottlenecks even for existing quotas. Generally, the existing regional instruments, if implemented, could go some way towards nurturing an integrated regional logistics market. By virtue of its geographical position in the sub-region, Cambodia exhibits the problems that are faced especially where trucks cannot cross international borders. Removing transshipment could increase spillover effects of the more efficient and lower cost operations in Thailand and Vietnam.

**A recent case of a firm allowed to operate its trucks across the border with Thailand can serve as a template for further reforms.** The government recently provided special dispensation to a firm to run trucks from Bangkok all the way to its factory in Phnom Penh illustrating government's ability to unilaterally open the borders to through traffic and the benefits that would be realized by joining regional production networks.



The main recommendations stemming from this report are summarized in the table below.

Issue	Recommendation
Eliminate informal fees	<p>Informal fees that seem prevalent in trade and transport facilitation in Cambodia are an avoidable cost. Suggested actions are:</p> <ul style="list-style-type: none"> <li>a) Detailed corruption risk mapping. This can be based on the Arusha Declaration Concerning Good Governance and Integrity in Customs.</li> <li>b) Develop the trade portal to provide all regulatory information on requirements and formal fees</li> <li>c) Expedite automation of customs and border management, and urgently deploy direct trade input module in ASYCUDA.</li> </ul>
Enhance capacity in transport and logistics services	<p>While transport costs are not much higher than in other countries, costs could be lowered by:</p> <ul style="list-style-type: none"> <li>a) Completing the rehabilitation of the Phnom Penh – Sihanoukville railway line and prioritizing freight operations</li> <li>b) Reconnecting the Thailand and Cambodia railway networks</li> <li>c) Introducing a fleet modernizing scheme with appropriate financing and quality enforcement mechanisms.</li> </ul>
Work with neighbors for an integrated road transport market	<ul style="list-style-type: none"> <li>a) Extend the Minibea scheme to all firms, especially those operating in SEZs.</li> <li>b) Encourage Thailand to ratify the bilateral MoU.</li> <li>c) Work with ASEAN and GMS partners to decide on and implement a regional transit system.</li> <li>d) Introduce a regional third party liability insurance scheme.</li> <li>e) Agree on standardized regional axle and vehicle load limits.</li> </ul>
Encourage competition between ports	<p>There is an emerging competition yet complementary service between Sihanoukville and Phnom Penh/Cai Mep ports. This offers flexibility and increases capacity of the overall system. Rate setting by the ports should be liberalized so in addition to port performance, the ports can also compete on cost.</p>
Capacity building	<p>As demands increase for a sophisticated logistics sector linked to the SEZs there is need to provide for capacity enhancement measures for private sector service providers and regulatory authorities. Training opportunities should be designed for:</p> <ul style="list-style-type: none"> <li>a) Clearing and forwarding agents based on FIATA courses.</li> <li>b) Trucking industry on fleet management and modernization.</li> <li>c) Transport sector regulatory authorities on port, road and railway regulation and rate setting principles.</li> </ul>

# 1

## Introduction

**This paper assesses the performance of the main trade corridors that link Cambodia to overseas markets.** The assessment is based on various forms of primary data collection including surveys, trip sheets, observations at border crossings and a logistics background paper prepared by Emerging Markets Consultants (EMC, 2011).

**Cambodian exports have grown strongly over the past ten years, boosted among other factors by its accession to the World Trade Organization in 2004.** Current government trade priorities are to enhance competitiveness by lowering the cost of doing business and achieving full WTO compliance. These priorities are consistent with the recommendations of the 2007 Diagnostic for Trade Integration Strategy (DTIS) which government is implementing via a Trade Sector Wide Approach (SWAp). The Trade SWAp is structured around three pillars: (i) cross-cutting, regulatory, and legal reforms; (ii) product-specific support; and (iii) capacity development. One of the areas identified as critical to underpinning the SWAp is improving Cambodia's logistics performance.

**In 2010 Cambodia ranked a lowly 129 out of 155 economies in the World Bank's Logistics Performance Index,** behind that of immediate neighbors Laos, Thailand and Vietnam. Farmers and manufacturers encounter difficulties moving goods to markets, exporters face challenges to supply overseas customers and prices for cargo movements are higher than in neighboring Vietnam and Thailand. These factors may be impeding Cambodia's development by constraining the export sectors that could otherwise enjoy a comparative advantage. The cost of staple commodities such as rice varies with proximity to border markets and/or the large population centers of Sihanoukville, Siem Reap and Phnom Penh. Poor logistics may therefore be exaggerating wealth inequalities between regions.

**It is therefore important to examine in detail the issues surrounding Cambodia's weak logistics performance, including bottlenecks and gaps in infrastructure and services, storage and border clearance.** Identification of these impediments can inform policy changes by the government and enable line ministries and agencies to better target trade-related reforms. This paper seeks to identify the operational performance of trade corridors linking Cambodia to regional and international trade markets and to propose a set of actions that contribute to improving logistics performance in the country.

**Shippers and logistic services providers in Cambodia, both public and private, all stress the importance of deepening understanding of the issues impacting on logistics services and costs in the country.** They generally acknowledge that unless there are improvements, the trade and transport facilitation infrastructure and policies remain a constraint to further trade expansion and competitiveness. Stakeholders are also aware that Cambodia lies in the center of a region experiencing high growth and should take advantage of its advantageous geographic position through tighter regional integration.

**In addition to improving capacity and efficiency to handle current trade flows, there are two other forces that require a rethink of logistics in Cambodia:**

- The rapid expansion of export processing zones which are placing new demands on system design and performance; and
- Government policy to triple rice exports.

**Investors in SEZs in Cambodia require more sophisticated and integrated logistics services than are predominantly available in the country.**

Cambodia has been promoting Special Economic Zones (SEZ) for the past few years. The development of the zones is based on a decree issued in 2005. Since then some 21 licenses have been granted to develop SEZs. Most of the SEZs are located along the border with Vietnam and Thailand (Koh Kong, Bavet, Poipet, Phnom Penh) and at the Port of Sihanoukville. A recent SEZ established in Phnom Penh seems also to have grown fairly rapidly and successfully attracted several investors, including some from Japan and China. Overall, four zones (Phnom Penh, Sihanoukville, Koh Kong and Bavet) are fully operational. The locational preferences of this first wave of zones can be regarded as an indication of the high logistics costs that would be incurred elsewhere in the country. In fact, the main concerns expressed by Japanese investors are the high costs of electricity and logistics. The zone investors seek to take advantage of the incentives offered as well as the relatively low labor costs, and to do so while minimizing logistics costs. Based on experience in other countries and Cambodia's general attractiveness for investors, there is a potential for Cambodia to expand the economic impact of these zones. In order to do so effectively, however, it must improve its logistics performance.

**There is great potential for Cambodia to leverage its lower labor costs and to join regional production networks in South East Asia.**

High logistics costs are restricting SEZ growth mostly to border regions. The low volume of traffic on the overland routes is in part due to the poor performance and high cost in comparison to the sea transport routes. Currently, trade in the South East Asian region is conducted through large-scale sea shipments between the major ports of Thailand, Vietnam, China and other countries. The fast-growing middle income economies are currently constrained in their trade with less-developed countries with low capacity such as Cambodia, that do not presently have the capacity to handle time-sensitive goods at low risk. For example some investors in the SEZs in Cambodia are planning to produce high value components for digital cameras as components for final assembly in a neighboring country. Therefore, there is potential to create virtuous cycles where the pressure from the private sector to increase logistics performance could provide an impetus for further reform to improve trade facilitation performance in Cambodia. Improvement is critical to enable the country to become part of the production sharing networks that are developing in the South East Asia region and which Cambodia has not yet fully joined.

**Government has expressed an intention to triple its rice exports over the next five years.**

The majority of people in Cambodia are engaged in agriculture yet the rural areas are often characterized by poorer transport and storage infrastructure and logistics services than the core areas. Consistent with the official aim of expanding trade in agricultural products, it is critical to understand the nature, performance and costs associated with logistics services at the sub-national level, especially in the lagging rural areas.

**Cambodia produces more rice than it consumes.**

The World Bank (2010) maintains Cambodia has great potential to increase its rice exports from the current 300,000 tonnes a year to a potential level of 2 million tonnes, therefore yielding a surplus after accounting for domestic consumption. As such, Cambodia has a unique opportunity to expand its market share in world rice markets. The increasing import demand from Philippines and Indonesia is expected to contribute to scarcity in the international

rice markets that could offer regional export opportunities for Cambodian producers. However, in order to increase the value of exports the World Bank study proposes that Cambodia should redirect informal paddy trade to formal milled rice exports, which requires overcoming long-term production and infrastructure constraints. This is not easy as it requires solving problems including lack of finance for trading and processing, and limited transport infrastructure. Another opportunity would be to pursue bilateral negotiations with Vietnam for bonded warehouse arrangements at Ho Chi Minh (HCM) in order to overcome the high cost of shipping exports through the Cambodia port of Sihanoukville. Estimates are that if Cambodia was to export all surplus rice then the number of container truck requirements for rice exports could increase from the current 6,000 to over 230,000 per annum by 2015 (World Bank, 2010). This would increase the country's import and export traffic by 75 percent over current volumes for all cargo.

**The above emerging demands call for increased sophistication and scale in Cambodia's logistics systems and infrastructure.** While both emerging regional supply chains and growing agricultural exports will continue increasing the demand for logistics services, the demands of the two are very different, one needing seamless, fast and cost-efficient logistics and the other bulk handling capabilities. The paper takes both into consideration and identifies what could be the building blocks for a future higher capacity and more efficient national logistics system in Cambodia.

**This paper is based on a background paper prepared by Emerging Markets Consultants (EMC,(2011), following fieldwork carried out between September and December 2011.** Information was collected from a variety of sources including a survey of industry stakeholders in the trucking and shipping industries, site visits, observation of border checkpoints and the compilation of detailed trip sheets by drivers on traffic corridors. The report encompasses the movement of goods by road, sea and rail and assesses Cambodia's relative advantages and disadvantages in each of these contexts. The report was compiled simultaneously with similar reports on logistics in Thailand, Laos and Vietnam, though the information from those reports has only been included here to the extent that it may be relevant to Cambodia specifically. The authors would like to gratefully acknowledge the support of private sector stakeholders, the Royal Government of Cambodia and EMC in supporting this initiative.

**The remainder of the report is divided into five sections:** Section 2 sketches out the regional context for logistics in Cambodia; Section 3 examines Cambodia's core logistics infrastructure and services; Section 4 focuses on the road, sea and rail corridors connecting Cambodia to overseas markets; Section 5 makes a comparative assessment of the corridors and Section 6 presents a summary of the main findings and recommendations for policy makers.

# 2

## Regional Cooperation and Regulatory Context

**Although Cambodia is a coastal country with access to its own domestic seaport, regional logistics and interconnectivity with its neighbors are still important to the performance of the national logistics system.** This is because there is great potential to trade using overland transport routes especially with Vietnam, Thailand and Laos. In this regard there are two main regional agreements that Cambodia is party to that potentially have significant impacts on the efficiency of regional corridor operations. These are the ASEAN Framework Agreement on the Facilitation of Goods in Transit of 1998 and the GMS CBTA of 1999, which are seen as complementary agreements. Cambodia, in its role as Chair of ASEAN in 2012 may be able to focus attention on the implementation of these agreements. The recent CLV Framework Agreement signed with Laos and Vietnam and the Cross Border Navigation Agreement provide some leverage for the removal of existing regulatory impediments.

### **ASEAN Framework Agreement on the Facilitation of Goods in Transit**

**The ASEAN Framework Agreement for the Facilitation of Goods in Transit is one of two competing proposals for an integrated transit regime in South East Asia.** Cambodia together with Laos, Thailand, and Viet Nam are parties to the ASEAN agreement whose objective is to facilitate transportation of goods in transit; simplify and harmonize transport, trade and customs regulations requirements; establish an effective, efficient, integrated and harmonized transit transport system in ASEAN. The ASEAN Framework Agreement for the Facilitation of Goods in Transit (AFAFGT) of 1998 sets out a package of several measures pertaining to regulation of frontier facilities (designation frontier posts), harmonization and simplification of customs procedures, traffic, transit transport services, road transport permits, technical requirements of vehicles, mutual recognition of inspection certificates, mutual recognition of driving licenses, and motor vehicle third-party insurance. The high aspirations of ASEAN, however, are yet to be fully realized.

**The AFAFGT framework on trade facilitation offers great potential for Cambodia.** It recognizes that logistics performance for the ASEAN member countries can be improved through measures to facilitate the fast movement of goods carried by road and rail transport in particular. It recognizes also that the benefits of improved infrastructure across South East Asia will remain unrealized unless the regulatory environment is modernized to remove regulatory bottlenecks in particular. One of the main bottlenecks is in the granting of transit and traffic rights. Common practices at most border posts is for the transloading or cargo from a vehicle registered in one country to another and for the transit procedure to be initiated at each land border crossing. A study by ALMEC cited by IBF International Consulting (2008) estimates that this increases the cost of transport by US\$100-300 per container on top of transit fees which add another US\$150 to US\$200. Perhaps not surprisingly, there is little transit traffic across several countries, and especially across Cambodia. This is a significant barrier that suppresses intra-regional trade. However, implementation of the AFAFGT framework has been very slow. Rather, countries seem to rely more on the GMS framework.



## Greater Mekong Sub -Region Cross Border Transit Agreement (CBTA)

**The CBTA is the second competing transit regime in the region.** The CBTA has some progressive provisions that are poorly adhered to in the region. The CBTA was originally a trilateral agreement between Lao, Thailand, and Vietnam signed on 26 November 1999 at Vientiane. Cambodia acceded in 2001 and China and Myanmar later also joined. It is a comprehensive multilateral instrument that covers several aspects of cross-border transport facilitation, including single-stop and single-window customs inspection systems, cross-border movement of persons (i.e., visas for persons engaged in transport operations), transit traffic regimes, including exemptions from physical customs inspection, bond deposit, escort, and agriculture and veterinary inspection, requirements that road vehicles will have to meet to be eligible for cross-border traffic, exchange of commercial traffic rights and infrastructure, road and bridge design standards, road signs, and signals. The CBTA has 20 annexes and protocols that detail provisions on these areas. The CBTA applies to selected routes mutually agreed between states with designated points of entry and exit. However, not all countries have ratified all the Annexes and Protocols, preventing the full implementation of the agreement. Rather, implementation has largely been driven by bilateral agreements between the parties with the CBTA serving as a framework agreement.

**In particular, Thailand has not ratified some key annexes of the CBTA thereby hampering the realization of the intended benefits.** Even though the CBTA is not perfect, ratification of some of its provisions could allow more seamless movement of cargo across borders without the need to transship at the borders. Taking the lead to provide a predictable regulatory regime would benefit Thai companies in particular that seek to exploit the low labor costs in neighboring countries such as Cambodia.

**There are several bilateral legal instruments that Cambodia is party to and which affect the performance of the regional trade corridors (Table 1):**

**Table 1. Bilateral agreements between Cambodia and neighboring countries**

<b>Instrument</b>	<b>Year of ratification, accession, agreement</b>
Bilateral Agreement on Waterway Transportation (Cambodia and Vietnam)	1998
New Bilateral Agreement on Waterway Transportation (Cambodia and Vietnam)	2009
Bilateral agreements on road transport with Cambodia	1999
Mekong River Commission Agreement (Article 9)	1999
Accession to GMS Cross Border Transit Agreement	2001
GMS Customs Transit Guarantee System (allows Thailand and Vietnam to transit across Lao without transshipment)	2009

**The CBTA provides for gradual liberalization of the quota arrangements between countries.** This has happened between Cambodia and Vietnam where the quota has been revised gradually over time. Generally, the transport agencies seem to retain discretionary powers in the issuing of permits. Even then in all cases there remain many practical bottlenecks even for existing quotas. Operators find it difficult to operate out of their country of origin because of language issues, opaque regulations, driving conditions and vulnerability to corrupt practices and other barriers to market entry.

**Road transport services across the region are governed by bilateral agreements, though within the framework of the GMS Cross Border Transit Agreement.** Implementation of the CBTA has been slow and this is reflected in the differences in transit practices across borders between Cambodia and all three of her immediate neighbors.

**Anecdotally, there is evidence that the regional logistics markets are not well integrated.** For instance, Thai truckers interviewed at the Poipet border complained that few Thai trucks are allowed to cross the border, due to Cambodia's many regulations. According to them, "few companies and few trucks drive the price up" (EMC, 2011). The small number of trucks on either side of the border contributes to an environment in which competition is impeded.

**Route competitiveness is weakened by the lack of a clear cross-border agreement between Cambodia and Thailand and Vietnam.** As a result there is a prevalent practice of trans-loading cargo at the Poipet and Bavet borders with Thailand and Vietnam respectively. At present, Cambodian trucks are not allowed to operate in Thailand and a very limited number of Cambodian trucks operate in Vietnam. Similarly, Thai and Vietnamese trucks are generally restricted from operating in Cambodia, except to transload goods within the immediate border area, as outlined in greater detail in section 4 of this report. The lack of a transit agreement forces trucking companies to transload goods near the border, resulting in delays, additional costs, restricted competition and a limit on the price and shipping options available to the general public.

**Until recently there has been no exchange of traffic rights between Thailand and Cambodia apart from limited arrangement in the border areas.** This is despite the fact that a first step was taken to implement the CBTA through an MOU signed in May, 2010. The MoU provides for an initial quota of 40 trucks per country to be allowed to operate into each other's territory. However, the Thai parliament has not ratified all the protocols of the CBTA. Presently, Thai trucks may therefore only enter Cambodia up to an ICD in Poipet where the goods are transshipped. An exceptional case has recently arisen: the company Minebea is now permitted to drive its goods, sealed in containers, from Bangkok to Phnom Penh without transshipment at the border.<sup>1</sup>

**There is a bilateral agreement between Cambodia and Laos which can allow trucks to cross the border.** The agreement limits each side to 20 permits each, though presently demand is so low that the permits are underutilized. Route management between these two countries is not viewed as a constraint to trade at this time.

**The Thai border restrictions prevent positive knowledge and learning effects between the Thai and Cambodian trucking industries.** As noted above, trucks cannot operate deep into the neighboring country apart from a limited number of transshipment locations. Operators consider as a major constraint the fact that Thailand and Cambodia drive on different sides of the road, left in Thailand and right in Cambodia. They suggest that allowing vehicles into each other's territory would increase traffic accidents. The present restrictions appear to limit the potential spillover effects from Thailand's more open and more modern road freight operating environment.

**Cambodia and Vietnam have a bilateral agreement which provides for each side to issue up to 300 permits.** However, freight transport operators on both sides prefer to operate only to the border, reportedly due to the high cost of obtaining the necessary permits. Out of the quota of 300 permits each side is allowed, more than two-thirds are used for passenger services. Otherwise trucks carrying goods for the SEZ at Manhattan near Bavet, on the Vietnam border are exempt with pre-clearance. Though inefficient, this practice seems to be widely accepted in the ASEAN region and can be seen at similar checkpoints in other countries such as the Thai-Malaysia border on the Bangkok-Kuala Lumpur-Singapore route. The cost of transshipment on the Cambodia-Vietnam route is about US\$80 per container.

**Besides market access, there are two other issues that impact on road transport service integration between Cambodia and neighboring countries.** These are differences third party insurance and axle load limits.

**Southeast Asia does not have a functional regional third party liability insurance scheme.** Goods and vehicles registered in one country require third party liability insurance in case there is damage to property or personal injury in another country. Insurance companies do not cover cargo beyond their national borders and this represents a risk to the consigner and consignee. If there is an accident in Cambodia for instance, a truck and its cargo may be impounded and it can take months to be released, incurring high fees and charges (shipping line container fees) in the process. Presently cross border operators must independently arrange for insurance when Thai trucks cross the border. International best practice is to introduce a regional third party liability insurance scheme, of which there are several that are well established in Europe and even in Africa.

**One of the outstanding aspects of regional harmonization is on axle load limits.** Presently each of the countries in Southeast Asia has a different maximum axle load limit (Table 1). Suffice to say such disparities necessitate heavy overload control infrastructure with attendant negative impacts on trade facilitation.



**Table 2. Axle weight comparison among neighboring countries**

	<b>Lao PDR (Maximum Tonnage)</b>	<b>Thailand (Maximum Tonnage)</b>	<b>Cambodia (Maximum Tonnage)</b>
Gross weight allowed 18-wheel truck	39	45	40

**The reasons offered by trucking companies for vehicle overloading are threefold:** cost competitiveness, the availability of trucks capable of carrying heavy loads and demand for heavy goods:

- There is a perception that shipping overweight is needed (or is a calculated risk) in order to remain cost competitive, particularly in an environment where some large players benefit from informal relationships.
- Foreign truck makers have been building wider and higher vehicles to reduce costs but the additional size and weight of these trucks are not suited to Cambodia's roads and national legislation has not been updated to encompass their use.
- Cambodia's relatively rapid economic development is increasing the demand for movement of heavy construction materials and agricultural goods (such as rice).

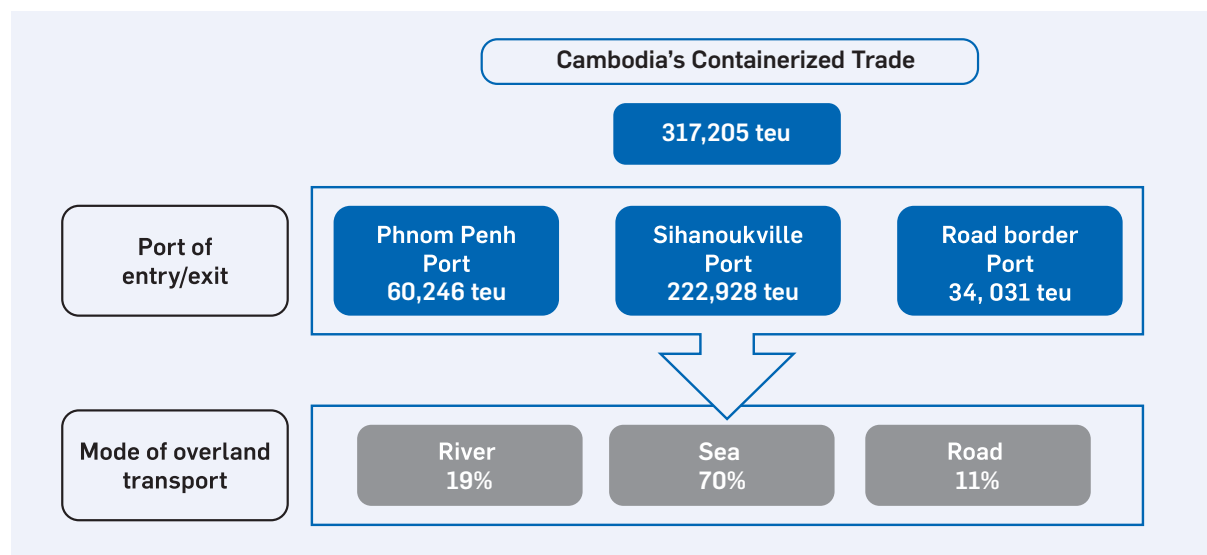
**In fact weighbridges provide one of the major opportunities for improper practices along regional trade corridors.** There is need for strict enforcement of vehicle axle load limits. Vehicle overloading imposes an economic cost on the economy by increasing infrastructure maintenance costs while accruing benefits to individual operators. However, the enforcement of weight requirements also opens up opportunities for improper practices unless it is properly regulated. In some cases, the weighbridge stop is used by some operators as an opportunity to offer payments to officials so they can let overloaded trucks through. A stricter enforcement of good practices with respect to fee collection at weighbridge stations may be warranted.

# 3

## Core Logistics Infrastructure and Services

**Cambodia has a sound core logistics infrastructure in place, comprised of sea and river ports, a national road network and a railway line.** The domestic airport is also linked to regional hub airports in Thailand and Vietnam and through them to numerous other destinations across the world. Overall the economy presently generates around 317,205 standard containers of cargo per year, both imports and exports (Figure 1).

Figure 1. Cambodia freight transport market (2010)



Source: Authors' estimates, data from various sources

**The imbalance between import and export volumes in Cambodia results in a scarcity of containers available for shipments in key routes, due to significant number of empty containers being shipped abroad.** Exports are much less than imports. This contributes to a lack of 'liquidity' in the container market as containers are sometimes unavailable. The majority of such empty box shipments are to Singapore and Thailand.

**Shipping lines impose strict limits on the return of empty containers to the ports.** Shipping companies (owners of the containers) require empty containers to be returned within 7 days<sup>2</sup>. These limits are much more generous in Cambodia than they are in Laos, where containers have to be returned within four days. Given the distance and time performance of domestic logistics in Cambodia, trucking companies



typically do not pay container storage fees. Containers are instead stored at dry ports (often owned by trucking companies) at carrier charge. In general, there is a collegial business relationship between shipping, freight forwarding and trucking companies with respect to containers, although overall industry coordination could be improved as evidenced by the large number of empty containers being both imported and exported. The rationale for shipping empty containers is that large shipping companies have container leasing agreements with other countries' ports (i.e. Singapore, Hong Kong) and have to re-export the empty containers to avoid paying demurrage fees. Since containers cannot be stockpiled, a scenario results whereby empty containers of different sizes are being both imported and exported in order to meet export demand from Cambodian firms.

**Table 3. Number of empty containers exported to regional countries, first half of 2011**

Countries	Volume of containers (first half 2011)		
	20ft	40ft	45ft
Other Asia	1179	1495	5
Singapore	837	902	6
Thailand	884	641	0
Hong Kong	170	283	0
Others (not stated)	156	161	2

### 3.1 Road Infrastructure and Transport

Cambodia has a road network of approximately 38,257 km comprised of 4,757 km of national roads and 5,700 km of provincial roads, which fall under the stewardship of the Ministry of Public Works and Transport, and 27,800 km of tertiary roads under the Ministry of Rural Development. Major roads link Phnom Penh and regional centers to all neighboring countries. The network has been much improved since the mid-1990s and is generally in fair to good condition. Road quality in Cambodia is therefore not considered a serious constraint to trade. However, trucking firms perceive the condition of roads in Cambodia not to be as wide or as well maintained as in neighboring countries. Some firms mention the need for further road infrastructure development in the future in order to keep up with regional standards. A major infrastructural impediment, noted during field research for this report and mentioned by truck drivers, is the lack of a bridge at the Mekong River crossing at Neak Loeung, on the critical route between Phnom Penh and Ho Chi Minh City in Vietnam. However, a new bridge is under construction at Neak Loeung, which is scheduled for completion in 2015.

**In terms of other infrastructural impediments, trucking companies point to road safety and accidents as a major problem.** This is not surprising as “Cambodia has one of the highest incidences of road accidents in the world, with 10 fatalities per 10,000 vehicles in 2010. This is a 44% decrease from 2007, but still represents the highest accident rate in Southeast Asia. Thus, road safety continues to be a major sector concern, especially with the growth of traffic in provincial and rural areas.”<sup>3</sup> The survey firm EMC (2011) established that frequent road accidents on the main Phnom Penh – Sihanoukville route often result in congestion or even closure of the corridor at times.

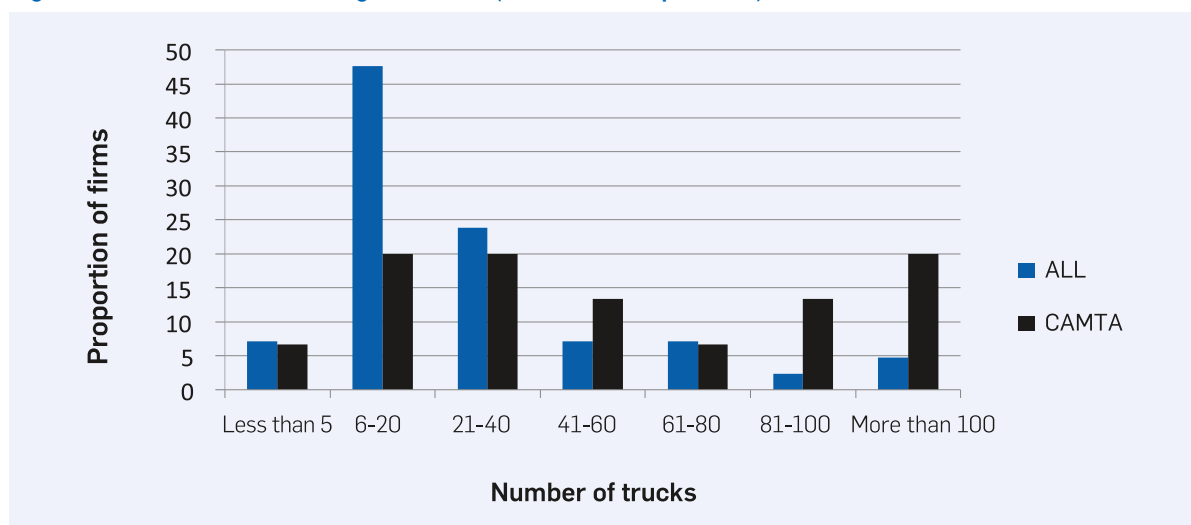
**The vehicle population of Cambodia has been increasing very rapidly, as is consistent with its rapid rate of economic growth.** Estimates are that the vehicle population is doubling every 6-7 years. For example the population of cars increased from 84,000 in 2003 to about 157,000 in 2009. In 2009, it was estimated that there were 98,438 cars and buses in the country. Statistics on the trucking industry are not readily available, but the trucking association estimates that there more than 3,000 trucks of 20t or higher carrying capacity. The total heavy goods truck fleet in the country is estimated at 1,500 (EMC, 2011). These are the trucks that are often used on the international trade routes. Over 90 percent of the fleet is registered in Phnom Penh, underscoring the importance of the capital to logistics in the country.

**A few large trucking firms dominate the road haulage sector in Cambodia.** There are many operators with some fleets, typically operated in an informal way. The twenty largest companies have on average 20 – 30 trucks each and between them operate more than 1,000 trucks. The largest firm has more than 200 trucks. The Government is now encouraging such operators to become formalized. This is being promoted through the association of trucking firms.

**The major trucking firms are organized in a formal trucking association, the Cambodia Trucking Association (CAMTA).** As of September 2011, CAMTA had 15 trucking companies as members. Between them the firms owned a total of 800 large trucks (majority semi-trailer). As such, member companies represent more than half of the heavy vehicle fleet in the country. The membership has not changed significantly in recent years though the Government is now actively encouraging all operators to join. The distribution of the CAMTA members' fleet compared with the general population is shown below (Figure 25).

<sup>3</sup> Source: <http://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/PPCR%208%20Cambodia%20Project.pdf>

Figure 2. Distribution of trucking fleet sizes (Phnom Penh operators)



Source: Authors' estimates, data from EMC and CAMTA.

**Most of the trucks operate on two routes connecting Phnom Penh to the ports of Sihanoukville and Ho Chi Minh City in Vietnam.** There is very little traffic between Cambodia and Laos and small volumes on the Thailand-Cambodia route. Traffic volumes have been increasing fastest on the route to Vietnam.

Some of the key characteristics of the trucking industry are the following:

- **The fleet is generally old and prone to frequent breakdowns.** Trucks are purchased and imported second-hand, mainly from South Korea, Taiwan and the United States. There is presently no legislative limit on the age of trucks when first imported, though the average is 5-7 years.
- **The cost of vehicles (and access to finance) poses a challenge for trucking companies.** Operators can borrow money from the bank to purchase trucks though most prefer to finance using their own resources due to high interest rates charged by banks. This explains the use of second-hand trucks which leads to higher maintenance costs (in addition to fuel costs) and poses a major constraint to the overall level of prices and the overall efficiency of the Cambodian trucking fleet.
- **Cambodia's trucks are under-utilized in international terms.** Trucks average 5-6 trips per month, giving an annual mileage of less than 40,000km. This suggests the trucks are seriously under-utilized as the mileage is about one-third that reported in Southern Africa, for example. The low level of utilization is partly a function of lack of return loads, low frequency of truck movements and the industry's limited geographic scope.

**High fuel cost is considered to be the greatest impediment to business operations, driving up total costs.** One trucking company reported that fuel accounted for up to 70 percent of the total transport costs. This proportion of fuel to other costs is consistent with reports from Lao PDR and Thailand, where fuel cost was also reported as a major constraint. It reflects a major challenge that is faced in investing in new fleets. In other regions of the world it is not unusual for fuel costs to be less than half of total costs, so the proportion of costs represented by fuel in the overall outlay reported by Cambodian truckers is large by international standards.

**It is not clear the extent to which fuel prices affect road transport costs, and hence the extent to which fuel prices impact on the competitiveness of Cambodian trucking companies.** As of September 2011, fuel prices in Cambodia were around 4,800 riel for diesel and 5,200 riel for gasoline. A survey of

international fuel prices (Table 17) shows that Cambodian fuel prices are on the higher end of the spectrum within the group of ASEAN countries, but close to those of Lao PDR, even though Lao is landlocked. Vietnam has the lowest prices of the four countries, possibly due to government subsidies. The limited geographic scope of the Cambodian trucking industry, rarely crossing national boundaries, may mitigate the high cost of fuel in Cambodia compared with its near neighbors and thus limit the impact of relatively high fuel costs on the overall level of pricing in Cambodia.

**Table 4. Cost of diesel fuel (November 2010)**

Country	Cost of diesel (US c/lt)
Cambodia	98
Laos	97
Thailand	95

Source: [www.gtz.de/fuelprices](http://www.gtz.de/fuelprices)

**Competition among trucking companies is mostly local.** Due to the fact that foreign trucks are restricted from operating deeply into Cambodia, international competition does not strongly affect pricing policy for trucking services (EMC, 2011). The logistics landscape is changing, however. There are new international players entering the market, as evidenced by Japanese logistics companies setting up office in Cambodia (Nippon Express, Yusen Logistics and Sojitz Logistics, for example). These companies have potential to strengthen the logistics environment, especially as CBTA implementation and BRTAs between Cambodia and its neighboring countries are finalized. Competition in the trucking sector, however, faces additional barriers to entry in the form of cross border truck quotas that are only allotted to majority-owned Cambodian firms. Several trucking companies report that more than 50 percent of their sales originate from one key client—a finding that indicates market entry is predicated on having an anchor client rather than functioning in a state of free competition for services. A survey by EMC (2011) found only one logistics company reported a large number of customers (about 1,000), with only 11-25 percent of revenue coming from their most important one. These findings suggest that current operational practices limit contestability in Cambodia's trucking service markets.

## 3.2 Railways

**Generally, given its limited availability, railway transport does not appear to be influencing pricing and competition in the transport service markets.** Cambodia has a one-meter gauge network which was concessioned to a private operator in 2009. The network consists of the Northern line linking Phnom Penh with Sisophon (338 km), the Southern Line linking Phnom Penh to Sihanoukville (264 km), and a branch line from Phnom Penh to the petroleum storage facilities at Ton Le Sap River (6 km). The Cambodia railway network is meter gauge, the same as in Thailand. The railway system is only partially operational and is undergoing rehabilitation, which will include the reconstruction of the "missing" stretch of rail from Sisophon to Poipet (48 km) on the Thailand - Cambodia border. This stretch of railway was removed during the war in the 1970s and its restoration will enable a link from Cambodia to Thailand. It is possible that once the railway is operational it could help overcome some of the costs incurred in transshipping cargo at the Cambodia-Thailand border. However, this will depend on the efficiency of wagon transfers on crossing the border.

### 3.3 Ports and Shipping Services

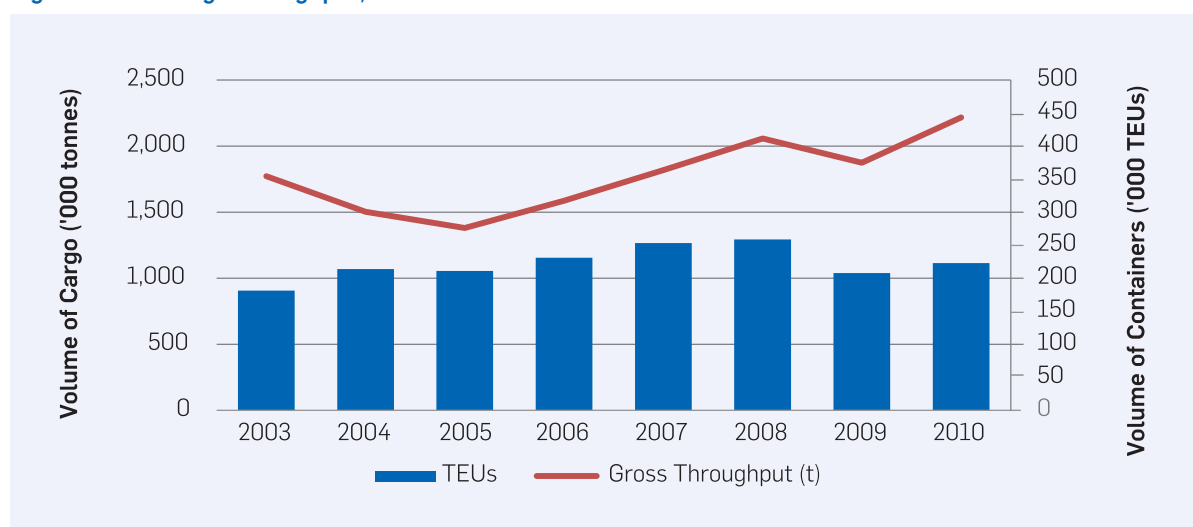
**Cambodia is served by two main domestic ports, one river port in Phnom Penh and a seaport in Sihanoukville.** Both ports are state owned but autonomously operated. (Another port, called the Mong Rithy Port, exists under a semi-official status. It is located North-West of Sihanoukville but does not publish official data and was not covered by the EMC survey on which this report is based). Sihanoukville is operated by Port Autonomous Sihanoukville (PAS) and Phnom Penh by Phnom Penh Automous Port (PPAP) trusts.

**Cambodia has access by road and inland water transport to seaport trade gateways.** Traffic to Sihanoukville from Phnom Penh is transported by road while that to the Vietnamese ports moves either via the Mekong River via staging points in Cambodia to the deep water port of Cai Mep (some 35 miles southeast of Ho Chi Minh City) in Vietnam or directly to Ho Chi Minh City (HCMC) port. The port of Cai Mep was opened in 2006 as a joint venture between the shipping line Maersk (49 percent) and the Vietnam-based Saigon Port and Vietnam National Shipping Lines, Vinalines. Whereas the HCMC port serves as a gateway for waterborne trade between Cambodia and Vietnam and as a transshipment port to major maritime destinations (with some direct services, but also via Singapore and Malaysia), Cai Mep port is used as transshipment point for direct liner services to most hub ports in the US, the Middle East and Asia.

**The Port of Sihanoukville is the largest seaport in the country.** The port was constructed in the 1950s and became operational in 1960. It has an old berth that can accommodate four medium sized vessels on both sides. A new quay was constructed in the 1960s which can accommodate three vessels with about seven meters draft. A container terminal opened in 2007 and this can handle vessels with about 10.5m draft. Port cargo volume is close to 2.5m tones per annum, more than two thirds of which is containerized. The actual volume of containers as measured in twenty-foot equivalent units is just over 250,000 TEU per year.

**The Port of Sihanoukville has a limited draft which in turn restricts the sizes of vessels that can call at the port.** The limitation and the generally small volumes of traffic are one of the reasons why Sihanoukville is predominantly a feeder port linked in the main by feeder services to Singapore and Hong Kong.

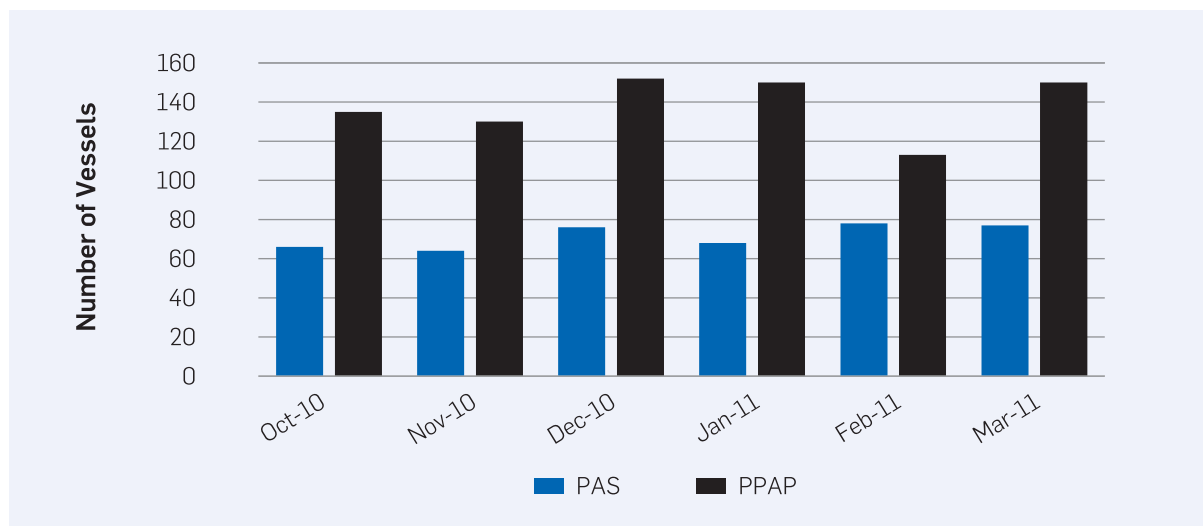
Figure 3. PAS cargo throughput, 2003-10



**Sihanoukville is the main trade gateway for seaborne cargo entering or leaving Cambodia.** Cargo passing through Sihanoukville is transhipped through Singapore or Hong Kong. There are, therefore, no direct vessel calls serving Cambodian ports. Sihanoukville handles about three-quarters of all trade traffic by volume. In 2008 the port handled about 250,000 TEUs while the river port handled about 50,000 during the same year (Figures 3 and 6.) Cargo volumes passing through Vietnam have been increasing in recent years, due to the perceived competitiveness of both the overland and sea routes.

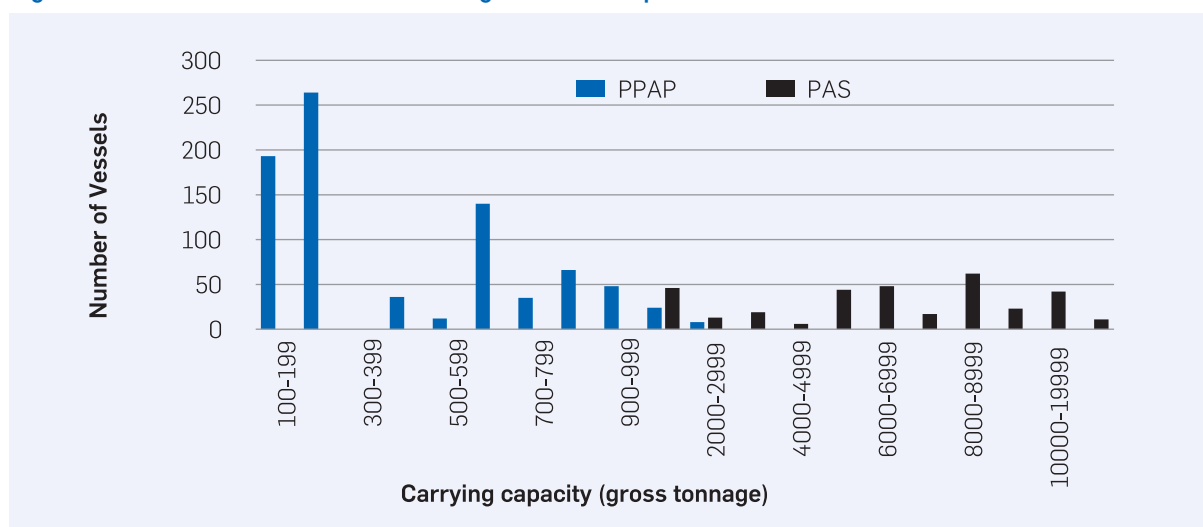
**Vessels calling at Sihanoukville Port are small by international standards.** The biggest ports in the region through which Cambodia traffic is transhipped (Hong Kong and Singapore) are more than 100 times larger than Sihanoukville in terms of container volumes. Sihanoukville Port is smaller than all the other seaports in neighboring countries and is characterized by much lower international connectivity, as measured by the UNCTAD Liner Shipping Connectivity Index. These patterns both show and explain why the port operates largely as a feeder for the nearby deep-water ports (Figures 4 and 5).

**Figure 4. Number of vessels calling at Cambodia ports**



Source: World Bank and Containerization International, 2010.

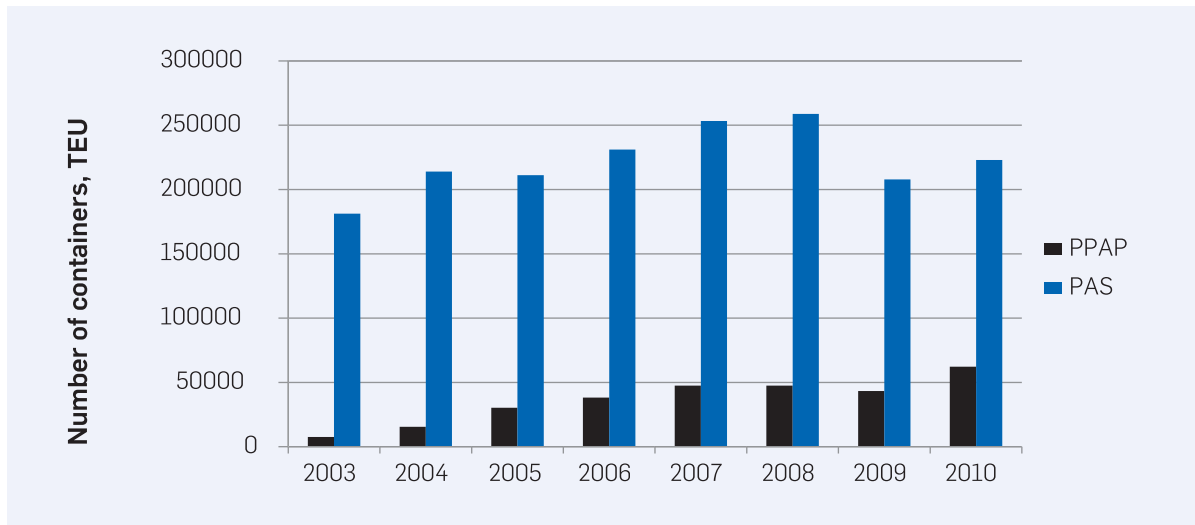
**Figure 5. Distribution of vessel sizes calling at Cambodia ports**



Source: World Bank and Containerization International, 2010.



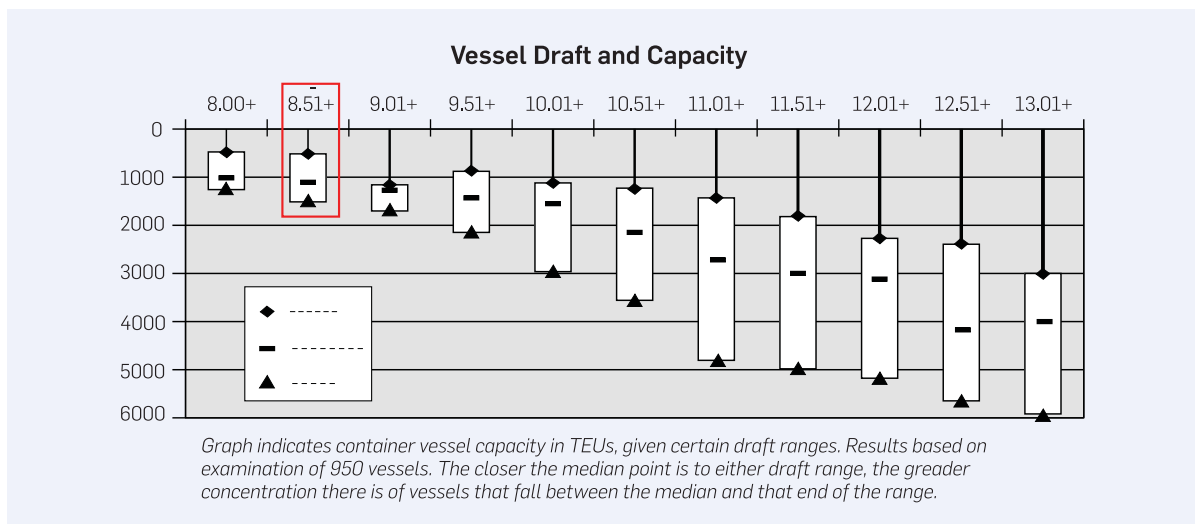
Figure 6. Container volumes at Cambodia's main ports



Source: Authors, data from PPAP and PAS.

One of the reasons why Sihanoukville does not handle large vessels is due to the limited depth of the entrance channel to the harbor. Rocky outcroppings in the channel limit entry to vessels of a maximum draft of 8.5m. Empirical evidence points to a relationship between draft and vessel size (Figure 30) and it is not every port in the world that is capable of handling such large vessels. Potentially, therefore, due to its limited depth, the maximum size of the container vessels that can be handled at Sihanoukville is about 1,800 TEU capacity.

Figure 7. Relationship between draft and vessel capacity



Source: Palsson (1998).

The trade traffic volume on the major trade routes out of Phnom Penh to the seaports is influenced in part by the frequency of vessel calling at the respective ports. So, while some shipping lines, such as APL, provide a regular weekly service to Sihanoukville, it is only a feeder service to Singapore. In comparison, Ho Chi Minh has many direct vessel calls to numerous overseas destinations. Shippers typically make an assessment of the option that gives the shortest possible transit time within the constraints imposed by their overseas buyers. Cambodia's ports are not functioning as international gateways. Improvements in physical capacity including blasting and dredging to deepen the entrance channel would be required for direct vessel calls, especially by the larger vessels now used in international shipping.

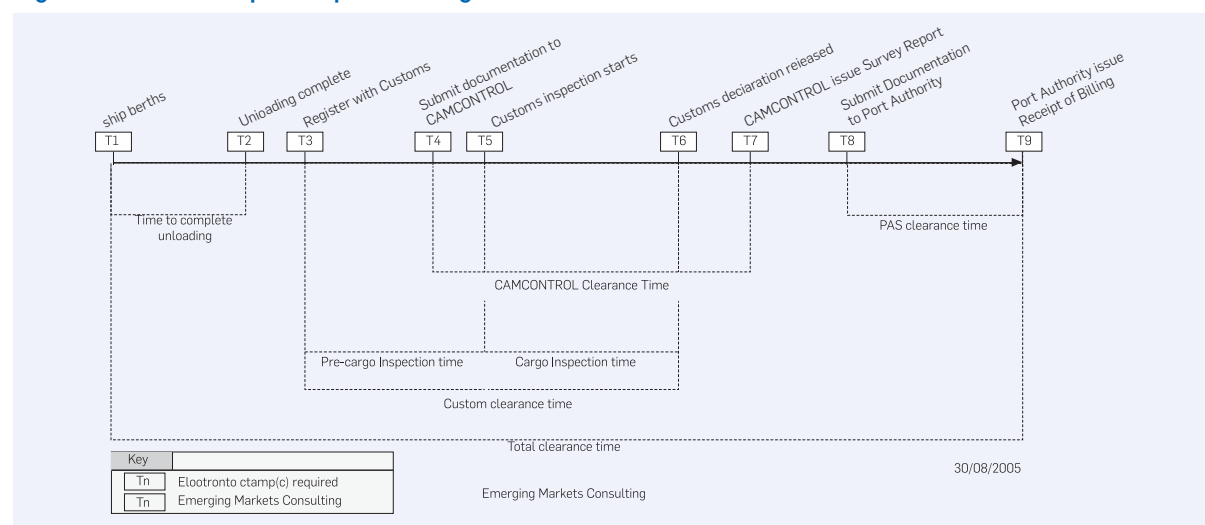
**The most competitive route for shipping is via the Mekong River from Phnom Penh to Cai Mep port outside Ho Chi Minh City in Vietnam.** Traffic through PPAP has been growing in recent years. This is mainly due to the connection to Cai Mep port in Vietnam by river barge, which is an option that offers international connectivity advantages over both Sihanoukville and Ho Chi Minh ports. Sailing down the river from Phnom Penh to Cai Mep and linking to a deep sea vessel to the United States is US\$200 cheaper per container and two days shorter than driving from Phnom Penh and connecting through Ho Chi Minh. The same route is also US\$100 cheaper and 3 days shorter than going through Sihanoukville. A new port with an adjacent container terminal is under development in Phnom Penh, some 30km downstream from the current port, which will ultimately have a capacity of 300,000 TEU per year. This will add to the efficiency of the river transport option for shipments from Cambodia to Vietnam's deep-sea ports.

### 3.4 Customs and Border Management

**It generally takes a few hours to clear the customs procedures related to cargo through Cambodia's various ports of entry.** There is an ongoing process of automating customs processes, though clearing agents or importers are not yet able to enter data directly into the customs system. The authorities are already using some form of risk management, in which about 20 percent of cargo passes through a red channel and in general some 60 percent of cargo is passed free of physical inspection.

**Shippers in Cambodia suggest that the clearance procedure is cumbersome and significantly increases costs.** Part of the clearance process takes place before goods are shipped to Cambodia, when the importer submits documents for valuation purposes. When the goods finally arrive in Cambodia the preparatory document submission often helps with the clearance process, due to the fact that the contentious stage of goods clearance may already have been completed. Clearance itself is based on submission of hard copies of all documents, some of which, such as the import permit, can only be obtained in Phnom Penh. Clearing agents have to employ staff to take the documents to the port of entry and clearance can only be done by a registered broker. The process is characterized by duplication of bureaucratic activities and lack of data sharing between Customs and other border agencies, such as Camcontrol. (Figure 31 shows trade process maps for PAS.)

**Figure 8. Process map for imports through Sihanoukville Port**



Source: World Bank and Emerging Markets Consulting, 2009.

## 3.5 Clearing and Forwarding Services

**Logistics services in Cambodia are typically provided by numerous brokers, each contributing one activity to the final clearance of the goods. This means that multiple actors are involved in the transport and delivery of goods, muddying the waters about where and to who and for what various payments are really being made.** This can be illustrated by the case of textile exports, where manufacturers pass shipments to Inland Container Depot operators who work with forwarding agents and trucking companies to get a shipment to the port. For many exports, shipping lines have typically been designated in advance by the overseas buyer. In order to ensure smooth operations, therefore, the agents working with the designated shipping line tend to be preferred over independent agents, creating an informal bias in favor of one shipper that impedes competition and impacts on costs in general. As a result of this practice, while in theory there is competition in logistics services, in practice shippers have to work with service providers linked to one or other of the shipping lines. The lack of clarity about the roles played by various brokers presents exporters with an opaque process and regulatory environment that is characterized by limited competition and unusually high costs for shippers.

**In agriculture, the practices are similar though processors and exporting companies have greater control over the farmgate portions of their supply chains.** Processors purchase from middlemen who buy directly from farmers and have to work with forwarders to export their produce. As a result there is little in-house management of logistics services by the country's private sector.

**Freight forwarders are probably the most important player in organizing logistics in Cambodia.** EMC (2011) found significant overlaps among the services provided by trucking and freight forwarding firms. Some trucking companies provide basic transportation services while a few also offer freight forwarding services and warehousing. Some freight forwarders offer standard clearance services while others also own their own trucks. In many cases, businesses claim to provide a wide range of services but actually outsource the activities to another party. The area of most common overlap between trucking and freight forwarding companies is provision of customs brokering and warehousing services. In total, there are about 200 freight forwarders operating in the country.

**The freight forwarders in Cambodia are organized in a national association, the Cambodia Freight Forwarder Association (CAMFFA).** CAMFFA was officially established and recognized by the government in 2004. It has 21 members: 19 regular members and 2 associated members. CAMFFA and the Cambodian Trucking Association (CAMTA) are active in the same Government-Private Sector Forum (G-PSF) working group, which allows for dialogue between the private sector and the Government on logistics and trade related issues.

## 3.6 Informal Payments in Logistics in Cambodia

**One of the fundamental problems underlying the logistics market in Cambodia is the opacity of the costs elements in determining the final price for shipments.** This is one of the reasons manufacturing firms do not invest in in-house logistics capability, because they wish to avoid having to deal with some of the informal practices that are encountered along the trade corridors. Importantly, the desire to avoid informal fees, or the desire to avoid being personally involved in making informal fee payments, enhances the power of agents and brokers to increase the charges involved in transporting goods into and out of the country. The ability of agents and brokers to claim the existence of high informal fees, and use it as

justification for charging high shipment prices, seems to be one of the main contributors to Cambodia's high logistics costs. Furthermore, the agents and brokers have a financial incentive to maintain the opacity of the regulatory environment so as to discourage any outside investigation of the amount that is really paid by them in informal clearance fees versus the amount that is retained by them in the form of abnormally high profits.

**Generally, trucking firms consider lack of access to accurate and up-to-date information as a constraint.** They perceive information regarding fees, regulations (particularly upcoming legislation changes) and procedures to be unclear at times. Problems may also arise because of poor dissemination of information by government agencies and lack of knowledge in the private sector about where to access the information provided. According to some operators there is no advance notice regarding new regulations that have come or will come into effect. Informal fees are also sometimes charged for obtaining information. The lack of transparency proves a fertile ground for informal payments including to various border officials.

**Informal payments are regularly reported to take place at weighbridges and enroute checkpoints.** Trucking firms report that informal fees reportedly are collected routinely by police at checkpoints on main roads. On the route between Phnom Penh and Poipet, for example, informal fees range between 5,000 and 20,000 riel, though fees as high as US\$10 were reported. Weighbridge stations also provide an opportunity for informal fee collection due to truck axle-weight and length issues. Many truckers elect to pay an informal fee simply to avoid losing time from inspections.

**Unclear and unfair application of traffic laws was also noted.** Traffic police can collect informal fees from shipping company trucks for "every perceived minor problem", as stated by one interviewee (EMC, 2011). While this may well be justified, there is a perception of harassment for purposes of extracting informal fees. Operators on the PAS route report paying informal fees ranging from 10,000 to 50,000 riel relating to "every single mistake related to truck safety" (EMC, 2011).

**The informal fees are a significant impediment to business, most frequently occurring at checkpoints and weighbridge stations, at traffic stops, and during border crossing and customs clearance.** These comments are consistent with findings from previous studies. Most operators are reluctant to even discuss informal fees. Unequal treatment by border officials, based on informal relationships, may also have skewed some responses more positively than is otherwise the case.<sup>4</sup>

**There are also high levels of informal payments to clear cargo.** Typically agents pay US\$180 to US\$210 to clear each 20-foot container (a breakdown of the typical informal payments is given in Annex A). The payments are shared between the clearing agent and border officials. Stakeholders view the border processes as the main contributor to high trade costs in the country. For example, shippers report a) officials

extracting fees for mistakes made in filling out forms during the pre-shipment process; b) customs officials routinely contest the value declared on the form leading to a kind of "bargaining" between officials and clearing agent over the value of the shipment, which is often settled with informal fees; and c) when a container carries multiple kinds of goods, an informal fee is sometimes demanded by customs officials under threat of offloading the entire container for inspection. Some exports of agriculture goods besides rice (such as cassava or corn) also require payment of informal fees. As a result of the above practices, the cargo clearance costs in Cambodia's ports of entry and land border crossing points are high, even by regional standards.

**The informal costs are passed on to shippers, but without supporting receipts, leading to opacity about the real rate of informal payments that are truly required for clearance of each shipment and exacerbating the distrust between agents and shippers.** In any event, agents add a premium on each informal payment that they make. The practices are similar at both ports and land border crossings where informal payments are common, though the clearance procedures can vary amongst the different ports and border crossings. Each crossing or port has its own rules and informal fees have to be paid in different situations to varying amounts.

# 4

## Trade Corridors

**Cambodia is connected to regional and international trade markets by several domestic and international trade corridors.** The main domestic corridor links Phnom Penh to Sihanoukville Port, while the main international corridor connects Bangkok through Cambodia to Ho Chi Minh City in Vietnam. There is little traffic traversing the route between Laos and Sihanoukville Port. Rather most traffic originates in Bangkok and travels through the Poipet border post to Phnom Penh (734 km) and/or between Phnom Penh and Ho Chi Minh City in Vietnam (228 km). Traffic volumes are higher on the latter route and have been increasing, especially in containerized cargo. This is mainly due to shippers who prefer using Ho Chi Minh as their export gateway.

The rest of this Note considers the performance of the international trade corridors (Table 5 and Figure 9).

**Table 5. Trade volumes on Cambodia's main trade corridors**

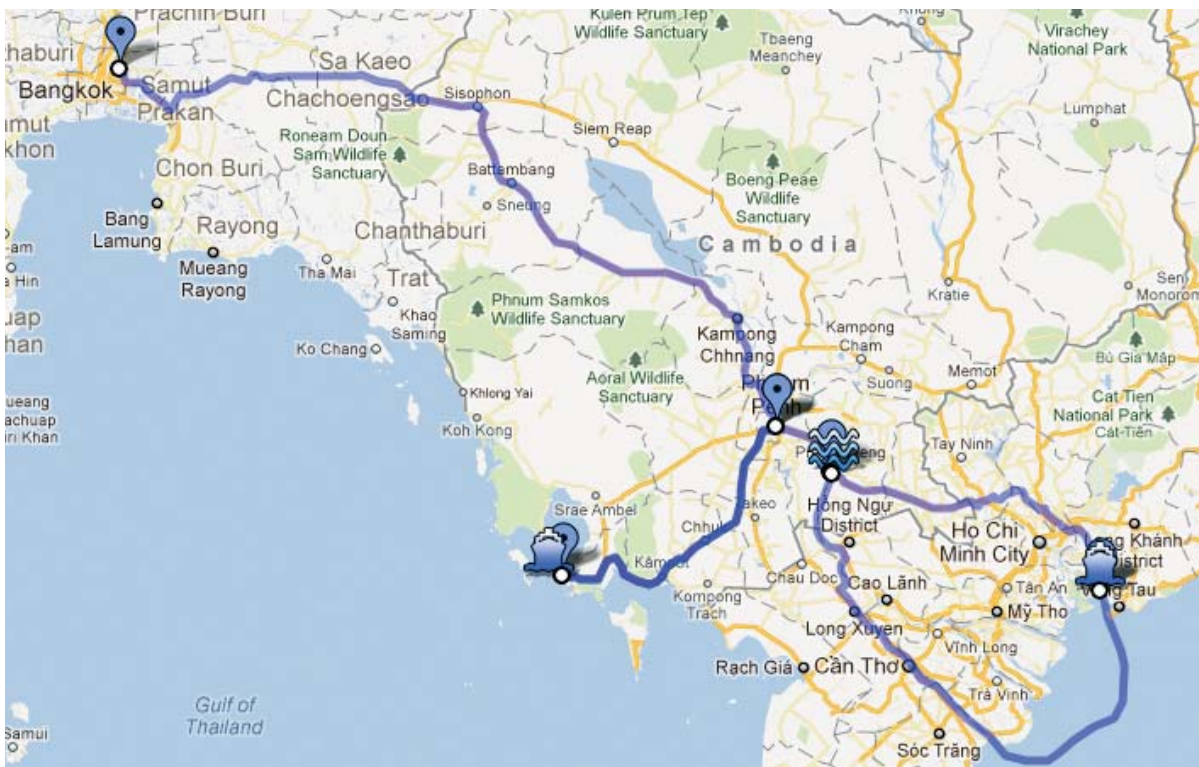
Corridor	Trade Volume	
	TEUs	% of total
Sihanoukville	260,000	73
Cai Mep	62,000	17
GMS Southern	34,000	10

**The Corridor Performance assessment focused on the following key indicators:**

- Traffic flows
  - Transit volumes
  - Border crossing volumes at the main border crossing points
- Time indicators
  - Inland transport between major economic centers along a corridor
  - Transit time within countries
  - Border crossing times
  - Delays at control and check points
- Costs
  - Delivery to destination
  - Cost associated with each activity and component of the transit operation.



Figure 9. Major trade corridors for Cambodia



## 4.1 Phnom Penh – Sihanoukville Corridor

**Infrastructure within the Phnom Penh-Sihanoukville (PPS) corridor is comprised of the Port of Sihanoukville, a highway (National Route 4), and a railway line.** Each of these infrastructural components is described below.

**The Phnom Penh transport corridor linking Phnom Penh to Sihanoukville is the main trade route in Cambodia, handling about 75 percent of the country's trade traffic.** The corridor passes through six provinces<sup>5</sup> that contain close to one third of Cambodia's population. It is a 235km long two-lane highway called National Road Number 4. The road was originally constructed in the 1950s when the port was developed. Following extensive rehabilitation works in the 1990s the road is in good condition once more, as is the highway network across the country in general. Highway 4 has three toll gates. It is one of the most important roads in Cambodia, carrying almost three quarters of the country's international trade traffic.

**The corridor also has a railway line, the Southern Line, linking Phnom Penh to Sihanoukville, and a branch line from Phnom Penh to the petroleum storage facilities at Ton Le Sap River.** Presently the railway is undergoing rehabilitation and does not carry international traffic. It is expected that the Southern Line will start moving international cargo in mid-2012. The opening of the rail link may provide a real alternative to road transport and is likely to reduce the opportunities for informal revenue collection along Cambodia's main roads.

**Most of the import and export cargo volume passing through Sihanoukville Autonomous Port (PAS) is originating from or destined for China.** However, the majority of containers exported through PAS are sent to America, followed by Europe, Asia and Africa. In 2010, Asia and Africa had the largest percent increase in exports over the previous year, but together only accounted for 22 percent of total PAS export volume. Asia in fact continues to be the fastest growing trading partner for Cambodia (+305 percent and +570 percent year-on-year growth in 2010-11 and 2009-10, respectively). Exports to America (-41 percent) have decreased compared with this same period in 2010, while exports to Europe (+39 percent) Oceania (+25 percent) have also increased. Total exports from PAS increased by 21 percent from 2009 to 2010. Rice, garment and wood commodity exports in particular rose over 2009 figures, along with the exports to Africa, Asia and Oceania.

**The PP-PAS Corridor has the largest number of logistics services providers in the country.** It accounts for the greatest volume of imports/exports and is the main route for Cambodian trucking and freight forwarding firms. Close to three-quarters of trucking firms and the majority of clearing and forwarding agents are active on the corridor.

<sup>5</sup> Phnom Penh, Kampong Speu, Kandal, Koh Kong, Sihanoukville and Kampot.



Figure 10. Top 10 origins of imports

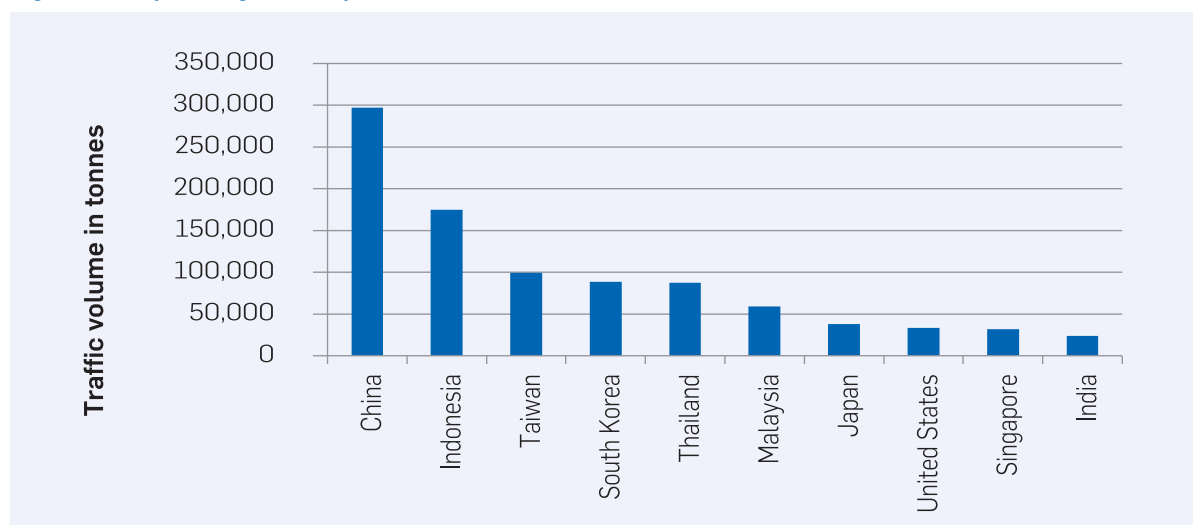
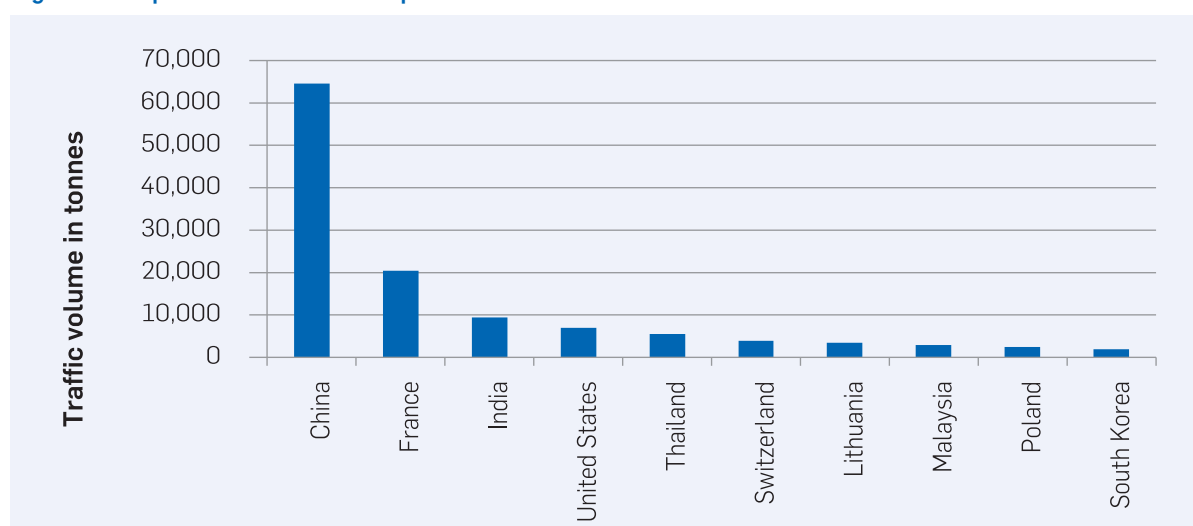


Figure 11. Top 10 destinations of exports



The SEZs located in Sihanoukville aim to increase investment by providing incentives such as VAT and 3-year profit tax exemption and a smoother and shorter customer procedure for both exports and imports. Proximity to the port is a main attraction for the SEZ. Additionally, if current national plans for local oil production materialize—based on encouraging results in offshore oil exploration in Sihanoukville—PAS is expected to play a role as stock keeper and oil transfer point for local and international markets. PAS intends to build an oil vessel terminal located 15km from the port.

### Border Clearance at the Port

**All the border clearance agencies are available in the same building at the Port of Sihanoukville.**

The main agencies are the terminal operator, Customs, Camcontrol, Kampuchea Shipping Agency and Brokers (KAMSAB) and clearing agents. In general, the customs clearance process for imports is the same as for exports, with two exceptions: (1) garment products do not require scanning at the port but do require inspection at the factory premise by customs officers; and (2) the import process requires obtaining a “Delivery Order” from KAMSAB, which may take about 30 minutes.

**The total required time for export custom clearance is 2 to 3 hours on average.** The import process however takes longer, between 3 to 4 hours. Informal fees range widely, from US\$50 to more than US\$1,000 depending on the products. For example, the informal fee paid for rice export scanning is 100,000 riel and tobacco is 300,000 riel.

## 4.2 Bangkok - Phnom Penh Corridor

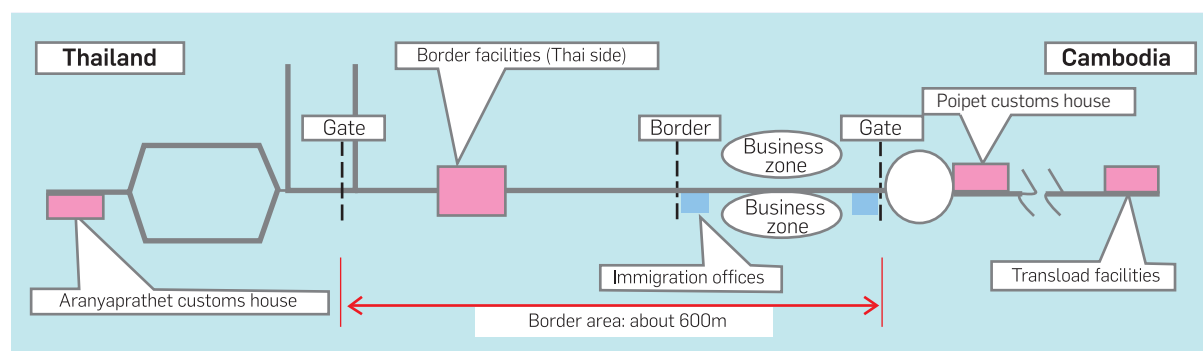
**The corridor between Bangkok and Phnom Penh connects two major metropolitan areas, linking through the towns of Poipet or Koh Kong.** While Bangkok is already an established production base, Phnom Penh is an emerging one with an increasing number of firms locating on one of the SEZs around the city. The corridor passes through the Aranyaprathet/Poipet border to Phnom Penh and stretches over a total distance of roughly 665 km, around 405 km of which is in Cambodia and 260 km in Thailand (comprising National Road No. 33 in Thailand, National Road No. 5 in Cambodia). In Cambodia, the road traverses south of the Tonle Sap region, one of the largest rice reservoirs in Cambodia and therefore a route most likely to grow in importance as Cambodia's rice exports increase.

**The quality of the infrastructure itself differs significantly between the two countries.** There are for the most part four lanes (two in each direction) in Thailand and two lanes (one in each direction) in Cambodia.

**On both sides around the Aranyaprathet/Poipet border the road is very narrow, leaving only little room for trucks to park for drivers to complete border formalities.** The following figure gives a sense of the process involved in shipping goods on both sides of the border area (Figure 12). On the Cambodian side of the border there are in total seven casinos, one of which is built just next to the rail connection to Thailand taking up the space that was initially reserved for a common control area for inspections of the Thai and Cambodian Customs. Also, both Thailand and Cambodia fail to segregate their lanes for different types of vehicles and trucks, cars and buses, all of which are queuing in the same lanes.

**The ICT infrastructure differs between the two countries.** Thailand uses an e-Customs system whereas Cambodia has just rolled out the ASYCUDA World program in this border post.<sup>6</sup>

**Figure 12. Diagram of both sides of the Aranyaprathet/Poipet border**



Source: Survey on Improvement of Customs Procedures for Trade Facilitation in the Mekong Region.

<sup>6</sup> Survey on Improvement of Customs Procedures for Trade Facilitation in the Mekong Region, P. 6-4

**Total trade between Cambodia and Thailand (in terms of value) is on the rise** again after a dip in 2009, with over \$1.3 billion in Cambodian imports in the first half of 2011. Cambodian exports, which more than doubled between 2009 and 2010, still remain minor compared to imports.

**There is a large trade deficit between Cambodia and Thailand**, as illustrated in table 6 and Figure 13 below. For example, in 2010 Cambodia imported US\$2,342 million from Thailand compared with exports of US\$214.90 million. This trade imbalance has a profound impact on the logistics sector in Cambodia as trucking companies often have to travel without an export-bound load from Phnom Penh to the border crossing before they can pick up imported goods.

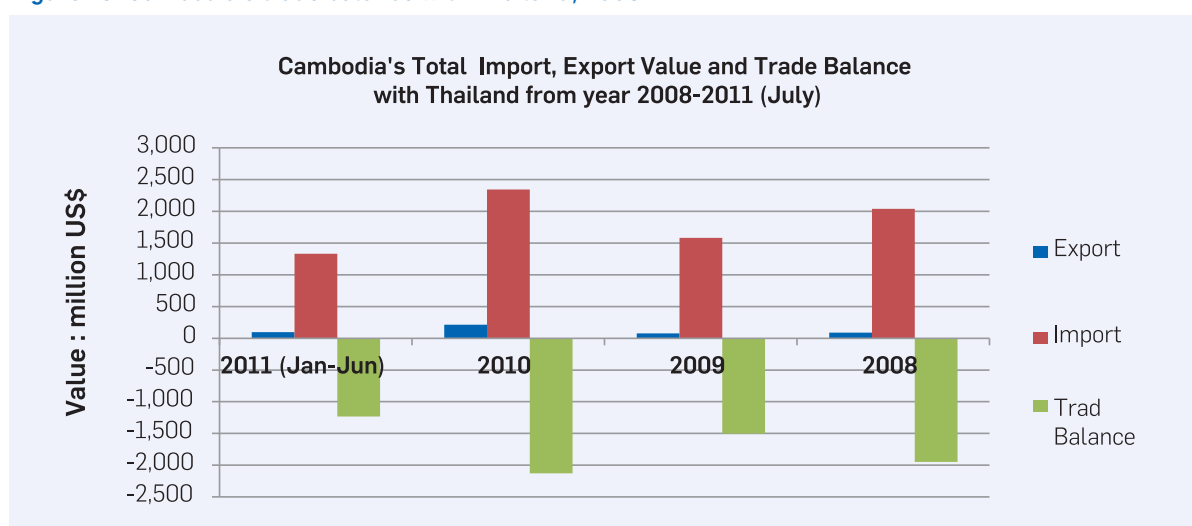
**Table 6. Cambodia's total import/export value and trade balance with Thailand**

(US\$ million)	Export	Import	Trade Balance with Thailand
2011 (Jan-Jun)	98.18	1,332.73	-1,234.55
2010	214.90	2,342.09	-2,127.19
2009	77.72	1,580.59	-1,502.87
2008	90.22	2,040.08	-1,949.86

Source: Thailand Ministry of Commerce.

**The border crossing of Aranyaprathet/Poipet is the principal border for the Thai-Cambodia trade although it represents only a minority of Cambodia's total import-export border trade.** The total export and import value between Cambodia and Thailand can be broken down by border crossing (Table 7 and Figure 36).<sup>7</sup> The findings for the Thai side reveal that more than 70 percent of the trade between the two countries is transacted via land transportation through the Aranyaprathet - Poipet border and Klong Yai - Koh Kong borders.

**Figure 13. Cambodia's trade balance with Thailand, 2008-11**



Source: Thailand Ministry of Commerce

<sup>7</sup>There is some inconsistency between the data obtained from the Customs Houses and Thailand Ministry of Commerce as the Import through Custom houses exceeds the Thailand's total Import.

**On the Cambodian side, import/export figures show that the Poipet border is responsible for roughly half of Cambodia's overland imports from Thailand and the vast majority of its overland exports (83 percent) to Thailand.** Furthermore, the Koh Kong border crossing is predominantly used for imports as there are not many exports through it, while there is a small share of exports going through the Phsar Prom crossing (to Chanthaburi province in Thailand).

**There is a large discrepancy between data from the Cambodian and Thai sides of the border crossing.** Cambodia seems to underreport data compared to Thailand. For example, in 2010 Thai Customs reported a total export value that is 2.6 times higher than Cambodia's reported import value and an import value that is 19 times higher than Cambodia's reported export value (Table 7).

**Table 7. Import and export volume between Cambodia and Thailand per Custom House**

million US\$	2011 Jan-Jun	% Trade through Border Custom Houses 2011	2010	% Trade through Border Custom Houses 2010	2009	% Trade through Border Custom Houses 2009	2008	% Trade through Border Custom Houses 2008
Total Export, (Import for Cambodia)	1,332.73		2,342.09		1,580.59		2,040.08	
Export through Custom houses <sub>2</sub> (Import for Cambodia)	973.26	73%	1734.1	74%	1437.15	91%	1594.80	78%
Sa Kaeo	568.01	43%	963.45	41%	715.22	45%	891.66	44%
Trat	341.72	26%	631.65	27%	599.91	38%	551.49	27%
Chanthaburi	47.33	4%	76.70	3%	56.88	4%	70.20	3%
Surin	8.93	1%	29.73	1%	24.79	2%	27.38	1%
Sisaket	2.18	0%	23.97	1%	30.19	2%	45.64	2%
Ubon RatChathani	5.10	0%	8.60	0%	10.17	1%	8.43	0%
Total Import <sub>1</sub> (Export for Cambodia)	98.18		214.90		77.72		90.22	
Import through Custom Houses <sub>2</sub> (Export for Cambodia)	108.03	110%	175.13	81%	102.73	132%	107.02	119%
Sa kaeo	89.91	92%	124.66	58%	64.65	83%	71.91	80%
Trat	1.20	1%	2.08	1%	1.66	2%	1.16	1%
Chanthaburi	15.82	16%	46.35	22%	28.54	37%	30.19	33%
Surin	0.67	1%	0.91	0%	1.71	2%	1.86	2%
Sisaket	0.43	0%	1.13	1%	6.17	8%	1.90	2%
Ubon Ratchathani	0.00	0%	0.00	0%	0.00	0%	0.00	0%

Source: 1. Thailand Customs Houses in the Northeastern Region and Eastern Region  
2. Thailand Ministry of Commerce

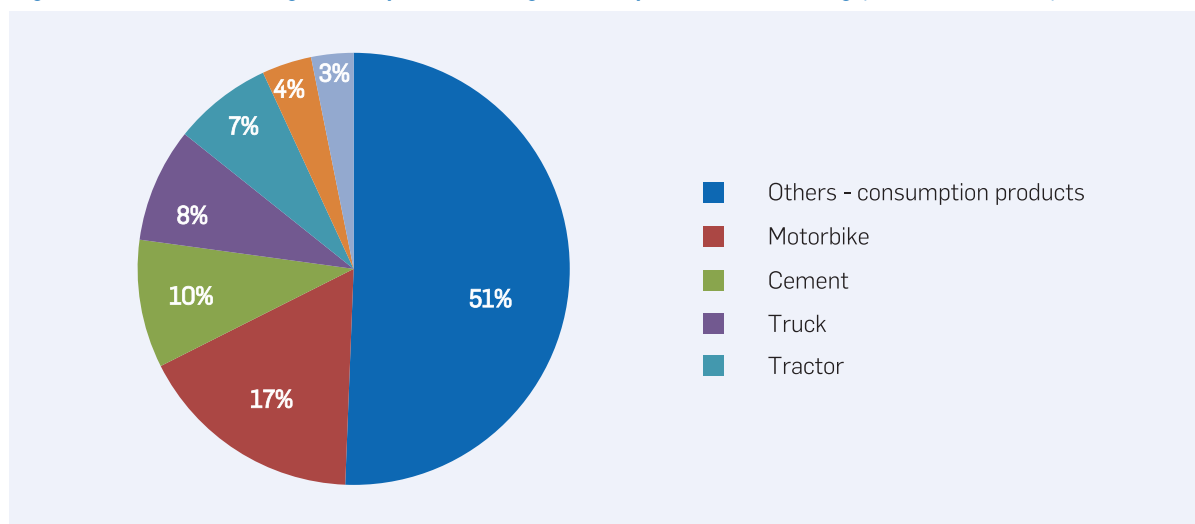
**Table 8. Trade value through Aranyaprathet-Poipet border**

Aranyaprathet-Poipet trade volume				
(US\$ million)	Thai Export through Aranyaprathet <sub>1</sub>	Cambodia Import through Poipet <sub>2</sub>	Thai Import through Aranyaprathet <sub>1</sub>	Cambodia Export Through Poipet <sub>2</sub>
2009	715.22	308.23	64.65	9.32
2010	963.45	367.27	124.66	6.54

Source: Thailand Customs Houses in the Northeastern Region and Eastern Region and Cambodia General Department of Customs and Excise<sub>2</sub>

**Most of the goods flowing through the Poipet border are Cambodian imports.** It is useful to note the kinds of goods imported

Figure 14 and Table 9 provide an overview and breakdown of goods, as reported by the Banteay Meanchey Customs Office in Cambodia.<sup>8</sup>

**Figure 14. Breakdown of goods imported through the Poipet border crossing (in terms of value)**

Source: Banteay Meanchey Customs Office

**Table 9. Total value of goods imported to Cambodia through Poipet, July 2011**

Type of goods	Value (US\$)
Others - consumption products	11,006,670
Motorbike	3,686,094
Cement	2,083,642
Truck	1,860,920
Tractor	1,607,321
Construction materials	810,270
Fertilizer	687,943
Total	21,742,861

Source: Banteay Meanchey Customs Office

<sup>8</sup> The data is for the month of July, 2011.

Figure 15. Type of imports through Poipet

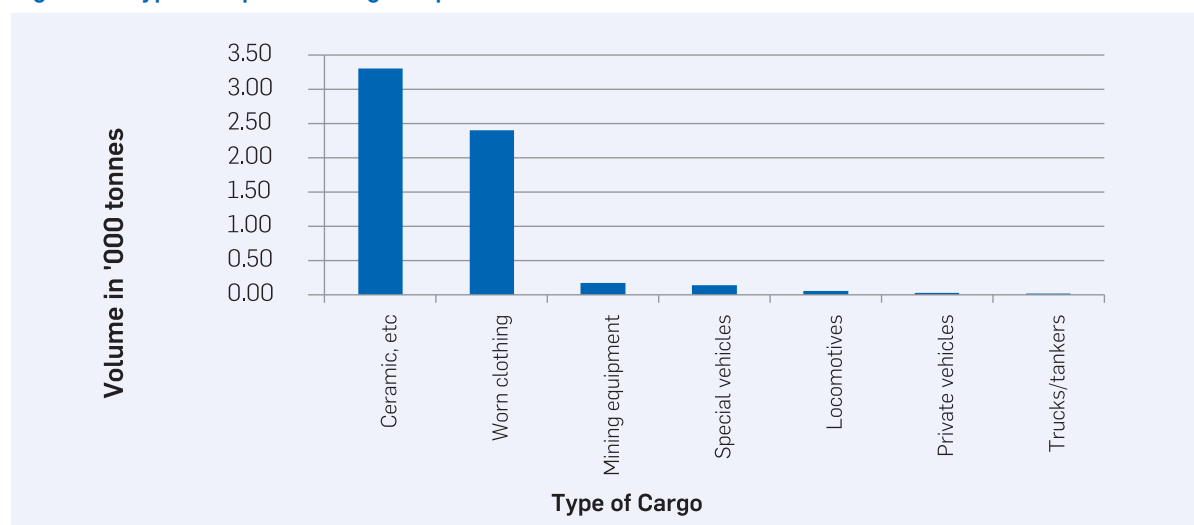
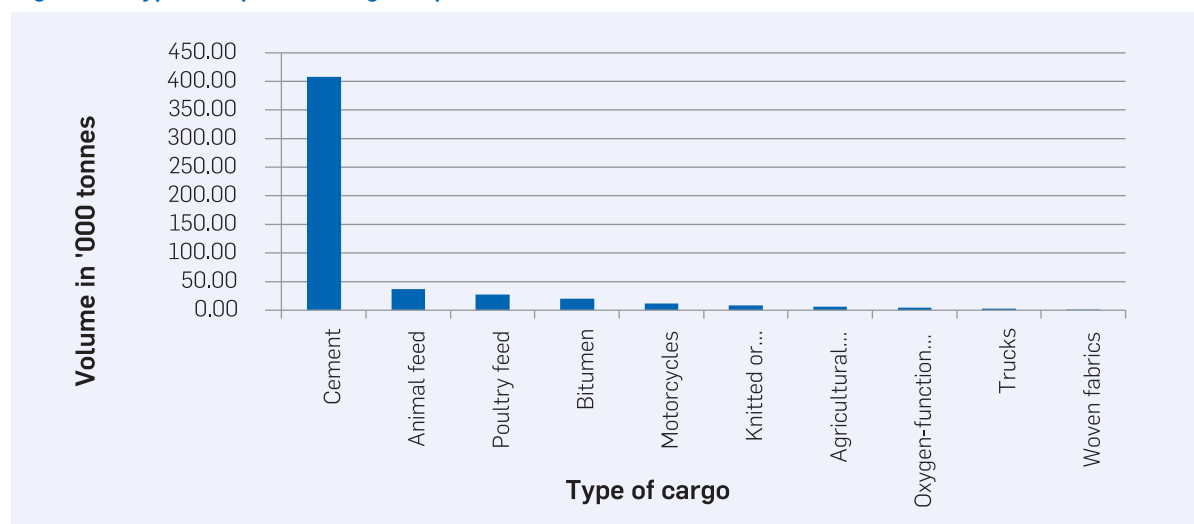


Figure 16. Type of exports through Poipet



**Consumer goods represent the largest share of Cambodian imports from Thailand by value**, based on the data from the Banteay Meanchey Customs Office. The other two main categories are vehicles (motorbikes, cars, trucks, tractors) and construction materials, including cement. By volume, consumer goods and cement represent the major share of imports due to their lower per unit value compared to vehicles. The relative distribution of trade products was also validated from interviews with trucking and logistics companies. Thus, despite differing findings between Customs and mirror data, the principal categories of goods imported from Thailand through the Aranyaprathet/Poipet border appear accurate.

**The number of trucks crossing the border in both directions is estimated to be around 120 trucks per day<sup>9</sup>.** However, traffic count data from the Thai Department of Highways suggests that those numbers are overestimated as they counted on the road leading to the border a total of 5,835 trucks in 2010, or roughly 16 trucks per day. The type of trucks are distributed roughly to equal shares between light, medium, heavy, semi-trailer and full-trailer trucks.<sup>10</sup> The largest volumes of trucking traffic occur typically between 8am and 5pm, but some trucks can leave the warehouses as late as 7pm. The trucks bound for Phnom Penh normally depart around 4pm in the afternoon.

<sup>9</sup> Survey on Improvement of Customs Procedures for Trade Facilitation in the Mekong Region, P. 6-2.

<sup>10</sup> Light Truck: Light Truck or Pick-Up / Medium Truck: Two-Axle Truck (6 Wheels) / Heavy Truck: Three-Axle Truck (10 Wheels) / Semi-Trailer: Semi Trailer (Four or More Axle) / Full-Trailer: Full Trailer (Four or More Axle)

**There are very few logistics providers available on the Cambodian side of the corridor, which raises questions about the openness of the market.** For example, only three trucking firms (Diamond Transport, Pacific Transport and Tean Po) operate on this route, whereas Diamond and Pacific are connected through family ties. Although there are a few more smaller players with less volume operating, their price quotations seem to be higher than the larger players. Similarly, only one freight forwarder sustains business on this route (Chay Da Logistics). One reason why there is only one freight forwarder could be that the two trucking companies do their own freight forwarding operations. In general, this leads to the conclusion that opaque market practices create a disincentive for new players to enter the market and make abnormally high profits for a few market participants.

**With the exception of few isolated instances, all goods are transloaded at one of warehouses in Cambodia.** In total, there are nine warehouses in the immediate proximity of the border (within 5 km), where transshipment of goods takes place. All of the warehouses are operated by the private sector; three by each of the trucking firms operating on the corridor and the remaining six are owned by large importers from Phnom Penh (Chipmong, Tong Hout, Lay Sreng, Ly Ony, Teng Hong Heng and RPC) that use their warehouse only for their own production/export. The warehouses are all located along the national road number 5 within close proximity to the Thai-Cambodia border.<sup>11</sup>

**In total, there are seven border agencies present on the Thai side:** Customs, Immigration, Food and Drugs Agency, Animal Quarantine, Public Health, Ministry of Agriculture and Foreign Trade. The Thai side offers a one-stop-service center. On the Cambodian side there are Customs (lead agency), CamControl, Police, Immigration and Quarantine present whereas CamControl acts as a duplicate customs agency in many respects.<sup>12</sup>

### 4.3 Phnom Penh – Ho Chi Minh City Corridor

**The route between Phnom Penh and Ho Chi Minh City follows National Road No. 1 to the Southeast via Bavet to the border with Vietnam (250 km).** After the border, a relatively unimpeded stretch of four-lane road continues to Ho Chi Minh City (80 km) and the port (90 km). On the Cambodian side of the corridor, the road is only one-lane in each direction. A toll fee has to be paid for this road. However, traffic speed is relatively slow (around 40km/h) because the road leads through several villages and smaller towns and experiences high traffic volumes in the form of buses and smaller trucks.

**Infrastructure is generally of higher quality on the Vietnamese side of the border.** The road condition on the Cambodian section of the corridor varies. A 60km strip, financed by JICA, is of high quality whereas a roughly 120 km part of the road is of low tarmac quality but nonetheless passable throughout all seasons. One missing link along the corridor, the bridge at Neak Leung, is presently under construction and is expected to be completed in 2015. In the meantime, a ferry operates daily from 5:30 to midnight.

**In addition, there are three operational SEZs located along the corridor to Ho Chi Minh City located on National Road No. 1.** The Phnom Penh SEZ is located outside the capital. The Manhattan SEZ and Tai Seng SEZ are both located a few kilometers before the border to Vietnam in Bavet. All SEZs offer one-stop-shops where all government services are offered in one building such as the General Department of Customs and Excise, CamControl, Ministry of Commerce (MOC), the Council on the Development of Cambodia (CDC), and the Labor Ministry. Within the exporting process, the MOC is responsible for issuing the Certificate of Origin. The CDC (issues investor licenses) and the Ministry of Labor (facilitates the

<sup>11</sup> EMC 2011

<sup>12</sup> Survey on Improvement of Customs Procedures for Trade Facilitation in the Mekong Region, P. 6-5.

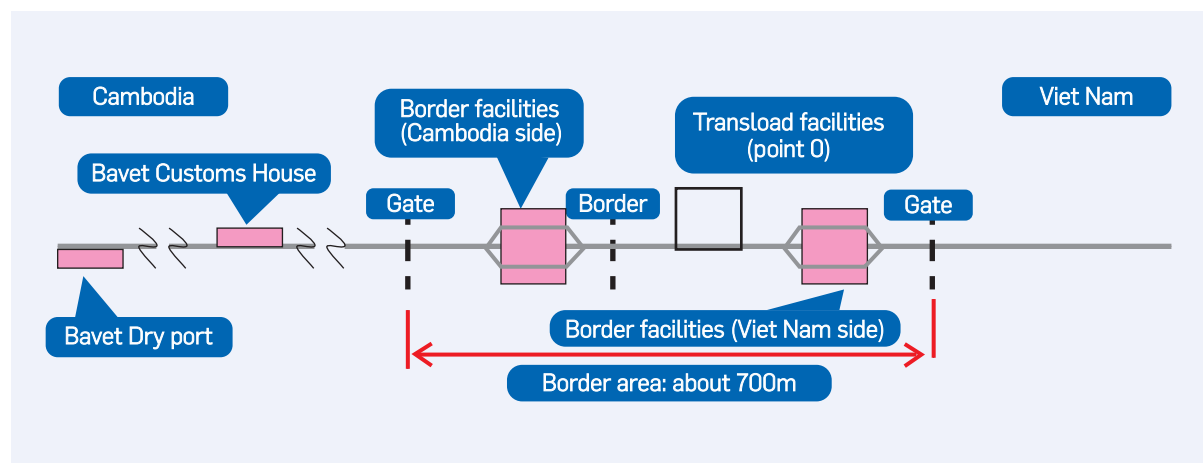
provision of labor and assists in dispute resolution) have no role in the export process. Export and import clearance for the SEZs is usually completed at the warehouse of the firm.

**The SEZs are major demand generators for logistics services in the region.** Particularly the SEZs near Phnom Penh or at the Vietnamese border in Bavet, Manhattan SEZ and Tai Seng SEZ, all of which contribute significantly to the production capacity of the Cambodian economy. For example, the Phnom Penh SEZ has 20 multinational manufacturing tenants, several of them from Japan. Products manufactured range from micro-motors, plastic and paper production, parts for the car industry, etc. Manhattan SEZ has 11 investors manufacturing footwear, bicycles, wetsuits and other industrial products. Tai Seng SEZ is the smallest and newest. Presently there are only six companies in the zone but they expect to have 10 zone investors by the end of 2012. Among the six companies, two are presently responsible for the majority of exports: one bicycle manufacturer, as well as one garment producer.

**Cargo export and import clearance can also be completed at one of the dry ports along the corridor.** In Bavet, clearance is primarily performed at the So Nguon Dry Port which was established in 2008. Another possibility is to complete the export clearance at a dry port in Phnom Penh and domestically transit the cargo to the border.

**The border facilities of Bavet/Moc Bai itself are adequate by international standards.** There are no fast track lanes available on either side but a small common control area which should be replaced by a larger one in the near future<sup>13</sup>. ASYCUDA World has just been rolled out in mid-September 2011. The following Figure 17 provides a diagram of processes on both sides of the border area.

**Figure 17. Diagram of both sides of the Bavet/Moc Bai border**



Source: Survey on Improvement of Customs Procedures for Trade Facilitation in the Mekong Region, P. 6-8

**The Cambodian border post (at Bavet) is equipped with 10 computers but none have internet connection.** Although there are four x-ray machines to inspect luggage none of them are functioning. Vietnam has 15 computers with internet connection at the Moc Bai border and functioning scanners but they can be used for scanning luggage only.<sup>14</sup>

**Formal trade between Cambodia and Vietnam has been steadily increasing.** The first half of 2011 was especially strong, with imports approaching 2010 totals and exports already exceeding it. Similar to the trade with Thailand, trade with Vietnam is also highly imbalanced. Cambodia imports 5.6 times more goods from Vietnam than it exports (2010).

<sup>13</sup> Survey on Improvement of Customs Procedures for Trade Facilitation in the Mekong Region, P. 6-8/9.

<sup>14</sup> Survey on Improvement of Customs Procedures for Trade Facilitation in the Mekong Region, P. 6-9.



**Table 10. Total import/export value and trade balance with Vietnam**

US\$ million	Exports	Imports	Trade balance
2011 (Jan-Jul)	282.8	1,315.7	-1,032.9
2010	276.6	1,551.7	-1,275.1
2009	197.1	1,166.5	-969.4
2008	214.3	1,531.6	-1,317.3

Source: General Statistics Department of Vietnam

**According to the Vietnam Marketing and Management Institute (VMMI)**, total Import-Export value through Moc Bai Border in 2009 and 2010 are US\$178 and US\$368 million respectively. The Bavet/Moc Bai border is an active crossing where 13 percent (2009) and 20 percent (2010) of total trade between Cambodia and Vietnam is transacted.

**From a value perspective, the largest imports are inputs to the garment industry.** Other products are electronic products such as cell phones and electric parts. Exports by value consist of more than 75 percent garments with the rest divided in different kinds of vehicles, motorcycles and bicycles.

**In terms of weight, the dominating export products were 'used rags' and other worn out articles of twine, rope and textiles materials together with garment exports.** Together they accounted for roughly 80 percent of export products. The largest import products by far are inputs for the garment industry, such as knitted, crocheted or woven fabrics of different quality that account for about 53 percent of imports by weight in 2010. Other major import products are vegetables as well as some carbonate. In total, 36,645.28 tons were transported across the border of Bavet, of which most were imports (32,540 tons vs. 4,105 tons exports).

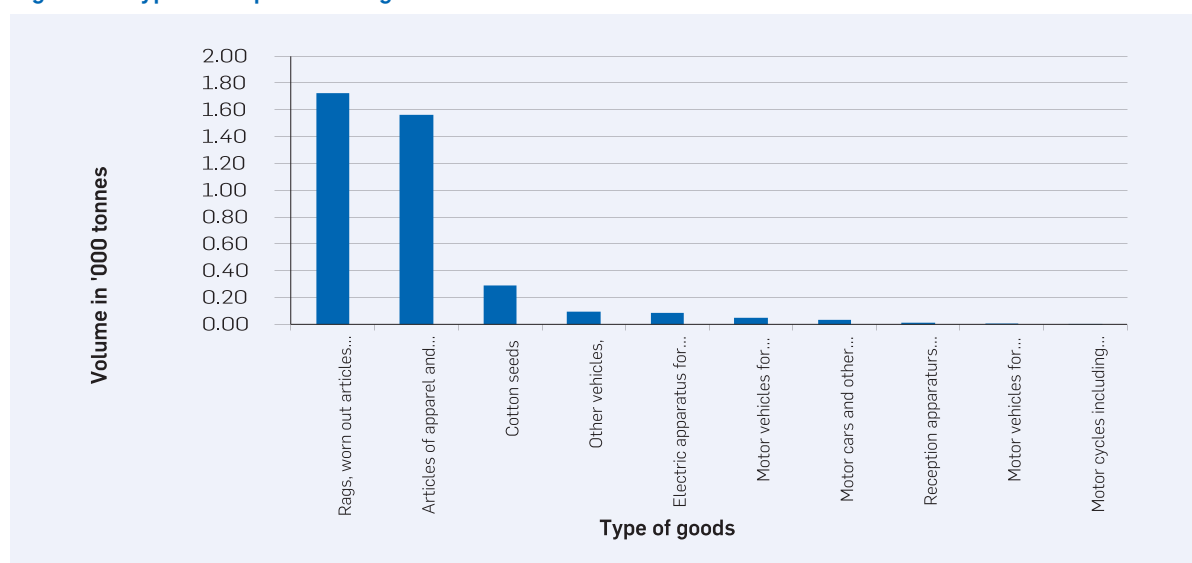
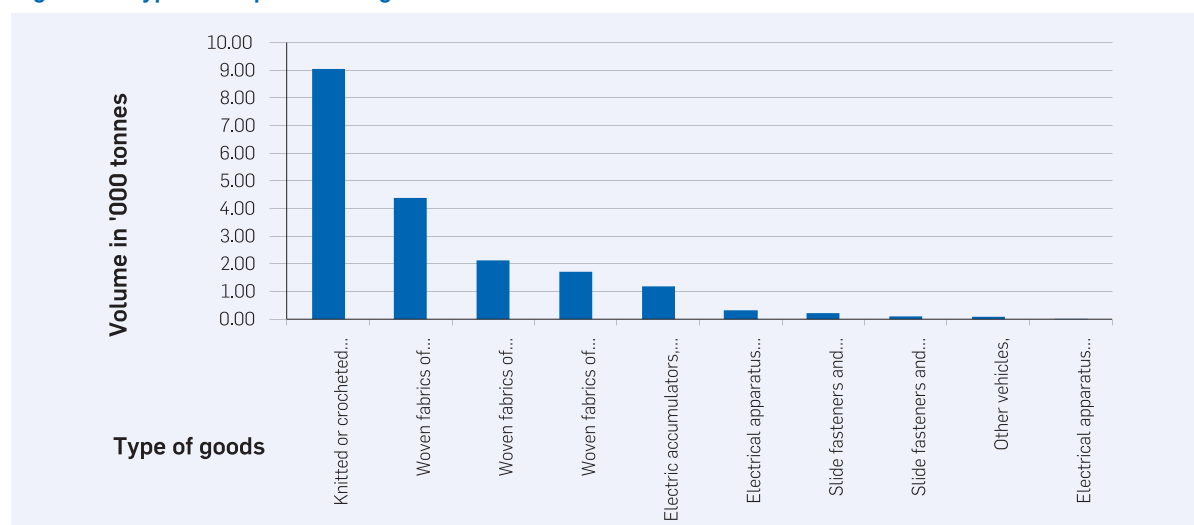
**Figure 18. Types of imports through Bavet**

Figure 19. Types of exports through Bavet



**According to a customs official, traffic amounts to about 80 trucks per day at the Bavet border-crossing with Vietnam (in terms of both imports and exports).** The majority of trucks carry containerized cargo (40-50 in imports; 15-20 for exports) with only very few (5-7 trucks per day) transporting gas and liquids. Around 80 percent of trucks for imports clear their cargo in either the dry port or one of the SEZs and the remaining 20 percent at the border gate itself. Most of the export cargo comes from one of the SEZs and is therefore cleared there. Only around 10 trucks per month carrying export cargo do not come from an SEZ which is usually some garment exporters with destination Ho Chi Minh City seaport or airport.

**There are numerous transport and freight forwarding companies operating along the corridor between Phnom Penh and Ho Chi Minh City.** The most predominant of all is the So Nguon Company, which runs the dry port near the Bavet border.

**According to a So Nguon Dry Port representative, only about 10 percent of exported cargo is cleared directly at the border in Bavet.** The rest is performed at ICDs in Phnom Penh and Bavet. Clearance in Bavet is primarily performed at the So Nguon Dry Port or at one of the five Special Economic Zones (SEZs) located near the border. Imported cargo is usually cleared at one of the SEZs or at the So Nguon Dry Port near the border (around 80 percent of all imports). Only a few trucks (the remaining 20 percent) are actually cleared at the border.

**There are at present four agencies at the Cambodian side of the border:** Customs, Immigration, Quarantine and the Police. If clearance is not completed at one of the SEZs, it is done at an ICD, 2 km away from the border using the single administrative document. Both Customs and CamControl are present at the ICD and have a joint inspection team. Changes are expected due to the recent roll-out of the ASYCUDA World system at the Bavet border.

**At both the ICD and SEZs there are “one-stop-shops” housing officials from the General Department of Customs and Excise and CamControl.** At the SEZ there are also offices from Ministry of Commerce (MOC), CDC and the Ministry of Labor (MOL), although the CDC and MOL have a limited role in the actual clearing process. The MOC is primarily involved in the exporting process, concerning the Certificate of Origin.

**Most trucks transporting goods on the route between Phnom Penh and Ho Chi Minh City operate under the so-called bilateral agreement as the implementation of the CBTA has drifted.** The latest MOU, signed in 2010, between Cambodia and Vietnam allows 300 vehicles from either side to operate in the other country. In Cambodia, the licenses are split between 243 buses and 57 trucks (from 9 different companies). Vietnam has dedicated all its licenses to buses. This number has been increasing from 40 in 2006 and 150 in 2009. Although until recently only one company with 20-30 trucks applied to operate under the bilateral agreement, there are now nine firms (Table 11) in Cambodia who hold cross-border trucking licenses. Goods carried by trucks with no license have to transship their containers onto Vietnamese trucks which are allowed to come to the ICD and SEZs on the Cambodian side.

**A “white zone” at the Cambodia-Vietnam border line has been established for transloading imports and exports.** Due to the small area and congestion however, all transloading is currently performed at the So Nguon Dry Port. Generally, operations are dominated by only a few operators.

**Table 11. Cambodia-Vietnam trucking companies granted permits**

Cambodia companies with international cargo transportation permits to Vietnam			
N°	Company	Number of Trucks	Member of CAM-TA
1	Bus Express & Travel (Cambodia) Co., Ltd	2	No
2	Khai Nam Transportation (Cambodia), Ltd	2	No
3	Phal Sareth Import Export & Tourism Co., Ltd	2	No
4	Raksmey Samaki Co., Ltd	0	No
5	Rubytran Import Export & Transport Co., Ltd	3	No
6	So Nguon Transportation & Service Import Export Co., Ltd	34	Yes
7	Sokan Transport Pte.Ltd.	8	Yes
8	Tai Seng Import Export & Construction Co., Ltd	5	No
9	Van Rec Co., Ltd	1	No
<b>Total</b>		<b>57</b>	<b>-</b>

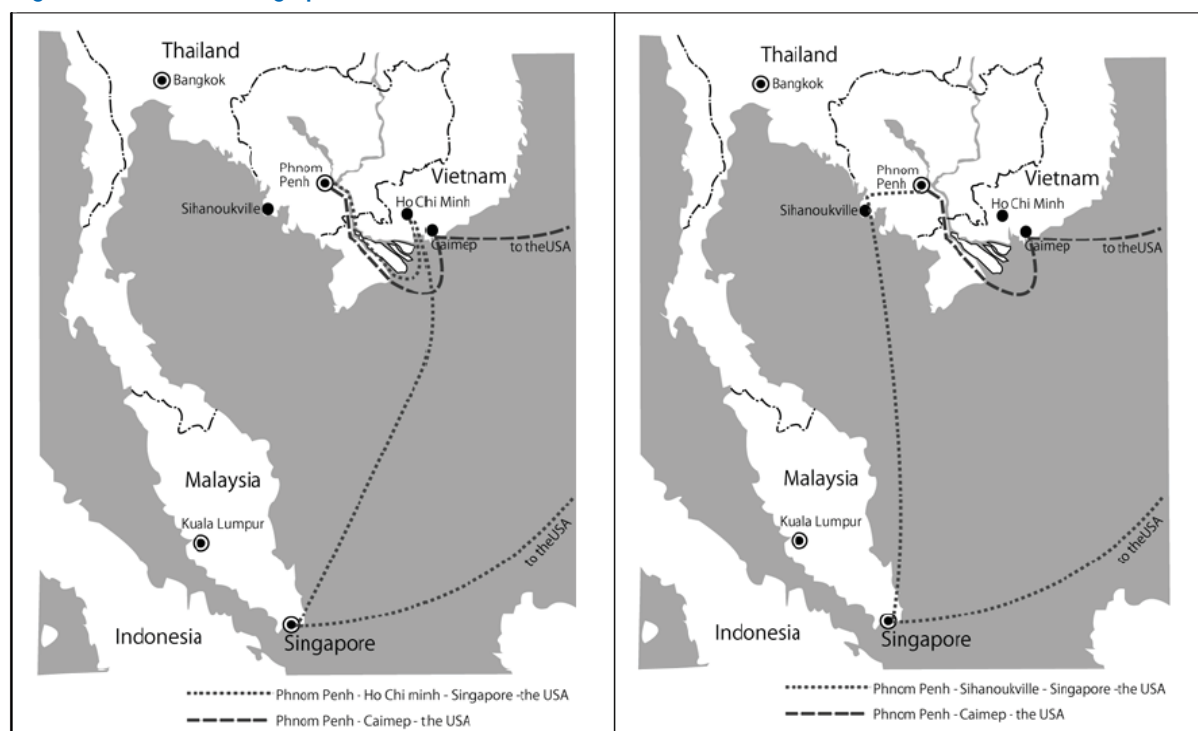
## 4.4 Phnom Penh-Ho Chi Minh Waterway Transport Corridor

**This corridor takes advantage of the Mekong System navigable waterways, stretching from the river port of Phnom Penh in Cambodia, to the Cai Mep deep sea port (380 km) and Ho Chi Minh City Port (430 km) in Vietnam.** Phnom Penh Port is located right next to the city's most transited areas. The cargo terminal is 3-4 km from the junction of the Tonle Sap and Mekong rivers, and about 330 km away from the mouth of the Mekong, of which about a third is in Cambodian territory. Vessels of up to 2,000 DWT can use this route without major difficulties, whereas much larger ships can pass the entrance to the Mekong only on favorable tides. For these latter vessels to operate, dredging is necessary at three points in Cambodia for ships to reach Phnom Penh.

**Phnom Penh Autonomous Port (PPAP) is rapidly reaching capacity at its current location.** The throughput capacity is currently set at about 65,000 TEU/year, which is currently slightly over the current container traffic. The main-cargo port consists of two sites. The container terminal consists of a 300x20m long quay built in reinforced concrete, with a simultaneous berthing capacity of 3 barges. The container yard spreads over 14,000 sq.feet. The domestic port is located some 500m downstream of the container terminal, with a length of about 300m and currently serving interprovincial routes to Kampong Cham and Siem Reap.

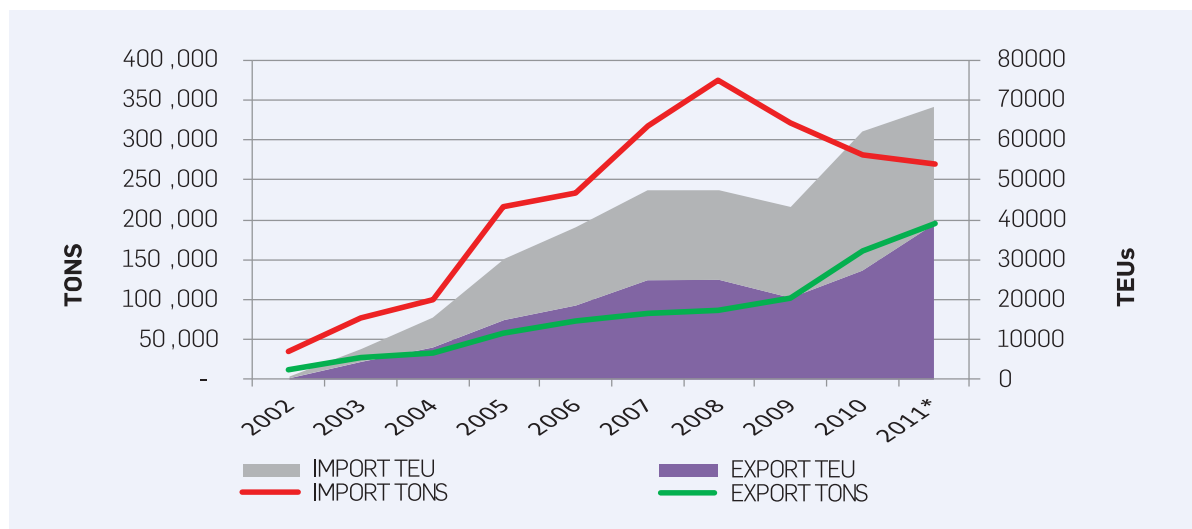
**Currently the bulk of traffic handled by PPAP is containerized, consisting mainly of textiles.** However, agricultural commodities are also shipped both by container and break bulk. Container throughput (in TEUs) has expanded at an annual average rate of 65 percent between 2002 and 2010, and currently adds up to about 68,000 TEUs (Figure 21). Although container inbound and outbound movement presents a marginal difference, the imbalance in tonnages is substantial. In 2008, import volumes (in tons) more than tripled that of outbound shipments, although this gap has narrowed considerably considering the imports drop of about 100,000 tons between 2008 and 2011.

**Figure 20. Traffic routing options out of Phnom Penh**



Source: Sisovanna, S. (2011)

Figure 21. Containerized traffic handled at Phnom Penh Port (TEUs)

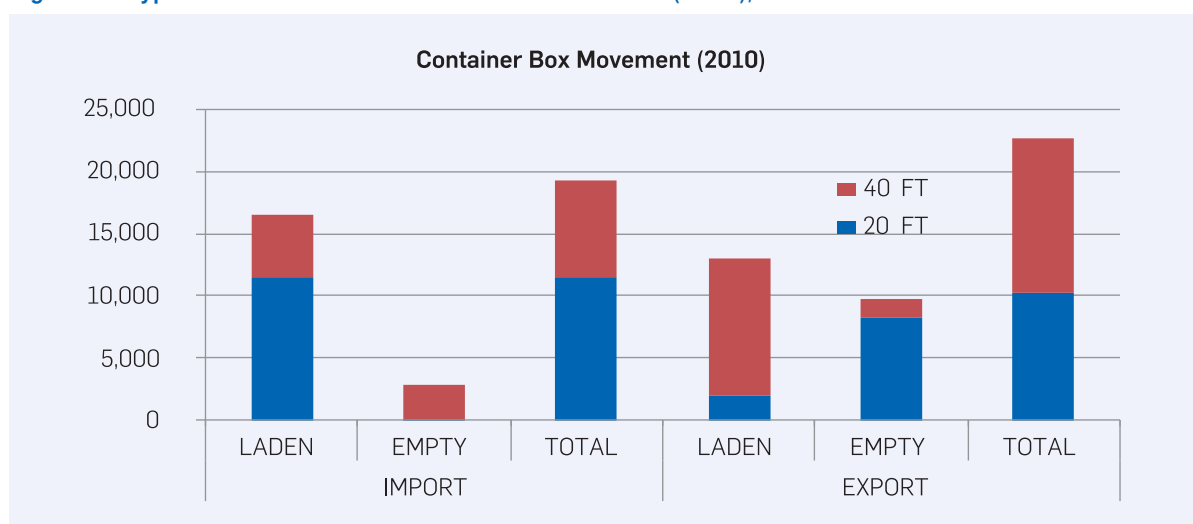


Source: Based on Phnom Penh Autonomous Port Statistics.

**A more detailed examination of container movements at the port shows that about 40 percent of the outbound movements belong to empty containers leaving Cambodia by waterborne transport.**

For exports, most of the cargo leaving Cambodia by river travels downstream in 40-foot containers to Vietnamese ports. Up to 4,000 additional empty forty foot containers to those arriving by river are needed to carry this volume of cargo out of Cambodia via PPAP. A logical assumption is that the needed containers come from the Phnom Penh hinterland, where industrial SEZs unpack their containers filled with imported inputs. Meanwhile, imports from Vietnam are mostly carried out with 20-foot containers (LCL or FCL), whereas most of the 20-foot containers being exported out via PPAP do not contain cargo at all.

Figure 22. Type of container movement in Phnom Penh Port (TEUs), 2010



Source: Based on Phnom Penh Autonomous Port Statistics.

**Domestic and international exports and imports as well as transit operations use river transport.** For the latter, these are mainly coming from mainland China, Hong Kong, South Korea, Taiwan, and Japan.

## Characteristic of Supply and demand for logistics services for the corridor

**Phnom Penh port is currently served by a number of Vietnamese shipping lines that make between 13 and 16 weekly calls.** These consist mostly of smaller vessels and barges with a capacity between 40 and 130 TEU, capable of carrying both containerized loads and break bulk cargo. In general, these are feeder services connecting to the Port of Ho Chi Minh City (HCMC) and later to Singapore, where goods are transhipped on their way to their final destination overseas. The newly inaugurated deep sea Port of Cai Mep in Vietnam has expanded the number of services to main markets in US and Europe, thus allowing Cambodian exporters to avoid a transshipment in HCMC. The direct route to Phnom Penh-Cai Mep-USA saves at least US\$200 and at least 2 days lead time compared with Phnom Penh-Ho Chi Minh-Singapore-USA; and US\$100 and 3 days vis-à-vis the Phnom Penh-Sihanoukville-Singapore-USA land-sea route. Currently, Cai Mep offers services from most first-class international shipping lines to the West Coast of the United States (via China and/or Japan), and to the Atlantic Ports in Europe and in the East Coast of the United States (via Suez-Mediterranean -Gibraltar).

**There are three foreign carriers operating services to Cambodia on top of the Cambodian flag vessels in PPAP:** Gemadept Corporation, Hai Minh and New Port Cypress, all Vietnamese corporations. Currently, Gemadept handles the largest volumes of cargo in volume at Phnom Penh Port, with a 24,000 TEU throughput (57 percent of the total); approximately 16,000 TEU correspond to laden cargo (7,000 for imports, and the rest for exports) and 8,000 TEUs in empty boxes. Frequency of vessel calls in PPAP grew from an average of 5 to 7 weekly calls between 2010 and 2011. In addition, the company offers transshipment services within its liner network connecting the Terminals in Southern Vietnam to Thailand, Malaysia, Singapore, Indonesia, Hong Kong, Taiwan, coastal services to Northern Vietnam, and Sihanoukville Port.<sup>15</sup> In late 2010, New Port Cypress started its services with two vessels—each with a capacity of 128 TEU—in both directions, making two weekly calls. Outbound container barges from Phnom Penh Port feed the Tan Cang – Cai Mep Terminals in Vietnam for onward shipping to the United States and Europe.<sup>16</sup>

**Part of the demand using this route stems from garment shippers that favor the use of containerized cargo, and to lesser extent, exported break bulk agricultural commodities, such as rice, coconut oil, corn, bean and rubber wood.** A key comparative advantage of the Phnom Penh port in comparison to Sihanoukville lies in the proximity to the factory floor; though hourly restrictions on the movement of trucks within Phnom Penh hinder the flexibility of delivery and shipping times to and from the PPAP, as well as its limited capacity (now closer to its full use).

## Regulatory issues

**The Cross Border Navigation Agreement between Cambodia and Vietnam signed in 1998 and amended in late 2009 is the main regulatory landmark governing the supply of cross border shipping services along the Mekong River between the two countries.** This agreement sets the routes for both countries to navigate, as well as the ports and terminals where vessels are allowed to call. In addition, cabotage (the right to embark and disembark revenue passengers or freight between two points in the other Party's territory) is not permitted under this agreement, although multiple calls within the territory of the vessel's country flag are allowed. This means that, for example, Vietnamese vessels—now accounting for the bulk of the tonnage transported out of Cambodia via the Mekong—will be able to load (or unload) cargo at PPAP and also on the soon-to-be-inaugurated container terminal downstream, to be discharged (or loaded) in a Vietnamese port. The agreement mutually recognizes the authority of the other contracting party to issue the needed operating permits to carriers without any limitations in number.

<sup>15</sup> Gemadept Corporation Annual Reports: [http://www.gemadept.vn/financial\\_report.aspx](http://www.gemadept.vn/financial_report.aspx)

<sup>16</sup> [http://www.bairdmaritime.com/index.php?option=com\\_content&view=article&id=8453:cambodia-vietnam-trade-augmented-by-new-shipping-route&catid=66:container&Itemid=57](http://www.bairdmaritime.com/index.php?option=com_content&view=article&id=8453:cambodia-vietnam-trade-augmented-by-new-shipping-route&catid=66:container&Itemid=57)

# 5

## Comparative Assessment of Corridor Performance

The costs and time performance of using each corridor is summarized below:

**Table 12. Comparison of corridor performances**

Corridor	Distance (km)	Transport Cost	Transport price	Transit time	Average speed (km/hr)	Cost per t-km US\$	Price per t-km US\$
PAS	235	220	650	8.5	28	0.06	0.18
BKK	734	1110	1650	14	52	0.10	0.15
HCMC	228	260	680	11	21	0.08	0.20

**Some of the main findings** are that:

- **The corridors perform reasonably well in terms of time**, even though average speeds can be low. Transshipment and customs and border clearance times take a significant proportion of the total time.
- **The corridors feature two operating modalities:** uninterrupted flow as on the domestic Phnom Penh-Sihanoukville corridor (same would apply on the river corridor) and transshipment as on the Phnom Penh-Bangkok and Phnom Penh-Ho Chi Minh corridors.

**Table 13. Transloading procedures per route**

Border	Import	Export
Poipet	All cargo is transloaded at Cambodian warehouses. Thai trucks with a "border permit" can travel there and back after crossing the border.	Same as Import; cargo is transloaded between Cambodian and Thai trucks at Cambodian warehouses. Only rare exceptions are made for some firms in SEZs, in which case the Thai trucks can go to final destination.
Bavet	No Vietnamese trucks can operate in Cambodia at the moment. They can enter the country with a "transit permit" to go to the Dry Port or SEZs near Bavet.	Fifty-seven Cambodian trucks have license to operate in Vietnam. Others have to transload at the border, which is usually done at the So Nguon Dry Port.

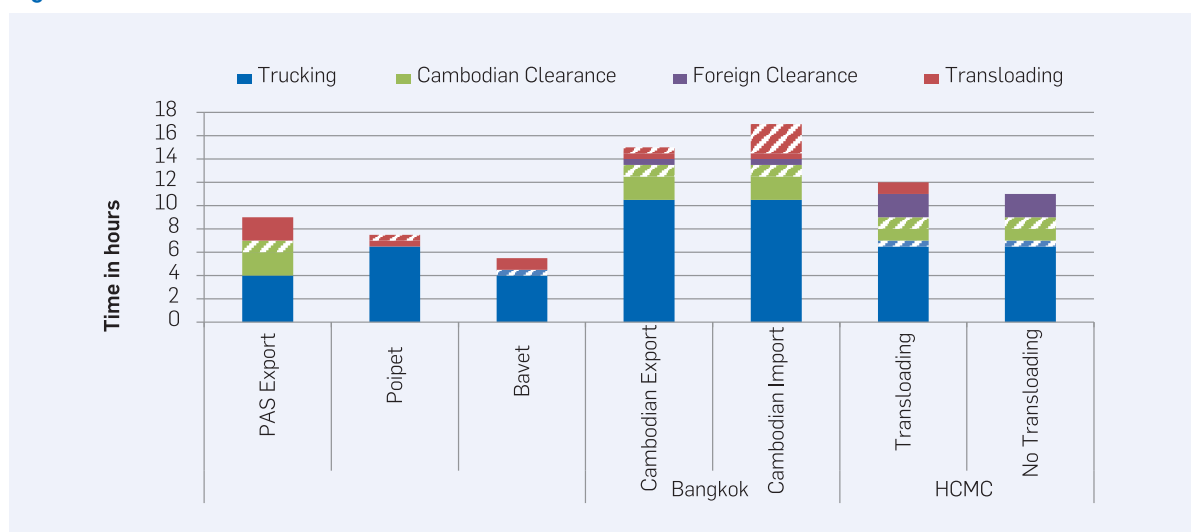


- **Trucking costs are higher than for South East Asian countries**, but are generally within the range of costs in other developing regions of the world.
- **Transport prices in general are much higher than other parts of the world.** Generally such rates are less than US\$0.15 per tonne/km, whereas in Cambodia they are above this rate except on the Phnom Penh-Bangkok route.
- It would appear facilitation fees and other payments en-route, especially at weighbridges, account for the most of the increase in price beyond trucking costs.
- **The higher transport prices in Cambodia would explain the low level of international transit traffic through the country**, if any exists. The bulk of transport consists of the country's own imports and exports with Thailand and Vietnam, rather than flow along a transit corridor. A recent JICA study<sup>17</sup> cites Cambodian regulatory constraints as a main reason for low utilization of the Cambodian transport corridors in international transit trade.

<sup>17</sup> Source: JICA, Survey on Improvement of Customs Procedures in the Mekong Region (2011)



Figure 23. Breakdown of transit times on the road corridors



Source: EMC, 2011.

### Box 1: Integrated regional logistics operations: The case of Minebea

Minebea (Cambodia) is a subsidiary of Minebea Company of Japan. It manufactures miniature ball bearings, mechanical parts and electronic devices. The Cambodia operation is part of a network that includes 32 manufacturing centers in 14 countries. The Minebea factory in Cambodia is located in the Phnom Penh Special Economic Zone (PPSEZ) and assembles precision motors using parts from Minebea's production facilities in other countries, mainly Thailand and Malaysia. Presently, the Phnom Penh plant is responsible for the final assembly only while the finished products are sent Thailand for final testing before they are exported to overseas markets. There are plans that as quality and consistency are established then exports will be directly from through Phnom Penh's airport.

Minebea maintains that even though Cambodia has weak infrastructure compared to other countries in the region, it was selected for the plant because of its proximity to the Thai production plants and low labor costs. Labor costs in Cambodia are much lower than those in coastal China and Thailand. An additional but critical consideration was how Minebea could overcome Cambodia's poor logistics performance, especially given the sensitive nature of the inputs and products it handles. The company was then granted special dispensation by the Cambodia government to allow Thai trucks to operate to Phnom Penh without the need to transload cargo at the border. Allowing the same truck to bring in components from Thailand to Phnom Penh and return with finished products removed the need for multiple handling would could have compromised the quality and reliability of the products and the supply chain in general.

The Minebea case suggests that the transloading of cargo at the border can be a constraint to some firms that may wish to take advantage of Cambodia's lower labor costs. The transloading increases costs and reduces reliability of supply chains. The special dispensation granted to Minebea shows also that it is possible for countries such as Cambodia and Lao to join the production networks that have exploded in recent years across the Southeast Asia region. However, for this to happen it is important that current logistics constraints are tackled.

# 6

## Framework for Improving Corridor Performance

**Transport infrastructure sufficient for good trading networks to develop is in place, at least along the three major corridors.** However, the quality of the infrastructure is uneven. Only relatively small parts of the network need to be developed or a few bridges constructed. Road quality is therefore not a major binding constraint to facilitate flow of goods, except in parts of Vietnam and Laos.

**Cambodia should note the importance of taking a whole-of-corridor approach to deal with shipping liner connectivity at the regional hub ports of either Ho Chi Minh, Singapore or Hong Kong.** Clearly shippers consider all the options including those in neighbouring countries when they decide how to make their shipments. This influences their decision as to which port to access, depending on the frequency of vessel calls and overall port connectivity to global market.

**Even though specialization is critical to good performance, specialization has been forsaken in Cambodia due to the preference of some large shippers to use sub-contractors to avoid complex and challenging arrangements for shipments.** The main reason is the prevalence and wide acceptance of facilitation fees as inducements for fast clearance and processing. Facilitation fees contribute to the high costs. The fees include formal and informal charges to speed up processing. Intermediaries play a key role in advising and collecting the payments—and transporters and shippers rely on the services of such intermediaries. However, the payment of such fees is clouded by lack of transparency. Freight forwarders and brokers would appear to be the main conduit for such payments. The single most important issue is how to deal with the informal payments in logistics in the country.

**Poor implementation of the regional transit framework remains problematic.** This issue is identified as a major constraint in all previous studies and still remains of concern. Currently there is no secure and integrated environment for modern logistics operators who wish to operate regionally—for instance to support production sharing. Though the basic ingredients of transit operation are available through the CBTA, implementation has been poor and inconsistent such that there are important gaps across the region. By virtue of its geographical position in the sub-region, Cambodia shows clearly the manifestation of the problems that are faced especially where trucks cannot cross international borders. Removing transshipment could increase spillover effects of the more efficient and lower cost operations in Thailand and Vietnam.

**The corridors with transshipment have higher costs than those without transshipment, such as the national corridor or the river corridor.** Though some restrictions have been lifted between pairs of countries, operations are largely governed by bilateral agreements. The agreements have quotas for trucks allowed to operate in other countries. The conditions of allocation of the quotas to the operators are not transparent and discretionary power is often given to the transport agencies. The CBTA provides for gradual liberalization of the quotas, yet there are many practical bottlenecks even for existing quotas.



**Border processes are costly.** Border facilities and procedures are often rudimentary. Gains could be achieved through improved capacity at the border, better implementation of risk management, and improved coordination of control activities—across agencies within a country, or across countries. Ongoing modernization projects in the country should address some of the current constraints.

**Rent-seeking activities are widespread, especially at the port and land border crossing points.** Trucking faces a significant exposure to corrupt practices particularly outside the operator's home country. Generally, operators find it difficult to operate outside of the country, partly because of language differences and driving conditions. The practices are not so much a source of delay but they add to a lack of predictability of the transit routes for operators looking for high reliability.

**The private sector capacity is still low.** Most of the truck fleet is operated by family-run businesses owning a few trucks. Trucks are generally old which contributes also to the lack of appetite to operate across borders and at the same time compromises the feasibility of developing an effective transit system. Intermediation in logistics is largely by local players. International players seem to play by the same rules as the locals leading to a high cost equilibrium.

## Summary of Main Recommendations

Issue	Recommendation
<p><b>Eliminate informal fees</b></p>	<p>Informal fees that seem prevalent in trade and transport facilitation in Cambodia are an avoidable cost. Suggested actions are:</p> <ul style="list-style-type: none"> <li>(i) Detailed corruption risk mapping. This can be based on the Arusha Declaration Concerning Good Governance and Integrity in Customs.</li> <li>(ii) Develop the trade portal to provide all regulatory information on requirements and formal fees.</li> <li>(iii) Expedite automation of customs and border management, and deploy direct trade input module in ASYCUDA.</li> </ul>
<p><b>Enhance capacity in transport and logistics services</b></p>	<p>While transport costs are not much higher than in other countries, costs could be lowered by:</p> <ul style="list-style-type: none"> <li>(i) Completing the rehabilitation of the Phnom Penh – Sihanoukville railway line and prioritizing freight operations.</li> <li>(ii) Reconnecting the Thai-Cambodia railway networks.</li> <li>(iii) Introducing a fleet modernizing scheme with appropriate financing and quality enforcement mechanisms.</li> <li>(iv) Reconstruction of the Neak Leung Bridge on the road from Phnom Penh to Ho Chi Minh City.</li> </ul>
<p><b>Work with neighbors for an integrated road transport market</b></p>	<ul style="list-style-type: none"> <li>(i) Extend the Minibea scheme to all firms, especially those operating in SEZs.</li> <li>(ii) Encourage Thailand to ratify the bilateral MoU</li> <li>(iii) Work with ASEAN and GMS partners to decide on and implement a regional transit system.</li> <li>(iv) Introduce a regional third party liability insurance scheme</li> <li>(v) Agree on standardized regional axle and vehicle load limits.</li> </ul>
<p><b>Encourage competition between ports</b></p>	<p>There is an emerging competition yet complementary service between Sihanoukville and Phnom Penh/Cai Mep ports. This offers flexibility and increases capacity of the overall system. Rate setting by the ports should be liberalized so in addition to port performance, the ports can also compete on cost.</p>
<p><b>Capacity building</b></p>	<p>As demands increase for a sophisticated logistics sector linked to the SEZs there is need to provide for capacity enhancement measures for private sector service providers and regulatory authorities. Training opportunities should be designed for:</p> <ul style="list-style-type: none"> <li>(i) Clearing and forwarding agents based on FIATA courses.</li> <li>(ii) Trucking industry on fleet management and modernization.</li> <li>(iii) Transport sector regulatory authorities on port, road and railway regulation and rate setting principles.</li> </ul>

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