

# INVESTING IN LOGISTICS FOR SUSTAINABLE ECONOMIC GROWTH



## BACKGROUND STUDIES FOR THE PREPARATION OF CAMBODIA LOGISTICS MASTER PLAN

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# ABBREVIATIONS AND ACRONYMS

<b>ASEAN</b>	Association of Southeast Asian Nations
<b>C2C</b>	Cash Conversion Cycle
<b>COE</b>	Council of Europe
<b>DIFOT</b>	Delivery in Full, on Time
<b>FDI</b>	Foreign Direct Investment
<b>GDCE</b>	General Department of Customs and Excise
<b>GDL</b>	General Department of Logistics
<b>GDP</b>	Gross Domestic Product
<b>GMS</b>	Greater Mekong Subregion
<b>GVC</b>	Global Value Chain
<b>IMD</b>	International Institute for Management Development
<b>IMO</b>	International Maritime Organization
<b>IT</b>	Information Technology
<b>JICA</b>	Japan International Cooperation Agency
<b>KPI</b>	Key Performance Indicator
<b>LPI</b>	Logistics Performance Index
<b>LSP</b>	Logistics Service Providers
<b>M&amp;E</b>	Monitoring and Evaluation
<b>MARPOL</b>	Convention for Prevention of Marine Pollution
<b>MPWT</b>	Ministry of Public Works and Transport
<b>NLC</b>	National Logistics Council
<b>NLSC</b>	National Logistics Steering Committee
<b>NSW</b>	National Single Window
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>OTIF</b>	Intergovernmental Organisation for International Carriage by Rail
<b>RGC</b>	Royal Government of Cambodia
<b>RID</b>	Regulation concerning the International Carriage of Dangerous Goods by Rail
<b>SOLAS</b>	Safety of Life at Sea
<b>TAB</b>	Trading Across Borders
<b>TEU</b>	Twenty-foot Equivalent Unit
<b>WDI</b>	World Development Indicators
<b>WEF</b>	World Economic Forum
<b>WHO</b>	World Health Organization

# CHAPTER ONE



## **CAMBODIA'S TRADE COMPETITIVENESS: INVESTING TODAY IN LOGISTICS DEVELOPMENT TO SUSTAIN TOMORROW'S GROWTH**



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# EXECUTIVE SUMMARY

## Why is trade important for Cambodia?

**During the last decade, Cambodia's exports of goods and services outpaced the growth of the economy and outperformed the growth in world export over the same period.** Over this period, exports of goods and services expanded threefold, from about US\$4 billion in 2005 to US\$13.3 billion in 2016.

**The solid export growth resulted in improved livelihoods for Cambodian households.** For a small economy such as Cambodia, trade is a platform for productivity-led growth. It offers access to larger markets and it comes hand in hand with foreign direct investment (FDI)—that has boomed in Cambodia over the last 10 years—and gives access to transfers of technology and know-how. In fact, concomitant to fast export growth, Cambodia also experienced a booming gross domestic product (GDP) growth, averaging 6 percent per year for the past decade. In per capita terms, this led to Cambodia climbing up 9 positions in the international ranking, moving from 163rd in 2005 to 154th in 2016. This income growth was pro-poor, resulting in a decline in the poverty headcount. In 2014, the poverty rate was 13.5 percent compared to 47.8 percent in 2007.

## Where did this export growth come from?

**Exports concentrated in the garment sector, with some diversification occurring within the sector, either in new products or new markets.** The most common form of diversification involved the penetration of a new export product into an existing export market,<sup>A</sup> but exports also diversified into new destinations during this period, reaching 34 new destinations.<sup>B</sup> Diversification was mostly within the garment sector, where the importance of logistics costs in sales is relatively low compared to other

sectors,<sup>C</sup> indicating that inefficiencies in logistics is a reason for low export diversification in other sectors.

**Even though there is evidence that Cambodia has moved up the value chain toward a more sophisticated export mix, garments and specifically, cut-make-trim activities still account for most of the value added in manufacturing.** Garments account for 55 percent of all manufacturing value added in the economy and for 84 percent of all the value added in manufacturing that is exported. In turn, for every dollar exported of garments in gross terms, 43 cents originate in Cambodian value added, while 57 cents correspond to imported components.

**Despite Cambodia's strong position in global garment exports, Cambodian firms still occupy a low-quality segment of the garment market.** The prices that Cambodian firms fetch for garments in the international markets are 70 percent lower than those fetched by top-quality exporters, suggesting that there is substantial space for quality upgrading. Upgrading, in turn, requires top-class logistics and skilled workers and managers.

## Where is Cambodia aiming at?

**By 2030, through Cambodia's highways, ports, airports, and warehouses, Cambodian firms are projected to move 4.1 times more goods.** At the current trajectory, merchandise exports will grow from US\$10.1 billion registered in 2016 to US\$41.5 billion in 2030.<sup>1</sup> For this growth to materialize and be sustainable, traditional sectors including rice, rubber and low-end garments will have to keep performing strongly with diversification expanding into higher value-added segments with more knowledge-intensive activities.

**There are encouraging signs that Cambodia's exports are becoming more sophisticated.** The growth in electronics and auto-assembly is promising. Recent Japanese investments in plants producing small electrical components in the border areas of Bavet (located on the border with Vietnam) and Poipet (located on the border with Thailand) could originate growth

<sup>1</sup> 2016 US\$ value.

poles around which new investment can cluster over time. The Royal Government of Cambodia (RGC) would have to design adequate policies to foster these activities to position Cambodia as a regional center for FDI and manufacturing.

## What will it take?

**For Cambodia to improve its competitiveness, more transformative reforms are needed to reduce high logistics costs that are external to firm performance and competitiveness.** The extremely high logistics cost in Cambodia does not find a justification on market conditions only, as they hide opaque practices aiming at formalizing illegal payments at the border. The cost to transport a 40-foot container from Bangkok to Phnom Penh over land is about US\$2,170. However, trucking costs are very competitive in Cambodia when they are compared to neighboring countries. In fact, informal costs for border clearances and weighbridge inspection are billed by local freight forwarders, which contribute to formalizing and hiding corruptive practices. Local agents include in their invoices<sup>2</sup> all the informal costs that they incur when clearing goods at the border and weighbridges. This practice was introduced to avoid any qualified scrutiny by external audits, undergone by large exporters. These large exporters are mostly foreign investors and suppliers of major international brands, which operate under strict anticorruption corporate codes.<sup>3</sup>

**The RGC could consider the implementation of substantial reforms to reduce high logistics costs, including the consolidation of multiagency border controls and the implementation of a single inspection scheme to improve transparency and remove informal payments.** There is room to streamline border operations, by removing the Customs/CAMCONTROL duplication and by aligning the risk management framework for border clearance. While Customs has a risk management framework in place, CAMCONTROL does not currently use any risk

framework for border clearance but inspects every shipment. Moreover, reforms could be introduced to enable trucks to travel from and to neighboring countries without transshipping goods at the border.

**Diversification and upgrading could be supported by a combination of public and private interventions to enhance production capabilities with respect to capital equipment and worker skills.** To support the development of more sophisticated manufacturing in Cambodia, it is necessary to enhance production capacity. By comparing Cambodia's performance across a series of dimensions, it is possible to identify the gaps that it must address to improve its competitiveness compared to global competitors.

**To expand export diversification in new sectors such as intermediate electronics, machinery, and transport equipment products, Cambodia needs to upgrade its logistics in the short run and its human capital in the long run.** In terms of logistics capabilities, Cambodia ranks 73rd out of 159 countries. Successful exporters of electronics, such as Thailand or Malaysia, are positioned about 30 positions ahead of Cambodia, showing the importance of efficient logistics to attract investment in this sector. In the long term, increased human capital is crucial for new export products to develop. Cambodia—with its population having an average of 4.7 years of schooling—ranks 126th out of 146 countries, while successful exporters are typically endowed with an average of 9.72 years of schooling.

**Cambodia's successful integration into global value chains (GVCs) can deepen only if urgent actions are taken.** To build upon its current level of value chain integration Cambodia will have to focus on logistics. Two broad themes emerge from this study. First, worker skills and capacity will need to improve over the medium term if Cambodia is to maintain its ambitious growth trajectory. Second, the institutions governing

2 Allegedly freight forwarders' total charge from Phnom Penh to Sihanoukville Port is about US\$600, of which US\$200–US\$250 are for trucking costs, and the rest goes to formal and informal payments for border clearance. It is estimated that about 15 percent of the garment industry's revenues go in unofficial payments at the border.

3 U.S. Foreign Corrupt Practice Act (1977), Organisation for Economic Co-Operation and Development (OECD) Antibribery Convention (1999), and the Council of Europe (COE) Criminal Law Convention on Corruption and the Civil Law Convention on Corruption.

trade facilitation require stronger governance and more efficient procedures. Cambodia could consider aligning its trade strategy with its plan for increased human capital<sup>4</sup>, as well as building up institutions to face the challenges and opportunities that integration into the global marketplace provides.

## Main recommendations

To continue growing along the intensive margin—that is, to consolidate existing exports, Cambodian firms will need to remain cost-competitive. This implies that productivity will need to increase at the same pace as wages. Increases in productivity will be driven by increases in competition, improvements in the provision of key backbone services (including electricity and logistics), upgrading of skills—both of workers and managers—and increased innovation.

To diversify into more sophisticated segments of production, Cambodia faces serious reform challenges in the short run and in the long run. In the short run, Cambodia would have to reduce trade costs to remain competitive. Three components stand out.

(a) First, for trade and investment costs that are related to market access, Cambodia could take actions to integrate more deeply with the world, going beyond agreements on tariffs and implementing the harmonization of standards in service trade or investment agreements. These are critical to transform trade and investment operations in the country for increased participation into GVCs. As firms become part of international production networks led by firms elsewhere, these agreements tend to reduce the transaction costs for these firms to coordinate processes and exchange parts and components. This, in turn, increases the likelihood of joining and upgrading within these networks. In this regard, Cambodia needs to seriously implement its trade and investment agreement commitments to lower trade and investment costs.

(b) Second, Cambodia performs poorly in trade costs that are related to logistics and border crossing when compared to competitors in the region and beyond. Because informal costs appear to be included in the current value of logistics costs, it is critical for the government to tackle informal payment practices by undertaking more radical reforms to remove corruption and patronage preference practices at border clearance and weighbridge inspection. Key priority actions include the following:

- (i) Adopt a comprehensive integrity and anticorruption strategy (including a strong and implementable ethical code of conduct for border agency staff) considering international good practices for border management operations.
- (ii) Implement a modern automation system for non-customs border agency management, especially for CAMCONTROL, by reducing face-to-face interactions between staff and traders and by using the appropriate risk management framework to reduce the current rate of 100 percent physical inspections.
- (iii) Digitalize/automate port operation processes to reduce face-to-face interaction and remove informal payments.
- (iv) Establish a feedback loop for border agencies and port operators by expanding the existing mechanism initiated by General Department of Customs and Excise (GDCE). This system should be designed to receive complaints and opinions of the trading communities and logistics operators on informal payments and administrative burdens related to border clearance and road transport weighbridges.

<sup>4</sup> Human capital refers to intensive skills of workers, education quality, and good health.

(c) Third, Cambodia would have to upgrade its human and institutional capital to close the gap with competitor countries and upgrade its participation in GVCs. For Cambodia to increase its capabilities required to move into more knowledge-intensive investment activities, it could consider three main actions in parallel:

- (i) Establish a clear policy framework to improve skills and knowledge of workers and upgrading managerial competency in industries and in government institutions.
- (ii) Close the current gap of skills shortage and mismatch by considering importation of skilled labor and implementing knowledge transfer programs for specific industries through investment incentives.
- (iii) Invest in human capital development by improving education and health delivery services focusing on education and health quality.

Investment in improving soft and hard logistics infrastructure would have to be commensurate to Cambodia's growth ambitions. Logistics will have to be adequate to support a

quadruplication of trade volumes in the next 15 years. Currently, transportation, warehousing, and storage services appear to account for almost 14 percent of export value added but this share is far higher than its neighboring countries and competitors in the region. Logistics and transport operators often charge higher fees because of inefficient and uncertain logistics operations. Exporters have to face higher costs for inputs and goods storage and inventory, reducing the competitiveness of Cambodia's exports in regional and global markets. Two actions are recommended:

- (d) Undertaking regulatory and operational reforms to enable inter-transport mode and multimodal transport operations is a high priority to optimize the use of existing transport infrastructure of different modes along each economic corridor. This would help reduce costs for warehousing, storage, and inventory for exporters as logistics operation becomes more efficient and predictable.
- (e) Attract large foreign investment in logistics operation to modernize both infrastructure and services. This would contribute to increase competition in the sector and to rationalize logistics costs.

# 1

## INTRODUCTION

**Cambodia's two decades of growth have been largely driven by trade.** Cambodia has achieved strong economic growth and it has leveraged integration into the global marketplace to grow for the past two decades. Cambodia's exports of merchandise, at US\$10 billion in 2016, stood at 50 percent of gross domestic product (GDP), reaching 148 destinations—and standing at US\$13.3 billion when adding services exports. Export performance led by integration into global value chains (GVCs), with substantial foreign direct investment (FDI) from East Asia and Pacific sources and strong trade links to major export destinations in the United States and the European Union (EU). Exports, however, have been concentrated in textiles and garments, with little sophistication and technological content. Indeed, exporters in Cambodia are specialized in the cut-make-trim phase of the garments value chain—a segment with low profit margins. With labor costs increasing on one hand, and prospective trade agreements between developed countries and several ASEAN countries potentially eroding preferences and diverting trade on the other hand, the competitive edge of Cambodia is at stake. This makes it essential for the country to seek new drivers of export growth, in more sophisticated and diversified activities to sustain long-term growth. The connectivity played by the logistics sector has been and continues to be an important part of the Cambodia's growth storyline and global market integration.

**Looking forward, Cambodia can sustain high growth and increase its competitiveness in the global market place by easing logistics bottlenecks that are one of the primary causes of high trade costs.** The reliability of a country's logistics network has a positive impact on firm productivity, whereas unreliable logistics networks force companies to stockpile large

inventories, thus driving up logistics cost. With better logistics, Cambodia can become a more attractive investment destination that will enable the country to position itself as an important node in regional value chains and GVCs. Likewise, at the center of fast growing and high-growth economies like China, Thailand, and Vietnam, there is a strong opportunity for Cambodia to diversify and upgrade its highly concentrated but low-tech export basket toward more diversified and sophisticated export products. Because of limited diversification and low value addition of current exports, the Royal Government of Cambodia (RGC) has undertaken several initiatives in the framework of the Industrial Development Policy (IDP) 2016–2025, approved in 2016. The IDP was formulated based on issues and policy priorities identified in the Rectangular Strategy (RS III 2014–2018), the 2014 Diagnostic Trade Integration Study, and the 2012 Cambodia Trade and Transport Facilitation Assessment.

**The Government's strategies and policies are appropriate, though implementation of those policies has been inconsistent.** Because the underlining objective is to prepare high-quality inputs into a logistics master plan development, this report provides an update on Cambodia's trade patterns, product diversification and sophistication, capability to drive Cambodia's participation in GVC, use of trade policy for trade expansion, and an assessment of export value addition and related constraints in the GVC. The analysis builds largely on existing studies such as Trade and Transport Facilitation Assessment (TTFA), Diagnostic Trade Integration Study (DTIS), and IDP as well as studies by development partners. By employing various analytical tools and techniques such as trade competitiveness diagnostics, trade outcome analysis, performance benchmarking, and Trade in Value Added (TiVA<sup>5</sup>) analysis of forward and backward links, the report provides insight into the challenges and opportunities facing Cambodian policy makers.

**This report is organized into three sections: trade competitiveness, trade policy framework in the**

<sup>5</sup> Trade in Value Added (TiVA) is the estimation of trade in value added terms that leads to the decomposition of gross exports into their domestic and foreign value-added contents. OECD website: <http://www.oecd.org/sti/ind/measuring-trade-in-value-added.htm>.

**GVC map, and value addition analysis in the GVC map.** First, it examines Cambodia's competitive patterns of export and import, diversification potentials and product sophistication, and capability to drive participation in GVC. Second, it reviews Cambodia's performance in the trade policy map with some detailed descriptive statistics focusing on trade policy in

light of export diversification and Cambodia's present capacity to participate in GVCs. Third, the report reviews Cambodia's market access and integration challenges. The report concludes with a discussion on the importance of value addition in the GVC map including the contribution of logistics sector reforms to export value addition.

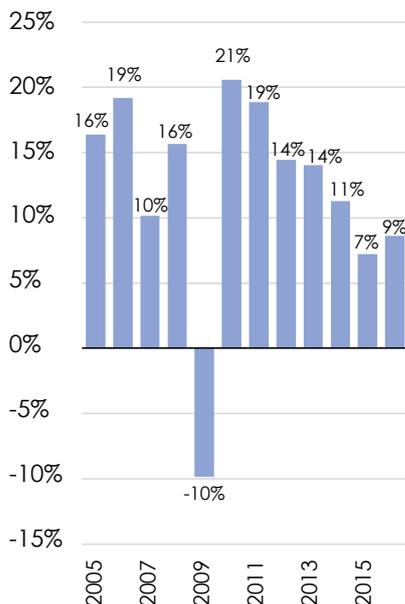
# 2

## TRADE COMPETITIVENESS IN CAMBODIA

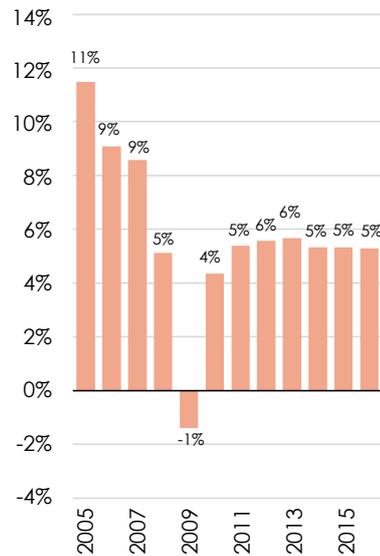
### 2.1 AN OUTLOOK OF TRADE COMPETITIVENESS

Trade has played a critical role in reducing Cambodian household poverty. For a small economy such as Cambodia, trade is a platform for productivity-led growth. It offers access to bigger markets, it comes hand in hand with foreign direct investment (FDI)—that has boomed in Cambodia over the last 10 years—and generates knowledge spillovers associated with transfers of technology and know-how. In fact, export growth has supported an impressive GDP growth in Cambodia, averaging 6.5 percent per year. This income growth has been pro-poor, resulting in a decline in the poverty headcount by 19 percentage points from 2004 to 2014 (Figure 3).

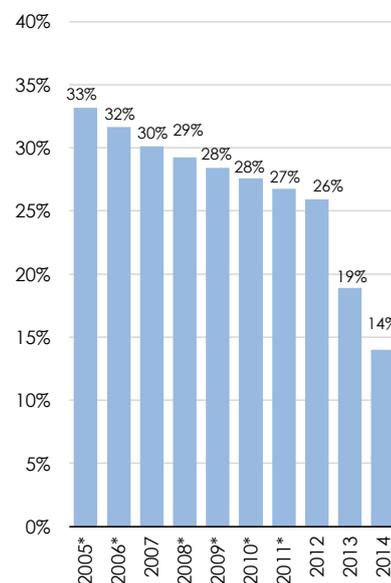
**Figure 1. Annual Growth of Exports of Goods and Services (Constant 2010 US\$)**



**Figure 2. Annual Growth of GDP per Capita (Constant 2010 US\$)**



**Figure 3. Population below the Poverty Line (National)**



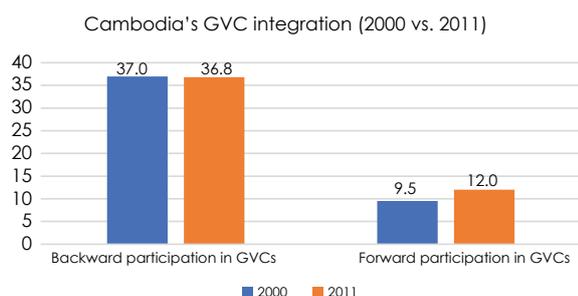
Source: Authors' calculations based on World Development Indicators (WDIs), World Bank Group.

**Cambodia has averaged economic growth of 6 percent over the past decade.** Over this period, exports of goods and services expanded threefold, from about US\$4 billion in 2005 to

US\$13.3 billion in 2016, contributing to reduce the poverty rate from 53.2 percent in 2004 to 13.5 percent in 2014 (World Bank 2017). Despite poor infrastructure and a weak investment climate, FDI rose from US\$1 billion in 2004 to US\$3.14 billion in 2014.

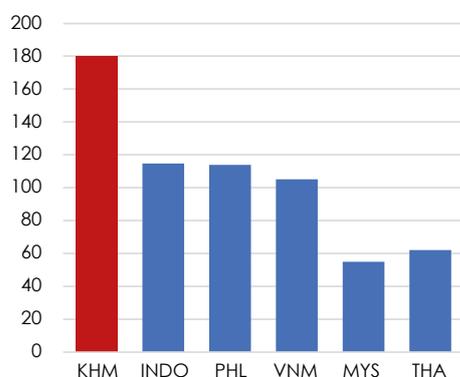
**To maintain a growth rate of 6–7 percent over the next decade, Cambodia will need to expand future exports and FDI.** Initial diversification from garments into new sectors such as electronics and bicycles is helping Cambodia climb up the value chain. Two bottlenecks are constraining Cambodia's climb up the value chain—logistics costs and electricity costs. Labor skills will also have to be developed to sustain the growth of the manufacturing sector.

**Figure 4. Cambodia's Participation in GVCs**



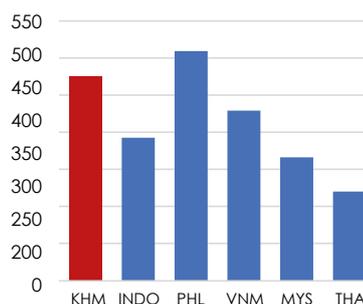
Source: Authors' calculation based on data from OECD TiVA.

**Figure 5. Time for Documentary and Border Compliance to Export (hours)<sup>6</sup>**



Source: Trading Across Borders, 2018 World Bank Doing Business Indicators.

**Figure 6. Cost to Export (US\$)**



Source: Trading Across Borders, 2018 World Bank Doing Business Indicators.

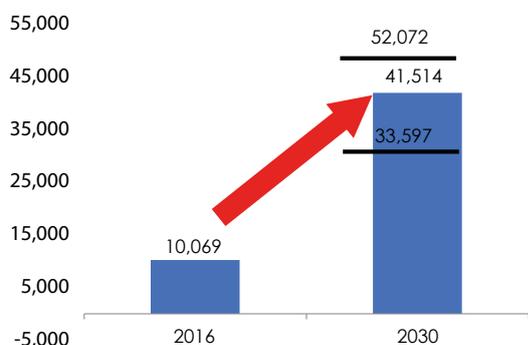
**Logistics costs remain high due to poor quality of logistics services and inadequate quality of transport infrastructure.** The cost and time to export a container from Sihanoukville, Cambodia's major sea port, is much higher than the global average, as reflected in the country's poor ranking in the Trading Across Borders indicators of Doing Business (108 out of 190 countries). Cambodia's performance is particularly striking when compared to neighboring Thailand and Vietnam. Figure 5 shows that documentary and border compliance procedures take 180 hours in Cambodia, over 70 percent more time than in Vietnam and almost triple the time needed in Thailand. Documentary and border compliance procedures impose greater costs to Cambodian firms than in most comparator countries: while the cost adds up to US\$475 in Cambodia, it is 10 percent lower in Vietnam (US\$429) and 33 percent lower in Thailand (US\$320) (Figure 6). Based on perceptions of logistics service operators during the stakeholder consultations in Phnom Penh 2017, the informal payment per container is estimated at about 48 percent of the cost of one container transaction. The estimated logistics cost for an export container of 40-foot size is about US\$931–US\$1,000 and for an import container about US\$979–US\$1,167 through Sihanoukville Port.

**A linear projection of Cambodia's economic expansion implies that 4.1 times more goods will be shipped in 2030 than the current volumes of trade in 2016<sup>D</sup>** (Figure 7). The national infrastructure system, including highways, ports, airports, and warehouses, will have to be ready to process this volume of goods. If

<sup>6</sup> KHM refers to Cambodia, INDO refers to Indonesia, PHL refers to the Philippines, VNM refers to Vietnam, MYS refers to Malaysia and THA refers to Thailand.

this will not be the case, the government risks curbing Cambodia's export potential and having an impact on the economy's capacity to create new and better jobs.

**Figure 7. Cambodia's Exports Now and in 15 Years (Constant 2016 US\$, million)**



Source: Authors' calculations based on data from International Monetary Fund (IMF) World Economic Outlook (WEO) (April 2017).

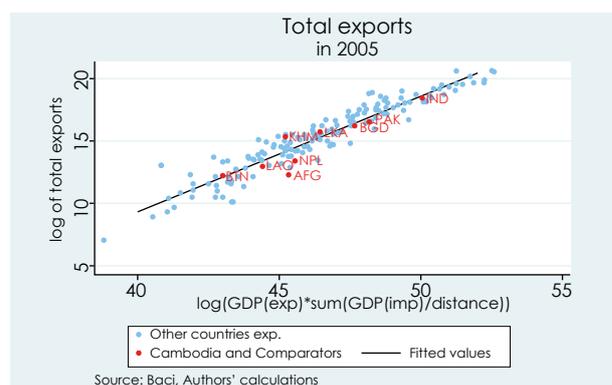
**The current high ratio of exports to GDP will have to be maintained if Cambodia is to maintain its growth targets.** Yet, sustaining export competitiveness will depend on overcoming three challenges. First, trade preferences awarded to Vietnam and Thailand through free trade agreements (FTAs) will erode Cambodia's competitive edge. Second, its forthcoming graduation from least developed country (LDC) status will further erode market access. Third, the increasing cost of labor<sup>E</sup> will make it more difficult for Cambodia's products to be competitive, unless productivity increases.

**Improving logistics performance through lowering logistics costs, increasing service reliability, and reducing delays is a high priority for Cambodia over the next decade.** A coherent logistics master plan is needed and proposed by the Ministry of Public Works and Transport (MPWT) to establish a modern and efficient logistics/multimodal transport system that will improve logistics services, reduce costs, increase reliability, and decrease the time needed to move goods within Cambodia and across borders. It also supports policies to reduce congestion and the environmental impact of transport.

<sup>7</sup> BACI is the World trade database developed by the Centre d'Études Prospectives et d'Informations Internationales (CEPII) at a high level of product disaggregation.

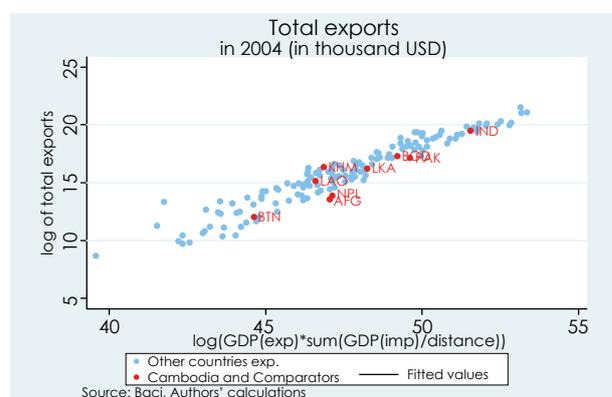
**Cambodia's impressive export growth since 2005 has been sustained (Figures 8 and 9) by strong FDI flows, indicating a consolidation of its position in GVCs.** Cambodia's performance outstrips other countries in the region that have been integrated into GVCs over a longer period, such as Thailand and Vietnam. Cambodia's FDI has been increasing in parallel with export growth. Between 2001 and 2005, Cambodia attracted US\$178 million per year on average (about 3 percent of GDP), and between 2011 and 2015, this reached US\$1.7 billion (closer to 9 percent of GDP) (Figures 10 and 11). The main sources of investment in Cambodia were China; the Republic of Korea; Malaysia; Taiwan; Hong Kong SAR, China; and Thailand.

**Figure 8. Cambodia's Export Performance in 2005**



Source: Authors' calculations based on BACI<sup>7</sup>.

**Figure 9. Cambodia's Export Performance in 2014**

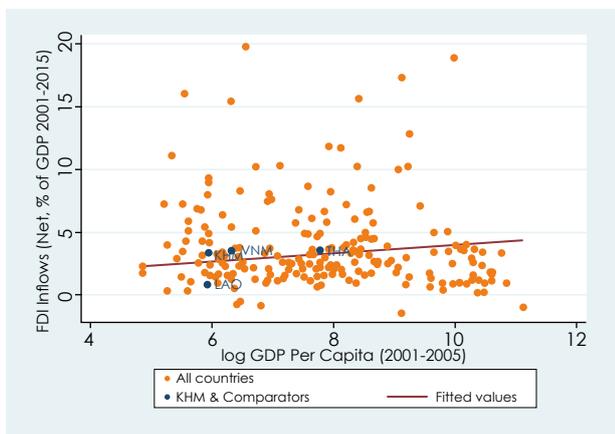


Source: Authors' calculations based on BACI.

**Robust FDI, coupled with a relatively open economic regime, has brought rapid integration**

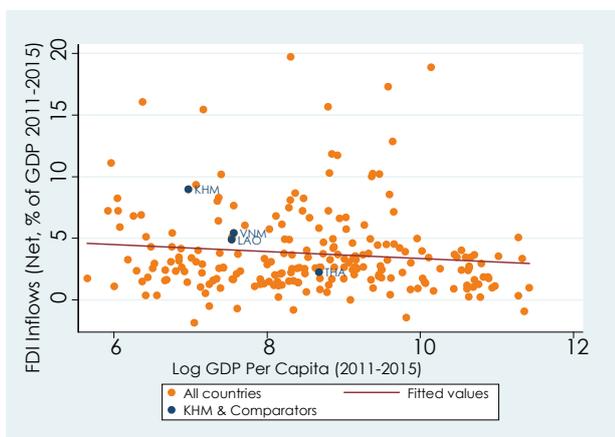
into the world trading community. Cambodia joined the World Trade Organization (WTO) in 2004. As part of its accession package, Cambodia undertook reform commitments, which contributed to open the economy with their progressive implementation in the following decade. Over the last decade, Cambodia's export market share has been increasing exponentially and faster than that of East Asia and Pacific as a whole (Figure 12 and Figure 13 ). In 2016, Cambodia accounted for almost US\$8 out of every US\$10,000 exported globally, up from US\$3.4 of every US\$10,000 exported globally just 11 years before, in 2005.

**Figure 10. Cambodia's FDI Performance in 2001–2005**



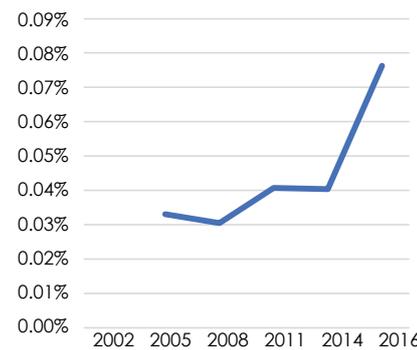
Source: Authors' calculations based on WDI.

**Figure 11. Cambodia's FDI performance 2011–2015**



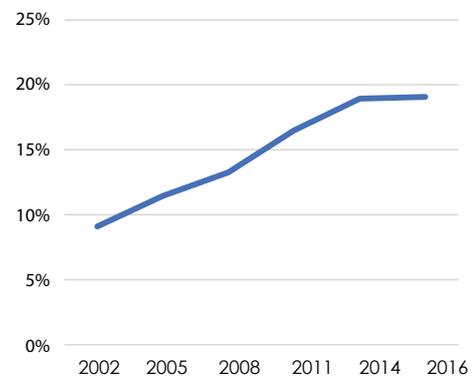
Source: Authors' calculations based on WDI.

**Figure 12. Cambodia: World's Export Shares**



Source: Authors' calculations based on UN Comtrade<sup>8</sup>.

**Figure 13. East Asia and Pacific: World Exports Share**



**Cambodia's export growth has been characterized by diversification of export products and export destinations.** Figure 14 decomposes Cambodia's export growth, showing that 44 percent was due to more exports of the same products to the same destinations (intensive margin) and 56 percent was generated due to some sort of diversification in terms of products or destinations (extensive margin).

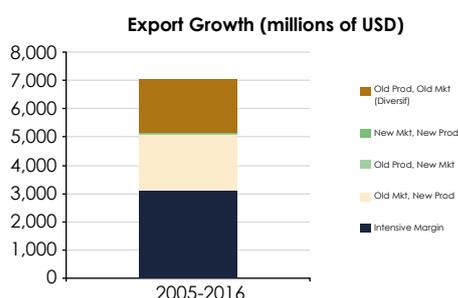
This is an important indicator as it points to a strong dynamism, although a large part of it was recorded within the garment and footwear sector. Within the extensive margin, product diversification in established markets accounted for 27 percent of the total growth and bringing a new product (already exported somewhere else) to an old market accounted for 29 percent of total growth.

**Cambodia's trade direction needs to be diversified and focused toward emerging growth poles.** The bulk of Cambodia's exports, mostly

8 UN Comtrade Database. (Accessed in December 2017). <https://comtrade.un.org/>.

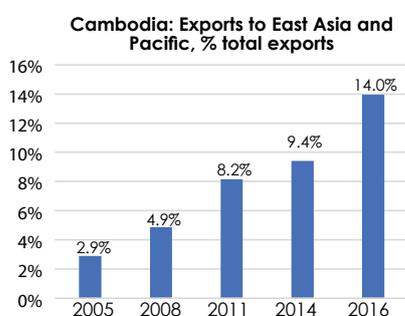
garments and footwear, are transported to Europe and the United States, which have been the main exporting markets since the country started its integration in the world trading system. However, it is important to point out that part of Cambodia's export growth is associated with increasing integration in regional value chains in the East Asia and Pacific Region, particularly with China and neighboring Association of Southeast Asian Nations (ASEAN) countries (Figure 15). This is in part attributable to the recent diversification from garments to electronics and machinery.<sup>F</sup> Within the latter, vehicle parts and accessories' exports grew 48-fold between 2010 and 2016, from US\$69,000 to US\$3.35 million. Although this is still an incipient sector (only US\$3.3 for every US\$10,000 of Cambodian exports fall into this sector), it constitutes an area with more potential for expansion in the future development of Cambodia's exports.

**Figure 14. Composition of Cambodia's Export Growth**



Source: Authors' calculations based on data from UN Comtrade.<sup>G</sup>

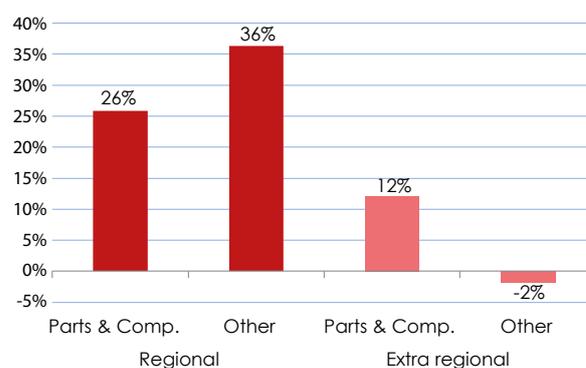
**Figure 15. Cambodia's Regional Integration**



Source: Authors' calculations based on data UN Comtrade.

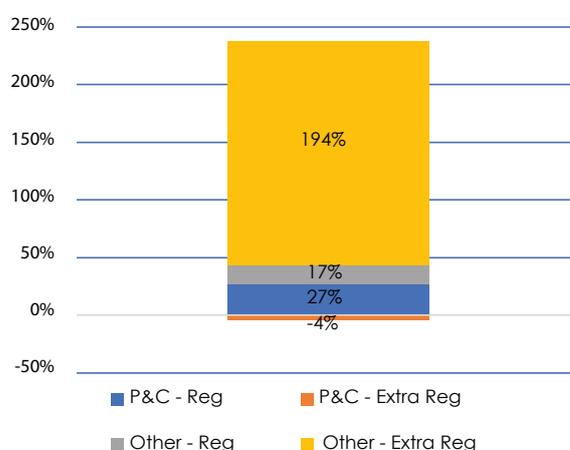
**Cambodia's trade with ASEAN is accelerating faster than Cambodia's trade with the rest of the world.** The fast growth of exports of parts and components to the region (increasing 12-fold in the 2005–2016 period) suggests that Cambodia is strengthening its links to regional value chains (Figure 16) at a sustained rate. In the last decade, Cambodia succeeded in reaching out to new export destinations<sup>H</sup> but the volume of exports to these new destinations remain relatively small. However, export growth in the last decade continued to be driven by Cambodia's traditional export destinations: Europe and the United States.

**Figure 16. Composition of Cambodia's Export Growth 2005–2016 (US\$)**



Source: Authors' calculations based on UN Comtrade.

**Figure 17. Contributions to Export Growth (2005–2016) in US\$**



## 2.2. DIVERSIFICATION AND SOPHISTICATION OF EXPORTS

Cambodia's exports remained highly concentrated in garments over the past 15 years. The percentage share of garments in total exports did not change much between 2005 and 2016 (Figure 18 and Figure 19). Garments are still the dominant export product with limited diversification into other high-value products. Nevertheless, signs of nascent diversification can be observed in some emerging exports (rubber, fur-skins, bicycles, telephone accessories, and cereals) though volumes are low.

**Figure 18. Cambodia's Export Composition by Sector (2005)**



Source: *Atlas of Economic Complexity (MIT)*.

**Figure 19. Cambodia's Export Composition by Sector (2016)**

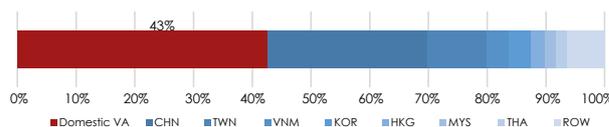


Source: *Atlas of Economic Complexity (MIT)*.

**Garments, and specifically, cut-make-trim activities account for most of the value added in manufacturing.** Garments account for 55 percent of all manufacturing value added in the economy and for 84 percent of all the value added in manufacturing that is exported. In turn, for every dollar exported of garments in

gross terms, 43 cents originate in Cambodian value added, while 57 cents correspond to imported components (Figure 20).

**Figure 20. Decomposition of Cambodia's Garments Value Added - Domestic Versus Imported<sup>9</sup>**

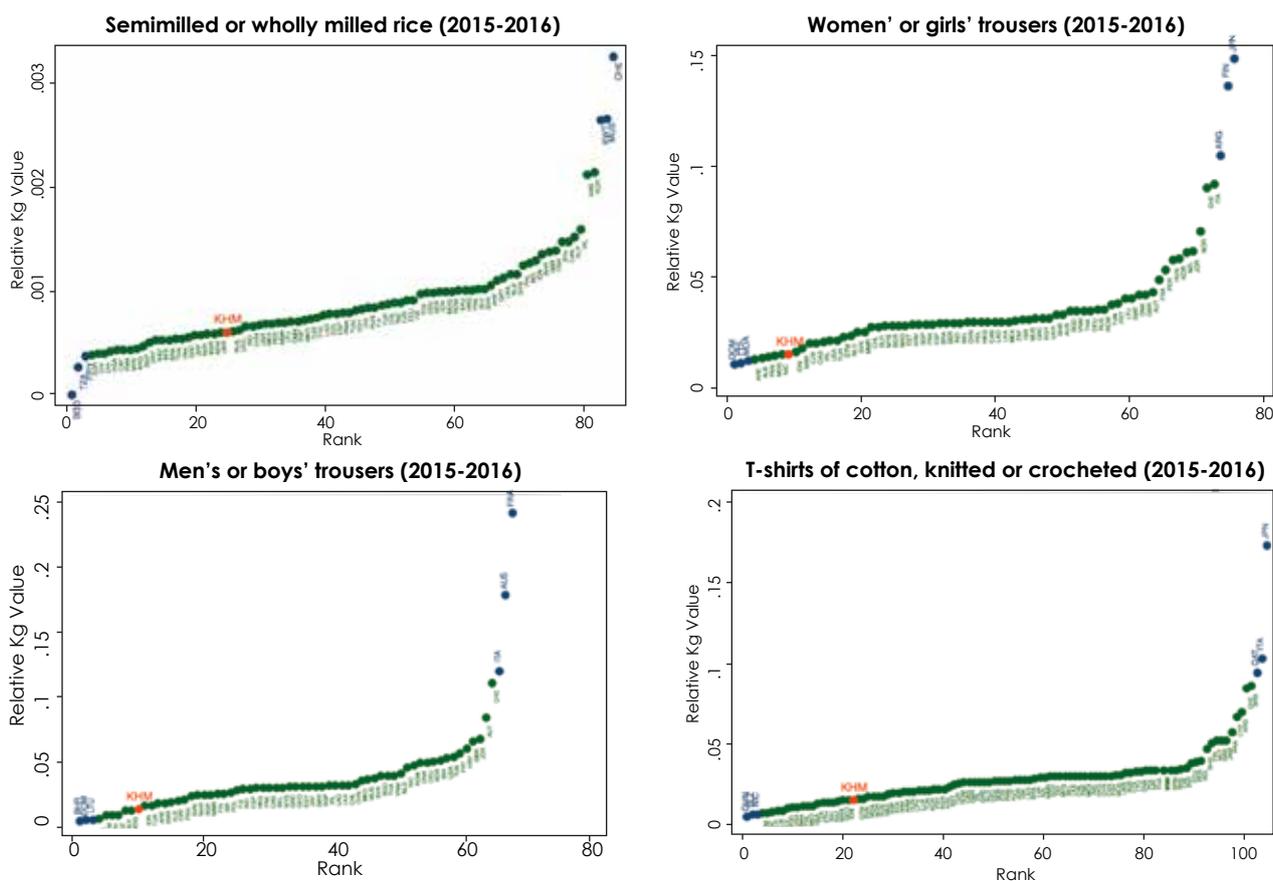


Source: Authors' calculations based on TIVA (OECD).

**Cambodia's rapidly evolving export mix has not changed the fact that most of Cambodia's export garments still consist of low-price garments.** Specializing in low-price garment segments, Cambodia is at the bottom of the distribution in terms of quality. The charts in Figure 21 present quality ladders for the top four export products of 2014. The position of Cambodia's exporters in the quality ladder is low, compared to other countries exporting similar products (quality is proxied by the unit price received by exporters). For rice, Cambodian exporters appear in the bottom half rather than in the bottom quarter, indicating a specialization in products with a higher value added. Also in rice, however, similar to garments, the analysis implies substantial space for quality upgrading.

<sup>9</sup> Domestic VA refers to "domestic value added"; CHN refers to China; TWN refers to Taiwan; KOR refers to Korea; ROW refers to "Rest of the World".

**Figure 21. Cambodia's Position in the Quality Ladders for its Main Exports**



Source: Authors' calculations based on data from UN Comtrade.

**Table 1: Threshold RCAI for Cambodia's Exports**

Matrix	Product	By Tech Category					Average PRODY	Average Path	Average Exports (US\$, millions) Average Share of Total Exports (%)				
		PP	RB	LT	MT	HT			2000-04	2005-07	2008-10	2011-13	2014-16
Classics	7	1	-	6	-	-	13,003	101	1,316.1	2,381.4	2,628.2	3,958.5	5,384.4
									67.6	70.6	52.8	62.0	63.5
Disappear	1		-	1	-	-	17,059	101	9.0	6.0	5.6	12.9	15.3
ances									0.4	0.2	0.1	0.2	0.2
Emerging	4	1	-	3	-	-	13,183	119	52.9	100.6	273.1	713.2	1,227.6
Champions									2.7	3.0	5.5	11.2	14.5
Marginals	15	—	3	9	2	1	14,264	138	98.0	120.9	166.3	206.4	365.0
									5.0	3.6	3.3	3.2	4.3
Totals	27	2	3	19	2	1	*10,816	*87					

Source: Author's calculation using Comtrade data.

Note: \*Weighted by average export share for 2014-2016; RCAI = Revealed Comparative Advantage Index

**Cambodia's emerging export structure still appears unsophisticated, with classics and emerging champions concentrated in low-tech sectors.**<sup>1</sup> Table 1 indicates the threshold RCAI for Cambodia's exports in four dimensions: classics, disappearances, emerging, and marginals. The share of export classics products<sup>10</sup> has declined over the period between 2000 and 2016. In 2000, the classics products (undergarments, dresses, and natural rubber latex) accounted for 67.6 percent, while in 2014–2016 this share declined to 63.5 percent. Both the average income level (PRODY) of classics (US\$13,003) and its path (101) are low when compared to the other categories, meaning that segments, in which Cambodia traditionally had a comparative advantage, reach relatively poor countries

and have less scope for diversification than the sectors belonging to other categories. Also, the low average income level of the destination countries is an indicator of the quality of the products exported, while the low path means that factors of production employed in producing these classic products cannot be easily redeployed to alternatives. Seven classics products are primary products and six are low-technology products. The share of disappearances has decreased over the period from 0.4 percent to 0.2 percent.<sup>11</sup> However, the average income level of the product is comparatively very high at US\$17,059 with a path of 101. This implies that the disappearances are exported toward countries that have a relatively high average income level.

**Table 2: Details of the Specific Products in Each Category (Classics, Disappearances, Emerging, and Marginals)**

ID (SITC)	Product Name	Tech Category	PRODY	Path	Count
<b>CLASSICS</b> (RCA 0406=1, RCA 1416=1) filtered with exports > US\$500,000 in 2004–16					
2320	Natural rubber latex; natural rubber and	Primary Products	10,093	51	
8443	Undergarments, women's, of textile	Low Tech	12,757	92	
8451	Jerseys, pullovers, twinsets, and cardigans	Low Tech	16,698	114	
8452	Dresses, skirts, suits and so on, knitted or	Low Tech	14,929	128	
8459	Other outer garments and clothing, knitted	Low Tech	13,881	113	
8462	Undergarments, knitted out of cotton	Low Tech	13,715	109	
8464	Under garments, knitted of other fiber	Low Tech	8,950	Not reported in the	
Average			13,003	101	7
<b>DISAPPEARANCES</b> (RCA 0406=1, RCA 1416=0) filtered with exports > US\$500,000 in 2004–16					
8484	Headgear and fittings thereof, n.e.s	Low Tech	17,059	101	
Average			17,059	101	1
<b>EMERGING CHAMPIONS</b> (RCA 0406=0, RCA 1416=1) filtered with exports > US\$500,000 in 2004–16					
422	Rice semi-milled or wholly milled,	Primary Products	9,126	93	

10 Classics: Products in which Cambodia's RCA was high in the earlier period (2000–2004) and continues to remain high in the recent period (2014–2016). As a policy implication, classics products have a strong export performance and long-term competitiveness that should be maintained.

11 Disappearances: Products in which Cambodia's RCA in the earlier period was high but is now low. This means that the competitiveness of disappearances products declines.

8463	Undergarments, knitted, of synthetic	Low Tech	13,749	119	
8465	Corsets, brassieres, suspenders, and t	Low Tech	15,211	120	
8510	Footwear	Low Tech	14,645	143	
Average			13,183	119	4
<b>MARGINALS</b>					
<b>(RCA 0406=0, RCA 1416=0) filtered with exports &gt; US\$500,000 in 2004–16</b>					
1222	Cigarettes	Resource Based	14,559	144	
2483	Wood of non-coniferous species, sawn	Resource Based	8,195	110	
2690	Old clothing and other old textiles	Resource Based	6,239	173	
6534	Fabrics, woven, of discontinuous synthetic fabric	Low Tech	13,830	155	
6583	Travelling rugs and blankets, not knit	Low Tech	11,074	145	
6584	Bed linen, table linen, toilet and kitchen cloth	Low Tech	13,736	134	
6924	Casks, drums, boxes of iron/steel for	Low Tech	15,274	185	
7234	Construction and mining machinery, n	Low Tech	14,431	173	
8423	Trousers, breeches, and so on of textile fabrics	Low Tech	12,298	112	
8429	Other outer garments of textile fabrics	Low Tech	20,211	115	
8431	Coats and jackets of textile fabric	Low Tech	15,202	134	
8434	Skirts, women's, of textile fabrics	Low Tech	12,414	137	
8435	Blouses of textile fabrics	Low Tech	12,914	116	
8439	Other outer garments of textile fabrics	Low Tech	17,383	116	
9310	UN Special Code	Not classified	26,202	118	
Average			14,264	138	15

Source: Authors' calculation using Comtrade.

**Marginal products are 15, out of which 3 are RB, 9 LT, 2 MT, and 1 HT.** Table 2 shows the share of marginal products, in which Cambodia has exported but has not had comparative advantage. Marginals decreased over the period from 5 percent to 4.3 percent. Cambodia's RCA has been low in both the earlier and recent period. However, the average income level is comparatively higher at US\$14,264 with a high path of 138. This implies that the disappearances products are exported toward countries that have a relatively high average income level. The high path implies that there are more opportunities to diversify from marginal products than others. Significantly, the share of emerging champions products<sup>12</sup> has increased over the period from 2.7 percent to 14.5 percent. However, the average income

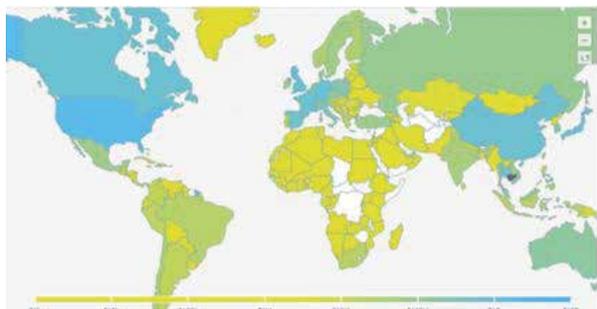
level is comparatively low at US\$13,183 with a high path of 119.

**Cambodia is slowly moving from garment exports to more sophisticated activities and has not yet begun to export sophisticated products.** The increase in exports has been based on diversification along the product dimension, which occurred mostly within the textiles and garment sector. In 2005, only 15 products accounted for 80 percent of Cambodia's exports, while in 2016, 39 products have to be considered to reach 80 percent of exports (Figure 22). Outside of garments, initial diversification is occurring in a handful of sectors, including in wood products, rice, and electronics. A large part of rice exports, however, is still informal. Unmilled rice is being transported across the border to Thailand and

<sup>12</sup> Emerging champions: products in which Cambodia's RCA was low in the earlier period but is high in the recent period. This implies that these products have an emergent competitiveness.

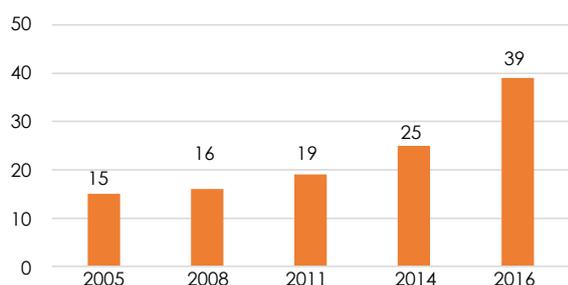
Vietnam where it is processed and packaged, to provide value addition that could be done in Cambodia itself if more investments would be made in processing and if logistics bottlenecks were addressed.

**Figure 22. Cambodia's Export Partners in 2016 (Gross Exports)**



Source: *Atlas of Economic Complexity (Harvard University)*.

**Figure 23. Number of Products Composing 80 Percent of Total Exports**



Source: *Authors' calculations based on UN Comtrade*.

**A comparison of the 20 most exported products in 2005 and 2016 indicates that the garment sector still plays a significant role, accounting for 50 percent of the most exported products in 2016 (Tables 3 and 4).** Nascent export diversification is confirmed by the presence of rice (cereals), bicycles, and telephone parts in Cambodia's export mix. The garment trade continues to dominate Cambodia's exports destined to Europe, the United States, Canada, and Japan. These are low-value, low-tech products linked to Cambodia's specialization in cut-make-trim, which is the lowest profit margin sector in the garment industry. Moving up the sophistication ladder needs to be done simultaneously with maintaining competitiveness in the low-value garment segments where it is currently holding a solid position in relation to its competitors. In its attempt to increase value addition, Cambodia will have difficulties in competing with more advanced countries such as Hong Kong SAR, China; the Philippines; and Taiwan, China in the area of design. Cambodia could consider increasing some upstream activities in the area of merchandising (sourcing accessories and raw materials). This will be possible if additional skills are developed as these are not currently available in the market.



**Table 3. Main Exported Products in 2005****Top 20 HS6 Exported Products 2005**

2005			
HS6 Code	Product Description	USD	Share
611090	Jerseys (cotton)	565.193.347	23%
610469	Women's trousers (other material)	297.252.574	12%
610839	Women's pyjamas	143.282.472	6%
610342	Men's trousers (cotton)	125.638.689	5%
610690	Women's blouses, shirts	121.635.092	5%
610349	Men's trousers (other material)	99.039.633	4%
610419	Women's suits	96.585.982	4%
611020	Jerseys (other material)	72.686.333	3%
610319	Men's suits	72.033.094	3%
610462	Women's trousers (cotton)	65.158.996	3%
610459	Women's skirts	55.889.444	2%
610510	Men's shirts (cotton)	51.624.252	2%
610590	Men's shirts (other material)	47.310.997	2%
970600	Antiques	34.881.489	1%
400129	Natural rubber	34.722.047	1%
640320	Footwear (leather)	32.845.520	1%
610729	Men's pyjamas	32.594.025	1%
610339	Men's jackets	32.126.644	1%
611190	Babies' garments	28.920.832	1%
620590	Men's shirts (not knitted or crocheted)	26.531.471	1%
<b>Total top 20</b>		<b>2.035.952.933</b>	<b>83%</b>

Source: Authors' calculations based on data from UN Comtrade.2.3. Revealed Capability Intensities: Where is Cambodia positioned?

**Table 4. Main Exported Products in 2016****TOP 20 HS6 Exported Products 2016**

2016			
HS6 Code	Product Description	USD	Share
610469	Women's trousers (other material)	1.058.324.547	11%
610910	T-shirts (cotton)	915.841.017	9%
610349	Men's trousers (other material)	733.139.038	7%
611090	Jerseys (cotton)	549.196.544	5%
640320	Footwear (leather)	477.047.383	5%
871200	Bicycles	345.361.707	3%
610990	T-shirts (other material)	330.914.162	3%
100630	Cereals	303.544.325	3%
610339	Men's jackets	300.177.072	3%
610449	Women's dresses (other material)	192.072.978	2%
710812	Metals, gold	186.376.645	2%
640419	Footwear (rubber or plastic)	186.020.945	2%
610839	Women's pyjamas	177.855.529	2%
610439	Women's jackets (other material)	172.956.397	2%
430211	Furskins	172.064.373	2%
611190	Babies' garments	153.319.150	2%
400129	Natural rubber	132.759.828	1%
851770	Telephone parts	129.410.056	1%
610690	Women's blouses, shirts	123.245.992	1%
610590	Men's shirts (other material)	110.672.239	1%
<b>Total top 20</b>		<b>6.750.299.927</b>	<b>67%</b>

Source: Authors' calculations based on data from UN Comtrade.2.3. Revealed Capability Intensities: Where is Cambodia positioned?

**Cambodia's high concentration in garment manufacturing may be crowding out export diversification toward more value-added products.** Cambodia's garment exporting industry has been mainly driven by low wages and trade preferences. Measuring Cambodia's available capabilities in the economy is important to understand its current position in GVCs and how to upgrade toward greater diversified value-added exports. A country position in GVCs can be analyzed by comparing its capabilities with the revealed capability intensity (RCI) of traded goods that are most likely included in cross-border production networks. Following a classification developed by Farole and Pathikonda (2016), there are three relevant groups of GVC participation

capabilities, depending on the extent to which these can be affected by policy levers. These are (a) fixed capabilities that include proximity to markets and natural capital; (b) long-term policy variables that include human capital, physical capital, and institutional capital; and (c) short-term policy variables that include logistics connectivity, wage competitiveness, market access, and access to inputs. They also proposed that indicators to represent these capabilities, as illustrated in Table 5, are for use in the assessment of Cambodia's GVC position. Because it is challenging to obtain reliable data on some indicators for Cambodia, the indicators on total value of natural capital, wage competitiveness, and access to inputs are excluded.

**Table 5: Capability Framework to Participate in GVCs**

Category	Capability	Indicator	Units	Source
Fixed capability	Proximity to markets	GDP-weighted distance	Kilometers <sup>a</sup>	CEPII
	Natural capital	Total value of natural capital	Current US\$, billions	World Bank Wealth of Nations
Long-term policy variables	Human capital	Average years of schoolings (>15 years old population)	Years	Barro and Lee (2010)
	Physical capital	Capital stock per person	2005 US\$, thousands	WDI
	Institutional capital	Rule of law	Rating from (-) 2.5 to (+) 2.5	World Governance Indicators
Short-term policy variables	Logistics connectivity	Logistics performance index (LPI)	Rating from 1 to 5	World Bank LPI
	Wage competitiveness	Minimum wage for a 19-year old worker or an apprentice	US\$ <sup>a</sup>	World Bank Doing Business
	Market Access	Overall trade restrictiveness index (of trading partners)	Uniform tariff equivalent of partner country tariff and non-tariff barriers*	Kee, Nicita, and Olarreaga (2008, 2009)
	Access to inputs	Overall trade restrictiveness	Uniform tariff equivalent of country tariff and non-tariff barriers*	Kee, Nicita, and Olarreaga (2008, 2009)

Source: Farole and Pathikonda (2016).

Note: a. Two variables were inverted from the source data to give all indicators the same direction; a higher figure for all indicators signifies a higher capability level.

**Cambodia lies below the world average in GVC capabilities that can be shaped through policies.** The position of Cambodia's capability endowments in various non-fixed dimensions (including short-term and long-term policy variables) is still in the negative zone, implying that the country's endowments lie below the world average and that further significant upgrades are necessary to enable the country to join GVC at different stages of productions.

Cambodia is still far from joining the production of intermediate GVC products that typically have greater capability requirements (according to Farole and Pathikonda 2016), but at a closer distance from GVC products and final GVC products.<sup>13</sup> Capabilities to produce final GVC products involve mostly assembly activities in which wage competitiveness and access to inputs constitute the basic capabilities required. (see Table 6)

**Table 6. Cambodia's Selected Capability Endowments Versus GVC Participation Requirements**

Category	Capability	Requirements			Cambodia's Capability Endowment
		GVC Products	Final GVC Products	Intermediate GVC Products	
Fixed	Proximity to markets	0.0085	0.049	0.372	-0.36
Long-term policy variables	Human capital	0.0120	0.087	0.189	-1.30
	Physical capital	0.0079	-0.066	0.227	-0.86
	Institutional capital	0.0113	-0.020	0.240	-1.11
Short-term policy variables	Logistics	0.0157	0.141	0.484	-0.14
	Market access	0.0048	-0.080	0.099	-0.48

Source: Farole and Pathikonda (2016)

**According to Farole and Pathikonda (2016), different sectors are associated with different levels of capability requirements.** Transport, machinery, and electronics involve higher level of capabilities such as human capital, physical

capital, and institutional capital than sectors such as garments and textiles that involve mostly access to inputs and wages. They calculated RCI estimates for each industry, presented in Table 7.

13 The classification of products in intermediate and final follows Athukorala (2010) and Sturgeon and Memedovic (2011).

**Table 7. Capability Requirements by Sectors: RCI Estimates**

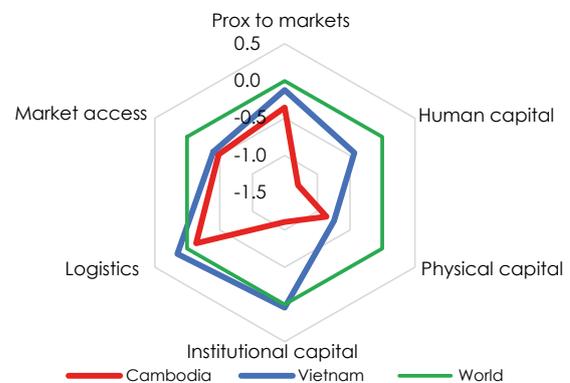
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Proximity to markets	0.56	0.17	0.28	-0.16	0.36	0.20	0.54	0.58	0.39	0.28	0.54	0.58	0.52	0.42
Natural capital	0.00	0.39	0.18	-0.09	0.19	0.42	0.15	0.11	0.97	0.23	0.03	0.10	0.18	0.16
Human capital	0.55	-0.57	-0.19	-0.17	0.16	-0.18	0.58	0.62	0.50	0.49	0.72	0.62	0.69	0.57
Physical capital	0.32	-0.35	-0.04	-0.48	-0.13	-0.14	0.65	0.76	0.16	0.28	0.69	0.54	0.88	0.46
Institutional capital	0.51	-0.42	-0.06	-0.41	-0.10	-0.13	0.62	0.73	0.34	0.47	0.76	0.62	0.86	0.54
Logistics	0.67	-0.04	0.15	-0.41	0.19	0.16	0.82	0.86	0.74	0.61	0.98	0.85	0.92	0.74
Wage competitiveness	-0.17	0.34	0.08	0.44	0.13	0.14	-0.47	-0.56	-0.05	-0.21	-0.50	-0.32	-0.64	-0.32
Market access	0.19	-0.46	-0.06	-0.63	0.16	0.20	0.24	0.33	0.33	0.22	0.32	0.30	0.26	0.25
Access to inputs	0.33	0.20	0.17	0.20	0.25	0.31	0.18	0.34	0.13	0.11	0.33	0.29	0.26	0.19

Source: Farole and Pathikonda (2016).

Note: Legend: 1 = Plastic/Rubber; 2 = Hides, Skins; 3 = Textiles; 4 = Clothing; 5 = Footwear - Intermediate; 6 = Footwear - Final; 7 = Stone/Glass; 8 = Metals; 9 = Machinery/Electronics - Final; 10 = Machinery/Electronics - Intermediate; 11 = Transport - Final; 12 = Transport - Intermediate; 13 = Miscellaneous - Final; 14 = Miscellaneous - Intermediate.

The results show that Cambodia lags behind the world average and its comparators in terms of capabilities necessary to integrate into GVCs. Cambodia faces a particularly important challenge in terms of long-term policy variables. It is positioned in the last quintile in the human capital, institutional capital, and physical capital dimensions (illustrated in Figure 24). With its current capability endowments, Cambodia is suited to participate in the low-margin garments in GVCs, the current main exporting sector. Long-term capabilities, such as human capital, institutional capital, and physical capital are crucial for Cambodia to move up to more sophisticated value chains such as transport equipment or machinery and electronics. While Cambodia's capability endowments in logistics and market access under the short-term policy variables are in a much better position, both indicators are far behind average requirements for participating in GVCs. These short-term policy variables play important roles to support GVC participation.

**Figure 24. Cambodia's Capability Endowments Versus Vietnam and World**



Source: Authors' calculations based on Farole and Pathikonda (2016), WDIs, CEPII, World Bank The Changing Wealth of Nations, Barro Lee Database, Penn World Tables, World Bank World Governance Indicators, World Bank LPI.

**Cambodia's capability endowments shape the country's success in some sectors but not in others.** Its capability endowments in market access, logistics, and proximity to markets are sufficient to participate in the garment GVCs. However, when it comes to human,

physical, and institutional capital, Cambodia is inadequately endowed even for garment production, one of the least capability-intensive GVCs. The fact that Cambodia has managed to integrate the GVCs in the clothing sector despite its shortcomings in long-term policy dimensions may imply the sector's reliance on low wages. With its current capabilities endowments, it should be no surprise that Cambodia has also limited activities in upstream value chains even within the clothing GVCs, such as cloth design and sourcing of fabrics and accessories. Cambodia is even more inadequately prepared to participate in textiles

and machinery/electronics—intermediate inputs than what it is for clothing. A comparison of three sectors is illustrated in Figure 25.

Human capital capabilities emerge as a binding constraint to diversification of Cambodia's export basket to higher value-added intermediate GVC products. Likewise, Cambodia also lacks logistics capability to drive its participation in key sectors, including machinery and electronics intermediates, machinery and electronics, and textiles and transport.

**Figure 25. Sectoral Capability Requirements Versus Cambodia's Capability Endowments**





Source: Authors' calculations based on Farole and Pathikonda (2016), WDIs, CEPII, World Bank The Changing Wealth of Nations, Barro Lee Database, Penn World Tables, World Bank World Governance Indicators, World Bank LPI.

**Firms will have to enhance their production capabilities, including better-trained workers, better equipment, more efficient production techniques, and low-cost electricity and logistics to succeed in diversification and upgrading.** To make more sophisticated activities feasible in Cambodia, it is necessary to enhance these production capabilities. Comparing Cambodia's performance in a series of capability dimensions is useful to assess

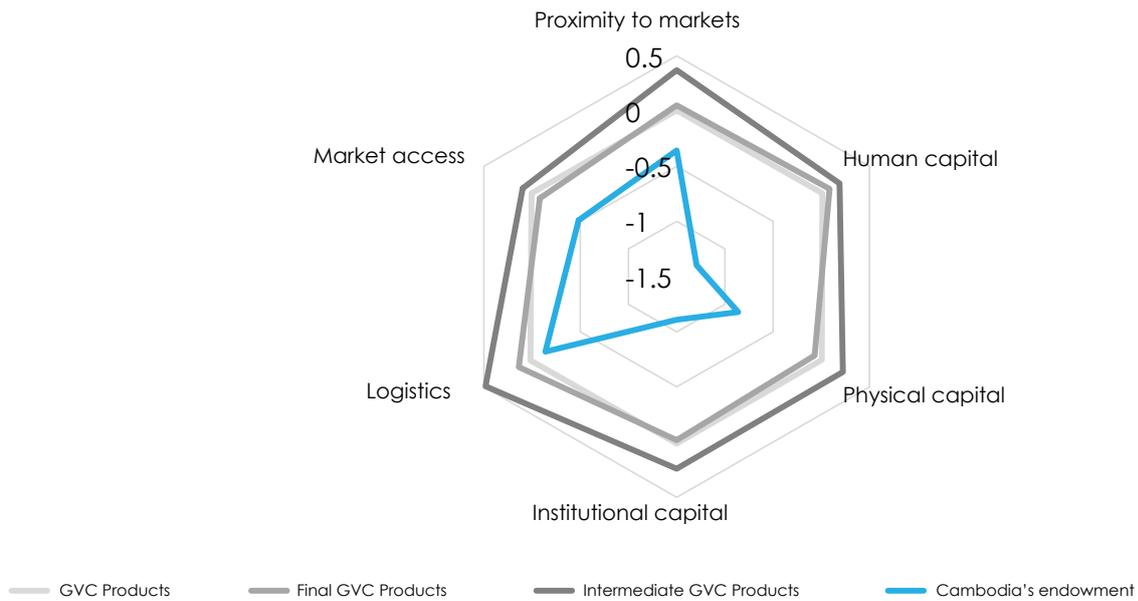
how far it stands from key players in different desirable GVCs.

**To produce intermediate electronics and machinery, or transport equipment products, Cambodia needs to upgrade its logistics in the short run and its human capital in the long run.** In terms of logistics capabilities, Cambodia is positioned 73rd in a ranking of 159 countries. Because logistics are crucial for this activity, on

average, successful exporters of electronics, such as Thailand or Malaysia are positioned about 29 ranks ahead. In the long term, increased human capital is crucial to make this activity feasible. Cambodia's low performance in terms of years of schooling of its population—

at 4.7 years—ranks 126th out of 146 countries with available information, with the average requirements for successful exporters being 9.72 years of schooling, closer to a mid-ranking position.

**Figure 26. Revealed Capability Intensities of GVC Products and Cambodia's Endowments (in standard deviations of world averages)**



Source: Authors' calculations based on WDI, LPI.

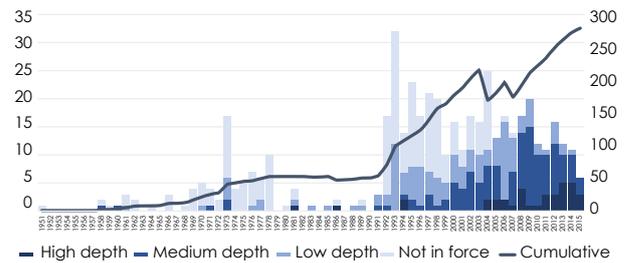
# 3

## MARKET ACCESS

**Cambodia's trade preferences confer an advantage on its exports by making them cheaper than Vietnamese or Thai exports at the destination markets of the EU, Canada, and Japan.** Cambodia enjoys enhanced market access for its exports conferred by its status as an LDC. It has benefited mainly from unilateral concessions, such as the Everything but Arms (EBA) scheme provided by the EU and similar schemes offered by Canada and Japan. Preferential access will be phased out progressively with LDC graduation. Without trade preferences, Cambodia will likely be less competitive in these garment sectors as well as in other sectors.

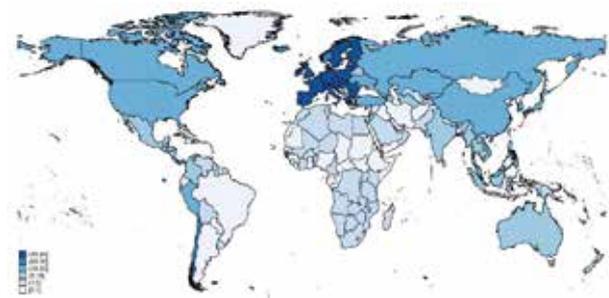
**Cambodia can use FTAs to ensure market access to major export markets as its LDC preferences wane over time.** Cambodia is lagging behind regional peers such as Vietnam, Thailand, and Malaysia in negotiating and signing bilateral FTAs (Figure 26). In the last 30 years, the number of trade agreements has increased substantially, as countries seek to reduce cross-border trade costs (Figure 27). Cambodia is part of only six agreements, all of which have been negotiated in the ASEAN framework. Cambodia belongs to the ASEAN free trade area (1992) and is part of the ASEAN +1 agreements with China, Japan, Australia-New Zealand, India, and the Republic of Korea. Cambodia has not yet made use of FTAs to increase market access. Moreover, Cambodia's agreements fail to include provisions beyond WTO rules that can help protect assets and attract sophisticated, knowledge-intensive FDI. Only half of Cambodia's agreements include provisions on intellectual property rights or competition policy that have been found to be key to attract knowledge-intensive investments—a crucial conduit for diversification into sophisticated tasks.

**Figure 27 Number of Agreements Over Time**



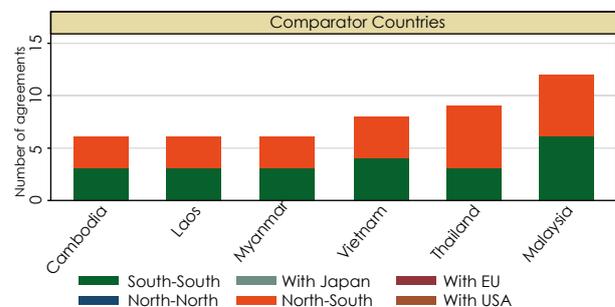
Source: Calculations based on World Bank Preferential Trade Agreement (PTA) content dataset (2016).

**Figure 28. Number of Agreements Per Country**



Source: Calculations based on World Bank PTA content dataset (2016).

**Figure 29. Number of PTAs**



Source: Calculations based on World Bank PTA content dataset (2016).

**Cambodia's success story can continue if specific reforms are designed and implemented to address the existing bottlenecks which are threatening trade expansion and jobs creation.**

Figure 30 shows that Cambodia's labor productivity is lower than in many comparator countries such as Guatemala, Malaysia, and the Philippines.<sup>14</sup> Despite recent salary growth and its relatively low labor productivity, Cambodia still has a competitive edge. However, if labor costs rise at a faster pace than productivity, the

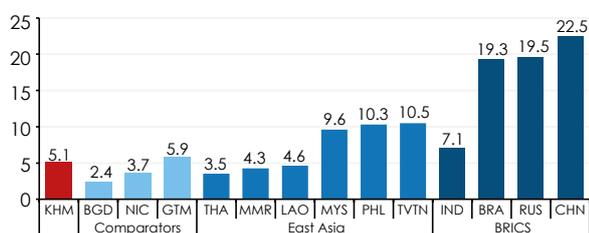
<sup>14</sup> Partial productivity measured in 2009 (US\$). All data points are for the median firm on each measure of performance.

country's competitiveness might be eroded. With labor intensity as the main source of comparative advantage, increases in labor costs detached from the evolution of labor productivity might discourage the entry of efficiency-seeking FDI.<sup>15</sup>

**It is also essential for the RGC to be proactive in promoting market access through higher-quality bilateral and regional trade agreements that will help mitigate the erosion of preferences.**

It is expected that Cambodia will lose much of its trade preferences when the economy graduates from its LDC status, expected to take place in 2025. Cambodia will only benefit from FTAs if it can implement trade agreements to improve market efficiency and to be attractive for more high-quality FDI. As indicated in the International Trade Centre (ITC) database, the level and complexity of Cambodia's tariff protection is restricting its access to foreign markets. Cambodia has not yet benefited much from reciprocal conditions in trade agreements but mostly from its entitlement to trade preferences for foreign market access. In this context, Cambodia operates in a less favorable environment than it used to in terms of market access. Implementation of key reforms required and encouraged by trade agreements is extremely crucial to upgrade Cambodia's foreign market access.

**Figure 30. Labor Productivity in the Garment Sector**



Source: World Bank Group calculation based on data from World Bank Enterprise Surveys.

**The cost of doing business in Cambodia is high.** Foreign investment is a necessary component of

Cambodia's export growth. As such, Cambodia will need to address business constraints to meet its growth and export targets. With significant delays in completing transformative reforms, private firms still face major constraints in doing business in Cambodia. Access to finance remains challenging. In 2016, only 2.6 percent of firms used banks to finance investment. This was a 30 percent drop from 2013 and substantially below the average for firms in lower-middle-income countries. The World Bank Enterprise survey<sup>16</sup> shows that exporters are particularly affected by this financial constraint. While only a third of non-exporter firms identified access to finance as an obstacle, 42 percent of exporters considered it an obstacle, confirming that access to finance is more of a constraint for firms that have greater working capital and investment needs (Table 8). Access to formal financial facilities is constrained by several reasons, including the relatively unsophisticated structure of Cambodia's banking sector, a poor regulatory structure, and the inability of SMEs to obtain loans, including because of the informality of a large portion of the private sector. Poor access to formal credit, however, is partially offset by informal financing framework offered to small firms. Moreover, medium and large exporting firms are mostly subsidiaries of larger companies operating in several countries, where they can obtain easier access to finance through subsidiaries abroad.

**Table 8. Percentage of Firms Identifying Access to Finance as an Obstacle**

	Access to Finance		
	Not an Obstacle	An Obstacle	Total
Non-exporter	67%	33%	683
Exporter	58%	42%	148
Total	547	284	831

Source: Authors' calculations based on World Bank Enterprise Surveys.

<sup>15</sup> The recent increase in the cost of labor is likely to have an impact on unit cost if Cambodia has challenges to enhance its productivity in the garment sector. Experience demonstrated that Cambodian garment firms used to successfully mitigate the adverse effect of increased wages on competitiveness through productivity enhancement, especially through the implementation of 'the better work better factory' (Fukunishi and Yamagata 2015). The GMAC recognizes difficulties created by high labor costs, which have now reached those of Vietnam, whose productivity, however, is higher. However, labor is still abundant in Cambodia and this is a major advantage in attracting FDI, particularly for labor-intensive operations.

<sup>16</sup> Enterprise Surveys (<http://www.enterprisesurveys.org>), The World Bank.

Other distinctive constraints for exporters include access to skills (inadequately educated labor force), labor costs regulations, and corruption—correlated with payments of bribes (Table 9). Coincidentally, exporting firms that revealed paying ‘gifts’ to Customs, completed border procedures about one full day earlier than those that did not pay ‘gifts’ (4.6 days on average versus 5.75 days).

**Table 9. Percentage of Firms Identifying the Following as the Top Constraints for Operations**

Potential Constraint	Exporters (%)	Overall (%)
Inadequately educated labor force	15	11
Corruption	13	11
Electricity	13	15
Labor regulations	12	3
Political instability	10	11
Tax rates	9	10
Practices of competitors in informal sector	5	13
Courts	4	2
Customs and trade regulations	4	2

Source: Authors’ calculations based on World Bank Enterprise Surveys.

For Cambodia to remain cost-competitive and diversify into more sophisticated manufacturing segments, it is critical to implement reforms aiming to reduce trade costs and improve trade transparency along two dimensions. First, logistics quality and reliability and to administrative players in public service delivery leading to informal payments. These costs account for a large part of Cambodia’s export value and are crucial for manufacturing upgrading. Second, trade costs driven by poor market access and lack of deep FTA provisions, including for example, asset protection, investment, services trade, or competition policy harmonization. The negotiation of new FTAs will contribute to attenuate the erosion of preferences and to attract FDI in higher-value sectors.



# 4

## LOGISTICS SERVICES IN CAMBODIA'S EXPORT STRATEGY

The logistics sector plays a leading role in facilitating, linking, and supporting the country's socioeconomic development and enabling Cambodia to take advantage of exporting opportunities. However, local logistics service providers lack the capabilities to provide modern logistics value-added services and Cambodian manufacturers usually suffer from low levels of logistics performance and high logistics cost. The World Bank Group's 2017 Systematic Country Diagnostic (SCD) report highlights that poor quality of transport infrastructure and logistics services is a constraint to Cambodia's international trade and economic diversification. The IDP paper of the RGC also identified the transport and logistics sector as an important pillar of the IDP implementation. The transport and logistics sector is a critical aspect of Cambodia's economy in two significant ways. First, logistics is a major business cost. Second, logistics supports many economic transactions; it is an important aspect of facilitating the sale of all goods and services. Improved logistics enables the seamless flow of goods, services, and persons.

**Cambodia's overall logistics performance remains poor and regional performance below average.** In 2016, Cambodia ranked 73rd in the World Bank LPI. This was an improvement from a rank of 129 in 2010. The improvement can be attributed to significant customs reforms and automation including the use of the Automated System for Customs Data (ASYCUDA) at all checkpoints. However, the overall logistics score of 2.80 (against the average overall score for the East Asia and Pacific Region of 3.14) points to a need and potential for further improvements. The scores of more competitive neighbors, such as Thailand and Vietnam, were 3.26 and 2.98, respectively.

**Table 10. Selected Policy Indicator, Average by GVC Type, 2001**

GVC type	FDI	LPI	Educ Quality	Innovation
buyer_agr_mfg	4.97	2.52	3.17	2.77
buyer_mfg	5.82*	3.21	4.31	3.48
buyer_mfg_serv	4.53	3.06	4.33	3.57
hub	1.97	3.85	4.77	5.09
seller_agr	4.05	2.37	3.15	2.77
seller_agr_mfg	3.00	2.54	3.40	2.92
seller_comm	5.61	2.56	3.55	3.01
seller_comm_mfg	3.06	2.78	3.62	3.04
seller_comm_mfg_serv	3.63	3.14	3.91	3.42
seller_comm_serv	4.53	2.71	3.99	3.43
seller_mfg_serv	5.55	3.84	5.08	4.71

Source: Making GVCs work for development.

Note: Countries are classified into 11 GVC types which are defined using three measures: (a) overall GVC integration, (b) value added sectoral decomposition, and (c) upstream nature of the export and import baskets. Green refers to high values and red refers to low values. Most important policy objective by GVC type highlighted in bold.

\*Average higher due to two outliers Ireland and Singapore with average FDI inflows of 18–19 percent. FDI = Avg. FDI inflows (percentage of GDP) between 2000 and 2011 from WDI. LPI = Average LPI of 2007 and 2011 (1–5 = High) from WDI. Education quality = Average index of educational quality, 1–7 (Best), between 2006 and 2011 from World Economic Forum (WEF). Innovation = Average index on innovation environment, 1–7 (Best), between 2006 and 2011 from WEF.

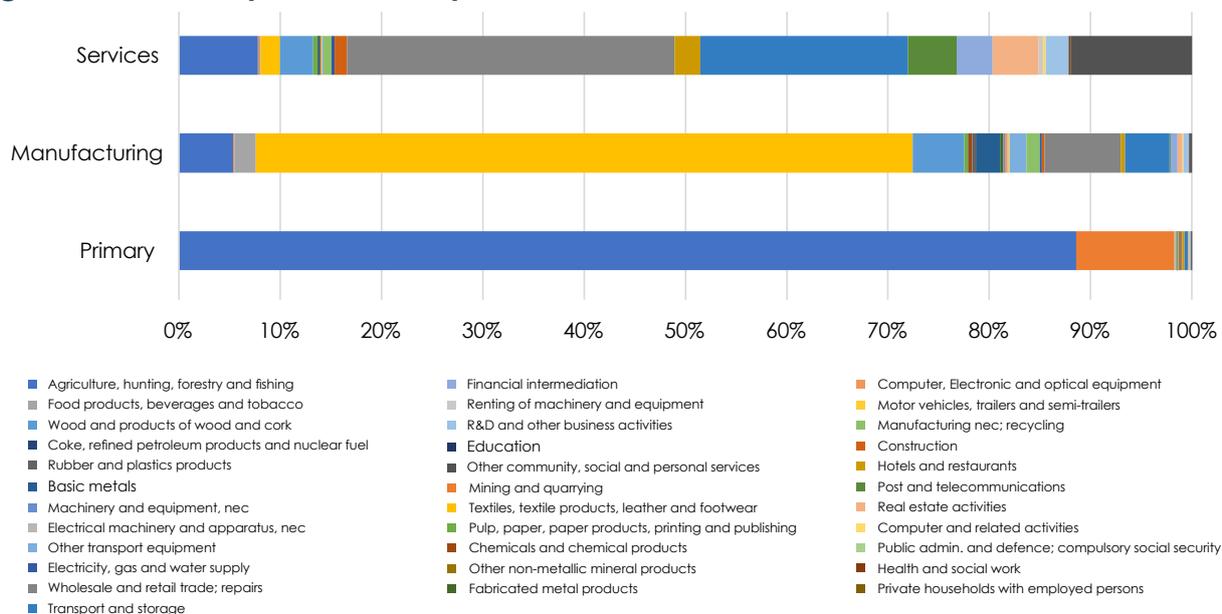
**International cross-country evidence suggests that logistics performance matters for upgrading into manufacturing GVCs.** Table 10 shows that FDI attraction matters most strongly for resource-intensive sellers. Once diversification into manufacturing takes place, connectivity (as measured by the LPI) becomes more important than FDI. The quality of education (including worker skills and worker education), together with connectivity, is very relevant for manufacturing buyers. Moreover, to become a manufacturing seller or hub, countries need to have strong innovative capabilities—besides world-class connectivity and education quality (and FDI attraction). Figure 30 indicates that, in 2011, more than a fifth of the value added of the inputs into manufacturing came from the transport and storage sector.

**The quality and reliability of logistics services in Cambodia will have to improve to support export diversification and expansion.** To improve the quality of logistics services in Cambodia, the RGC could consider addressing several legal gaps

to develop an adequate legal environment, in line with regional sectoral agreements and international conventions. Primary focus of the RGC could be on addressing qualitative criteria for logistics operators to access the market, ensuring consistency between the legal

framework and the policy objectives described in the IDP and in other RGC policy documents. Quality of logistics services would improve also as a result of liberalization of ports' administration and enhanced transparency of fees' structure.

**Figure 31. Decomposition of Exported Value Added**



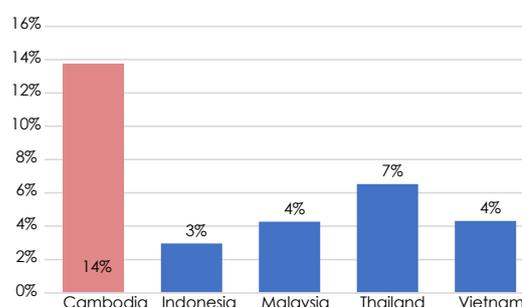
Source: Authors' calculations based on data from TIVA OECD.

**Cambodia requires streamlined access to imported inputs in the manufacturing sector.**

Foreign inputs are important in Cambodian domestic production that makes transport and logistics a key sector for Cambodia's growth and development. Foreign inputs in in garments result in large value added: 27 percent of total value of production correspond to value added that comes from China, 10 percent from Taiwan, 4 percent from Vietnam, 4 percent from the Republic of Korea, 2 percent from Hong Kong SAR, China, 2 percent from Malaysia, 2 percent from Thailand, and so on. The transport sector alone accounts for 14 percent of the exports value added in Cambodia and has a larger share in the exporting structure than in comparator countries (average 4 percent) (**Error! Reference source not found.**), reflecting higher transportation costs in Cambodia. Transport and storage, together with wholesale and retail services, play a crucial role in the textile and garments export strategy: together

they account for about half of the value-added exports by the garments value chain. Cambodia faces challenges in terms of trade facilitation that must be addressed to better integrate with the world and embrace GVCs.

**Figure 32. Forward Exported Value Added by Transport and Storage (percentage of total exported value added)**

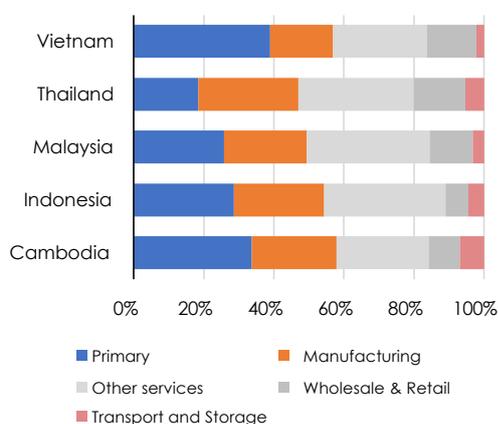


Source: Authors' calculations based on OECD TIVA (2011).

For Cambodia to remain competitive, it is necessary to reduce trade costs (including transportation cost) which are currently very high. In Cambodia, 43 percent of the garments' value corresponds to domestic value added and 57 percent to foreign value. Only transport and storage costs explain a big chunk of exported value added in Cambodia. The contribution of logistics to Cambodian exports of value added is significantly higher than in other countries in the region. Forward exported value added by transport and storage accounted for about 14 percent of total exported value added. In contrast, its neighbors—Thailand and Vietnam—have transport and storage contributing to their exports of value added only at 7 percent and 4 percent, respectively (Figures 19 and 20). This high share of transport and storage explains how important this sector is for Cambodian garments in the GVC but it acts as a burden on its exporters because logistics service providers and transport operators pass on all costs to the exporters.

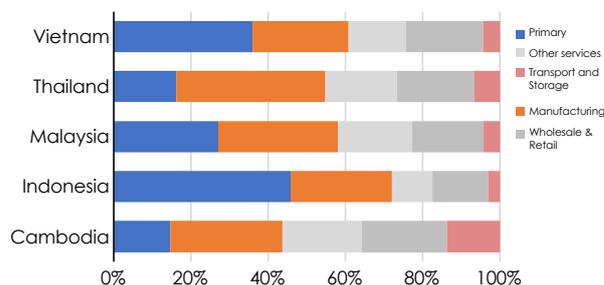
**Overall logistics contribution to value added in Cambodia is high when compared to the region, it is even higher for exported value added.** By decomposing forward links, logistics contribution to total domestic value added is almost 10 percent. Decomposition of forward links for exported value added also shows that logistics contribution is the highest, as much as more than 14 percent.

**Figure 33. Total Domestic Value Added (forward links' decomposition)**



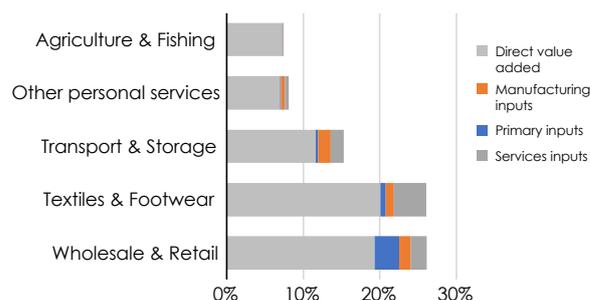
Source: Authors' calculations based on OECD TIVA (2011).

**Figure 34. Total Exported Value Added (forward links' decomposition)**



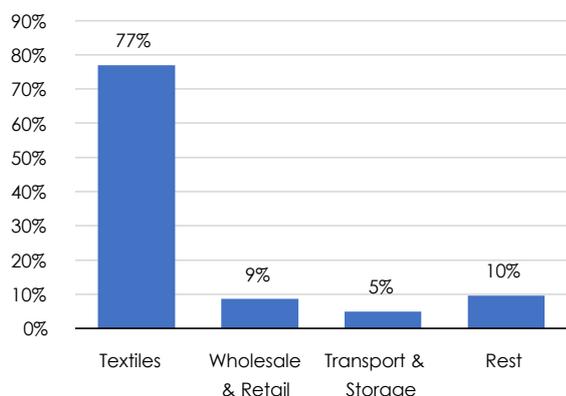
**Although the textile sector by itself constitutes one of the largest creators of value added, when the whole textile value chain is considered (including associated services), its large share in Cambodia's total value-added exports grows considerably.** Textiles directly account for about 27 percent of total value-added exports being embedded in textile products. In the case of Cambodia's exports to the United States, when the logistics and wholesales sectors are included in export value added for textiles exports, the participation of the textile value chain in the total value-added exports almost doubles. When decomposing the domestic value added in Cambodia's textile exports to the United States, there is a majority of 77 percent that corresponds to value added directly by the textile sector through backward links, while 5 percent corresponds to value added originally generated in the logistics sector. Transport and storage value added embedded in Cambodia's exports of textiles to the United States is 5 percent and lower than 14 percent embedded in overall exports of Cambodia to the world.

**Figure 35. Exported Value Added (backward links, percentage of total value added)**

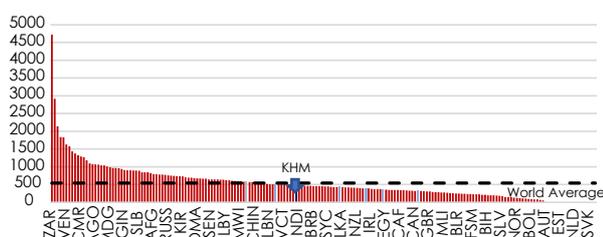


Source: Authors' calculations based on OECD TIVA (2011).

**Figure 36. Backwards Cambodian Value-Added Decomposition**



**Figure 37. Trade Facilitation, Cost to Export in US\$, 2018**



Source: World Bank Doing Business database.

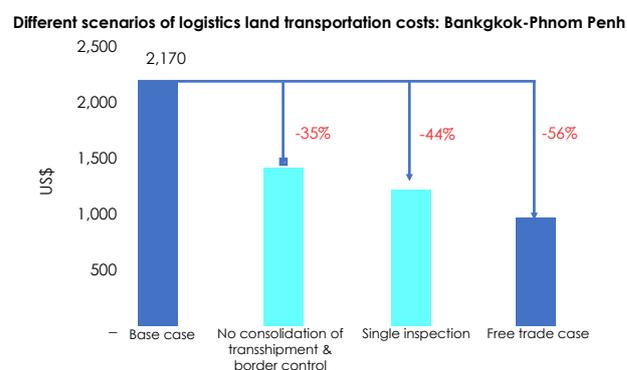
**Although the cost of exporting in Cambodia is relatively low when compared to the world average, Cambodia falls behind the region in most trade facilitation indicators (Figure 37).**

One issue raised by the garment industry is that local competition among freight forwarders is not working as it should because of the way the apparel international value chain is structured. In fact, the common practice is that buyers nominate shipping lines, and the nomination generates a cascade of nominations: each shipping line uses a specific logistics company, which nominates the dry port, which in turn nominates the trucking company to be used by the manufacturer.

**It is difficult to justify this extremely high logistics cost, based on market conditions in Cambodia only.** Trucking costs, in fact, are very competitive when they are compared to neighboring

countries. Local freight forwarders, however, have allegedly consolidated opaque practices whereby they produce formal invoices to cover also the informal costs they incur when clearing goods at the border. This practice seems to have been introduced to hide informal costs, which could not pass auditing controls that large garment exporters were subjected to. These, in fact, are suppliers of major international brands which operate often in legal and social environments sanctioning corruptive practices. Figure 38 shows that it costs US\$2,170 to transport a 40-foot container over land from Bangkok to Phnom Penh. This extremely high cost could be substantially reduced if a combination of reforms could be implemented, including the possibility for trucks to travel across the countries without transshipping the goods at the border, the consolidation of border control, and the implementation of a single inspection scheme. With reference to border operations, the cost of logistics in Cambodia could be reduced by addressing transparency of border clearance practices, as informal payments to Customs and CAMCONTROL are bundled in the invoices issued by the freight forwarders to the exporters.<sup>17</sup> There also is room to streamline border operations, by removing the Customs/CAMCONTROL duplication.

**Figure 38. Logistics and Land Transport Costs from Bangkok to Phnom Penh (US\$ per 40-foot container)**



Source: Authors' compilation based on World Bank data.

<sup>17</sup> Allegedly freight forwarders' total charge from Phnom Penh to Sihanoukville Port is about US\$600, of which US\$200–US\$250 is for trucking costs, and the rest goes to formal and informal payments for border clearance. It is estimated that about 15 percent of the garment industry's revenues go in unofficial payments at the border.

# 5

## CONCLUSION AND RECOMMENDATIONS

**Economic growth is projected to navigate between 6 percent and 7 percent depending on expansion of future exports and FDI.** Initial diversification from garments into new sectors such as electronics and bicycles is helping Cambodia climb up the value chain. This trend could only be supported if effective policy measures are devised and implemented to address the two main bottlenecks: high electricity and logistics costs. Moreover, labor skills will also have to be developed to sustain the growth of the manufacturing sector.

**Cambodian firms are expected to move 4.1 times more goods in 2030 than in 2016.** Soft and hard infrastructure in logistics will have to be adequate to support this substantial increase. Cambodia needs to strengthen its competitiveness to ensure that its exports-to-GDP ratio remains at least at the current level to sustain a medium- and long-term high economic growth. Easing logistics bottlenecks is important for Cambodia to sustain its competitiveness in the international market. Lowering logistics costs, increasing service reliability, and reducing delays is key to maintaining Cambodia's growth story for the next 15 years.

**Robust FDI coupled with a relatively open economic regime have led to Cambodia's increasing role in the world trading community.** Diversification has played a role in this story. Cambodia has not yet extensively engaged in sophisticated exports. Cambodia's trade direction needs to be diversified and focus on emerging growth poles. The bulk of Cambodia's exports, mostly garments and footwear, are being sent to Europe and the United States, which have been the main exporting markets since the country started its integration in the world trading system. Exports toward regional destination has been growing faster than export to the rest of the world.

**However, Cambodia is facing serious challenges**

**to diversify beyond its well-established garment exports and has not yet begun to export sophisticated products.** The increase in exports has been based on a diversification along the product dimension, which occurred mostly within the garment sector. Its emerging export structure also still appears unsophisticated, with classics and emerging champions concentrated in low-tech sectors. Cambodia's high concentration in garment manufacturing has hindered export diversification toward more value-added products in GVCs and regional value chains.

**The position of Cambodia's capability endowments in GVCs is still in the negative zone, implying that further significant upgrades are needed for the country to join GVCs at different stages of production.** Cambodia is still far from joining the production of intermediate GVC products, but at a closer distance from GVC products and final GVC products. Limited endowments in human capital appears to be the biggest constraint for each sector to participate in the GVCs. Human capital capability is even more important for Cambodia to diversify from its current concentration toward more high-value-added intermediate GVC products.

**Cambodia is lagging behind regional peers such as Vietnam, Thailand, and Malaysia in pursuing bilateral and regional FTAs to enhance market access.** It is essential for the RGC to be proactive in promoting market access by negotiating deep bilateral and regional trade agreements that will help mitigate the erosion of preferences.

**With significant delays in transformative reforms, private firms in Cambodia still face major constraints in doing businesses.** For Cambodia to remain cost-competitive and diversify into more sophisticated manufacturing segments, it is critical to implement reforms aiming to reduce trade costs and improve trade transparency.

**The logistics sector plays a leading role in facilitating, linking, and supporting the country's socioeconomic development and enabling Cambodia to take advantage of exporting opportunities.** Foreign inputs are important in Cambodian domestic production that

makes transport and logistics a key sector for Cambodia's growth and development. Transport and storage costs represent a major chunk of exported value added in Cambodia.

**Although the cost of exporting in Cambodia is relatively low when compared to the world average, Cambodia falls behind the region in most trade facilitation indicators.** The high logistics cost is not justified by local market conditions. Trucking costs, in fact, are very competitive when compared to neighboring countries. Informal costs are often hidden in lump-sum service contracts between industry and services operators to which services operators would absorb all informal payments in their final prices presented in the service contracts. The design and implementation of a strong anticorruption policy is an essential element to reduce logistics costs and support export expansion.

**Cambodia would have to upgrade its game in logistics now and at the same time design a clear strategy to increase the human capital of its population, as well as building up institutions, to be prepared to face the challenges and opportunities that integration into the global marketplace provides.** A number of recommendations could be considered by the RGC to ensure, on the one hand, that the observed export growth is sustained and continues contributing to economic development, and on the other, that Cambodian firms move into more sophisticated and knowledge production processes, to appropriate more value-added products. To produce intermediate electronics and machinery, or transport equipment products, Cambodia needs to upgrade its logistics in the short run and its human capital in the long run.

## RECOMMENDATIONS

To continue growing along the intensive margin—that is, to consolidate existing exports, Cambodian firms will need to remain cost-competitive. This implies that productivity will need to increase at the same pace as wages. Increases in productivity will be driven by increases in competition, improvements in the provision of key backbone services (including

electricity), upgrading of skills—both of workers and managers—and increased innovation.

To diversify into more sophisticated segments of production, Cambodia faces serious reform challenges in the short run and in the long run. In the short run, Cambodia needs to reduce trade costs to remain competitive. Three components stand out.

- (a) First, for trade and investment costs that are related to market access Cambodia can reduce these costs by deeper integration in the world trading system, going beyond agreements on tariffs, and by implementing the harmonization of standards in service trade or investment agreements that are critical to transform trade and investment operations in the country for increased participation into GVCs. As firms become part of international production networks led by firms elsewhere, these agreements tend to reduce the transaction costs for these firms to coordinate processes and exchange parts and components. This, in turn, increases the likelihood of joining and upgrading within these networks. In this regard, Cambodia needs to seriously implement its trade and investment agreement commitments to lower trade and investment costs although it has a long way to go.
- (b) Second, Cambodia performs poorly in trade costs that are related to logistics and border crossing when compared to competitors in the region and beyond. Because informal costs appear to be included in the current value of logistics costs, it is critical for the government to tackle these over-burden informal payment practices by undertaking more radical reforms to remove corruptions and patronage preference practices at border clearance and weighbridge inspection. Key priority actions include the following:
  - (i) Adopt a comprehensive integrity and anticorruption strategy (including a strong and implementable ethical

- code of conduct for border agency staff) considering international good practices for border management operations.
- (ii) Implement a modern automation system for non-customs border agency management, especially for CAMCONTROL, by reducing face-to-face interactions between staff and traders and by using the appropriate risk management framework to reduce the current rate of physical inspections that are almost 100 percent after the risk-based customs inspections.
  - (iii) Digitalize/automate port operation processes by entailing cross-border trade to the extent technologically feasible that will reduce face-to-face interaction and remove informal payments.
  - (iv) Establish a feedback loop for border agencies and port operators by expanding the existing mechanism initiated by the GDCE to seriously take complaints and opinions of the trading communities and logistics operators on informal payments and administrative burdens at border clearance and road transport weighbridges.
- (c) Third, Cambodia needs to upgrade its human and institutional capital immediately to close the gap of skilled mismatch and shortage for an upgrade in participation in GVCs. For Cambodia to increase its capabilities required to move into more knowledge-intensive investment activities it should consider three main actions in parallel:
- (i) Establish a clear policy framework to address its largest capability deficit, especially skills and institution that currently constrains Cambodia by building up skills and knowledge of workers and upgrading managerial competency skills in industries and in government institutions.
  - (ii) Close the current gap of skills shortage and mismatch by considering importation of skilled labor and implementing knowledge transfer programs for specific industries through investment incentives.
  - (iii) Invest in human capital development through improving education and health delivery services focusing on education and health quality.
- Investment in improving soft and hard infrastructure of logistics would have to be commensurate with Cambodia's growth ambitions. Logistics will have to be adequate to support a quadruplication of trade volumes in the next 15 years. Currently, transportation, warehousing, and storage services appear to account for almost 14 percent of export value added but this share is far higher than its neighboring countries and competitors in the region. Logistics and transport operators often charge more due to the inefficient and uncertain logistics operation that results in more pressures for exporters to carry on a high rate of input and goods storage and inventory control and these costs have made Cambodia's export products less competitive in regional and global markets. Two actions are recommended:
- (d) Undertaking regulatory and operational reforms to enable inter-transport mode and multimodal transport operations is a high priority to optimize the use of existing transport infrastructure of different modes along each economic corridor and this would help reduce the level of warehousing, storage, and inventory requirement for exporters as logistics operation becomes more efficient and predictable.
  - (e) Attract large foreign investment in logistics operation to modernize both infrastructure and services to follow the global players' international standards and practices that would increase competition in the sector and rationalize logistics costs to be more favorable to Cambodia exporters and manufacturers.

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# END NOTES

- <sup>A</sup> To explain this in simpler terms, for every US\$100 of additional exports, US\$44 was accounted for more exports of the same products to the same destinations, while the remaining US\$56 represented some sort of diversification into new export markets or new products.
- <sup>B</sup> The new markets were distributed across the following regions: Africa (14), Latin America (9), and Europe (6), bringing the total of export partners being served by Cambodian firms to 149.
- <sup>C</sup> Logistics cost over sales for the textile and garment industry was estimated at 13.06 percent, lower than automotive (15.83 percent), chemical products (16.50 percent), and food (20.38 percent). These figures were estimated from the survey data on logistics users and service providers for the draft paper on the monitoring and evaluation framework for Cambodia's logistics.
- <sup>D</sup> To forecast Cambodia's exports in 2030, Figure 7 uses IMF's WEO projections to 2022, which have been extended to 2030 assuming that the historical growth rate after 2022 will be maintained and a constant export-GDP elasticity of 1.7. Alternative elasticities based on Constantinescu, Mattoo, and Ruta (2016) are used to construct an interval and showed in dotted lines. IMF's real export growth expected in 2017–2022 is 10.5 percent per year. The real expected GDP growth in 2017–2022 (IMF) is 7 percent per year. The GDP growth to export growth ratio for 2017–2022 is 1.7. The historical average of GDP growth assumed for 2022–2030 is 7 percent.
- <sup>E</sup> From 2018, minimum wages for garment workers in Cambodia will increase from US\$153 (2016) to US\$170 in 2018, an increase of about 11 percent, announced by the Ministry of Labor and Vocational Training in October 2017, and of which US\$5 will be topped up by the RGC. The current minimum wage was already doubled from US\$80 in 2012. EuroCham Cambodia at <http://www.eurocham-cambodia.org/post/452/Prakas-396-on-Minimum-Wage-Determination-for-Workers-in-Textile-Garment-and-Footwear-Sector-for-2018>.
- <sup>F</sup> Electronic components correspond to telecom parts and accessories (US\$149 million exported in 2016), toys and games (US\$23 million exported in 2016), computer peripherals (US\$20.4 million exported in 2016), telephone lines (US\$12.6 million exported in 2016), and others (US\$35 million exported in 2016). Machinery corresponds to electric motors and AC generators (US\$27 million exported in 2016), circuit breakers and panels (US\$12.6 million exported in 2016), iron tubes (US\$5.7 million exported in 2016), locksmith hardware (US\$5.7 million exported in 2016), yarn preparing machines (US\$3.9 million exported in 2016), vehicle parts and accessories (US\$3.35 million exported in 2016), and others (US\$29.5 million exported in 2016).
- <sup>G</sup> Export growth can be decomposed into the expansion of existing trade flows (the intensive margin) and the addition of new products and markets (the extensive margin). This indicator allocates all product growth—and contraction—to one of seven categories. Intensive margin: (a) increase of existing products in established markets, (b) decrease in existing products in established markets, and (c) extinction of exports of products in established markets. These three categories are represented all together in the 'intensive margin' category. Extensive margin: (a) introduction of new products in new markets ('new market, new product'); (b) introduction of new products in established markets ('old market, new product'); (c) introduction of existing products in new markets ('old product, new market'); and (d) product diversification in established markets—for example, France exports widgets to Guatemala and Singapore, but exports gizmos only to Singapore. The

following year, France begins to also export gizmos to Guatemala, thereby diversifying its trade ('old product, old market [diversified]').

- <sup>H</sup> Cambodia's export partners in 2016 included 34 new destinations with respect to 2005, of which 14 were in Africa, 9 in the Americas, 6 in Europe, 3 in Oceania, and 2 in Asia. The net increase in countries reached is concentrated in low income but populous countries. They account for 0.4 percent of global GDP and for 6 percent of global population. These new destinations include Nigeria (186 million inhabitants), Ethiopia (102 million), Uganda (41 million), Algeria (40 million), and Sudan (39 million). The main export products with which these markets have been reached are rice, rubber, tobacco, and garments and footwear. As indicated in Figure 13, however, North America, Europe, and China remain the main destination countries.
- <sup>I</sup> PRODY indicates the average income of the buyers. The path is an indicator of scope for diversification and ease of redeploing factors of production into other uses. The greater the path, the greater the scope for diversification. Technology categories are defined as primary products (PP), resource-based (RB), low technology (LT), medium technology (MT), and high technology (HT). PP includes fresh fruit, meat, rice, cocoa, tea, coffee, wood, coal, crude petroleum, and gas. RB includes prepared meats/fruits, beverages, wood products, vegetable oils, ore concentrates, petroleum/rubber products, cement, cut gems, and glass. LT includes textile fabrics, clothing, headgear, footwear, leather manufactures, travel goods, pottery, simple metal parts/structures, furniture, jewelry, toys, and plastic products. MT includes passenger vehicles and parts, commercial vehicles, motorcycles and parts, synthetic fibers, chemicals and paints, fertilizers, plastics, iron, pipes/tubes, engines, motors, industrial machinery, pumps, switchgear, ships, and watches. HT includes office/data processing/telecommunications equipment, televisions, transistors, turbines, power generating equipment, pharmaceuticals, aerospace, optical/measuring instruments, and cameras.

# CHAPTER TWO



## AN ASSESSMENT OF THE LEGAL AND REGULATORY FRAMEWORK FOR THE LOGISTICS SECTOR IN CAMBODIA



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# ACRONYMS

<b>ADN</b>	European Agreement on International Carriage of Dangerous Goods by Inland Waterways
<b>ADR</b>	European Agreement on International Carriage of Dangerous Goods by Road
<b>ASEAN</b>	Association of Southeast Asian Nations
<b>ASYCUDA</b>	Automated System Customs Data
<b>CAMFFA</b>	Cambodian Freight Forwarders Association
<b>CAMTA</b>	Cambodian Truckers Association
<b>CBTA</b>	Cross-Border Transport Facilitation Agreement
<b>CCNR</b>	Central Commission for Navigation on the Rhine
<b>CFR</b>	Cambodian Rice Federation
<b>CFS</b>	Container Freight Station
<b>CPC</b>	Certificate of Professional Competence
<b>CPPM</b>	Customs-private Sector Partnership Mechanism
<b>FBL</b>	FIATA Bill of Lading
<b>FDI</b>	Foreign Direct Investment
<b>FIATA</b>	International Federation of Freight Forwarders Association
<b>GDCE</b>	General Department of Customs and Excise
<b>GDL</b>	General Department of Logistics
<b>GDTP</b>	General Department of Trade Promotion
<b>GHG</b>	Greenhouse Gas
<b>GIZ</b>	German International Cooperation Agency (Deutsche Gesellschaft für Internationale Zusammenarbeit)
<b>GMAC</b>	Garment Manufacturers Association in Cambodia
<b>GMS</b>	Greater Mekong Subregion
<b>ICC</b>	International Chamber of Commerce
<b>ICT</b>	Information and Communication Technology
<b>IDP</b>	Cambodia Industrial Development Policy
<b>IMO</b>	International Maritime Organization
<b>IRU</b>	International Road Transport Union
<b>JICA</b>	Japan International Cooperation Agency
<b>KAMSAB</b>	Kampuchea Shipping Agency and Brokers
<b>MARPOL</b>	International Convention for the Prevention of Pollution from Ships
<b>MEF</b>	Ministry of Economy and Finance
<b>MOC</b>	Ministry of Commerce
<b>MPWT</b>	Ministry of Public Works and Transport
<b>MRC</b>	Mekong River Commission
<b>MTO</b>	Multimodal Transport Operator
<b>NLC</b>	National Logistics Council
<b>NLSC</b>	National Logistics Steering Committee
<b>OTIF</b>	International Organization for International Carriage by Rail
<b>PAS</b>	Sihanoukville Autonomous Port
<b>PPAP</b>	Phnom Penh Autonomous Port
<b>RGC</b>	Royal Government of Cambodia
<b>RID</b>	Regulation for the International Carriage of Dangerous Goods by Rail
<b>SDR</b>	Special Drawing Right
<b>SMEs</b>	Small and Medium Enterprises
<b>SOLAS</b>	International Convention for the Safety of Life at Sea
<b>STCIN</b>	Development of the Standards of Training and Certification in Inland Navigation
<b>STCW</b>	International Convention on Standards of Training, Certification and Watchkeeping for Seafarers
<b>UN</b>	United Nations
<b>UNCTAD</b>	United Nations Conference on Trade and Development
<b>UNECE</b>	United Nations Economic Commission for Europe
<b>VAT</b>	Value Added Tax

# EXECUTIVE SUMMARY

**Cambodia's transport sector policy has paid attention to close the infrastructure gap by focusing on more investments in hard infrastructure development, but it does not adequately strike a balance for improving soft infrastructure.** Due to huge needs for hard infrastructure development, Cambodia has struggled to get all the planned infrastructure investments as prescribed in the key transport sector policy as part of the Industrial Development Policy (IDP). Its emphasis on hard infrastructure development has left a large gap in the soft infrastructure of the sector. Specifically, the legal and regulatory framework for Cambodia's transport and logistics sector has been underdeveloped and enforcement has been weak. In addition, the transport sector policy also lacks sufficient inclusion of sustainable dimensions of the transport sector to improve competitiveness in the long run, including greenhouse gas (GHG) emission reduction and efficient fuel consumption in the country.

**Currently, logistics and transport services in Cambodia operate under numerous decrees, sub-decrees and regulations, orders, and guidelines but not all activities in the sector are covered.** Cambodia does not have a law on land transport, but it has partial coverage of some aspects of road transport mainly under a Road Law and Land Traffic Law. Other transport modes, railway, port and maritime transport, and inland waterways are presently not covered by any primary legislation. However, the Royal Government of Cambodia has drafted laws for these sectors though they are still to be enacted. In fact, the process of enacting new legislation seems to face long delays in part due to limited capacity of the lead agencies and a seemingly convoluted bureaucratic process. That said, the Government is keen to make progress and is actively driving the process of enacting the new legislations.

**In addition to incomplete coverage, Cambodia's regulatory framework for logistics does not**

**fully conform to regional commitments and is inconsistent with international best practices.**

Regional and international conventions and agreements on transport and logistics are partially translated into the national sector laws and regulations. Some of the international conventions that can help fill the regulatory gaps relate to safety and handling of hazardous materials. Cambodia signed the Association of Southeast Asian Nations (ASEAN) Framework Agreement on Multimodal Transport in 2005 but has not transposed this agreement into its national law on multimodal transport, which means that the country is not compliant with the agreement. For instance, Cambodia does not have a system to authorize and recognize operators registered in other ASEAN member states and its operators are also not widely recognized by other member countries. Implementation of this agreement is important as it will strengthen the legal position of the international multimodal transport operators (MTOs). In addition, even though Cambodia ratified the Greater Mekong Subregion (GMS) Cross Border Transport Agreement (CBTA), it has not implemented all the annexes and protocols to the agreement. This has constrained the full implementation of the agreement. Consequently, Cambodia typically enters into the less-efficient approach of concluding bilateral transport agreements with its neighbors, especially Thailand and Vietnam.

**Cambodia does not have a land transport law but has it in preparation like many other laws in the transport and logistics sector.** Some general transport issues are being regulated in the existing road law and land traffic law. These include registration for obtaining an operator's license and overloading of trucks as they directly affect the road infrastructure and road traffic safety. Access to the road transport market and access to the profession of road transport operator and truck or bus driver are hardly regulated in Cambodia. Often, registration and fulfilment of the administrative requirements are sufficient to obtain an operator's license for carrying out road transport. Professional drivers only need a driver's license and are often able to obtain a license without driving lessons and examinations.

**Railway transport in Cambodia operates with a regulatory regime of some secondary legislations, but these often lack important provisions, especially those relating to safety.**

The only railway operator, the Royal Railway Company, has to deal with several government agencies, including the Port Authority, Customs, and CamControl, and follow and comply with their guidelines and regulations on different aspects of its operations. In the field of international railway transport, the transport of dangerous goods is mostly regulated under the Regulation for the International Carriage of Dangerous Goods by Rail (RID), under the guidance of the International Organization for International Carriage by Rail (OTIF). Although rail traffic in Cambodia is purely domestic, and the OTIF and RID relate to international carriage, in many countries RID also applies to national traffic. This is also recommended for the Royal Railway Company in Cambodia.

**Cambodia has drafted but not yet finalized the important basic laws that govern port, maritime transport, and inland waterway transport.**

Currently, these transport modes and facilities are being guided by secondary legislations such as royal decrees, sub-decrees, ministerial regulations, standards, and procedures. By recognizing the requirement of basic primary legislations that should conform to and be compliant with international conventions and that serve as a framework for transport and logistics development, three draft laws were prepared and are pending to be proposed for finalization and adoption. These include (a) Draft Port Law, (b) Draft Law on Maritime Transport, and (c) Draft Law on Inland Waterway Transport. These draft laws were reviewed, and their contents appear to include basic conformity and principles of international conventions, good practices, and standards.

**The Draft Port Law contains provisions that conform with international good practices and standards.**

It defines four classes of port categories (international, bilateral, domestic, and special ports, for example, for a specific commodity and for a specific user) and the port zone. The responsibilities of the port management body include, among others, port

facilities and channels, harbor master function, port development and implementation plan, and supervision and/or conducting of port operations. The last one leaves room for third-party/private involvement. It specifies the principles of port dues and charges and the requirement for publication of those and the possibilities of the Ministry of Public Works and Transport (MPWT) to set limits. The Draft Port Law has a chapter on safety and environment, for example, for ship-generated waste, spill contingency plan, and port facility security requirements, all in line with International Maritime Organization (IMO) regulations, and chapters on pilotage and the navigation channels and navigation. Details are to be included in sub-decrees. The Port Authorities are in discussion with the MPWT on the Draft Port Law but argue that the main points for them in the Draft Port Law relate to trade facilitation and safety issues.

**The Draft Law on Maritime Transport provides the legal and institutional framework for administration and management of maritime transport and defines the general principles on the governance structure for development, administration, and management of maritime affairs.**

Each chapter in the law addresses the international conventions (International Convention for the Safety of Life at Sea [SOLAS], International Convention for the Prevention of Pollution from Ships [MARPOL], and so on). The general provisions describe the objectives, (among others, safety of ships, environment, maritime operations and commerce, development of the sector, labor force), followed by the marine area and the exclusive economic zone of the Kingdom of Cambodia. Respective chapters deal with ship registration, business licenses for shipping companies (to be issued by the MPWT), crew requirements, safety of ships, safety of environment, navigation and entry permits, inspection and control of vessels, investigations in case of incidents, shipyards and repairs, and finally enforcement and penalties. The provisions are of a general nature, and not all details are included. Some of the details are then elaborated in secondary legislation.

**The Draft Law on Inland Waterway Transport**

**mainly focuses on cabotage in inland waterway transport operations. The main purpose of the Draft Law is to maintain order, security, and safety of inland waterway transport and to protect human and wildlife and environment of the inland waterways.** It also draws some content to prevent adverse effects to human health and damage of public and private property and encourage development of the inland waterway sector. The draft law is applicable to the ships, the crew, ship owners and shipping companies, and the construction of waterways and other activities related to navigation. The Draft Law only relates to Cambodian waters and does not include cross-border international transports. The draft law mainly covers those activities that are not regulated under the Draft Law on Maritime Transport. The intersection between maritime transport regulations and inland waterway transport can at times be confusing unless the scope of respective regulations is clearly defined. In particular, Cambodia seeks to regulate carriage of cargo between two points in national waterways, including coastal sea water within the country by vessels registered in Cambodia and in another country. Like most countries, Cambodia still highly restricts the permission of foreign vessels to engage in cabotage.

**Cambodia does not have a national legal framework for multimodal transport, though it signed the ASEAN Framework Agreement on Multimodal Transport.** A national legal framework for multimodal transport should normally cover carriage of goods by national and international multimodal transport contracts, which also include provisions concerning the liability of MTOs. Cambodia and other ASEAN member states<sup>1</sup> signed the ASEAN Framework Agreement on Multimodal Transport on November 17, 2005. In the agreement 'international multimodal transport' is defined as the carriage of goods by at least two different modes of transport on the basis of a multimodal transport contract from a place in one country at which the goods are taken in charge by the MTO to a place designated for delivery situated in a different country. An important element in

this agreement is the registration of the MTOs. For inclusion in the register of MTOs, the person concerned shall submit an application to the respective competent national body and establish that he/she fulfils all requirements as prescribed by national law. Lack of a national legal framework for multimodal transport in Cambodia has constrained its compliance with this agreement. This puts serious bottlenecks for the international and national operation of MTOs. While Cambodia does not have a system to authorize and recognize operators registered in other member states, its operators are also not yet widely recognized by any of the other member countries. Having a national legal framework for MTOs would help address this constraint.

**Cambodia does not currently regulate freight forwarding while it regulates customs brokers.**

This is quite common across the world as most countries do not have a legal and regulatory framework for freight forwarding other than having freight forwarding businesses registered as enterprises. Some countries impose business operating licenses issued by public work and transport agencies, but such imposition often brings about administrative frustrations rather than facilitating the establishment of freight forwarding businesses. It may not be necessary that Cambodia should have national legislation to regulate the freight forwarding business. Rather, if Cambodia drafts a law on multimodal transport, then that should cover the freight-forwarding activities without the need for a specific law. Customs brokers are regulated under the Law on Customs and related customs regulations. However, the capacity of customs brokers needs substantial upgrade as they have a significant impact on the performance of Cambodia supply chains.

**Cambodia faces capacity challenges not only in coordinating across ministries to process and adopt new laws but also in implementing and enforcing existing laws and regulations of the transport and logistics services.** In November 2017, Cambodia established a National Logistics Steering Committee (NLSC) and a National

<sup>1</sup> Brunei Darussalam, Republic of Indonesia, Lao People's Democratic Republic, Malaysia, Union of Myanmar, Republic of the Philippines, Republic of Singapore, Kingdom of Thailand, and Socialist Republic of Vietnam.

Logistics Council (NLC) that aim at improving coordination between line ministries and being a consultative and decision-making forum to deal with transport and logistics issues. While there has been some progress, key challenges remain especially in terms of the MPWT's capacity to develop and enforce laws and regulations. Cambodia has a lengthy process to develop primary legislation with a few reaching the final stage of approval. There have also been limited stakeholder consultations in drafting legislations and regulations to which important feedback and opinions of the private sector were reported to be excluded in the final legal text of laws and regulations. The MPWT still needs to improve its capacity to monitor implementation of laws and regulations and their impact.

**Cambodia does not prohibit importation of second-hand motor vehicles.** Cambodia remains one of the developing countries that maintain a large second-hand vehicle market. Imports of second-hand motor vehicles still account for more than 80 percent of used vehicles in the country. Increased use of second-hand vehicles has some serious implications on fuel use efficiency and GHG emission issues. While there is no study available at the moment, Cambodia may need to assess the impact of increased imports and use of second-hand vehicles, especially for trucks in the country with respect to fuel use efficiency and GHG emission. Old vehicles have some disadvantageous technical issues as they were designed with limited use of environmental-friendly technology, such as fuel efficiency and emission reduction. They also have maintenance costs and durable implication in use. To implement a more competitive and sustainable transport and logistics sector, there should be remedial measures to raise the technical standards and specifications of importation of used motor vehicles that minimize GHG emission and improve fuel use efficiency.

## **AN AGENDA FOR LEGAL AND REGULATORY REFORM**

Cambodia needs to modernize its legal and regulatory framework for logistics. A modern framework should be clear on what needs to be regulated and what does not need to

be regulated in support of a dynamic and innovative transport and logistics services sector. Along those lines, the preparation and adoption of primary and secondary legislations for transport and logistics services should involve adequate and wide participation of stakeholders. Gathering the feedback and opinions of all relevant stakeholders is critical for a sound and well-understood legal and regulatory framework that will help modernize and develop transport and logistics services. It is also good practice when formulating legislation to carry out some regulatory impact assessment to balance the costs and benefits of such new legal instrument. Other good practice principles are the following:

- Regulation should be kept minimal and limited to only a few issues relating to the interests of safety or market failures such as the existence of monopolies that one market player can create more income and profit than that would be allowed in a healthy market.
- Regulations should be accessible, simple, and understandable (Cambodia established a national trade repository or trade portal, but it has not been regularly updated to enrich the content, especially legal and regulatory content on transport- and trade-related issues).
- Rules and regulations should be consistent with transport and logistics policy goals.
- Special sectors may require special policies and regulations.
- Rules and regulations should conform to bilateral, regional, and international agreements.
- Guidelines and administrative structure for implementation and enforcement should be established.
- Implementation of laws and regulations and their impacts should be monitored.

Guided by these principles the main legal and regulatory issues for each subsector in each background section and specific proposed reforms are summarized in the legal and regulatory priority action matrix for the Cambodia Logistics Master Plan in annex 1.

# 1 INTRODUCTION

## 1.1 CONTEXT

**Cambodia has made tremendous progress in key areas of trade facilitation, as evidenced by an improvement in the country's logistics performance which has increased from a ranking of 129 in 2010 to 73 in 2016 in the World Bank's Logistics Performance Index.**

However, its overall score of 2.80 is still lower than the regional average of 3.14 for the East Asia and Pacific Region. For the country to meet its growth targets in exports and the planned diversification of manufacturing and agricultural exports, Cambodia should make further improvement in logistics performance. The Government recognizes this need and has requested the World Bank and Japan International Cooperation Agency (JICA) to contribute to the development of a Logistics Master Plan.

**The development of the master plan is consistent with the national and regional integration priorities and efforts.**

For instance, the Royal Government of Cambodia (RGC) has prioritized connectivity in its Rectangular Strategy III (2014–2018), while the Industrial Development Policy (IDP) 2015–2025 foresees the development and implementation of a master plan for the transport and logistic system. Moreover, the development of a comprehensive strategy for the logistics sector in Cambodia also fits in with the Association of Southeast Asian Nations (ASEAN) Transport Strategic Plan 2016–2025, which aims to “establish an integrated, efficient and globally competitive logistics and multimodal transportation system, for seamless movement of passengers by road vehicles and cargos within and beyond ASEAN,” and the ASEAN Connectivity 2025 which aims at lowering supply chain costs and improving speed of supply chains in each ASEAN member state.

**At the national level, the Government has already established some of the fundamental building**

**blocks for a national logistics strategy.** One of the key actions has been the establishment, in 2016, of a National Logistics Council (NLC) to be chaired by the Deputy Prime Minister. The Council, which comprises all the main national stakeholders, including representatives of the private sector, is supported by a National Logistics Steering Committee (NLSC) and a General Department for Logistics (GDL) which will serve as the Secretariat to the Steering Committee and the Council. The Royal Decree on the Establishment of the NLC and NLSC is signed by the King in November 2017 and this establishes the NLC and the NLSC.

**The World Bank has been supporting the RGC on various aspects of trade facilitation and logistics.**

The support includes the 2014 Diagnostic Trade Integration Study and technical support for the establishment of the NLSC and the GDL. The GDL has recently drafted a tentative outline of the National Logistics Master Plan, which is expected to be finalized by March 2018. The World Bank and JICA have been requested by the Government to elaborate specific sections of the Logistics Master Plan. JICA will focus on key strategic actions associated with the hard infrastructure aspects of the proposed Logistics Master Plan, while the World Bank will build on its previous and ongoing engagement and support to elaborate four main aspects of the soft issues to be included in the master plan, (a) legal and regulatory framework for the logistics sector, (b) monitoring and evaluation system for the proposed Logistics Master Plan, and (c) an update of trade competitiveness to inform the design of the proposed Logistics Master Plan.

**This background paper focuses on an assessment of the existing regulatory framework for transport and logistics services in Cambodia.**

Having an appropriate regulation regime is important for services providers to respond to growing demand for economic diversification and growth and lower costs but higher quality better logistics service provision. The RGC has recognized the need to improve logistics performance and reduce the high logistics costs in the country to achieve economic growth and meet its growth targets in exports and the planned diversification of manufacturing

and agricultural exports. To guide this process, a National Logistics Master Plan is being developed with support from JICA and the World Bank. The assessment of the legal and regulatory framework is one of the inputs for the logistics master plan development.

**The regulatory framework assessment covers domestic laws, decrees, and regulations as well as international conventions in the transport and logistics services<sup>2</sup> sector in Cambodia.**

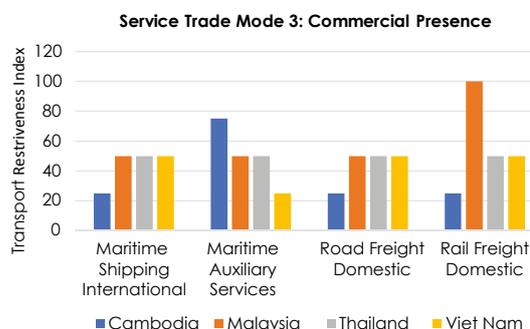
The focus of the review is on regulations that affect market access, costs of services, operational efficiency, and integration of markets with those of neighboring countries. A diagnosis of bottlenecks for transport and logistics operators has been made based on a review of previous studies and reports as well as on collection of primary data from the public sector and transport and logistics services operators in Cambodia. Attention has been paid to procedures and restrictions affecting access to cargo; documentary requirements for the organization of transport and the transport of goods by the various modes of transport (in particular road, rail, and inland water transport);<sup>3</sup> accessibility to regulatory information (transparency); and conformity of regulations with international good practices. In addition, a review of institutional issues related to logistics services has been made. Priorities for legal and regulatory reform have been identified and an action plan for reform of the regulatory framework for logistics services in Cambodia is presented. Finally, recommendations have been made to improve the regulatory process in Cambodia in a more general way.

## 1.2 DETERMINING A NEED FOR LEGAL AND REGULATORY REFORM

**Cambodia has one of the most open policies for foreign participation in logistics services.** It has virtually opened most subsectors, including

commercial presence for international maritime shipping, domestic road freight, and domestic rail freight, but does not open its maritime auxiliary services to foreign investment. However, maritime auxiliary services to own ships are virtually closed with a Risk-Sophistication-Treatment-Inventory score of 75<sup>4</sup> that include cargo handling, storages and warehousing, customs clearance services, container station or depot services, maritime agency services, and freight-forwarding services (see figure 1). The provision of important maritime auxiliary services is currently monopolized by state-owned enterprises, leaving a large gap for competition to improve services' quality and delivery. Price setting is somewhat artificial through administrative decisions made by the Ministry of Public Works and Transport (MPWT) and the Ministry of Economy and Finance (MEF). Services for port-related services handling specifically is higher in Cambodia in comparison with similar services in Thailand and Vietnam.

**Figure 1. Restriction of Transportation Services in Cambodia**



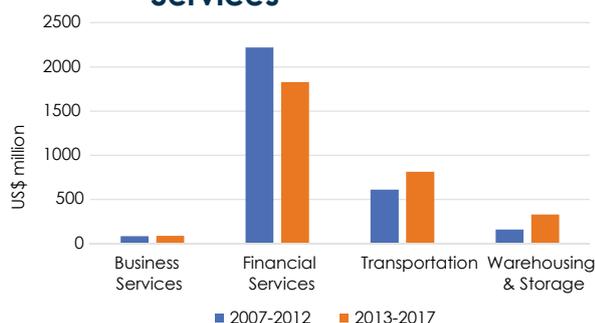
Source: World Bank Group's service trade restriction database.

**At the same time, the demand for modern and competitive international logistics services is growing.** Foreign direct investment (FDI) into logistics services has been strong in recent years that the country has attracted a number of international players, including APL Logistics, DSV, Panalpina, and Yusen Logistics, to establish operation in the country. While statistics on

2 The transport and logistics sector includes, among others, trucking, railway transport, maritime and inland waterway transport, ports, air transport, warehousing, freight forwarders, shipping and customs agents, and value-added logistics services (third- and fourth-party logistics providers).  
 3 No attention has been paid to air cargo, which, although important for the transport of essential and strategic components, for instance, the manufacturing industry, is almost neglectable in terms of volume.  
 4 Service trade database by the World Bank Group. <http://iresearch.worldbank.org/servicetrade/home.htm>.

FDI in the logistics services sector is lacking, Cambodia's export-oriented industries such as garments, rice, and emerging manufacturing products has been a key target for international logistics providers. FDI inflows into transportation services rose by 33 percent and warehouse and storage services by 103 percent, comparing the FDI sums between two different periods of 2007–2012 and 2013–2017 (see figure 2).

**Figure 2. Cambodia's FDI in Logistics Services**



Source: World Bank Group.

**Competition between foreign and local logistics operators appears to rise.** Foreign operators have more competitive advantage in providing high value-added services, including track and trace and inventory management, while local operators lack professional and management personnel and have limited international experiences. However, it is also more challenging for foreign operators to compete with local operators that focus on low-end services that serve the domestic market. The current penetration of foreign operators into Cambodia's logistics services suggests further enhancement of legal and regulatory transparency to reduce administrative burdens for investment entry. It is likely that foreign equity participation in logistics services investment will help modernize local firms' quality and reliability of higher value-added services.

**Based on the abovementioned and previous studies, it is clear that Cambodia's regulatory regime for logistics services is outdated and fragmented and has a large gap with regard to international good practices and standards.** As a result, services are similarly fragmented and high cost, contrary to modern practice which places a premium on seamless service and efficient door-to-door services.

**In addition, there are other more specific weaknesses with the regulatory framework that require special attention for a modern and competitive logistics services market to emerge.**

The main weaknesses are the following:

**(a) Competition between formal registered service operators and informal unregistered operators drags down the standards in the provision of transport and logistics services in Cambodia.**

Formal services operators appear to have competitive disadvantages in competition with informal operators that have enjoyed much higher profit margins due to regulatory avoidance. In addition, formal operators are also required to follow some standards and quality in their provision of services, set by Cambodian Truckers Association (CAMTA) and Cambodian Freight Forwarders Association (CAMFFA). However, the informal operators are operating independently without proper standards and quality assurance though surviving competition due to financial viability and market capture. There have been no clear efforts by CAMTA and CAMFFA to integrate the informal operators into their associations. It would be necessary to integrate these informal operators into the formal associations so that they would be more compliant to set standards and regulatory requirements such as taxation and public safety measures. There has been an outstanding issue on non-compliance of the length of trucks in Cambodia and most of these trucks are operated by informal operators. Non-compliance of safety measures has also elevated the authority's responses with more frequent inspections on main economic corridors. There are now about two or three road checkpoints for safety and weight control inspections, conducted by the MPWT. Effectiveness of such frequent inspections of trucks on the road remain doubtful, while more inspections appear to open the opportunity for informal payments from truck drivers to avoid regulatory compliance.

**(b) There are large gaps and inconsistencies in laws and regulations governing logistics services.**

Legal and regulatory reform in transport and logistics can be a tool that promotes economic efficiency and enhances logistics operations, thus contributing to a reduction in logistics costs. Reform should include adoption of good practices following the implementation of international conventions and alignment with common regulatory practices of neighboring countries in ASEAN/Greater Mekong Subregion (GMS). Legal and regulatory reform should ensure provision of transparency in procedures, services and fees, accessibility to information in relevant languages, and the development of clear and objective criteria for access to the market and the profession. Transparency in regulations and access to regulatory measures, fees, and forms are critical to ensure predictability of and less time to navigate through layers of transactions being executed with requirements of less discretionary decisions to be made by authorities.

**(c) Some activities are dominated by state-owned monopolies, at apparent significant costs to the economy. The existence of monopolies is an example of a market failure, where one market player can create more income and profit than would be allowed in a healthy market. However, overregulation should be avoided.**

In this respect, the economic analysis and efficiency can be used to guide legal practice and considers how legislation should be used to improve market conditions. The introduction of minimum standards will result in incentives for higher quality and better logistics

performance. Qualitative access criteria embedded in the legal and regulatory system are then required. It is important to ensure economically efficient transactions through the enforcement of valid contracts. By ensuring compliance with contractual terms, market parties are given confidence that all will fulfill the obligations that were agreed upon.

**The remainder of this background paper reviews and assesses the existing regulatory framework for transport and logistics services.**

The regulatory framework is defined to include domestic laws, decrees, and regulations as well as international conventions in the transport and logistics services<sup>5</sup> sector in Cambodia. The focus is on regulations governing access to specific markets and operations. A diagnosis of bottlenecks for transport and logistics operators has been made based on existing studies and reports as well as on information provided by the public sector and transport and logistics service operators in Cambodia. Attention has been paid to procedures and restrictions affecting access to cargo; documentary requirements for the organization of transport and the transport of goods by the various modes of transport (in particular road, rail, and inland water transport<sup>6</sup>); accessibility to regulatory information (transparency); and so on. Also, a review of institutional issues related to logistics services has been made. Priorities for legal and regulatory reform have been identified and an action plan for reform of the regulatory framework for logistics services in Cambodia has been presented. Finally, recommendations have been made to improve the regulatory process in Cambodia in a more general way.

5 The transport and logistics sector includes, among others, trucking, warehousing, freight forwarders, shipping and customs agents, and value-added logistics services (third- and fourth-party logistics providers).

6 No attention has been paid to air cargo, which, although important for the transport of essential and strategic components, for instance, the manufacturing industry, is almost neglectable in terms of volume.

# 2

## ROAD TRANSPORT

### 2.1 INTRODUCTION

**The transport and logistics sector in Cambodia does not have an integrated Land Transport Law.** Like many other laws, a Draft Law on Land Transport is under preparation, but it has not been advanced for parliament debates and approval. One of the main problems is that Cambodia has a very long process of developing legislation. Many drafts of legal acts and regulations are still in the preparation stage or pending for many years. These draft versions often face many revisions, and few reach their final stage of approval and adoption. This may be caused by many factors: changing policy priorities, lack of involvement stakeholders, lack of capacity in drafting legal acts and regulations, and so on. Some general transport issues are being regulated in the existing Road Law and Land Traffic Law. These include requirements for obtaining an operator's license, registration of trucks, and overloading of trucks. These were included because they directly affect road infrastructure and road traffic safety.

**Access to the road transport market and access to the profession of road transport operator and truck or bus driver are hardly regulated in Cambodia.** Registration and fulfilment of the administrative requirements are often sufficient to obtain an operator's license for carrying out road transport. The professional driver only needs a driver's license and he or she is often able to obtain such a license without having driving lessons and qualification examinations.

**Domestic regulation does not place major constraints to access to the domestic road transport market in Cambodia.** Access to the international road transport market is regulated through multilateral agreements for road transport permits within the framework of ASEAN, the GMS Cross-border Transport Agreement (CBTA), and bilateral road transport agreements.

### 2.2 ACCESS TO THE PROFESSION OF ROAD TRANSPORT OPERATOR

**Cambodia does not have any qualitative requirements for access to the profession of road transport operator in Cambodia.** Many countries establish three main requirements in common for an access to the profession of road transport operator:

- (a) Good repute
- (b) Financial standing
- (c) Professional competence

**Good repute** relates to the conditions that the applicant has not been convicted of serious criminal offences, including offences of a commercial nature, and has not been declared unfit to pursue the occupation under any rules in force concerning the pay and employment conditions in the profession, road haulage, or road passenger transport, as appropriate; rules relating to driver's driving and rest periods; environmental protection; and rules relating to professional liability and any other legislation.

**Financial standing** requires the road transport company to maintain minimum available capital and reserves. The amount differs from one country to another. For the constitution of a firm, international practice shows an average of about US\$50,000 as available capital and reserves and about US\$10,000 when operating one vehicle and US\$5,000 for each additional vehicle.

**Professional competence** requires a qualification certificate for the manager who will run the daily operations of the road transport company. The reason behind this requirement is that the manager of the road transport company should have knowledge about the laws and regulations, safety, security, financial management and tax issues, labor conditions, insurances, liabilities, and so on.

**Although there is no international regulation,** which prescribes that these requirements should be included in the national legislation, the International Road Transport Union (IRU) <sup>7</sup>

—the international organization of national road transport associations—recommends that all countries include these requirements into national legislation. The IRU also has an IRU Academy, which sets the minimum standards for access to the profession of road transport operators and may assist countries in this process.

## 2.3 ACCESS TO THE PROFESSION OF TRUCK OR BUS DRIVER

**Professional drivers only need a driver's license, but there is no requirement for a certificate of professional competence (CPC) of professional drivers (trucks and buses).** Because the profession of professional drivers has been evolving over the last 20 years, being a driver of goods and passengers is much more than just 'steering the wheel, driving on the road, and watching over the traffic'. Communication skills, geography and route planning, loading and unloading, administrative procedures and documentation handling, communication with inspection agencies and clients, road safety, eco-driving, and so on are becoming more and more important for the driver. Because of these reasons, many countries have introduced an additional requirement for the professional competence of drivers, that they would need a CPC in addition to the driver's license to be a truck or bus driver. The Cambodian Truckers Association (CAMTA) agrees with this requirement and has proposed to the Government to establish driving schools for professional drivers, which do not currently exist in Cambodia. Currently, the German International Cooperation Agency (Deutsche Gesellschaft für Internationale Zusammenarbeit, GIZ) supports the Cambodian road transport sector in enhancing the training of professional drivers, including training in eco-driving. Furthermore, it is important to include qualitative requirements for professional drivers in the new Land Transport Law, which is under preparation.

## 2.4 REGULATIONS ON TECHNICAL STATE OF VEHICLES

**Both the Road Law and Land Traffic Law do not define any up-to-date technical requirements concerning the technical state of vehicles, including trucks.** What is regulated in the Cambodian Land Traffic Law is the frequency of the technical checks of the vehicles. Second-hand trucks will be checked every year and a first check for a new truck will be done two years after registration. The Cambodian Land Traffic Law also prescribes that technical inspection has to be carried by a garage, which is licensed by the MPWT. There is much room for improvement for enforcement of the technical requirement of the vehicle. The Government still allows importation of second-hand trucks into Cambodia because they are cheaper but less durable and economically diminished. Most of the trucks on Cambodian roads are old and are in bad technical state, with slow driving speed resulting in congestion on the roads, high levels of emissions, and high fuel expenses. Exemptions are mostly trucks that transport fuel (Kampuchea Tela Co., Ltd. (Tela), Sokimex Petroleum (Sokimex), and so on.), which, in general, are in good technical state and often even comply with the European Agreement on International Carriage of Dangerous Goods by Road (ADR) standards.

**Figure 3. On the Road from Sihanoukville to Phnom Penh - November 10, 2017**



*Source: Photo taken by authors*

7 <https://www.iru.org/>; <https://www.iru.org/iru-academy>.

**It is important to regulate and enforce the technical state of vehicles, particularly trucks, as they, because of their dimension and weight, have enormous impact in case of accidents and collisions.** Newer trucks are more expensive to purchase but normally are safer to run and more efficient than older trucks as they have less maintenance costs and more efficient use of fuel. The Government may promote the replacement of the old fleet of trucks with a variety of measures: restrict the import of trucks

older than seven years, for instance, apply a principle of a lower percentage of import duties and value added tax (VAT) for newer trucks, apply a lower rate of excise duties on fuel for newer trucks, and so on. To stimulate the renewal of the fleet, the Government may also want to buy the old trucks, at a price of US\$5,000, for dismantling and/or scrapping. For instance, this amount may be reduced from the import duties and/or VAT when a new truck is purchased or a second-hand truck is imported.

**Figure 4. On the Road from Sihanoukville to Phnom Penh - November 10, 2017**



*Source: Photo taken by authors*

## 2.5 LAW AND REGULATIONS ON OVERLOADING

Both the Road Law and the Land Traffic Law regulate overloading of trucks or vehicles in Cambodia. Carrying goods on a vehicle or truck in Cambodia should not exceed the maximum

weight of the sustaining axles and should not exceed the maximum capacity limit set by the company producing the vehicle and will not be over the permitted weight. The laws provide some regulatory measures as shown in box 1.

### BOX 1. REGULATORY MEASURES

#### 1. Maximum weight on the sustaining axle of automobile, trailers or semitrailers is limited as follows:

- 6 tons for single axle with two wheels under the steering wheel
- 11 tons for twin axles with four wheels under the steering wheel
- 10 tons for single axle with four wheels
- 19 tons for twin axles with eight wheels
- 24 tons for triple axles adjacent to each other with twelve wheels

#### 2. Permitted maximum total weight of automobile is defined as follows:

- 16 tons for automobiles with twin axles, where one axle is located in the front of the automobile with two wheels, and the other one located in the back with four wheels
- 25 tons for automobile with triple axles as one axle is located in the front of the automobile where there are two wheels and the twin ones are located in the back of the automobile where there are eight wheels
- 30 tons for automobile with four axles as twin ones are in the front of the automobile where there are four wheels and the other two axles are in the back of the automobile where there are eight wheels

#### 3. Limitation of permitted maximum total weight of automobile with trailers shall be defined as follows:

- 35 tons for automobile with trailers having four axles as a single axle, which is located in the front of automobile where there are two wheels and the other single axle in the back of the vehicle where there are four wheels and the single axles of the trailers with eight wheels
- 40 tons for automobile with trailers having five axles onward

#### 4. Limitation of permitted maximum weight of automobile with semitrailers shall be defined as follows:

- 35 tons for automobile with semitrailers having four axles as a single axle, which is located in the front of automobile where there are two wheels and the other single axle in the back of the vehicle where there are four wheels and the twin axles of the semitrailers with eight wheels
- 40 tons for automobile with semitrailers having five axles onward

The Road Law further adds that all vehicle axle loads as specified earlier shall bear a pressure on the road of not more than 5 kg per cm<sup>2</sup>. The

penalties for those who disobey these regulatory measures are included in both laws.

## BOX 2. CAMBODIA ROAD LAW

### Article 75

Any person who has used heavy trucks to transport overloaded goods on the road that damages the road, culvert, or bridge shall be subject to imprisonment from six months to two years and a fine from KHR 1,000,000 to KHR 4,000,000.

Any competent government official who permits overloading of vehicles, which has been the cause of traffic on the roads and caused damage to the roads, or broken crossing drainages or bridges shall be considered a perpetrator.

### Article 76

Legal entity may be found criminally responsible under Article 42 of the criminal code on the criminal responsibility of legal entities, for the offences in the Article 75 of this law.

Legal entity shall be subject a fine of KHR 1,000,000 (one million) to KHR 10,000,000 and including one or more additional penalties as follows:

1. Dissolution according to formalities determined by Article 170 of the criminal code on the Dissolution and Liquidation of Legal Entities
2. Placement under the court surveillance according to formalities determined by Article 171 of the Criminal Code on the Placement under the Court Surveillance
3. Prohibition from operating one or more activities according to formalities determined by Article 172 of the Criminal Code on the Prohibition from Operating Activities
4. Expulsion from public transactions according to formalities determined by Article 173 of the Criminal Code Expulsion from Public Transactions
5. Posting decision on punishment according to formalities determined by Article 180 of the Criminal Code on the Posting of Decisions
6. Publication of decision on punishment in newspapers or broadcasting by all means according to formalities determined by Article 181 of the Criminal Code on the Broadcasting the Decision by Means of Audio-Visual

### Cambodia Land Traffic Law

#### Article 84

Overloading the limited maximum weight on the axles of the vehicles and overloading the limited maximum weight of the vehicles shall be punished as follows:

- (a) Less than 5 percent shall have a written warning without fine.
- (b) More than 5 percent to 10 percent, the drivers shall
  - (a) Be fined KHR 100,000 per ton;
  - (b) Have to unload the goods and the vehicle will be detained for 10 days; and
  - (c) Have their driving licenses taken away and be suspended for 10 days.
- (c) 3 More than 10 percent to 20 percent of the drivers will
  - (a) Be fined KHR 200,000;
  - (b) Have to unload the goods and the vehicle will be detained for one month; and
  - (c) Have their driving licenses taken away and be suspended it for six months.
- (d) More than 20 percent, the drivers shall
  - (a) Be fined KHR 300,000 per ton;
  - (b) Have to unload the good and the vehicle will be detained for one year; and
  - (c) Have their driving licenses taken away and be suspended for two years.

In case that there is an offense in the total loading weight on vehicles and including the offense of overloading weight on axles, there shall be fine on the two cases.

In case the drivers are still committing the offences, the fine will be doubled and the transportation business will be stopped for one year. The owner of the vehicles shall be responsible for the cost

of loading and reloading the goods and renting the place to keep the goods and vehicles. The abovementioned punishment shall not be an obstacle to the judge's decision in case infrastructure was damaged because the vehicles were overloaded.

**There are too many weighbridges along the main transport routes to control the weight of the trucks.** These weighbridges are sometimes not necessary and are reported to contribute to traffic delays and rent-seeking exercises by inspectors. There is no coordination between the different weighbridges and inspections have been overwhelming without any use of risk-based and compliance approaches. Because the weight of a container is normally specified in the bill of lading and once it has been checked and closed with a seal, no additional weighing would need to be conducted en route. However, in practice, the trucks carrying such containers were still weighed and inspected again on the road in Cambodia. Another problem is the calibration of the different weighbridges, which is not completely uniform according to CAMTA. Inspection agencies should recognize the weight of a truck with cargo as verified by another authority. In Cambodia, inspection agencies do not coordinate and/or recognize the results and verification made by another authority.

**The height, width, and length of the vehicles are also regulated by the Land Traffic Law.** When crossing the bridges, all drivers of automobiles, automobile with trailers, or semitrailers shall obey the permitted maximum weight signs placed in front of the bridges. The technical standards of size and weight of other types of vehicles shall be defined by Prakas (Secondary Regulation) of the MPWT. The size of automobiles, automobiles with trailers, or semitrailers with no loading shall be defined as follows:

- Maximum width of the vehicles shall not exceed 2.5 m, except vehicles equipped with tools should not be more than 3 m width.
- Maximum height should not be higher than 4.2 m.
- Maximum length of each automobile shall not exceed 12.2 m.
- Maximum length of the automobiles

towing semitrailers shall not exceed 16 m.

- Maximum length of the automobiles towing trailers shall not exceed 18 m.

## 2.6 HARMONIZATION OF CAMBODIAN ROAD TRANSPORT LEGISLATION WITH NEIGHBOURING COUNTRIES

**The harmonization of Cambodian road transport legislation with neighboring countries—Vietnam, Thailand, and Lao PDR—remains challenging although substantial parts of the legislation have been aligned with the general framework of ASEAN, GMS, and some bilateral road transport agreements.** Further harmonization of the road transport legislation within the framework of ASEAN's interstate transport facilitation and GMS-CBTA would increase international market access and regional connectivity and facilitate cross-border road transport, thus lowering transport costs and promoting regional trade integration. It would also stimulate the development of a professional road transport sector. While Cambodia signed two important agreements on road transport within the framework of ASEAN's interstate transport facilitation and GMS-CBTA, like other ASEAN member states, it did not transpose these agreements into national legislation and continues to apply its own technical standards. The technical standards for vehicle weight and dimensions still differ from one-member state to another. For example, the permissible length of an articulated vehicle in Cambodia is 16 m, but in Vietnam it is 20 m.

**Different technical standards for vehicle weight and dimensions have further prevented recognition and compliance of trucks of different nationalities operating en-route, especially in transit.** It is, therefore, important that the four countries discuss the remaining differences and agree upon a way forward to complete harmonization. Both the national Ministries of Transport and the national road

transport associations should participate in these discussions. Transposing international agreements into national legislation is, therefore, important and would provide national inspection agencies with legal power for enforcement.

## 2.7 CONCLUSION AND RECOMMENDATIONS

**Cambodia does not have a land transport law but has it in preparation like many other laws in the transport and logistics sector.** Some general transport issues are being regulated in the existing Road Law and Land Traffic Law. These include registration for obtaining an operator's license and overloading of trucks as they directly affect the road infrastructure and road traffic safety. Access to the road transport market and access to the profession of road transport operator and truck or bus driver is hardly regulated in Cambodia. Often, registration and fulfilment of the administrative requirements are sufficient to obtain an operator's license for carrying out road transport. The professional driver only needs a driver's license and is often able to obtain such a license without driving lessons and examinations.

**The harmonization of Cambodian road transport legislation with the neighboring countries—Vietnam, Thailand, and Lao PDR—remains a great challenge.** Although there are two important signed international agreements concerning road transport within the framework of ASEAN and GMS with its CBTA, it seems that the countries did not transpose the contents of all these agreements into national legislation and continue to apply their own technical standards. Technical standards for vehicle weight and dimensions still differ, which makes smooth international road transport difficult as certain trucks with certain loads will not be allowed to cross the border into the neighboring country.

**The four countries need to discuss these differences and agree upon establishing and implementing the same technical standards.** Both the national Ministries of Transport and the national road transport associations should participate in these discussions. As stated

earlier, there is a need to transpose international agreements into national legislation to enforce the application and provide national inspection agencies with legal power for this enforcement.

**Cambodia should introduce qualitative criteria for the licensing regime of road transport operators in Cambodia, such as good repute, financial standing, and a CPC for the road transport operator.** This will be an important step toward the professionalization of the road transport sector in Cambodia, increasing its quality and efficiency and resulting in the improvement of road safety. If the licensing regime is related with an obligation to provide statistical information to the licensing authority, it will also be an important source of information for monitoring the development of the road transport sector in Cambodia.

**It should also introduce an additional requirement to the profession of road transport driver, a so-called Certificate of Professional Competence, in addition to the required driving license.** The measure will contribute to increasing of the quality of road transport services and improving road safety.

**Cambodia needs to set up a more coordinated and efficient risk-based and compliance enforcement approach to conduct inspection and reduce the excessive number of weighbridges along the main routes and at ports, terminals, and logistics centers.** This measure would ensure improved efficiency and effectiveness of control and inspection of loads that would reduce transport and traffic delays but improve effective enforcement of compliance and reduce overloading breaches. Like many other countries, Cambodia has faced serious challenges in addressing overloading issues for many years.

**The road transport agreements concluded within the framework of ASEAN and GMS-CBTA should be transposed into national legislation of all member states of ASEAN and GMS and be enforced.** This will allow for further development of seamless international road transport, provide international market access for road transport operators, lower the overall transportation costs, and facilitate the development of professional road transportation.

# 3

## RAILWAY TRANSPORT

**Railway transport in Cambodia still faces many challenges ranging from limited provision of required infrastructure and weak logistics service capacity and operations on the rail.**

The Royal Railway is the only concessional company that holds a concession for 30 years, which is currently in year 6. Only the southern line between Phnom Penh dry port and Sihanoukville sea port is currently operational. However, a limited number of freight trains are operated on this line, both for containers as well as for some bulk commodities like coal, fuel, and cement. A northern line up to the Thai border is under development and much is expected from freight potential. Currently, Cambodia does not have a plan to connect the Phnom Penh River Port to the railway network.

**The volumes by rail are still low, at around 3,000–4,000 containers per month that are transported to and from the seaport, and the market share is still less than 20 percent.** Majority of freight transport still goes by truck, especially for containers, but also for other cargoes like fuel. Railways should be an important mode of freight transport in Cambodia due to key factors, including the low level of theft and pilfering on the freight trains, the guaranteed transport and handling times, and dry port services. However, this advantage of low railway cost is offset by high cost for last mile transport, extra handling cost, and internal port transport by trucks. With limited use and development of railway freight, the high dependence on freight transport by trucks comes with high transport costs and huge maintenance costs for the road links between seaports and Phnom Penh. The RGC has planned to obtain a loan from the World Bank to maintain the road between Sihanoukville and Phnom Penh.

**The concession model does not leave any room for third-party operations in the railways.** The current concession model includes provision of

infrastructure and a full range of train services, warehouses under concession, truck fleet, dry port operations, customs clearance on the site, and land and office space rental. It claimed to provide full logistics service competing with door-to-door truck services. However, it primarily provides passenger services and operates on certain days of the week such as Friday, Saturday, Sunday, and Monday. It is questionable whether in a small and developing market loosening the concession model may lead to quicker development of freight services by rail. An assessment of the performance indicators of the concession contract should be recommended to ensure faster development of railways in Cambodia. As was concluded in the waterways transport section, Cambodia does not have a modal shift policy that supports faster development of multimodal transport systems and rail and water transport. Road transport accounts for more than 70 percent of all transport freights.

**Rail freight fees and passenger fares are published and available to clients, but volume discounts are still determined on a bilateral basis and are not published. There is no specific regulation on fees and fares and they are not yet fully developed.** There are limited ranges of tariffs and not tailored widely with respect to broad commodity types, specific customers, and industries and routes. The Royal Railway conducted some consultations with stakeholders on its services and fee charges through the existing mechanisms, such as the meetings of EuroCham, logistics committee, CAMFFA, and so on, but these remain inadequate. It organized some meetings for the Cambodian Rice Federation (CFR) and the Garment Manufacturers Association in Cambodia (GMAC) in 2017 to promote railway services.

**From a legal and regulatory perspective, railway transport operates with a regulatory regime of some secondary legislations, but important legislations are still missing as it does not have a proper legal framework at the primary legislation.** The Royal Railway Company has to deal with the Port Authority, the customs and inspections, and follow the guidelines and

regulations in these areas. As far as could be concluded from the interviews, no points are raised from the client groups in the railways in the regulatory field. A specific regulation for dangerous goods is missing. In the field of international railway transport, the transport of dangerous goods is mostly regulated under Regulation for the International Carriage of Dangerous Goods by Rail (RID), under the guidance of the International Organization for International Carriage by Rail (OTIF). Although rail traffic in Cambodia is purely domestic, and OTIF and RID relate to international carriage, in many countries RID also applies to national traffic. This is also recommended for the Royal Railway Cambodia.

**To enable railway development, Cambodia may need to draft a Law on Railway Transport, but this is presently not so urgent. However, having a Law on Railway Transport will become necessary for connecting Cambodia's railway networks to international railways in Thailand, Lao PDR, and Vietnam.** Cambodia is also recommended to apply RID, under the guidance of the OTIF for domestic railway transport of dangerous goods. The application of RID is crucial for the Royal Railway to establish and upgrade facility standards, its handling capacity, and quality of services intended for dangerous goods for domestic and transit routes.



# 4

## PORTS, MARITIME, AND INLAND WATERWAY TRANSPORT

### 4.1 INTRODUCTION

**Ports and water transport are an important component of Cambodia's transport network and ports, maritime, and inland water transport play a considerable role in the economy of the country.** Cambodia has two major ports and is blessed with huge assets in inland water transport, as a major inland water artery crosses the country, providing it with very good water connectivity servicing international and domestic and international freight trade.

**The two major ports are Sihanoukville Autonomous Port (PAS) and Phnom Penh Autonomous Port (PPAP).** PAS is a deep seaport and a main gateway for maritime cargo, with a number of regular and irregular services mainly to Asian ports in the region. Major facilities include the liquid bulk terminal and the container terminal, as well as other facilities for bulk and break-bulk cargoes.

**PAS has most of hinterland transport moved by road, but recently the railway line to Phnom Penh has opened for freight services for containerized traffic that are linked to PAS.** It is estimated that some 30 percent of container traffic between Sihanoukville and Phnom Penh now moves by rail. The majority still moves by truck, resulting in lines of trucks waiting for port access and a huge number of trucks on the main roads to Phnom Penh. To streamline the port access process, the Port Authority has taken up the plan to develop a so-called extended gate, or pre-gate, 30 km outside the port where part of the documentation process and inspections could be carried out and which could increase efficiency in gate access and

terminal movements in the port itself. This has been a valuable contribution to port efficiency improvement, as it will reduce waiting time in the port area itself, the line of queuing trucks, and streamline the process.

**The PAS expansion plan foresees the development of new quay walls and terminals with better (deeper) navigation accessibility.**

The management model of PAS is that of a public service port, where the Port Authority is the owner of the infrastructures and superstructures and also performs the stevedoring and other services activities. This is contradictory to the internationally more common landlord model, where these two functions are separated, and the private sector can be involved in operations, for example, through a concession system especially for stevedoring and other service activities.

**PAS could explore the possibility of attracting and involving private investments and introducing a more open market in stevedoring for its future expansion plan.** It is expected that volumes in the port will grow substantially in the coming years. The Port Authority is open to start this discussion for new port areas. An economic zone has been established in the adjacent area outside the port, just outside Sihanoukville City.

**Likewise, PPAP also follows the same management model and has no plan expand the port in the near future.** PPAP controls many facilities along the Mekong River and is responsible for the navigation on the river for a stretch of 160 km. In recent years, it has developed a new container port facility south of Phnom Penh where most of the container business is now concentrated. Traffic to and from the industrial areas is now less hampered by the congested city traffic. An economic zone has been planned, but strangely enough it is not adjacent to the port, but is at a distance of some 3.5 km. A main reason is that land price is higher for the land closer to the Mekong River. Unfortunately, this will lead to a suboptimal circumstance because additional road transport will be required, adding costs to logistics cost as well as transaction costs for procedures and documentation. The old

port areas in the city center mainly handle conventional cargoes. The area has no space for expansion and traffic to and from these port areas is constrained by growing city traffic.

**PPAP has direct services to Vietnam ports such as Cai Mep, but traffic has been limited as most freights move by road transport between Phnom Penh and Vietnam.** The traffic to and from Vietnam along the rivers is arranged through a bilateral agreement on waterway transportation, which includes guarantees on draught, dredging, and so on. The agreement includes transportation on the Bassac and Mekong Rivers. However, in practice there are some draught issues on both rivers. The Port Authority is responsible for maintenance dredging; funding is mainly from its own funds. Capital dredging is also required, but funding remains an issue. PPAP is a one-stop shop and it performs lift-on and lift-off, stripping and stuffing, survey, dredging, compulsory pilotage, and warehousing. Private operations are limited only to 'container repair and maintenance services'. In contrast, PAS follows a more open policy than PPAP, in that most of the container freight stations (CFSs) and warehousing services in PAS are provided by some private parties. In addition, PPAP does not have rail connectivity and no clear plans are foreseen to make a connection in the future.

## **4.2 LEGISLATIONS ON PORTS, MARITIME TRANSPORT, AND INLAND WATERWAY TRANSPORT**

**Currently, Cambodia does not have general and comprehensive laws that regulate ports, maritime transport and inland waterways, and transport activities carried on them.** Most legal provisions on inland waterways are scattered throughout various secondary legislations, including royal decrees, sub-decrees, circulars, Prakas, and so on that deal with more general matters (for example, water pollution) and do not cover the entire field of ports and shipping. Cambodia is still behind its neighbors, especially Vietnam which has its law on Inland Waterways Navigation, Law of the Sea, and Maritime Code.

**The need for having more comprehensive**

**laws in these areas were recognized by the Government and for this reason, several draft laws have been developed to fill the gap.** In the field of ports, maritime transport, and inland water transport, three draft laws have been developed, but none of them has reached the approval stage at the moment. The three draft laws are

- (a) Draft Port Act;
- (b) Draft Law on Maritime Transport; and
- (c) Draft Law on Inland Waterway Transport.

**Finalization of these draft laws is still ongoing, but the time line remains unclear.** Draft versions of the laws have been developed with the assistance of foreign experts through technical assistance projects. Some of them were drafted 10 years ago or more. It is anticipated that it would take several years for these draft laws to be enacted. The MPWT has inadequate capacity to draft and finalize legislations and limited capacity has been the major issue for long delays in legislation development. In addition, making secondary legislations (not law) takes much shorter time and has less extensive consultation processes. This seems to be a favorable path for bureaucrats to keep the status quo and not undertake serious changes in primary legislations (laws). However, without proper laws in the sector, the secondary legislations remain inconsistent, leaving a large gap to be harmonized and compliant with international good practices and standards. There has not been serious transposition of the international and regional agreements that Cambodia is signatory to, into its national legislations.

**The three draft laws distinguish between maritime transport and inland water transport, where the latter relates to domestic shipping or cabotage.** In international shipping, the International Maritime Organization (IMO) is a major party, and Cambodia follows most of the conventions in this field. An important factor in international shipping is the role of the Kampuchea Shipping Agency and Brokers (KAMSAB), which holds a monopoly this field and sets high tariffs for its operations and services. There have been

many debates on the role of KAMSAB to allow liberalization, but there is no traction of key stakeholders, KAMSAB, MPWT, and MEF. After discussions with shipping lines, the European Chamber of Commerce, and business associations, the industry has demanded more flexibility and lower fees, for example, for overtime charges. Some progress has been made in the introduction of lower service fees, but the monopoly remains. The public sector insists that documentation has to be unified and the present system appears to support trade. Chambers of Commerce and industry associations still demand further improvements in quality and efficiency of service, service-level standards, tariffs, and costs because some improvements have not been standardized yet but vary upon the users' requests. It is unlikely that this part of the shipping service market would be opened up. The master plan for waterborne transport from 2005–2006 advises liberalization in shipping services, but this has not been pursued due to lack of willingness by the Government in fear of losing fiscal revenue.

**Inland water transport has decreased in recent years mainly because of improvements in the road transport network.** Domestic inland waterway transport is now almost nonexistent and unfortunately there is no stimulating and supporting policy. Social benefits of inland waterway transport are well-known in many cases. However, experiences in many other countries show that without a supporting policy and a well-balanced package of incentives, it is challenging to shift to inland waterway transport. Stimulating measures for inland waterway transport should be to create a sustainable multimodal transport system as part of the Logistics Master Plan. Good practices can be found in several Asian waterway countries, including China, which is probably one of the best examples with a high success rate, but also Vietnam and India that adopt and follow waterway-friendly policies. Even the inland waterway transport market is quite matured in the European Union and providing incentives is still very common to stimulate the use of inland waterway transport for both social and commercial purposes.

### 4.3 LAWS AND INTERNATIONAL CONVENTIONS IN PORTS AND MARITIME TRANSPORT

**Substantive parts of a Maritime Law and a Port Law of a sovereign country should be made uniform and aligned with international treaties and conventions that it is signatory to.** However, not every country is party to all conventions and the existing conventions do not always cover all questions regarding a specific subject. In the case of conflicting rules in treaties, it is necessary to decide which national law may apply. These conflict of law rules can either be found in a treaty or, in most cases, in national law. The IMO is the United Nations' technical body that deals with ports and maritime traffic.

**Cambodia is member of the IMO since 1961 and has ratified all the principal conventions.** Most of the conventions adopted under the auspices of the IMO fall into three main categories. The first group is concerned with maritime safety; the second with the prevention of marine pollution; and the third with liability and compensation, especially in relation to damage caused by pollution. Outside these major groupings are a number of other conventions dealing with facilitation, tonnage measurement, unlawful acts against shipping and salvage, and so on.

**The enforcement of the IMO conventions depends upon the Governments of member parties.** Contracting governments enforce the provisions of the IMO conventions as far as their own ships are concerned and also set the penalties for infringements, where these are applicable. They may also have certain limited powers with respect to the ships of other governments. In some conventions, certificates are required to be carried on board the ships to show that they have been inspected and have met the required standards. These certificates are normally accepted as proof by authorities from other states that the vessel concerned has reached the required standard, but in some cases further action can be taken. The key IMO conventions are

- International Convention for the Safety of Life at Sea (SOLAS);

- International Convention for the Prevention of Pollution from Ships (MARPOL); and
- International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW).

## 4.4 DRAFT PORT LAW

**Cambodia does not have an existing Port Law covering the full scope of port classification, safety, pollution regulations, port facility security code, and technical standards.** Ports in Cambodia are currently governed by secondary legislations, including royal decrees, sub-decrees on establishment of specific ports, and ministerial notices (Prakas) of technical regulations and standards. Without a proper Port law, it has delayed implementation of international conventions that are signatory. Cambodia has ratified all the major conventions, although in some cases not all annexes under these conventions.

**The human capacity in the MPWT seems to be an important factor in the slow process of implementation.** For example, the ministry is required to set up designated bodies and officers for specific activities. In mid-2017, an IMO audit team visited Cambodia. The audit's aim was to determine the extent to which Cambodia gave full and complete effect to its obligations and responsibilities contained in a number of IMO treaty instruments. The mandatory IMO instruments included:

- SOLAS 1974 and its 1988 protocol;
- MARPOL;
- STCW 1978;
- Load lines (LL 66 and its 1988 protocol);
- Tonnage measurement of ships (Tonnage 1969); and
- Regulations for preventing collisions at sea (COLREG 1972).

The audit report has been sent to the MPWT recently and contains a set of findings and recommendations that have to be implemented. Unfortunately, the IMO report was not made available to the consultants despite several requests and commitments. But in general, it is assumed that the MPWT will do

its utmost to meet requirements from the IMO and bring practice in line with international regulations.

The Draft Port Law was completed some years ago but has not been finalized for submission to the Council of Ministers and subsequently to the National Assembly for approval. The MPWT conducted several rounds of discussions in the ministry and consultation workshops with stakeholders. The Draft Port Law has been delayed due to several factors, including weak ownership, bureaucratic process, and incentives to make changes. The ministry is running behind schedule and it now expects that, at the earliest in 2019, the law may be submitted to the Council of Ministers.

**The Draft Law integrates important and substantial parts of international conventions.**

The Draft Law defines four classes of port categories (international, bilateral, domestic, and special ports, for example, for a specific commodity and for a specific user) and the port zone. The responsibilities of the port management body are also articulated. These include, among others, port facilities and channels, harbor master function, port development and implementation plan, and supervising and/or conducting port operations. The last one leaves room for third-party/private involvement. It specifies the principles of port dues and charges and the requirement for publication of those and the possibilities of the MPWT to set limits. The Draft Law has a chapter on safety and environment, for example, for ship-generated waste, spill contingency plan, and port facility security requirements, all in line with the IMO regulations and chapters on pilotage and the navigation channels and navigation. Details are to be included in sub-decrees. The Port Authorities are in discussion with the MPWT on the Draft Law but argue that the main points for them in the Draft Law relate to trade facilitation and safety issues.

**Tariffs and fees for port services remain high, much higher than ports in Thailand and Vietnam.**

The current system of tariffs is determined by the Board of Directors, which has representatives of the MPWT and the Ministry of Commerce (MOC),

as well as independent experts and employee representatives. The port due consists of several components (for example, pilotage, canal fee, vessel fee, and fee to the cargo owner) and tariffs are published, and information is easily accessible to all. The tariff system allows volumes discounts. Port operators and service providers still need to improve the service quality and standards. The use of stakeholder consultation to obtain feedback and recommendations from the industry and business associations is important. The consultation mechanism exists through the Chamber of Commerce, working groups, the communication center for port clients, and the customs-port dialogues. However, consultations should be carried out on a regular basis.

**An important issue related to ports, but also an issue on the inland waterways and in land transport, is dangerous goods.** Port Authorities indicate that they do not know exactly what to do in this field and that guidelines are missing. The MPWT should take up this issue on a priority basis. The regulations and guidelines to deal with dangerous goods are still missing at both the primary and secondary legislations.

## 4.5 DRAFT LAW ON MARITIME TRANSPORT

**Cambodia does not have an existing law on maritime transport.** Maritime transport is currently governed by several secondary legislations across different agencies and ministries. These secondary legislations are not yet consistent and aligned with international conventions and treaties. The existing procedures face several challenges at the administrative level for speeding up, for instance, registration for vessels and so on, but that this is hampered by the complexity of the issue and limited institutional capacity.

The Draft Law on Maritime Transport, developed in 2012, is designed to close the gaps in the secondary legislations. However, according to the MPWT, it will take at least up to 2021–2022 to finalize this draft law before it can be approved. Many issues still have to be developed and detailed, including secondary legislation and

sub-decrees, in parallel to submission of the draft law for endorsement by the Council of Ministers and subsequently for approval by the National Assembly.

**Like the Port Law, Cambodia follows some main conventions in the Draft Law on Maritime Transport. The purpose of the law is to provide the legal and institutional framework for the administration and management of maritime transport and provide general principles for the governance of the development, administration, and management of maritime affairs.** Each chapter in the law addresses the international conventions (SOLAS, MARPOL, and so on). The general provisions describe the objectives, (that is, safety of ships, environment, maritime operations and commerce, development of the sector, and labor force) followed by the marine area and the exclusive economic zone of the Kingdom of Cambodia. Respective chapters deal with ship registration, business licenses for shipping companies (to be issued by the MPWT), crew requirements, safety of ships, safety and environment, navigation and entry permits, inspection and control of vessels, investigations in case of incidents, shipyards and repairs, and finally enforcement and penalties. The provisions are of a general nature and details are not included. It is concluded they all must be detailed and included in secondary legislation.

## 4.6 DRAFT LAW ON INLAND WATERWAY TRANSPORT

**Like ports and maritime transport, Cambodia's inland waterway transport is operated under several secondary legislations and administrative procedures across several agencies and ministries.** Through a bilateral agreement on waterway transportation between Cambodia and Vietnam for navigation along the Bassac and Mekong Rivers, Cambodia has laid some regulatory foundation to deal with international connectivity for trade freight and passenger transport through inland waterways. However, the existing secondary legislations are inadequate to provide improved regulations, monitoring, coordination, and control of navigation activities toward

a healthier riverine environment by reducing shipping accidents that result in oil spills and other dangerous substances. For example, specialized port facilities can eliminate the risks involved in the beach landings of petroleum tanker barges. The Mekong River Commission (MRC) is responsible for developing regulations in transport and handling of dangerous goods in the Mekong.

**According to the United Nations Economic Commission for Europe (UNECE),<sup>8</sup>** the legislation on inland waterway transport must regulate the transport of dangerous goods. In the case of the European Union, the transport of dangerous goods is regulated by the European Agreement on International Carriage of Dangerous Goods by Inland Waterways (ADN). This agreement became a model that was being followed by many countries outside Europe. In the field of training of crew, the Development of the Standards of Training and Certification in Inland Navigation (STCIN) became a standard, like the STCW in maritime transport.

**For Cambodia, the MRC plays the role of a regional facilitating and advisory body governed by the water and environment ministers of the four participating countries.** The MRC ensures the efficient and mutually beneficial development of the Mekong River while minimizing the potentially harmful effects on the people and the environment in the Lower Mekong Basin. Article 9 of the MRC Agreement covers the Freedom of Navigation, which gives the Commission a powerful mandate to promote and coordinate cross-border waterborne transportation on the Mekong River. Unlike the Central Commission for Navigation on the Rhine (CCNR), the MRC does not have legislative powers and a bilateral agreement between Cambodia and Vietnam is in place for transport on the Bassac and Mekong Rivers, which was facilitated by the MRC. The bilateral agreement on waterway transportation aims to reduce cross-border navigation restrictions and improve efficiency and safety standards on the Mekong River.

**The Draft Law on Inland Waterway Transport is designated to include some improved regulations, monitoring, coordination, and control of navigation activities.** It also aims toward a healthier riverine environment by reducing shipping accidents that result in oil spills and other dangerous substances.

**This draft law should be clarified to avoid confusion and overlapping with the Draft Law on Maritime Transport.** One of the issues is that Cambodia seems to define inland waterway transport in a broad scope that includes not only cabotage or domestic shipping but also coastal water transport, which, when compared with international practices, can be complicated and confusing because maritime transport seems to overlap with inland waterway transport.

**The Draft Law on Inland Waterway Transport is considered the most advanced in the package of the three draft laws in this transport sector.** The draft text was developed with international technical assistance and consultation workshops were conducted. The draft law is now at the level of the Council of Ministers for decision making. According to the information from the MPWT, the consultation process is finalized, and the text can now only be amended by the Council of Ministers. This draft law is expected to be approved in 2018.

**The law only relates to Cambodian waters and does not include cross-border international transports.** The draft law contains 15 chapters and 99 articles. The purpose of the law is to maintain order, security, and safety of inland waterway transport; protect humans and wildlife and environment of the inland waterways; prevent adverse effects to human health and damage of public and private property; and protect and encourage the development of the inland waterway sector. The law is applicable to ships, the crew, shipowners and shipping companies, and the construction of waterways and other activities related to navigation.

<sup>8</sup> The UNECE, based in Geneva, is the body that has a worldwide mandate in this field, and many countries outside Europe, follow the guidelines set up by UNECE.

**The draft law specifies who can carry out this inspection and the MPWT is entitled to provide ship technical inspection to the private sector.**

The MPWT is responsible for ship registration and issuance of license. The ships also need a technical inspection certificate from the MPWT and inspections shall be held once a year. Ships that do business on the inland waterways shall possess a license for such business that will be granted by the MPWT. The requirements and procedures for obtaining such license shall further be defined by regulation by the MPWT.

**The draft law also deals with the inland waterway and vessel signs; navigation rules and responsibilities of the captain; compensations in case of collisions and incidents and liability; carriage of goods; crew requirements with regard to training, certification, and manning; ship construction and repair; inspections; and penalty provisions.** A chapter deals with the inland waterway transport policy and master plan, which, according to the draft law, is to be prepared by the MPWT. The ministry has to also set up a maritime institute of technology and

the organization and functioning of this institute is to be determined by a sub-decree. The law specifies only the main provisions and, like in the other laws, specifics will be included in the instructions and sub-decrees and many of them still need to be developed.

## 4.7 RECOMMENDATION

**Cambodia needs to accelerate the process of developing, adopting, and implementing legislation in the field of ports, maritime transport, and inland waterway transport.** According to the MPWT, the lack of manpower and the need to build up the human resources in the legislative field is a priority. This has to be financed from the existing budget, which limits quick development. It also needs to urgently ensure its compliance with international regulations for the port, maritime, and inland waterway sector as set by international organizations such as the IMO. It should set up a special (temporary) stimulating policy for inland waterway transport to (re)develop this mode of transport.



# 5

## MULTIMODAL TRANSPORT AND FREIGHT FORWARDING

### 5.1 MULTIMODAL TRANSPORT

**Cambodia does not have a national legal framework for multimodal transport though it signed the ASEAN Framework Agreement on Multimodal Transport.** A national legal framework for multimodal transport should normally cover carriage of goods by national and international multimodal transport contracts, which also include provisions concerning the liability of multimodal transport operators (MTOs). Cambodia and other ASEAN member states<sup>9</sup> signed the ASEAN Framework Agreement on Multimodal Transport on November 17, 2005. In this agreement, ‘international multimodal transport’ is defined as the carriage of goods by at least two different modes of transport on the basis of a multimodal transport contract from a place in one country at which the goods are taken in charge by the MTO to a place designated for delivery situated in a different country

**An important element in this agreement is the registration of the MTOs. For inclusion in the register of MTOs, the person concerned shall submit an application to the respective competent national body and establish that s/he fulfils all requirements as prescribed by national law.** As a minimum s/he shall (a) possess the legal capacity as required by the provisions of the member country in which s/he is applying for registration; (b) have domicile in the member country in which s/he is applying for registration; (c) have an insurance policy, a coverage from a protection and indemnity club, or an alternative of a financial character to

cover payment of obligations for loss, damage, or delay in delivery of goods under multimodal transport contracts, as well as contractual risks; and (d) maintain minimum assets equivalent to SDR 80,000.<sup>10</sup>

**Lack of a national legal framework for multimodal transport in Cambodia has constrained its compliance with this agreement.** This causes serious bottlenecks for the international and national operation of MTOs. It is challenging for Cambodia to ensure transparency of its respective laws, regulations, and administrative procedures concerning the registration. The ASEAN Framework Agreement on Multimodal Transport further states the member states had to submit their registration of MTOs not later than six months after this agreement has entered into force.

**While Cambodia does not have a system to authorize and recognize operators registered in other member states, its operators are also not yet widely recognized by any of the other member countries.** Having a national legal framework for MTOs would help address this constraint. The benefit of implementing this agreement by transposing into a national legal framework is to enable registration by a competent Cambodian national body to authorize and recognize the MTOs to operate in Cambodia and any of the member countries, provided that the operator submits a copy of the registration certificate to the competent national body of the other member country in which s/he should have a legal representation such as through an agency agreement or branch office. (Annex 1 presents a generic example of an international multimodal transport agreement that can be used for future drafting of a national legislation for all multimodal transport, both national and international.)

**Implementation of the ASEAN Framework Agreement on Multimodal Transport faces many challenges. Only Malaysia, Singapore, Thailand, and Vietnam have transposed this agreement into national legislation.** Implementation of this

<sup>9</sup> Brunei Darussalam, Indonesia, Lao PDR, Malaysia, Union of Myanmar, Republic of the Philippines, Republic of Singapore, Kingdom of Thailand, and Socialist Republic of Vietnam.

<sup>10</sup> SDR—Special Drawing Rights—is a currency determined by the value of a basket of currencies: Chinese yuan, euro, Japanese yen, U.K. pound sterling, and U.S. dollar. The value on November 1, 2017, was US\$1.403480.

agreement is important as it will strengthen the legal position of the international multimodal transport operator. Without having such a transposition into national legislation, the MTO may theoretically issue, for instance, an International Federation of Freight Forwarders Association (FIATA) multimodal transport bill of lading and may assume liability for the cargo from the place of taking charge of the goods by the MTO until the delivery of the goods as provided for in the multimodal transport contract. However, in case of incidents and irregularities during the implementation of the contract, legal protection by national legislation works much faster, cheaper, and better than just going to court without any regulation in this respect. For the benefit of Cambodia and its neighbors, it should start discussions again with neighboring countries, such as Vietnam, Thailand, and Lao PDR about the implementation of the ASEAN Framework Agreement on Multimodal Transport.

**Cambodia may need to develop a Law on Multimodal Transport.** This law will provide legal protection to the MTO in terms of liability, particularly in situations when juridical enforcement of irregularities in business and trade is still a challenge. More importantly, it should transpose the ASEAN Framework Agreement on Multimodal Transport from 2005 into national legislation.

## 5.2 FREIGHT FORWARDING

**Cambodia may not need a legal and regulatory framework for freight forwarding.** International experiences suggest that only few countries have a legal and regulatory framework for freight forwarding. In principle, freight forwarding is a business activity between

the provider of freight-forwarding services and the client. It is not an issue for public authorities. As such, there is no real need for regulating the freight-forwarding business, which goes further than registration as a company with a tax identification number. There are freight forwarders who would approve of having their profession legally recognized. However, it is rather difficult to define the profession of freight forwarder in legal terms. Therefore, it is not necessary to have national legislation to regulate the freight-forwarding business. There are various understandings of what freight forwarders are, what kind of services they provide, and whether they assume liability for the cargo toward the shipper/client until the cargo reaches its destination and is delivered at the consignee under one bill of lading issued by the freight forwarder.

**If the RGC insists on having the freight-forwarding activities regulated, it may need to have a good justification on what it needs to address or choose between a legislation on freight forwarding and a legislation on MTOs.** A sample outline of a national law, which is very similar to the contents of a law on multimodal transport operations and focuses on liability issues, is provided in annex 3.

**The statutes of the CAMFFA define clearly the difference between a freight forwarder and an MTO in terms of the liability.** A freight forwarder is an agent and an MTO a principal. As such the freight forwarder, in principle, does not assume any liability for the cargo. If there is a Law on Multimodal Transport regulating the liability of the MTO, there is no need to adopt a Law on Freight Forwarding if the freight forwarder is an agent and not a principal.

### BOX 3. STATUTE OF CAMFFA

The Statute of CAMFFA, version February 2014 defines

“(b) Freight forwarder means the person or company, as an agent, concluding a contract with a customer on freight forwarding and logistics services.

(d) Multimodal transport operator means any person who on his own behalf or through another person acting on his behalf concludes a contract for the carriage of Goods by more than one mode of transport and who acts as a principal, not as an agent or on behalf of the consignor or of the carriers and assumes responsibility for the performance under a single contract.”

# 6

## CURRENT INSTITUTIONAL ARRANGEMENTS FOR LOGISTICS IN CAMBODIA

### 6.1 IDP

The RGC has the 'IDP 2015–2025'. It aims to include 'Market Orientation and Enabling Environment for Industrial Development' and was approved by the Council of Ministers on March 6, 2015. The main vision of the IDP is to transform and modernize the national industrial structure from a labor-intensive industry to a skill-driven industry by 2025, through

- Connecting to regional and global value chains;
- Integrating into regional production networks and developing interconnected production clusters along with efforts to

strengthen competitiveness and enhance the productivity of domestic industries; and

- Moving toward developing a technology-driven and knowledge-based modern industry.

To realize this vision, the IDP formulates four strategies: (a) mobilizing and attracting foreign investments and private domestic investments by focusing on large industries, expanding markets, and enhancing more technology transfer; (b) developing and modernizing small and medium enterprises (SMEs) by expanding and strengthening the manufacturing base, modernizing the registration of enterprises, and ensuring technology transfer and industrial links; (c) revisiting the regulatory environment to strengthen the country competitiveness through investment climate and trade facilitation, market information dissemination, and informal fees reduction; and (d) coordinating supporting policies, developing human resource and technical training, improving industrial relations, developing support infrastructure such as transportation/logistics and information and communication system (ICT), supply of electricity and clean water, and public, social and financial services. The IDP also stresses the importance of improving the regulatory environment and proposes measures to facilitate trade and promote export. Box 4 presents these proposed measures.

### Box 4. IDP

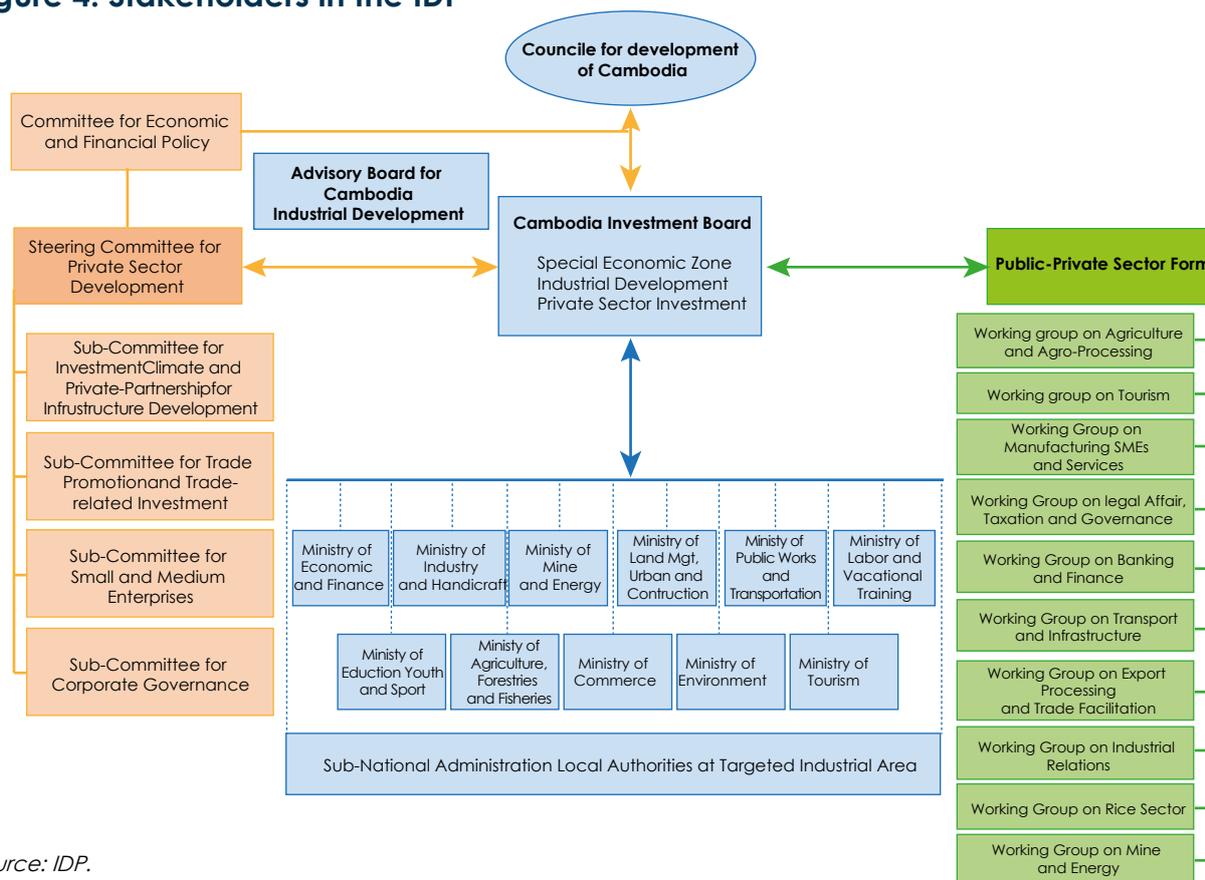
#### Improving the Regulatory Environment

#### Proposed Measures for Trade Facilitation and Export Promotion

- (a) Accelerate the finalization of the implementation of trade facilitation reform plan and the utilization of the National Single Window Service at all international border checkpoints and ensure its integration with the ASEAN Single Window Service to support the international logistic network.
- (b) Establish a trade information center that consists of Internet-based information on trade measures, tariffs, and formal fees imposed by the RGC.

- (c) Improve customs clearance procedures for tax-exempt goods by way of strengthening cooperation among relevant institutions, streamlining documentation, facilitating procedures, and eliminating informal payments.
- (d) Reduce and abolish repetitive and nontransparent procedures.
- (e) Prepare a logistic system master plan to serve as an efficient, reliable, and highly competitive platform for trade facilitation.
- (f) Increase regional and subregional efforts in the context of ASEAN and GMS, to implement the CBTA and the Single Window Mechanism, to improve the efficiency of international logistic system in the region. Other supporting measures include developing institutional frameworks to be integrated into the logistic system, cooperation and broader coordination with relevant authorities in charge of transport facilitation, and movement of people and goods.
- (g) Strengthen the capacity of the General Department of Trade Promotion (GDTP) of MOC to become an export promotion agency, equipped with highly specialized skills in market research and identification of export products and business networks. The GDTP can provide trade consultation services, that is, information on overseas markets, coordination of export promotion activities, including market studies or exhibitions;
- (h) Explore the possibility of establishing a policy-based financing institution tasked to provide credit to exporters who can export products in priority industries, and export insurance services to reduce export-related risks.
- (i) Strengthen trade facilitation by improving procedures, strengthening the implementation of the CBTA, reducing transactional cost of trade, and strengthening institutional coordination.
- (j) Consider the possibility of establishing a system to reward domestic firms with outstanding export performance and new products development. This reward is provided to firms achieving predetermined export target through a transparent evaluation system based on specific industrial development objectives.
- (k) Promote the formation of subsectoral associations where they can share knowledge and strengthen government relations.

**Figure 4. Stakeholders in the IDP**



Source: IDP.

The implementation of the IDP requires good coordination not only among the public sector, but also between the public and the private sector. Figure 4 shows an overview of the coordination and collaboration of stakeholders in Cambodia.

The IDP emphasizes the importance and need for the elaboration of a Logistics Master Plan to support economic transformation and development in Cambodia. The Logistics Master Plan should contain the development of a comprehensive strategy for the logistics sector in Cambodia and should be aligned with the ASEAN Transport Strategic Plan 2016–2025.<sup>11</sup>

## 6.2 COORDINATION OF THE PUBLIC AND PRIVATE SECTOR IN LOGISTICS

To develop and subsequently implement the Logistics Master Plan, Cambodia established an

institutional mechanism—GDL, NLC, and NLSC—for coordination and consultations on logistics issues and challenges as well as formulation of priorities and actions. A royal decree hereto was issued by the end of November 2017. The NLC will involve all major stakeholders from the public and private sector and will meet once a year. The NLSC, which will officially monitor this process, will meet twice a year. The establishment of the GDL, NLC, and NLSC has helped address important issues for the improvement of efficiency in the national logistics system. This not only involves transport infrastructure but also transport and logistics operations, trade facilitation, and customs and other inspection agencies along the trade supply chains within Cambodia. In the Cambodian context, these institutional arrangements are complementary to the existing setups and committee, especially the public and private dialogue that has been led by General Department of Customs and Excise (GDCE).

<sup>11</sup> The ASEAN Transport Strategic Plan 2016–2025 aims to "establish an integrated, efficient, and globally competitive logistics and multimodal transportation system, for seamless movement of passengers by road vehicles and cargos within and beyond ASEAN," and the ASEAN Connectivity 2025 which aims at lowering supply chain costs and improving speed of supply chains in each ASEAN member state.

## 6.3 COORDINATION BETWEEN CUSTOMS AND THE PRIVATE SECTOR

In the last 10 years, the GDCE has made good progress in building trust and confidence within the business community. MEF Prakas 906 was issued in October 2009 for an establishment of the Customs-Private Sector Partnership Mechanism (CPPM). After the official establishment of the Public Relations Unit within the GDCE on December 29, 2009, the CPPM was launched in January 2010 and aimed at further enhancing the investment climate and fair business. The CPPM is responsible for enhancing coordination, cooperation, and mutual understanding between the customs administration and the private sector, as well as for resolving all customs-related matters to the greatest possible extent before moving to other dispute settlement bodies or to the government-private sector forum. The level of trust and confidence between the GDCE and the business community has improved significantly. Cambodia also completed the rollout of the Automated System Customs Data (ASYCUDA) to all major customs checkpoints to improve customs clearance by using risk management techniques and selectivity operation in the system to facilitate trade and target specific control of noncompliance.

The CPPM remains an important forum for border agencies and the business community to engage in dialogue on trade facilitation policy in Cambodia. The CPPM meets normally once every year and all documentation, including agenda of the meeting, minutes of the meeting, new laws, regulations, and measures are made available online on the GDCE's website. All documents of the fifth CPPM meeting, which took place on July 1, 2015, have been compiled into one publication.

## 6.4 CONCLUSION

The Government of Cambodia is working very hard and has made good progress in establishing institutional structures to improve

inter-agency coordination, including the private sector to discuss, monitor, and evaluate new and existing laws and regulations in the transport and logistics service. In November 2017, a national logistics council and a national logistics steering committee were established as the consultative and decision-making forums to deal with transport and logistics issues and sector policy development. The Government is providing multiple platforms to discuss specific problems among the public and the private sector. These include IDP, logistics (including transportation), Customs, trade facilitation, and so on. This is a very positive development. The challenge is to also guarantee coordination among these different platforms by actively making relevant information available to all relevant platforms. It also requires continuous capacity development from civil servants.

**There is a trade-off between a more regulated logistics system, which requires a need to improve the licensing system and the enforcement system, versus a more open system that regulates only things that have to be regulated.** The first one places pressure on capacity in the MPWT and resources and human capital to develop and enforce. The second approach requires the minimum requirements with regard especially, for example,

- Access to the market (qualitative criteria);
- Access to the profession (certificates and training);
- Operational requirements notable with regards safety and security (transport equipment, dangerous goods); and
- Establishing 'traffic' rules.

**As stated in the previous chapters, activities like freight forwarding and warehousing do not need specific legislation and can be considered as 'free occupation'.** In most countries, the industry associations have set criteria for its member companies and a self-regulatory system has been created. The FIATA, for instance, has set minimum standards for the profession of freight

forwarders and many national associations of freight forwarders are providing standardized training programs for their members based on these minimum standards. Often, they also have a code of conduct for their members, which is related to business operations. A more open system, with clear qualitative criteria for market entry (with no quantity limitations), may stimulate a competitive and efficient logistics system, under clear and enforced rules when it comes to safety and security. To support policy goals in the field of multimodal transport and especially the promotion of the use of railway and water transport, specific stimulation programs could be adopted, with specific rules and regulations or exemptions to them (for example, tax reduction). The modal laws, as analyzed and described, contain the basics needed and are in line with international conventions and agreements. Additions have to be made especially in areas like the transport of dangerous cargoes.

**In discussion with the MPWT, and in the consultation meeting, it was concluded that this open approach is supported by the Government and industry.** Some progress has been made in improving the legal and regulatory framework in the transport and logistics sector over the last 10–15 years and in developing draft laws for most relevant sectors, but at a very slow pace. Some of these draft laws have reached the final stage of adoption and implementation. The main challenges remain in the following:

- Developing a national integrated sustainable logistics strategy
- Further liberalizing port, shipping, and logistics services
- Developing/implementing specific laws with regard to railway, ports, inland waterway transport, maritime, and dangerous goods (ADR/ADN)
- Introducing more qualitative (minimum) criteria for access to the transport/logistics market and to the profession

- Setting clear criteria on operations (fee structure/user charge, transparency and accessibility of information, traffic rules, safety and security requirements, liability and insurance)
- Developing and enforcing regulations

**There are some bottlenecks that need to be solved in developing a sound and sustainable legal and regulatory system.** Legislation is not always uniformly known, applied, and enforced, although considerable progress is being made in making laws and regulations more transparent. The starting points and advice for regulatory reform are the following:

- Improve the process of development, implementation, monitoring, and evaluation of laws and regulations and include stakeholder consultation.
- Do not overregulate and regulate only what needs to be regulated.
- Rules and regulations need to be in line with (multimodal) transport and logistics national policy goals and in compliance with bilateral, regional, and international agreements.
- Rules and regulations need to be simple and understandable and complex sets of rules need to be avoided.
- Develop guidelines/administrative guidance and structures for its implementation and enforcement.
- Institutionalize interaction with stakeholders and monitor implementation and impact of the rules and regulations.

**There is a tremendous need for further capacity development of enforcement officers, customs clearing agents, and transport and logistics operators.** A major part of all documentary requirements for transport and logistics operations can still only be fulfilled on paper and not electronically, thus resulting in longer waiting times, more mistakes, and more costs.

# ANNEX 1. SUMMARY MATRIX OF LEGAL AND REGULATORY PRIORITY ACTIONS FOR THE CAMBODIA LOGISTICS MASTER PLAN

Sector/Reform Areas	Priority (high, medium, low)	Main Gaps Identified	Good International Practices and Standards to be Adopted	Time Line (short, medium, and long terms)
<b>Road transport</b>				
Define qualitative criteria for access to the profession of road transport operator.	Medium	Not existent yet. The present low entrance requirements are not conducive for the development of an efficient and safe professional road transport sector.	Introduce qualitative criteria to the licensing regime of road transport operators in Cambodia, such as good repute, financial standing, and a CPC for the road transport operator.	Medium term
Introduction of a CPC for road transport drivers.	High	Not existent yet. There are almost no requirements for the profession of road transport driver, which are needed to develop an efficient, safe, and secure road transport sector	It is recommended to introduce an additional requirement to the profession of road transport driver, a so-called CPC, in addition to the required driving license. The measure will also contribute to the increase of the quality of road transport services and improve road safety.	Short term
Setting up a national coordinated system for control and inspection of overloading.	High	Improvement of the existing system.	Overloading is a real problem in Cambodia, like in many other countries. It is recommended to make the system of control and inspection of loads at weighbridges more efficient by setting up a more coordinated and efficient system of inspection at weighbridges along the main roads and at ports, terminals, and logistics centers.	Short term

Road transport agreements concluded within the framework of ASEAN and GMS-CBTA should be transposed into national legislation of all member states of ASEAN and GMS and be enforced as well.	High	Improvement of the existing system. Not all elements of the regional and bilateral road transport agreements are transposed in national legislation.		Short term
<b>Railway transport</b>				
Draft a Law on Railway Transport.	Medium	Not existent yet. Railway transport is currently guided by inadequate secondary legislations and concession agreement	This is presently not really urgent but may become necessary if in particular international railways are developed in the future with links to Thailand, Lao PDR, and Vietnam.	Medium term
Apply RID, under the guidance of OTIF for domestic railway transport of dangerous goods.	Medium	Not existent yet. It is challenging for Cambodia to enforce RID if no regulation is enacted and it also presents risks to Cambodia and its compliance with international good practices.	RID, under the guidance of OTIF, is good practice.	Medium term
<b>Port, maritime transport, and inland waterway transport</b>				
Acceleration of the process of developing legislation in the field of ports, maritime transport and inland waterway transport.	High	Draft laws are partly prepared and partly under preparation. The Council of Ministers is to approve the draft laws and detailed time frames are not known.	Compliance with international regulations set by international organizations such as the IMO is urgently needed.	Short term
<b>Multimodal transport</b>				
Develop a Law on Multimodal Transport.	High	Not existent yet. Lack of a national law on multimodal transport in Cambodia has constrained its compliance with the ratified ASEAN Agreement on Multimodal Transport. While Cambodia does not have a system to authorize and recognize the MTOs registered in other member states, its operators are also not yet widely recognized by any of the other member countries	This law will provide extra legal protection to the MTO with regard to liability, particularly in situations when juridical enforcement of irregularities in business and trade is still a challenge.	Short term

Transpose the ASEAN Framework Agreement on Multimodal Transport from 2005 into national legislation.	High	Not implemented yet. The MTOs do not have clear legal protection. Will be enforced later on.	This law will provide legal protection to the MTO in terms of liability, particularly in situations when juridical enforcement of irregularities in business and trade is still a challenge.	Short term
<b>Freight forwarding</b>				
If there is a Law on Multimodal Transport regulating the liability of the MTO, there is no need to adopt a Law on Freight Forwarding if the freight forwarder is considered to be an agent and not a principal.	High			
<b>Cross-cutting priorities in current institutional arrangements</b>				
Develop a national integrated and sustainable logistics strategy.	High	n integrated approach toward a national sustainable logistics strategy is not existent yet.	Sustainable logistics should take into account economic aspects (growth, efficiency, competitiveness, employment, and so on); environmental aspects (climate change, air quality, noise, land use, biodiversity, waste, and so on); and social aspects (safety, security, health, access, equity, and so on.).	Short term
Improve the process of the development, implementation, monitoring, and evaluating of laws and regulations.	High	The process of development of laws and regulations is too long.		Short term

# ANNEX 2. DRAFT INTERNATIONAL AGREEMENT ON MULTIMODAL TRANSPORT

## 1. OBJECTIVES

1.1. The Parties shall endeavor to harmonize their legislation to implement a unified legal framework using the definitions and based upon the concepts contained herein.

1.2. For this purpose, the Parties may set up a Legal Working Group, which will adhere to the concepts and definitions contained herein to work out a legal instrument, ("the Instrument") mandatory for the signatories thereto.

## 2. SCOPE

2.1. The Instrument reached by means of this Agreement shall be the basis for further development of a legal framework for multimodal transport performed between places in two Parties, if the place of taking in charge or delivery of the Goods as provided for in the multimodal transport contract is located in a Party.

2.2. The contracting parties may decide to apply the provisions of the Instrument in full or in part for carriage performed involving one or several modes of transport, with issuance of a single transport document or without it.

## 3. DEFINITIONS

For the purposes of the Instrument, the following definitions shall bear the meanings as follows:

**Multimodal transport** means a goods transportation performed by at least two different modes of transport.

**Multimodal transport contract** means a single contract for the carriage of goods by at least two different modes of transport.

**Multimodal transport operator (MTO)** means a natural or legal person who concludes a

multimodal transport contract and assumes responsibility for the performance thereof by issuing a document of multimodal transportation either in negotiable or non-negotiable form.

**Carrier** means the person who actually performs or undertakes to perform the carriage, or part thereof, whether he is identical with the multimodal transport operator or not.

**Consignor** means the person who concludes the multimodal transport contract with the multimodal transport operator.

**Consignee** means the person entitled to receive the goods from the multimodal transport operator.

**Multimodal transport document** means a document evidencing a multimodal transport contract issued in a negotiable or a non-negotiable form (consignment note of multimodal transportation, multimodal transport waybill and any other legally accepted form), whereby the MTO has accepted the goods for carriage and assumed the responsibility to deliver the goods as agreed thereby.

**Delivery** means the handing over of the goods to the consignee, or the placing of the goods at the disposal of the consignee in accordance with the multimodal transport contract or with the law or usage of the particular trade applicable at the place of delivery, or the handing over of the goods to an authority or other third party to whom, pursuant to the law or regulations applicable at the place of delivery, the goods must be handed over.

**Special Drawing Right (SDR)** means the unit of account as defined by the International Monetary Fund.

**Goods** means any property, including live animals as well as containers, pallets or similar

articles of transport or packaging not supplied by the MTO, irrespective of whether such property is to be or is carried on or under deck.

## 4. DOCUMENTS

The form of the multimodal transport document used under the Instrument, may be advised by the Governments of the Parties.

The Government of one Party shall agree to recognize the form of the multimodal transport documents advised by the Government of any other Party, so as to avoid impeding the performance of a multimodal transportation performed between the Parties.

The Legal Working Group set up to develop the Instrument shall develop and recommend for use by the Parties the model document for multimodal transportation, referred to above as the multimodal transport document, in accordance with the United Nations layout key

## 5. INSURANCE

5.1 The Parties shall endeavor to provide a legal basis to enable the MTO to:

- insure his public liability risks in connection with the transportation process
- insure his liability in connection with the goods in his charge

5.2. The Parties shall however leave it to the discretion of the MTO to insure his liability or the goods in his charge, depending on the contractual arrangements with the client.

## 6. RESPONSIBILITIES OF THE MULTIMODAL TRANSPORT OPERATOR

6.1. The Instrument shall provide that the period of responsibility of the MTO shall include the whole time when the MTO has the goods in his charge, until their delivery.

6.2. The Instrument shall also provide that:

- the MTO shall be responsible for acts and omissions of his servants or agents, when any such servant or agent is acting within the scope of his employment

- the MTO shall be responsible for any other person of whose services he makes use for the performance of the contract, as if such acts and omissions were his own

6.3. The Instrument shall also provide that the MTO may undertake to perform or to procure the acts necessary to ensure delivery of the goods.

6.4. The Instrument shall provide the following modalities of delivering the goods to the consignee:

- (a) when the multimodal transport (MT) document has been issued in a negotiable form "to bearer", to the person surrendering one original of the document, or
- (b) when the MT document has been issued in a negotiable form "to order", to the person surrendering one original of the document duly endorsed, or
- (c) when the MT document has been issued in a negotiable form to a named person, to that person upon proof of his identity and surrender of one original document; if such document has been transferred "to order" or in blank the provisions of (b) above apply, or
- (d) when the MT document has been issued in a non-negotiable form, to the person named as consignee in the document upon proof of his identity, or
- (e) when no document has been issued, to a person as instructed by the consignor or by a person who has acquired the consignor's or the consignee's rights under the multimodal transport contract to give such instructions.

## 7. LIABILITY OF THE MULTIMODAL TRANSPORT OPERATOR

The Instrument shall provide that:

7.1. The MTO is liable for loss resulting from loss of, or damage to, the goods as well as from delay in delivery, unless the MTO proves that no fault or neglect of his own, his servants, agents or sub-

contractors has caused or contributed to the loss, damage or delay in delivery.

7.2. Delay in delivery occurs when goods have not been delivered within the time expressly agreed upon or, in the absence of such an agreement, within the time it would be reasonable to require of a diligent MTO, having regard to the circumstances of the case.

7.3. If the goods have not been delivered within 90 consecutive days following the date of delivery, the claimant may, in the absence of evidence to the contrary, treat the goods as lost.

## **8. LIMITATION OF LIABILITY OF THE MULTIMODAL TRANSPORT OPERATOR**

The Instrument shall provide that:

8.1. If the nature and value of the goods have been declared by the consignor before the goods have been taken in charge by the MTO and inserted with the agreement of the MTO in the multimodal transport document, the MTO shall be liable in full for the loss of the goods and shall be liable for the goods damaged in the amount equivalent to the value of goods damaged, or, in case where the damage to the goods is such that none of the goods can be recovered, the MTO shall have to compensate in full for the goods lost. The value of the goods shall be deemed to be the Invoice value.

8.2. In all other cases when the nature and value of the goods have not been declared by the consignor, the MTO's liability for loss of, and damage to the goods shall be limited to 8.33 SDR per kilogram of gross weight of the goods lost or damaged.

8.3. Liability for loss resulting from delay in delivery, and for consequential loss or damage other than loss of, or damage, to the goods is limited to 5 percent of the transportation contract price for every day of delay. However, in any event, the liability of the MTO for the delay in delivery of goods cannot exceed the amount of the transportation cost agreed in the multimodal transport contract.

8.4. The MTO is not entitled to the benefit of the limitation of liability if it is proved that the loss, damage or delay in delivery resulted from an act or omission of the MTO done with the intent to cause such loss, damage or delay or recklessly and with knowledge that such loss, damage or delay would probably result.

## **9. THE RIGHT OF LIEN**

The MTO shall have the right of lien on the goods and documents in his charge, until the MTO is fully paid for the transportation and reimbursed for other costs incurred in connection with the transportation, unless otherwise agreed by the Contract.

## **10. LIABILITY OF THE CONSIGNOR**

The Instrument shall provide that:

10.1. The consignor is deemed to have guaranteed to the MTO all information given with respect to the goods, and, in particular, wherever applicable, their dangerous character.

10.2. The consignor shall indemnify the MTO against any loss resulting from inaccuracies in or inadequacies of the particulars referred to above.

10.3. The consignor shall remain liable even if the multimodal transport document has been transferred by him.

10.4. The right of the MTO to such indemnity shall in no way limit his liability under the multimodal transport contract to any person other than the consignor.

## **11. TIME-BAR**

11.1 The time-bar set for all purposes of the Instrument, shall be one year.

11.2 Time begins to run for the purposes of the time bar on the day following the day of delivery of the goods or the date when the goods should have been delivered.

## 12. THE SCOPE OF THE INSTRUMENT

Where neither other international agreements and conventions nor the Instrument make specific provisions, national law and the provisions of the contract shall apply.

### **Explanatory Note regarding proposed agreement on Multimodal Transport**

#### **Implementation**

The proposed framework agreement on multimodal transport is intended to give the parties flexibility in terms of implementation strategy. It should allow those states who wish to proceed rapidly to adopt its provisions without the need to achieve consensus. States could incorporate the provisions in bilateral agreements, or three or four pilot states might decide to incorporate them in a simple multilateral agreement.

Cambodia could establish a legal working group to perfect and implement the agreement. The framework is intended for international use. However, elements from the framework could also be used as guidelines for regulating liability in their domestic multimodal transport.

#### **Definitions**

The definitions used in the framework agreement are taken from the United Nations Conference on Trade and Development (UNCTAD)/International Chamber of Commerce (ICC) Rules, modified to fit the context of the region where necessary.

#### **Basis of liability**

The proposed framework agreement provides a basis of liability for the MTO in clause 5 whereby the MTO accepts responsibility as a principal from door to door. This is in line with policy set out in the Multimodal Transport Convention of 1980. In addition, this is compatible with the UNCTAD/ICC Rules upon which the FIATA Bill of Lading (FBL) is based and, for instance, with the current draft framework for an European Union Directive or Regulation on liability in multimodal transport.

#### **Limitation of liability**

The framework agreement at clause 7 recognizes the existing practice in the region of full liability based on the value of goods lost or damaged but it is envisaged that this will be the case only where the MTO has agreed to enter the value in the MT document and the customer has agreed to pay a surcharge on the normal rate. In all other cases the agreement may follow the European Union initiative on MT transport in proposing a uniform limited liability regime but with a lower limit of 8.33 SDRs per kilo (the limit under the CMR) thought to be appropriate for the region. Any working group set up to implement the agreement may wish to review the suitability of this limit and its potential insurability.

For simplicity, calculation of the value of the goods is based on the invoice value, as a sales invoice will normally be available. Any working group may wish to debate whether the market value at point of origin or destination, replacement cost, or some other measure of value should be used as is the case in some other instruments.

#### **Documentation**

The framework agreement at clause 6 avoids imposing a uniform transport document but requires mutual recognition of such documents by states where they are not uniform. It hopes, however, that any working group set up would attempt to agree a uniform transport document for use with the agreement. Such a document should adopt the physical format as elaborated by the United Nations (the United Nations layout key) so as to be compatible with commonly recognized software for electronic completion of documents whether as printed paper documents or as electronic virtual documents.

#### **Lien**

A simple lien is included in clause 8 as liens may not be available under all national laws. Any working group set up may want to consider giving the MTO a stronger lien for example as provided in the FBL terms.

### **Consignor liability**

In line with the expressed wishes of Counterparts in discussions and in the earlier draft TA, quite strict duties are placed on consignors with regard to information furnished by them.

### **Time limits for claims**

These have not been included as it is believed that the national Civil Codes deal adequately with giving notice of loss or damage to the carrier. However, if any working group wished to include an international provision, the Contractor would recommend taking the provision available in clause 9 of the UNCTAD/ICC Rules.

### **Time bar**

The time bar has been set at one year, in line with most national and international legislation. It should be noted that this is less favorable to the

MTO than the nine-month limit in the UNCTAD/ICC Rules and that of many Western European MTOs. However, even in Western Europe, the nine-month limit is not always enforceable, and it was felt that the one year limit would be more appropriate to existing conditions in the region. Any working group may wish to review this provision.

### **Conclusion**

The framework has been developed to allow the possibility of early implementation of provisions largely consistent with existing practices in the region while being largely compatible with practices in neighboring areas. It represents a compromise. As its terms are kept as simple as possible, it should make it much easier to update in the future than a more complex agreement containing many cross references and details.

# ANNEX 3. PROPOSAL FOR MODEL NATIONAL LAW ON FREIGHT FORWARDING

## CHAPTER 1. GENERAL PROVISIONS

### Article 1. Definitions

“**Contract**” means the contract of freight forwarding concluded by the Forwarder and Customer.

“**Customer**” means any natural or legal person at whose request or on whose behalf the Forwarder undertakes its professional activities or provides advice, information or services.

“**Delivery**” means the handing over of the goods to the consignee, or the placing of the goods at the disposal of the consignee in accordance with the Contract or with the law or usage of the particular trade applicable at the place of delivery, or the handing over of the goods to a third party to whom, pursuant to the law or regulations applicable at the place of delivery, the goods must be handed over.

“**Freight Forwarding**” means the provision of advice, information or services for the organization of carriage of goods by any type of transport and the drawing up of the documents of carriage, documents for Customs purposes and other documents necessary for effecting the carriage of goods.

“**Forwarder**” means a natural or legal person which undertakes Freight Forwarding (whether as an agent or a principal).

“**Services**” means any activity undertaken by the Forwarder in the course of its business on behalf of the Customer.

## ARTICLE 2. SCOPE OF APPLICATION

1. This Law regulates Freight Forwarding activities in the [XYZ]

2. The parties to the Contract may determine the terms of the Contract not stipulated by this Law, other laws of [XYZ] or other normative legal acts adopted in accordance with the Civil Code of the Republic of [XYZ].

3. The provisions of this Law shall not cover Freight Forwarding in the field of postal communication.

## CHAPTER 2. THE RIGHTS AND DUTIES OF THE FORWARDER AND THE CUSTOMER

### Article 3. The Rights of the Forwarder

1. The Forwarder shall be entitled to undertake any or all of its services as an agent or as a principal.

2. When the Forwarder contracts as principal for any services, it may perform such services itself or it may subcontract the whole or any part of such services as stipulated in the Contract.

3. Unless the Contract of freight forwarding stipulates otherwise, the Forwarder may, in the interest of the Customer, choose or change the type of transport, the route of the carriage of the goods, or the sequence of the carriage of the goods by various types of transport. In so doing the Forwarder must immediately notify the Customer about changes made in accordance with this sub-article.

4. Except as provided in Article 3(3) above, the Forwarder may deviate from instructions of the Customer only if

- (i) this becomes necessary in the interests of the Customer due to unforeseen circumstances, or
- (ii) the Customer's instructions are inexact or incomplete, or

- (iii) the Customer's instructions do not conform to the Contract and the Forwarder cannot obtain the Customer's further instructions or consent within a reasonable time.

5. If incomplete information is submitted, the Forwarder must request the necessary additional data from the Customer. The Forwarder may abstain from fulfilling the Services stipulated by the Contract pending the submission by the Customer of the necessary documents, and also information about the properties of the goods, about the conditions for their carriage and other information necessary for the fulfilment of the Forwarder's Services.

6. The Forwarder may check the accuracy of the documents submitted by the Customer, and also the information about the properties of the goods, the conditions for their carriage and other information necessary for the fulfilment by the Forwarder of the Services stipulated by the Contract.

#### **Article 4. The Rights of the Customer**

1. The Customer may:

- (i) request from the Forwarder relevant information about the carriage of the goods;
- (ii) give instructions to the Forwarder in accordance with the Contract;
- (iii) If the Contract so stipulates, choose the itinerary of travel of the goods and the type of transport.

#### **Article 5. The Duties of the Forwarder**

- (i) 1. The Forwarder must provide Services in accordance with the Contract and with a reasonable degree of care, diligence, skill and judgement.
- (ii) 2. When accepting the goods, the Forwarder must issue a certificate of receipt to the Customer.
- (iii) 3. When acting as agent, the Forwarder must also submit to the Customer the originals of the contracts

concluded by the Forwarder in the name of the Customer, on the basis of a power of attorney issued by him, in accordance with the Contract.

- (iv) 4. The Forwarder may not conclude in the name of the Customer a contract of insurance of the goods unless that is directly stipulated by the Contract.

#### **Article 6. The Duties of the Customer**

1. The Customer must promptly submit to the Forwarder full, exact and accurate information about the properties of the goods, about the conditions for their carriage and other information necessary for the fulfilment by the Forwarder of the Services stipulated by the Contract and also the documents necessary for fulfilling Customs, sanitary and other types of state control.

2. The Customer must pay the remuneration due to the Forwarder in accordance with the procedure stipulated by the Contract and also reimburse the expenses incurred by the Forwarder in the interests of the Customer.

### **CHAPTER 3. LIABILITY OF THE FORWARDER AND THE CUSTOMER**

#### **Article 7. General Basis of Liability of the Forwarder as agent**

1. When acting as agent, the Forwarder shall be liable to the Customer, subject to sub-articles 2 and 3 below and to the limits of liability set out in Article 9 below, for loss resulting from loss of or damage to the goods as well as from delay in Delivery if it fails to exercise a reasonable degree of care, diligence, skill and judgement in the performance of the Contract.

2. When acting as agent, the Forwarder shall be responsible for acts and omissions of its servants and agents, when any such servant or agent is acting within the scope of his employment.

3. When acting as agent, the Forwarder shall not be liable to the Customer for acts and omissions of third parties, such as, but not limited to, carriers, warehouse operators, stevedores, Port Authorities and other Forwarders, unless the

Forwarder has failed to exercise a reasonable degree of care, diligence, skill and judgement in selecting, instructing or supervising such third parties on behalf of the Customer.

### **Article 8. General Basis of liability of the Forwarder as principal**

1. The Forwarder shall be liable as a principal
  - i) when it performs Services by itself using its own facilities, installations or transport means, or
  - ii) when, by issuing its own transport document it has made an express or implied undertaking to assume liability as a principal.
2. The period of responsibility of the Forwarder, when acting as a principal, shall extend from the time when it takes the goods in its charge until their Delivery. Goods shall be deemed to be taken in charge when they are handed over to and accepted for carriage by the Forwarder.
3. When acting as a principal, the Forwarder shall be responsible for acts and omissions of its servants and agents, when any such servant or agent is acting within the scope of his employment and shall also be responsible for any other person of whose services it makes use for the performance of the contract as if such acts of omissions were its own.
4. When acting as a principal, the Forwarder shall be liable to the Customer, subject to the limits of liability set out in Article 9, for loss resulting from loss of or damage to the goods as well as from delay in Delivery unless it proves that no fault or neglect of its own, its servants agents or sub-contractors has caused or contributed to the loss, damage or delay in Delivery.
5. However, if the Forwarder proves that a violation of an obligation has been caused by breach of the contract of carriage and the stage of transport where the loss, damage or delay occurred is known, the liability of the Forwarder shall instead be determined on the basis [and in the amount] set by the rules applicable by law to that stage of transport.

6. Delay in Delivery occurs when the goods have not been delivered within the time expressly agreed upon by the parties to the Contract or, in the absence of such agreement, within a reasonable time, having regard to the circumstances of the case.

### **Article 9. General Basis of liability of the Customer**

1. For non-fulfilment or improper fulfilment of the duties stipulated by the Contract and by this Law, the Customer shall be liable on the basis and in the amount determined in accordance with Chapter [XYZ] of the Civil Code of the Republic of [XYZ] and this Law.

### **Article 10. Limitation of liability of the Forwarder**

1. If the nature and value of the goods have been declared by the Customer before the goods have been taken in charge by the Forwarder and inserted with the agreement of the Forwarder in the transport document, the Forwarder shall, subject to establishment of its liability in accordance with Articles 6 or 7 hereof, be liable in full for the loss of the goods and shall be liable for goods damaged in the amount equivalent to the value of the goods damaged, or, in cases where the damage to the goods is such that none of the goods can be recovered, the Forwarder shall have to compensate the loss in full.
2. In all cases when the nature and value of the goods have not been declared by the Customer in accordance with sub-article 1 hereof, the Forwarder's liability subject to the provisions of Articles 6 or 7 hereof for loss of, or damage to the goods shall be limited to 2 [8.33] SDRs per kilogram of gross weight of the goods lost or damaged unless a higher amount has been reimbursed by the person for whom the Forwarder is responsible.
3. In addition to compensation for loss or damage in accordance with sub-articles 1 or 2 hereof, the Forwarder shall refund any Contract remuneration paid by the Customer in full in case of total loss of the goods, and in proportion

to the loss sustained in the case of partial loss, but no further compensation shall be payable.

4. Liability for loss resulting from delay in Delivery shall be limited to 5 percent of the Contract price for every day of delay. However, in any event, the liability of the Forwarder for delay may not exceed the amount of the Contract price.

5. In the case of all other losses whatsoever and howsoever arising, the Forwarder's liability subject to the provisions of Articles 6 or 7 hereof shall be limited to the lesser of

- (i) the loss incurred, or
- (ii) 2 [8.33] SDRs per kilo of the gross weight of any goods subject to the Contract, or]
- (iii) 25,000 SDRs [50,000] [75,000]

6. The value of goods shall be deemed to be their Invoice value.

#### **Article 11. Loss of the right to limit liability**

1. The Forwarder shall not be entitled to the benefit of the limits of liability provided in this Law if the Customer proves that loss, damage or delay in Delivery resulted from an act or omission of the Forwarder done with intent to cause such loss, damage or delay or recklessly and with knowledge that such loss, damage or delay would probably result.

#### **Article 12. Agreement on Changing the Measure of Liability of the Forwarder**

1. The Contract may stipulate increases in the responsibilities and limits of liability of the Forwarder compared to those established by this Law.

2. Any agreement on the elimination or reduction of the liability of the Forwarder established by this Law shall be null and void.

## **CHAPTER 4. CLAIMS AND ACTIONS**

#### **Article 13. Notification of Loss or Damage to the Goods**

1. Unless notice of loss or damage, specifying

in writing the general nature of such loss or damage, is given to the Forwarder or its agent at the time of handing over of the goods to the consignee indicated in the Contract, such handing over shall be prima facie evidence of the Delivery of the goods in good order and condition.

2. Where the loss or damage is not apparent, the provisions of paragraph 1 of this Article shall also apply if notice in writing is not given within [6] [15] [30] consecutive days after the day when the goods were handed over to the consignee. The date of notification to the Forwarder shall be deemed to be the date of receipt.

#### **Article 14. Forwarder's lien**

1. Unless otherwise agreed in the Contract, the Forwarder shall have a general lien to distrain on goods, and any documents relating thereto, that are in its possession for any amount due at any time to the Forwarder from the Customer in relation to Services provided to the Customer. In this case the Customer shall also pay the expenses associated with the distraint on the property, including but not limited to storage costs.

#### **Article 15. Claims and Actions Made against the Forwarder**

1. The right to make a claim and action against the Forwarder shall be enjoyed by:

- (i) the Customer or a person authorized by him to make a claim and action,
- (ii) the consignee indicated in the Contract,
- (iii) the insurer that has acquired the right of subrogation.

2. The claim shall be made in writing. Documents confirming the right to make a claim and documents confirming the quantity and value of the goods (originals or copies thereof attested according to established procedure) must be attached to the claim.

3. The value of the Special Drawing Right (SDR) in units of the [insert national currency] shall be calculated in accordance with the method

for determining the value applied by the International Monetary Fund. The conversion into [insert national currency] shall be effected on the date of the rendering of a court judgement or on the date established by agreement of the parties.

### **Article 16. Limitation of Action**

1. The time-bar set for all purposes of this Law shall be one year.

2. In the case of loss, damage or delay to goods, time shall begin to run for the purposes of the time-bar on the day following the day of delivery of the goods or the date when the goods should have been delivered. With respect to other losses, time shall begin to run from the date of the event or occurrence alleged to give rise to a right to make a claim against the Forwarder.

## **CHAPTER 5. ENTRY INTO FORCE**

### **Article 17. Entry into Force**

1. This Law shall enter into force from .... [enter provision according to Civil Code]

2. The provisions of this Law shall be applicable to those rights and obligations which arise after its entry into force.

## **Explanatory memorandum on Model Forwarding Law**

### **Liability under the proposed Model law**

The model law makes a distinction between the forwarder acting as an agent with an obligation to place the Customer into direct contractual relationships with service providers and the forwarder acting as principal exercising its discretion on how the contract will be performed. The forwarder as agent is only liable for its failings in carrying out professional services. The forwarder as principal is liable for failure to deliver the service package it has offered and in particular the delivery of the goods to the consignee. Whatever the role undertaken there is, however, a common basis for compensation of the Customer based either on full compensation for loss or damage (where the value is declared) or alternatively on limited liability broadly compatible with

the UNCTAD/ICC Rules, FBL terms and so on. This should enable forwarders to offer liability options to their customers and would enable insurers to set premiums according to the level of risk accepted by the forwarder. The liability of the forwarder for errors and omissions is also limited to an amount which should be capable of being insured.

### **Options left for further discussion**

In **Article 10.2**, the proposed general limit is 2SDRs per kilo, following the precedent found in the UNCTAD/ICC Rules and in many European forwarding conditions. This is based on the maritime precedent of The Hague Visby Rules and reflects the fact that a substantial proportion of Western international trade includes a maritime element. In Cambodia, the relative importance of land-based transport is probably higher and for this reason it could be appropriate to consider a limit of 8.33 SDRs per kilo based on the CMR Convention limits. However, the insurance costs of forwarders' liability insurance would be higher with the higher limit and further research on this issue is recommended before a decision is taken.

In **Article 10.5**, dealing with compensation for professional errors and consequential losses, it is considered necessary to set a very clear maximum limit so that the liability can be insured at a realistic cost. The suggestion has been made of 25,000 SDR as the upper limit, which would be one third of the limit found in some Western European examples such as the UK and could be considered more appropriate to the present circumstances of Cambodia. However, even this limit may be thought too high and should be verified for suitability by each state. If the square brackets on 9(5)(ii) were removed so that the provision was definitely included in the model law, the effect would be to reduce the limit still further in the case of small quantities of goods carried (less than a container-load). Counterparts may feel that one overall limit of a maximum sum is more appropriate to these kinds of loss than one based on a limit per kilo. A further option would be to retain only a limit per kilo, but this would result in very low compensation indeed for professional errors when only small

quantities of goods were involved. It should be stressed that this section of the model law deals with situations other than loss or damage to the goods themselves, where a weight-based limit is usually considered fair.

In **Article 13.2**, various options for the time limit for notification of loss or damage are left for decision. The UNCTAD/ICC Rules suggest 6 days, the Hamburg Rules 15 days, and so on. It is suggested that a notification period` of 30 days

is so long as to be liable to encourage fraud by customers and for that reason would not be recommended by the Contractor. A period of 7 days as provided for in the CMR Convention might be considered as a good workable solution and the 15-day period in the Hamburg Rules UNCTAD/ICC Rules as a compromise solution. Again, it will be necessary for individual states to decide on their priorities.



# CHAPTER THREE



## A MONITORING AND EVALUATION FRAMEWORK FOR LOGISTICS IN CAMBODIA



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# EXECUTIVE SUMMARY

**Cambodia faces serious challenges in logistics performance with indications that costs are higher and quality of logistics services lower than regional peers.**

Establishing an accurate picture of the logistics performance is hampered by a lack of readily available data to monitor the sector. Given that Cambodia has leveraged integration into the global marketplace with continuous growth of trade volumes, there is a much stronger need for a proper monitoring and evaluation (M&E) system to support transport and logistics strategic planning, evidence-based policy making, and the monitoring of the implementation of policies related to logistics.

**Monitoring and evaluation are integral parts of policy development and implementation in the logistics sector.**

Monitoring focuses on the activities and outputs, and evaluation focuses on the outcome and goals through a set of appropriate indicators. Typically, at the macro level, indicators are defined to cover four dimensions of a national logistics system: (a) quality of transport and communication infrastructure, (b) efficiency and effectiveness of public institutions and policy framework for trade and logistics, (c) quality and reliability of logistics services, and (d) performance and competitive advantages of industry actors: shippers and consignees.

**Based on the available data, Cambodia has made some progress in improving logistics performance.**

For instance, data from the 2017–2018 World Economic Forum (WEF) Report point to improvements in the quality of road transport infrastructure (scored at 3.2 on a scale from 1 to 7), port infrastructure and air transport infrastructure (3.7) but also little improvement in the quality of railroad transport (1.6). The performance of institutional and policy dimension remains relatively poor, especially in terms of the legal framework for resolving disputes (2.9) and accessibility of regulations (2.8). Efficiency and effectiveness of policy and rules implementation also lag behind regional

averages. Irregular payments and bribes remain a serious issue in obtaining permits, certification, and inspections for industry traders and service providers. Despite huge investments in customs modernization and automation, the burden of customs procedures remains high and at the alarming level for traders and services providers.

**There are limited data available to monitor the performance of logistics service providers (LSPs) and shippers and consignees.**

In general, the logistics system of Cambodia is perceived as archaic, inefficient, ineffective, and costly to users. The available macro-level data are not detailed enough to allow the assessment of the actual logistics services in a country. There is therefore a need for establishing a baseline of the logistics performance of manufacturing firms and service operators in the Cambodian supply chains.

**Measuring the performance of a logistics system from the user perspective offers valuable insights.**

The users of logistics in a country are the exporters, importers, manufacturers, and traders. A monitoring framework with key performance indicators (KPIs) is designed to keep track of the actual logistics performance in the country. These KPIs focus on the actual logistics capability of both users of logistics services and LSPs covering three performance dimensions: logistics cost, time, and reliability. However, obtaining data on these parameters of performance often requires surveys of (a) manufacturers and other generators of demand and (b) freight forwarder and LSPs.

**The results of the logistics user and service provider surveys conducted for this background study on M&E confirmed that Cambodia suffers from significantly high logistics cost over sales compared to Vietnam and Thailand.**

Cambodia's logistics cost over sales is estimated at 20.52 percent, higher than Thailand (11.1 percent) and Vietnam (16.3 percent). In Association of Southeast Asian Nations (ASEAN), Thailand has the lowest logistics cost over sales while the Philippines has the highest logistics cost at more than 27 percent. It is possible that the archipelagic nature of the Philippines and Indonesia has a negative impact on logistics

cost as logistics activities tend to be more expensive in island countries. Logistics cost over sales is defined to have four components: (a) transport cost over sales, (b) warehousing cost over sales, (c) inventory carrying cost over sales, and (d) logistics administration cost over sales. In 2017, the value of logistics cost in Cambodia can be estimated at US\$1.96 billion of its total exports.

**Transport costs are the highest component of logistics costs followed by inventory carrying cost. Transport and warehousing cost in Cambodia is even higher than in Indonesia.** This means that reducing logistics cost in Cambodia is not just an issue of reducing transport cost. The high cost of inventory is a by-product of unreliability in the Cambodian logistics system. Another key issue is that logistics cost is driven by the sector in which the responding firm operates. Firms that operate in high-value sectors will often have lower logistics cost over sales compared with firms in lower-value sectors.

**The survey also confirmed that informal charges levied by government agencies remain significant.** Informal charges were estimated at about 48 percent of the logistics administration cost or represent about 4.38 percent of total annual logistics costs in 2017. A decomposition of these informal charges has been attempted to improve understanding of informal payments as a burden to the trading community. These informal charges were confirmed by industry stakeholders and logistic services providers and operators. Based on this estimate, the informal charges related to exports in Cambodia can therefore be estimated at US\$85,720,800 in 2017. Among others, trucking costs in fact are competitive compared to neighboring countries. Local logistics providers, however, have allegedly consolidated opaque practices whereby they produce formal invoices to also cover the informal costs they incur when clearing goods at the border. The informal costs are often hidden in lump-sum service contracts between industry and services operators by which services operators would absorb all informal payments in their final prices presented in the service contracts.

### **Reliability is the most important concern for export-oriented manufacturers in Cambodia.**

Reliability is the primary concern of manufacturing in the country with a share of 38 percent of the overall logistics performance that also includes time and cost dimensions. Lack of reliability in a national logistics system has a negative impact on the overall performance of logistics in a country. Poor reliability forces manufacturers, producers, and traders in the country to carry more inventory. The higher the inventory level, the higher the tied-up capital cost, thus affecting the overall logistics cost in the country. As such, reliability has to be given priority when policies are designed to improve logistics performance. If reliability is not improved, then cost issues cannot yet be given priority in the country. At the end of the day, high costs tend to be further transferred back to either customers or suppliers. In improving logistics, cost is still important but the level of cost is highly affected by the obtained reliability.

### **Cambodia is performing relatively well in cash conversion cycle (C2C) and delivery in full and on time (DIFOT).**

A comparison of these KPIs against selected ASEAN countries shows that Cambodia's C2C is shorter compared to other countries. It is possible because the country is still a cash economy where payment is often made upon delivery of goods and services, thus shortening cash flows. The country's DIFOT capability is slightly better than Indonesia. However, it is still one of the key weaknesses of the Cambodian logistics system. The DIFOT level for automotive is the highest in Cambodia. This is probably due to the nature of the automotive industry where just-in-time practices are the norm. It should also be noted that the textile and garment sectors have a relatively low DIFOT level compared with Indonesia and Thailand but higher than Vietnam. This is interesting as this sector is still relatively competitive compared to Vietnam even though there is not much difference in terms of logistics costs/sales. Food produce suffers from lower DIFOT compared with other selected ASEAN countries.

### **An M&E framework for Cambodia's logistics strategy has to be prepared based on the abovementioned baseline data to populate key**

**defined indicators at two levels: (a) macro-level indicators and (b) KPIs at the sector/firm level.**

The following recommendations are highlighted to elaborate the selection of indicators for the implementation of the M&E framework in the Cambodia Logistics Master Plan:

- (a) The macro-level indicators are defined to monitor and assess (i) national policies and interventions at the sector and country level and (ii) global comparisons and benchmarking. These indicators are mainly synthetic, combining several sub-indicators into a single indicator and can be obtained from secondary sources as described hereunder. Firm- and industry-level indicators are defined to capture and monitor sector strategies, supply chains solutions, intervention modes, and facility improvements. These indicators provide in-depth M&E of firm-level logistics performance and need to be obtained through automated data streams capturing real-time transactions through an automated logistics statistical system and surveys.
- (b) The existing macro-level indicators should be used—through global indicators such as the WEF - Global Competitiveness Indicators, International Institute for Management Development (IMD) - World Competitiveness Yearbook, World Bank's Doing Business, and the Logistics Performance Index (LPI)—to measure Cambodia's logistics performance. These include quality of infrastructure, time to export, control of international distribution, institutional capacity, ability to track and trace, and competence and quality of logistics service. Based on some of these indexes, it is apparent that Cambodia is making progress in many areas but still performs below the regional average on most logistics indicators.
- (c) The designing of KPIs needs to be realistic, implementable, and relevant. Key recommendations for KPI include the following:
  - (i) Indicators have to be tailored to

different class of users, both public and private.

- (ii) Collection, management, and timely processing of data on logistics are important to the success of the strategy.
- (iii) There is a need for a logistics data system to allow continuous monitoring and in-depth analysis that will support the development of more targeted logistics policies.
- (iv) It is important to automate data management, including big data techniques for the General Department of Logistics (GDL) under the Ministry of Public Work and Transport (MPWT), the lead agency and focal point for the logistics sector—including the planning and development of the logistics-related policies.
- (d) A draft design of the M&E framework for the Cambodia Logistics Master Plan has been prepared and aligned with five strategic areas (see table 19). The M&E framework includes some proposed macro-level indicators and KPIs.
- (e) In moving forward, it is necessary for GDL to continuously use the M&E system proposed here. There is a need for GDL to not only have institutional authority over the M&E system but also to develop a logistical statistical system that will compile the data and highlight areas for improvement. The purpose of M&E is not only to monitor and evaluate the national logistics master plan but also to collect key data that will be used for further policy decision making related to transport and logistics issues.
- (f) In terms of data collection frequency, GDL will need to collect the firm-level data at least once per year to reflect the ever-changing logistics situation in Cambodia. The first six months of the year could be used to collect data from users of logistics services and the last six months of the

year could be used to collect LSPs' data. GDL may consider collecting logistics performance data from specific sectors based on national priorities.

(g) GDL will be the secretariat of national logistics council (NLC) and national logistics steering committee (NLSC) and the lead agency and focal point for the logistics sector, including the planning and development of the logistics-related policies. Therefore, GDL responsibilities should include the maintenance of a logistics database that will reflect the developed M&E system. GDL will have to compile data from the WEF and the Doing Business database on an annual basis, collect data from the LPI on a biennial basis, and conduct their own surveys related to the performance of users of logistics and LSPs in the country on an annual basis. For the data collection to be sustainable, GDL should establish

Memorandums of Understandings (MoUs) with key private sector associations and academia to be successful in the collection of the necessary data.

(h) Collecting data will not be sufficient in itself and the development of a computerized system for logistics statistics will enable further in-depth analysis that will support the development of more targeted logistics policies. GDL would need to further explore the possibility of establishing an information technology (IT) system for transport and logistics-related statistics. Table E.1 describes the list of key actions needed for GDL to be able to monitor and evaluate the Cambodia Logistics Master Plan and other logistics-related policies in a sustainable manner. This table provides indications related to which actions will have the highest impact on the sustainability of the logistics M&E system for Cambodia.

**Table E.1: Recommended action plans for short-term and medium-term implementation of the M&E framework of the Cambodian logistics system**

	<b>Benefit</b>	<b>Cost</b>
<b>Short Term (2020)</b>		
• Train GDL staff to understand LPI methodology	High	Low
• Train GDL staff to understand WEF methodology	High	Low
• Train GDL staff to understand Trading Across Borders (TAB) methodology	High	Low
• Train GDL staff to deliver and analyze 'Users of Logistics Survey'	High	Low
• Train GDL staff to deliver and analyze 'LSP Survey'	High	Low
• Assign focal person for M&E system deployment	High	Low
• Establish MoUs with key business associations for data collection	High	Low
• Establish MoUs with other government agencies (such as Ministry of Commerce, Customs)	High	Low
• Train GDL staff to understand IMD methodology	Medium	Low
• Roadshow of Cambodia's 2017 logistics performance data	Medium	Medium
<b>Medium Term (2025)</b>		
• Establish Cambodia Logistics Statistical System (CLSS)	High	Medium
• Collect updated logistics statistics for CLSS	High	Medium
• Develop IT system for CLSS	High	High
• Revise and update Cambodia Logistics Master Plan	High	Medium
• Publish Cambodia's logistics report	High	Medium
• Establish MoU with IMD for inclusion in Competitiveness Report	Medium	High

# 1 INTRODUCTION

**Over the last 15 years, Cambodia has leveraged integration into the global marketplace to achieve economic growth.** Cambodia's exports of merchandise at US\$8.5 billion in 2015 stood at almost 50 percent of gross domestic product (GDP), reaching 159 destinations. Export performance was supported through integration into global value chains (GVCs), with substantial foreign direct investment (FDI) from East Asia and Pacific sources, and strong trade links with the United States of America and China. Exports, however, have been concentrated in textiles and garments, with little sophistication and technological content. Indeed, exporters in Cambodia are specialized in the cut-make-trim phase of the garment value chain—a segment with low profit margins. With, on the one hand, labor costs increasing and, on the other hand, prospective trade agreements between developed countries and several Association of Southeast Asian Nations (ASEAN) countries potentially eroding preferences and diverting trade, the competitive edge of Cambodia is at stake. This makes it compel for the country to seek new drivers of export growth in more sophisticated activities. The connectivity provided by the logistics sector has been and continues to be an important part of the Cambodia's growth storyline and global market integration.

**The logistics sector plays a leading role in facilitating, linking, and supporting the country's socioeconomic development and can enable Cambodia to take advantage of these opportunities.** However, local logistics service providers (LSPs) are at a disadvantage when it comes to offering modern logistics value-added

services and Cambodian manufacturers usually suffer from low levels of logistics performance and high logistics cost. The World Bank Group's 2017 Systematic Country Diagnostic (SCD) report highlights that poor quality of transport infrastructure and logistics services is a constraint to Cambodia's international trade and economic diversification. The Industrial Development Policy (IDP) paper of the Royal Government of Cambodia (RGC) also identified the transport and logistics sector as an important supporting industry in the implementation of the IDP.

**The logistics sector is important for the Cambodian economy in two significant ways.**

First, logistics is a major business expenditure, thereby affecting and also affected by other economic activities. Second, logistics supports the movement of many economic transactions; it is an important aspect of facilitating the sale of all goods and services. Improved logistics enable the seamless flow of goods, services, and persons.

**Assessing and measuring logistics performance in Cambodia is challenging because there are no readily available data on the system.**

Data on logistics system performance in Cambodia are limited and are not regularly collected. Only some secondary data that capture components of the logistics system are published by international organizations, typically for country benchmarking purposes. These include the Global Competitiveness Report (GCR) by the World Economic Forum (WEF), World Competitiveness Yearbook by International Institute for Management Development (IMD), and World Bank's Logistics Performance Index (LPI) and Doing Business Report. A lack of data compromises the quality of planning by both public and private sector stakeholders. It is on this basis that the public and private sector in Cambodia has long called for the development of a logistics monitoring

and evaluation (M&E) system based on sound data collection, management, and reporting systems. A robust M&E system would support exporters and importers by enabling them to have a better understanding of the current market situation and promote evidence-based decision making.

**The purpose of this background paper is to design an M&E framework for the proposed Cambodia Logistics Master Plan.** The framework is intended to support transport and logistics strategic planning, evidence-based policy making, and the monitoring of the implementation of policies related to logistics strategy. The success of the M&E system would be achieved through the establishment of a national system for collecting, processing, and publishing logistics statistics on an annual basis in Cambodia. This background paper is intended to provide the following:

- Reference to the logistics statistical system in policy and strategy documents on logistics in Cambodia

- Agreed indicators of logistics performance and guidelines for the collection, processing, and reporting of logistics data on an annual basis
- Published annual report on logistics statistics based on the survey result
- Enhanced capacity within General Department of Logistics (GDL) at the Ministry of Public Work and Transport (MPWT) for collecting and reporting logistics data

**The Government of Cambodia attaches a high priority to the Logistics Master Plan Development.** The process is led by the MPWT. The aim is to elaborate the main components of infrastructure, institutions, LSPs, shippers/ consignees, people, processes, and systems working together to support efficient and effective logistics.

# 2

## CONCEPTUAL FRAMEWORK FOR MONITORING AND EVALUATION OF LOGISTICS

**In Cambodia, logistics from a national perspective is much more than just transport infrastructure development.** Logistics at the national level is often referred to as the national logistics system and it can be described as having four key dimensions: (a) shippers, traders, and consignees who are the users of the national logistics system; (b) public, private sector LSPs; (c) provincial and national institutions, policies, and rules; and (d) transport and communications infrastructure. The integration of these four dimensions will reflect the logistics capability of a country. These four dimensions can combine to determine the performance of each part of the logistics system in terms of cost efficiency, responsiveness, reliability, and security. The sum of these dimensions will need to be integrated to reflect the logistics performance of the region(s) under study. Having high level of logistics performance would also mean that connectivity would be facilitated. It is therefore important to acknowledge that higher levels of logistics performance would lead to improved logistics connectivity (Banomyong, Thai, and Yuen 2015).

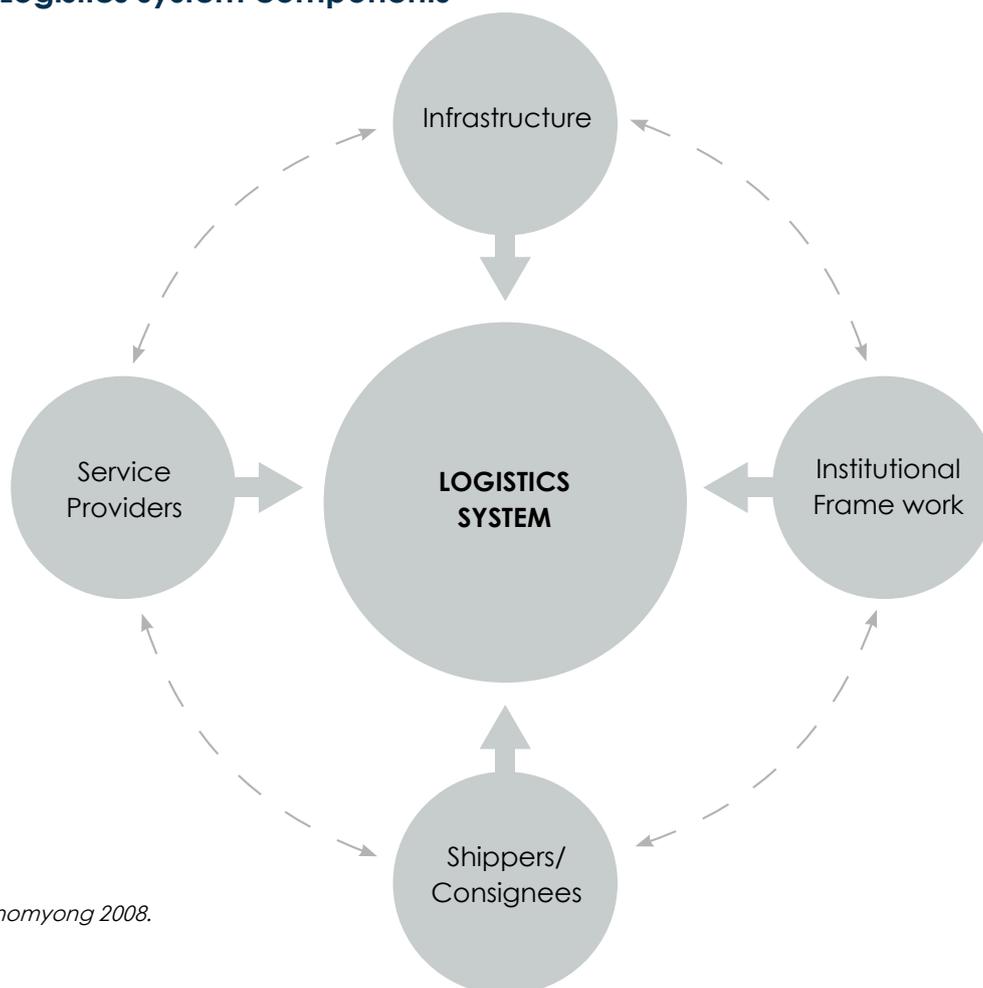
**The integration of the four dimensions is not yet fully mapped to build a good understanding of how the national logistics system performs.** A holistic approach to the collection of logistics statistics must be developed. These logistics statistics would need to address local firms' logistics capability, LSPs' expertise, infrastructure capacity and performance, and trade and transport facilitation institutional framework to understand current logistics capability. Currently, Cambodia does not have any logistics statistics; required performance data were collected to analyze the country's logistics performance on the four dimensions.

**Cambodia has attempted to analyze its national logistics system covering all four dimensions in the exercise to develop a Logistics Master Plan.**

An extensive assessment of the infrastructure quality and requirements is covered with the support of Japan International Cooperation Agency (JICA). A gap analysis of the legal and regulatory framework is also included in the master plan development. These assessments also respond to an update of Cambodia's trade competitiveness, while participating in the global and regional value chains. The assessment of the logistics performance is covered in this report through the collection of necessary performance statistics for the design of an M&E framework as inputs into the Logistics Master Plan.

The definition of logistics policy, coined by Banomyong (2008), is "the policy that involves the planning, facilitating, implementing, integrating and controlling the efficient, effective flow and storage of freight, people and information within and between logistics systems, for enhancing traders' competitiveness in order to increase national competitive advantage." This definition of logistics policy with its accompanying model describes the overall scope for the M&E system to be developed in Cambodia.

**Figure 1: Logistics system components**



Source: Banomyong 2008.

**Cambodia does not have an M&E framework to keep track of its actual logistics performance.**

Broadly, there are secondary sources of data and indicators capturing logistics performance at the macro level, but these indicators are not defined for its use in a more comprehensive framework. An M&E framework for logistics often refers to a set of indicators measuring key logistics quality and performance of the national logistics system. From international experiences, statistics for these four logistics dimensions of the national logistics system need to be defined and collected. An analysis of logistics quality and performance relies on these basic statistics. Because logistics has drawn much attention in countries and at the global level, there already exist a number of global indicators developed by institutions such as the WEF or the World Bank to broadly measure logistics quality and performance across the board. These indicators are already used by countries around the world for benchmarking purposes. The M&E system

can be separated into two different levels. The first level will be based on existing macro-level indicators which are high-level indicators available from secondary sources while the second level will focus more on the actual performance of the national logistics system with actual empirical data.

**At the macro level, these indicators are defined to focus on the four dimensions of the national logistics system.**

The indicators cover (a) quality of transport and communication infrastructure, (b) efficiency and effectiveness of public institutions and policy framework for trade and logistics, (c) quality and reliability of logistics services, and (d) performance and competitive advantages of industry actors: shippers and consignees. Through the literature, these indicators are commonly used and reported from the four most common sources in assessing the quality and performance of a national logistics system from a competitiveness perspective.

**Some existing secondary data are useful and can be used to update and analyze the aforesaid four broad dimensions of logistics performance.** Major internationally recognized databases, including the GCR by the WEF<sup>1</sup>, World Competitiveness Yearbook by IMD<sup>2</sup>, and LPI<sup>3</sup> and Doing Business by the World Bank<sup>4</sup>, provide some basic measurement to define macro-level indicators for a logistics M&E framework. For the Cambodian context, most existing

data are relevant for an annual assessment of logistics performance except for the LPI data which are published on a biennial basis. These secondary data are mainly compiled and used for cross-country benchmarking purposes. The only source of data that is missing is IMD's World Competitiveness Yearbook as it currently does not have data on Cambodia. Nonetheless the framework is valid and would be useful for the RGC to request IMD to include the country.

**Table 1: Scope of macro-level indicators for a logistics M&E system**

Dimension	Data	Source
<b>Infrastructure</b>	Quality of roads Quality of railroad infrastructure Quality of port infrastructure Quality of air transport infrastructure	2nd Pillar: Infrastructure GCR-WEF
	Roads density of the network Railroads density of the network Quality of air transportation Distribution infrastructure Logistics management Water transportation	Basic Infrastructure IMD World Competitiveness Yearbook
	Quality of trade and transport infrastructure	LPI
<b>Institutional and Policy Framework</b>	Irregular payments and bribes Burden of government regulation Efficiency of legal framework in settling disputes Efficiency of legal framework in challenging regulations Transparency of government policy making	1st Pillar: Institutions GCR-WEF
	Tariff barriers: Tariffs on imports: Most favored nation simple average rate Customs' authorities: Customs' authorities do facilitate the efficient transit of goods	Government Efficiency IMD World Competitiveness Yearbook
	Prevalence of trade barriers Trade tariffs Prevalence of foreign ownership Business impact of rules on FDI Burden of customs procedures	6th Pillar: Goods Market Efficiency GCR-WEF

1 GCR by the WEF at <https://www.weforum.org/reports/the-global-competitiveness-report-2016-2017-1>.

2 World Competitiveness Yearbook by the IMD <https://worldcompetitiveness.imd.org/>.

3 LPI by the World Bank at <https://lpi.worldbank.org/>.

4 DB by the World Bank at <http://www.doingbusiness.org/>

Dimension	Data	Source
	Time to Export (Border Compliance) Cost to Export (Border Compliance) Time to Export (Documentary Compliance) Cost to Export (Documentary Compliance) Time to Import (Border Compliance) Cost to Import (Border Compliance) Time to Import (Documentary Compliance) Cost to Import (Documentary Compliance)	Trading Across Borders (TAB) Doing Business
	Efficiency of customs and border clearance	LPI
<b>LSPs</b>	Competence and quality of logistics services	LPI
	Timeliness	LPI
<b>Shippers/ Consignees</b>	Local supplier quality State of cluster development Nature of competitive advantage Value chain breadth Control of international distribution Production process sophistication	11th Pillar: Business Sophistication GCR-WEF
	Ease of arranging competitively priced shipments	LPI
	Ability to track and trace consignments	LPI

Sources: Authors compiled from the GCR by the WEF; World Competitiveness Yearbook by IMD; and LPI and Doing Business by the World Bank.

**Some baseline data are drawn from these secondary data to populate macro-level indicators in the M&E framework.** By using these indicators and sources, it is important to understand the scaling used in the various reports to better understand what each score means. Tables 2 and 3 define the current baseline score of Cambodia's national logistics system as per

the proposed scope in table 1. In the GCR by the WEF, the indicators are constructed from surveys and always expressed as scores on a 1–7 scale, with 7 being the most desirable outcome. The LPI is also expressed on a 1–5 scale, with 5 being the highest score. The data in the Doing Business' TAB database illustrate actual values. Cambodia is not included in the World Competitiveness Yearbook by IMD.

**Table 2: Cambodia's baseline performance**

Dimension	High-level indicator score	Baseline score
<b>Infrastructure</b>	<b>WEF<sup>5</sup></b> Quality of overall infrastructure	3.4 out of 7
	<b>IMD<sup>6</sup></b> Distribution infrastructure Logistics management	No score for Cambodia
	<b>LPI<sup>7</sup></b> Quality of trade and transport infrastructure	2.36 out of 5
<b>Institutional and Policy Framework</b>	<b>WEF<sup>8</sup></b> Irregular payments and bribes	3.0 out of 7
	Burden of government regulation	3.4 out of 7
	Transparency of government policy making	3.2 out of 7

5 2nd Pillar: Infrastructure, GCR, WEF.

6 Basic Infrastructure, IMD World Competitiveness Yearbook.

7 LPI by the World Bank.

8 1st Pillar: Institutions, GCR, WEF.

	<b>IMD<sup>9</sup></b> Tariff barriers Customs' authorities	No score for Cambodia
	<b>WEF<sup>10</sup></b> Prevalence of trade barriers Burden of customs procedures	4.1 out of 7 2.9 out of 7
	<b>TAB<sup>11</sup></b> Time to Export (Border Compliance) Cost to Export (Border Compliance) Time to Export (Documentary Compliance) Cost to Export (Documentary Compliance) Time to Import (Border Compliance) Cost to Import (Border Compliance) Time to Import (Documentary Compliance) Cost to Import (Documentary Compliance)	48 hours US\$375 132 hours US\$100 8 hours US\$240 132 hours US\$120
<b>LSPs</b>	<b>LPI</b> Efficiency of customs and border clearance	2.62 out of 5
	<b>LPI</b> Competence and quality of logistics services Timeliness	2.6 out of 5 3.3 out of 5
<b>Shippers/ Consignees</b>	<b>WEF<sup>12</sup></b> Control of international distribution	3.0 out of 7
	<b>LPI</b> Ease of arranging competitively priced shipments Ability to track and trace consignments	3.11 out of 5 2.7 out of 5

Sources: Authors compiled from the GCR by the WEF; World Competitiveness Yearbook by IMD; and LPI and Doing Business by the World Bank

### There are two types of macro-level indicators.

Most identified macro-level indicators are based on perception scores, which offer a qualitative assessment of the situation. These scores are based on either a Likert type scale of 1–5 or 1–7 with 1 being the lowest score and 5 or 7 being the highest. The 1–5 scale is used in the World Bank's LPI while the 1–7 scale is used by the WEF in their GCR. The only indicators that are based on actual data are the ones provided by the TAB in the Doing Business annual database. However, the numbers provided by TAB have often been challenged from a methodological perspective.

### Cambodia has made some good progress in these indicators but its performance is

**still below average.** In the dimension for quality of infrastructure, Cambodia performs relatively at the average level but falls behind on railroad infrastructure. The institutional and policy dimension is assessed to have relatively poor performance with serious issues related to governance and transparency. Efficiency and effectiveness of policy and rules implementation still need further improvement. Irregular payments and bribes remain a serious issue in obtaining permits, certification, and inspections for industry traders and service providers. Despite huge investments in customs modernization and automation, the burden of customs procedures remains high and at an alarming level for traders and services providers.

9 Government Efficiency, IMD World Competitiveness Yearbook.

10 Sixth Pillar: Goods Market Efficiency, GCR, WEF.

11 TAB, DB by the World Bank.

12 11th Pillar: Business Sophistication, GCR, WEF.

The dimension for LSPs and industry traders such as shippers and consignees is not captured fully at this high level of indicators.

**From an infrastructure perspective, the obtained average score is slightly under the mean of each scale, thus indicating that infrastructure is perceived to be slightly below par and would need further improvement to obtain higher scores.** The same could also be said for the institutional environment where the average score is close to the mean for each scale. Irregular payment or bribes and burden of customs procedures under the WEF highlight that this is a challenging environment from an institutional perspective with lack of transparency and complicated government procedures not conducive to the establishment of a facilitating business environment.

**The LPI score is only slightly over the mean, which also reflects the limited efficiency of customs and border clearance.** Much is needed to improve the various scores in this dimension which require political will and implementation capabilities from related government agencies in Cambodia. The TAB

data describe the actual time and fee for border crossing in Cambodia and should be used as an initial baseline. LSPs' competence and timeliness, when combined, are again close to the mean, which indicates that much is still needed to improve the competence of LSPs in the country. The same can be also said for the shipper/consignee dimension.

**The overall observation of indicators and baseline data confirms that Cambodia has an average score on all the high-level indicators, thus indicating that the overall baseline performance is not so bad, but much more can be done to improve the various dimension scores.** Cambodia has made some progress, but a more in-depth assessment of its logistics performance is needed, especially in the two dimensions that require more performance data at the company and industry level: LSPs and logistic service users (LSP and shipper/consignee dimensions). Table 3 provides more details on the available indicators that can be used for the baseline assessment of Cambodia's logistics system based on the proposed scope for M&E in table 1.

**Table 3: Existing baseline indicators in 2017 for Cambodia's logistics M&E framework**

Dimension	Data	Score	Rank	Source
<b>Infrastructure</b>	Quality of overall infrastructure	3.4/7	99/137	2nd Pillar: Infrastructure GCR 2017– 2018-WEF <sup>13</sup>
	Quality of roads	3.2/7	99/137	
	Quality of railroad infrastructure	1.6/7	94/137	
	Quality of port infrastructure	3.7/7	81/137	
	Quality of air transport infrastructure	3.7/7	106/137	
		3.5/7	106/137	
	Quality of trade and transport infrastructure	2.36/5	99/160	LPI <sup>14</sup>
<b>Institutional and Policy Framework</b>	Irregular payments and bribes	3.0/7	113/137	1st Pillar: Institutions GCR 2017– 2018-WEF
	Burden of government regulation	3.4/7	68/137	
	Efficiency of legal framework in settling disputes	2.9/7	108/137	
	Efficiency of legal framework in challenging regulations	2.8/7	96/137	
	Transparency of government policy making	3.2/7	120/137	
	Prevalence of trade barriers	4.1/7	93/137	6th Pillar: Goods Market Efficiency GCR 2017– 2018-WEF
	Trade tariffs (% duty)	9.3%	96/137	
	Prevalence of foreign ownership	4.5/7	68/137	
	Business impact of rules on FDI	4.4/7	77/137	
	Burden of customs procedures	2.9/7	127/137	

<sup>13</sup> The score for the GCR-WEF is on a scale of 1–7 and the number of economies assessed is 137.

<sup>14</sup> The score for the LPI is on a scale of 1–5 and the number of economies assessed is 160.

	TAB (including hereunder)	n.a.	108/212	TAB
	Time to Export (Border Compliance - Hours)	48		Doing Business <sup>15</sup>
	Cost to Export (Border Compliance - US\$)	375		
	Time to Export (Documentary Compliance - Hours)	132		
	Cost to Export (Documentary Compliance - US\$)	100		
	Time to Import (Border Compliance - Hours)	8		
	Cost to Import (Border Compliance - US\$)	240		
	Time to Import (Documentary Compliance - Hours)	132		
	Cost to Import (Documentary Compliance - US\$)	120		
	Efficiency of customs and border clearance	2.62/5	77/160	LPI
<b>LSPs</b>	Competence and quality of logistics services	2.60/5	89/160	LPI
	Frequency with which shipments reach consignees within scheduled or expected delivery times	3.30/5	72/160	LPI
<b>Shippers/ Consignees</b>	Local supplier quality	3.6/7	122/137	11th Pillar: Business Sophistication GCR 2017– 2018-WEF
	State of cluster development	4.0/7	48/137	
	Nature of competitive advantage	3.2/7	90/137	
	Value chain breadth	3.6/7	90/137	
	Control of international distribution	3.0/7	115/137	
	Production process sophistication	3.1/7	114/137	
	Ease of arranging competitively priced shipments	3.11/5	52/160	LPI
Ability to track and trace consignments	2.70/5	82/160	LPI	

Sources: Authors compiled from the GCR by the WEF; World Competitiveness Yearbook by IMD; and LPI and Doing Business by the World Bank.

**These macro-level indicators reflect four dimensions of the national logistics system.**

However, it is not necessary to compile all these indicators for a rapid assessment of the logistics performance of Cambodia. The high-level indicators that need to be compiled

and monitored are described in table 4. These high-level indicators are sufficient to provide a snapshot of the current logistics capability of Cambodia without being submerged by numerous indicators.

**Table 4. High-level indicators for Cambodia**

Dimension	Indicator	Source
<b>Infrastructure</b>	Quality of overall infrastructure (3.4 out of 7)	WEF
<b>Institutional and Policy Framework</b>	Efficiency of customs and border clearance (2.62 out of 5)	LPI
<b>LSPs</b>	Competence and quality of logistics services (2.6 out of 5)	LPI
<b>Shippers/Consignees</b>	Ease of arranging competitively priced shipments (3.11 out of 5)	LPI
<b>Overall</b>	LPI score (2.8 out of 5)	LPI

<sup>15</sup> The DB database has 212 economies.

It can be observed that the majority of the high-level indicators come from the World Bank's LPI. The data are published once every two years. The infrastructure data come from the WEF and are published annually in their GCR.

To monitor these high-level indicators, it is necessary to understand how to interpret the meaning of the score for each of the indicators. The infrastructure score is based on a scale of 1–7, with 7 being the highest score. It is expected that over the next few years, this score will improve and be higher than the current score of 3.4 out of 7, which is slightly under the mean. The institutional, LSPs, and shippers/consignees scores are based on a Likert scale of 1–5, with 5 being the highest level. The expectation is that these scores will increase in the future and continue to increase to achieve an overall

higher logistics scores in the LPI. However, the interpretation of these scores still needs to be done carefully as all these scores are based on respondents' qualitative assessment and therefore they may vary highly depending on the respondents and their experience with the logistics system in Cambodia. The better the experience the higher the score.

It is important for the M&E system to focus on tracking the impacts of measures and interventions that are part of the Cambodia Logistics Master Plan. It is therefore critical for the M&E framework to be aligned with Cambodia's SMART Logistics 2025 strategies. The focal themes for SMART Logistics 2025 are described in table 5 while table 6 provides the development strategies.

**Table 5: Cambodia SMART Logistics 2025 focal themes**

	<b>Short Term (2018–2019)</b>	<b>Medium Term (2020–2022)</b>	<b>Long Term (2023–2025)</b>
<b>Theme</b>	Debottlenecking logistics	Reaching global standards	Activating logistics businesses
<b>Strategy 1</b>	Unblocking physical bottlenecks Early harvest to keep transport efficiency	Capacity and variety of transport mode to meet various transport demand	Capacity and variety of transport mode to meet various transport demand
<b>Strategy 2</b>	Unblocking physical bottlenecks at border areas and forming logistics complex	Improving border management and development of logistics complex	Achieving CCA/SSI <sup>16</sup> and developing regional logistics complex
<b>Strategy 3</b>	Preparing toward National Single Window (NSW) and trade facilitation	Progress of NSW and trade facilitation	NSW and ASW
<b>Strategy 4</b>	Human resource in logistics	Enhancement of logistics business	Expansion of variety of logistics services under market mechanism
<b>Strategy 5</b>	Strengthening logistics administration Unblocking regulatory obstacles to realize above	Building regulatory environment to realize above	Building regulatory environment to realize above

Sources: Draft report on proposed Cambodia Logistics Master Plan by JICA study team.

**Table 6: Cambodia logistics development strategies**

<b>Strategy 1</b>	<b>Development of Economic Corridors and International Gateways</b>
<b>Goal</b>	Strategy 1 aims at preparing efficient flow of goods and decreasing the transportation cost and time from physical improvement aspect. For this purpose, sufficient capacity of transport infrastructure and transport services should be prepared to meet future logistics demand. And, transport infrastructure should function well.
<b>Programs</b>	Road Transport Capacity Enhancement (P11) Promotion of Railways as an Emerging Mode (P12) Inland Water Transport Improvement (P13) Sihanoukville Port Development (P14) Phnom Penh Port Development (P15)
<b>Strategy 2</b>	<b>Development of Logistics Hubs for Multimodal Transport</b>
<b>Goal</b>	Strategy 2 aims at accelerating seamless cross-border transport at Bavet and Poipet to meet increased transport volume and attract more factories at the border areas. For this purpose, cross-border transport should be improved to reduce negative factors of congestion and less flexibility in border. It supports to maintain comparative advantages to locate factories in Cambodian side.  In addition, logistics complex, which is the designated area to integrate logistics activities such as dry port, ICD, truck terminal, supporting services including financing service, residence, and shopping, should be formed in major cities to optimize transport efficiency and cost.
<b>Programs</b>	Bavet Border Area Improvement (P21) Poi Pet Border Area Improvement (P22) Logistics Complex Development (P23) Air Cargo Development (P24) Urban Transport Facilitation (P25) Regional Development Support (P26)
<b>Strategy 3</b>	<b>Realization of Seamless Border Management</b>
<b>Goal</b>	Strategy 3 aims at preparing convenient and simplified export/import procedure toward NSW and ASW. The Government of Cambodia carries out computerization of export/import documentation and procedures. It is necessary for further acceleration of NSW with proper guide and support to respond to the speed and size of increased volume and variety of import/export goods.
<b>Programs</b>	Port Management Enhancement (P31) Introduction of Cambodia National Single Window (P32) Trade Support (P33) Trade Compliance Improvement (P34) Optimization of CamControl and Procedures (P35)
<b>Strategy 4</b>	<b>Capacity Enhancement of Logistics Service Providers</b>
<b>Goal</b>	Logistics infrastructure improvement (Strategy 1), logistics hub development (Strategy 2), and logistics efficiency improvement (Strategy 3) will exploit more business opportunity in logistics. Participants in the logistics market should be increased to generate reasonable competition to diversify the services and improve quality of services. At the same time, local logistics firms are relatively weak in terms of technical and financial capacity. It is accordingly important to take certain actions to support local firms to have more competitiveness in the market.

<sup>14</sup>Common Control Area (CCA)/Single Stop Inspection (SSI).

<b>Programs</b>	Establishment of Logistics Technical Training Center (P41) Public-Private Dialogue (P42) Logistics Business Modernization (P43) Introduction of Modern Logistics Technology (P44) Market Mechanism Enhancement (P45)
<b>Strategy 5</b>	<b>Strengthening of Legal and Institutional Framework</b>
<b>Goal</b>	Provision of solid legal background for logistics improvement Provision of self-sustained mechanism for implementation of master plan and future logistics improvements
<b>Programs</b>	Capacity Development of GDL (P51) Facilitation of Trade Agreements (P52) Enhancement of Borderless Transportation (P53) Optimization of Logistics Costs (P54)

Sources: Draft report on proposed Cambodia Logistics Master Plan by JICA study team.

**The detailed list of actions under each strategy needs to be monitored under the M&E system.**

In total, there are 25 programs that will need to be implemented under five key strategies. Table 6 provides the title, the goals, and related programs that will enable improved logistics in Cambodia as per the master plan. Under each

program there will be a number of actions that will need to be implemented. However, it is not necessary for the M&E system to track the implementation status of each actions as the M&E system should focus on the outputs and outcomes of each logistics development strategies.

# 3

## APPROACH TO LOGISTICS PERFORMANCE MONITORING IN CAMBODIA

**Despite the use of macro-level indicators, there are still important gaps in the data for monitoring the performance of logistics in Cambodia.** This particularly applies to data on service providers and shippers. The obtained macro-level data from these secondary sources are not detailed enough when trying to assess the actual logistics performance of a country. To assess logistics performance, it is important that a baseline is obtained from the perspective of users of logistics services as well as the actual capability of LSPs in the country. Currently, such data are not available for Cambodia and it is important to obtain an initial reference for further policy development purposes.

**Based on the results of a pilot survey, the logistics system of Cambodia is perceived as archaic, inefficient, ineffective, and costly to users.** Several complaints of users were reported through business and manufacturers'

associations in business dialogues. However, data on actual logistics performance in the country still remain limited and unclear to assess logistics capabilities in the country. Measuring and assessing logistics performance in terms of costs, time, and reliability is critical to pinpoint weakness and opportunity for improvement. Cambodia does not have a clear baseline of its actual logistics performance. It is therefore necessary to establish a baseline reference related to the logistics performance of manufacturing firms and LSPs and operators. This baseline will facilitate firms, industry representatives, and policy makers to work together in addressing the actual logistics weaknesses and sustaining strengths that may have been already existing in the logistics of manufacturing firms in the country.

**Cambodia requires a performance monitoring framework that can capture actual logistics performance by both users and providers of logistics services.** The users of logistics in a country are the exporters, importers, manufacturers, and traders. Table 7 describes the M&E framework that keeps track of the actual logistics performance in the country. The illustrated key performance indicators (KPIs) in table 7 are defined to capture the actual logistics capability of three key performance dimensions: logistics cost, time, and reliability. These data are not available through secondary sources and they have to be obtained through surveys.

**Table 7: M&E system KPIs**

Target Respondents	KPI	Source
Users of Logistics Services	<ul style="list-style-type: none"> <li>Logistics cost/sales</li> <li>Weight of logistics performance dimensions</li> <li>Delivery in full and on time (DIFOT)</li> <li>Damage rate</li> <li>Customer complaint rate</li> <li>Ratio of returns</li> <li>Forecast accuracy</li> <li>Cash conversion cycle (C2C)</li> <li>Outsourcing ratio</li> <li>Service-level agreements (SLAs)</li> <li>Warehousing, storage, and inventory costs</li> </ul>	Annual Survey

LSPs	<ul style="list-style-type: none"> <li>• Weight of logistics performance dimensions</li> <li>• Average order cycle time</li> <li>• Transportation lead time</li> <li>• DIFOT</li> <li>• Damage rate</li> <li>• C2C</li> <li>• Most common problems</li> </ul>	Annual Survey
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Sources: Banomyong 2008.

**To establish a baseline of Cambodia's current logistics performance, two sets of surveys were conducted, which are presented in table 7.** Even though many studies on the logistics sector have been conducted in Cambodia, almost all the empirical data were collected on an ad hoc basis to specifically serve the need of each study. The existing data are therefore scattered depending on the funding agency behind the study. Because logistics does not fall under the jurisdiction of one government institution, the RGC has never collected logistics-related data due to its confusing nature. There was no effort from the Government of Cambodia to establish a logistics database in the past, but the development of the national logistics plan has included the requirement for logistics statistics.

**The logistics data collected will focus on the performance of key logistics activities that reflects actual logistics performance of LSPs and users based on three performance dimensions: cost, time, and reliability.** Cambodia needs to have such kind of data to illustrate the actual logistics capability of LSPs when providing their services as well as to understand the logistics performance of shippers and consignees in the country.

**The logistics cost over sales reflects the logistics expenditures over the total sales.** Even though there are caveats in its usefulness, this indicator provides a strong reference on how expensive logistics is in Cambodia for the key industries. The time dimension is important as time-based competition has become the norm for enhanced competitiveness and it is important to know how quickly LSPs and shippers/consignees are able to respond to customers' request. The reliability dimension reflects the stability of the logistics system. Logistics planning

is impossible with low reliability and another sign of low reliability is high logistics costs. If data related to these performance dimension are not available, it will be impossible to know the logistics capability of firms in Cambodia.

### 3.1 METHODOLOGY AND DATA COLLECTION

**From an extensive literature review, two sets of questionnaires were designed and used to collect key data on Cambodia's logistics performance in three aspects: logistics costs, time, and reliability.** The first set of questionnaires was designed to capture an overview of manufacturing firms' logistics performance and costs. These include garments, electronic and electrical components, and agro-processing firms. The second set of questionnaires was designed to capture an overview of freight forwarders and LSPs' logistics performance and costs. Representatives from key professional organizations including GMAC, CAMTA, and CAMFFA in Cambodia were also involved in the validation and collection of the data.

**Data collection involved a total of 55 manufacturing and agro-processing firms and 43 LSPs responding to the questionnaires in Phnom Penh, Cambodia.** Data collection benefited from a strong collaboration with the Cambodian Chamber of Commerce (CCC), CAMFFA, CAMTA, GMAC, rice exporters' association, and so on. The data were collected through a workshop format in collaboration with the main related professional organizations in the country. The majority of respondents were small and medium size enterprises (SMEs). The data were collected during September 28

and 29, 2017, and on December 22, 2017. A total of more than 100 manufacturing and agro-processing firms and over 100 LSPs were approached based on a purposive approach focusing on the key strategic sectors of Cambodia.

### 3.2 CAMBODIA LOGISTICS COST OVER SALES

**Measuring the logistics cost over sales for key logistics performance in this study has four main components.** The first major component is the transport cost over sales, which includes both outbound and inbound costs of the surveyed manufacturing and agro-processing firm. The transport cost is relatively easier to find, as firms tend to outsource their transportation activities thus making the cost identification simpler. Warehousing cost over sales is the second main component, which covers all the activities related to the operations in the warehouse.

If the warehouse activity is outsourced, then again, the identification of the cost becomes easier but if done in-house then an estimate of the expenses of running the warehouse will be required. The third major component is the inventory carrying cost over sales and is probably the most challenging to gauge as it is the cost of having the physical inventory instead of using that money for other purpose, often referred to as the 'opportunity' cost.

**The fourth component is logistics administration cost over sales.** This last component is a proxy that is imputed by summing up the transport, warehouse, and inventory carrying cost. The logistics administration cost is equivalent to 10 percent of the sum. This is derived from the literature (Banomyong 2007), where it is stated that if transport, warehouse, and inventory carrying costs are obtained, then 90 percent of the total logistics cost is available.

**Table 8: Logistics costs over sales by components (%)**

Activity/Sales	Cambodia	Vietnam	Thailand	Indonesia	Philippines
Transport	8.95	7.04	5.57	8.81	10.71
Warehousing	3.69	3.78	2.49	3.45	5.20
Inventory carrying	6.00	4.00	2.04	7.19	8.78
Logistics administration	1.87	1.48	1.01	1.95	2.47
Logistics cost/sales	20.52	16.3	11.11	21.40	27.16

Sources: Survey data.

**Cambodia suffers from high level of logistics cost over sales compared to Vietnam and Thailand. Thailand has the lowest cost (illustrated in table 8). The Philippines has the highest logistics cost, at more than 27 percent.** It is possible that the nature of the Philippines and Indonesia has a negative impact on logistics cost as logistics activities tend to be more expensive in island countries.

**The transport cost has the highest ratio followed by the inventory carrying cost in Cambodia.**

**Transport and warehousing cost in Cambodia is even higher than in Indonesia.** This means that reducing logistics cost in Cambodia is not just an issue of reducing transport cost. The high cost of inventory is a by-product of unreliability in the logistics system in Cambodia. Another key issue is that logistics cost is driven by the sector in which the responding firm operates. Firms that operate in high-value sectors will often have lower logistics costs over sales compared with firms in lower-value sectors.

**Table 9: Logistics costs over sales by sectors (%)**

Sector	Cambodia	Vietnam	Thailand	Indonesia	Philippines
Automotive	15.83	33.55	14.75	16.84	23.08
Chemical products	16.50	27.14	10.09	27.01	43.3
Food	20.38	17.60	10.32	20.97	32.72
Textile and garment	13.06	14.30	8.55	16.01	20.35

Sources: Survey data.

**Overall, logistics cost by sectors in Cambodia is higher than in Thailand (table 9).** However, compared with Vietnam, there is just one sector with higher logistics costs over sales which is the food sector. Thailand is more industrialized with more value added in the final product and therefore benefits more from lower overall logistics costs over sales.

**In 2017, the value of logistics cost in Cambodia was estimated at US\$1.96 billion of its total exports.** According to the latest statistics from the Cambodian Ministry of Commerce, Cambodian exports grew by more than 19 percent in 2017, reaching US\$9.55 billion in value<sup>17</sup>. Compared with 2016 (last year), the total value of Cambodian exports increased by more than US\$1.5 billion. Table 10 provides a component breakdown costs for each key logistics activity.

**Table 10: Value of logistics costs (US\$)**

Activity	Cambodia
Transport	854,725,000
Warehousing	352,395,000
Inventory carrying	573,000,000
Logistics administration	178,585,000
<b>Logistics costs</b>	<b>1,958,705,000</b>

Sources: Calculated from table 8 and Cambodia 2017 export value.

**Informal charges levied by government agencies were estimated at about 48 percent of the logistics administration cost or represent about 4.38 percent of total annual logistics costs in 2017.** A decomposition of these informal charges has been attempted to improve understanding of informal payments as a burden to the trading community. These informal charges were confirmed by industry stakeholders and logistic services providers and operators. Based on this estimate, the informal charges in Cambodia can therefore be estimated at US\$85,720,800. Among others, trucking costs in fact are competitive compared to neighboring countries. Local freight forwarders, however, have allegedly consolidated opaque practices whereby they produce formal invoices to also cover the informal costs they incur when clearing goods at the border. The informal costs are often hidden in lump-sum service contracts between industry and services operators by which services operators would absorb all informal payments in their final prices presented in the service contracts.

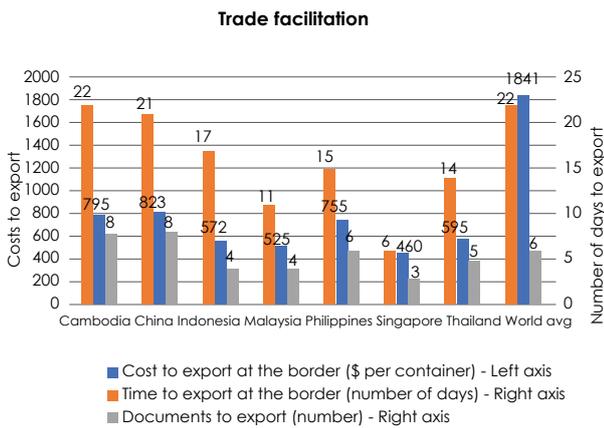
**For example, large garment exporters cannot deal with any informal payment transactions because they have to be compliant with international buyers' standard of garment sourcing.** This practice seems to have been formalized to ensure that garment exporters could not be scrutinized by auditing and compliance controls by independent third-party

<sup>17</sup> Press Article by the Ministry of Commerce in Khmer Times at <http://www.khmertimeskh.com/5098372/exports-19-percent-2017/> (accessed January 1, 2017).

organization, often nominated by international buyers in the garment supply chain. These, in fact, are suppliers of major international brands, which operate often in legal and social environments sanctioning corruptive practices.

Figures 2, 3 and 4 show that it cost US\$2,170 to transport a 40 ft container over land from Bangkok to Phnom Penh. This high cost could be substantially reduced if a combination of reforms could be implemented, including the option for trucks to travel across the countries without transloading the goods at the border, the consolidation of border control, and the implementation of a single inspection scheme. Likewise, customs clearance and CamControl clearance accounted for a share of 52 percent in an overall cost for a container imports to and exports from Phnom Penh through Sihanoukville.

**Figure 2: Costs and time to export**



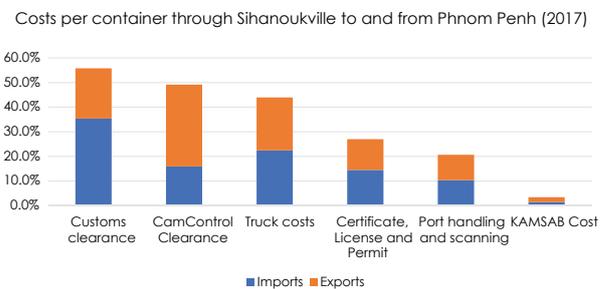
Sources: Authors compiled from the Cambodia Enterprise Survey database by the World Bank.

**Figure 3: Decomposition of land logistics costs between Bangkok and Phnom Penh**



Sources: : Estimated by authors.

**Figure 4 Decomposition of land transport costs between Sihanoukville and Phnom Penh**



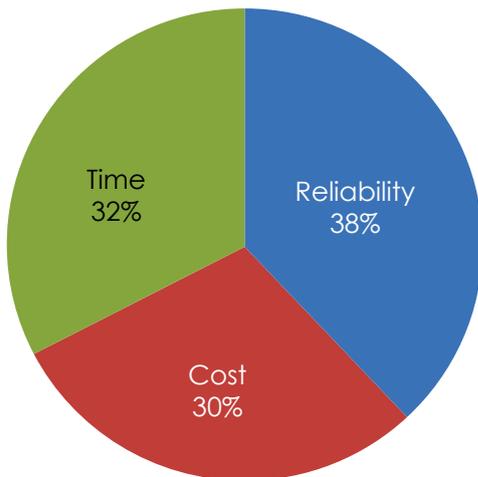
Sources: : Estimated by authors.

# 4

## LOGISTICS PERFORMANCE IN CAMBODIA

Logistics performance is composed of three main dimensions: cost, time, and reliability. The combination of these three dimensions reflects the overall performance. The survey respondents were asked to weigh which dimensions were the most important based on a multicriteria decision-making technique. Figure 4 illustrates how respondents in Cambodia consider overall logistics performance.

**Figure 5: Logistics performance dimensions**



Sources: : Source: Authors' estimates based on data from Logistics Users and Service Providers' Surveys in 2017.

**Table 11: Comparing KPIs of logistics**

KPIs	Cambodia	Vietnam	Thailand	Indonesia	Philippines
DIFOT (%)	<b>82.32</b>	90.99	87.84	81.92	89.62
Damage rate (%)	<b>3.46</b>	2.18	4.16	2.01	3.7
Customer complaint rate (%)	<b>5.80</b>	6.65	2.64	6.61	5.97
Ratio of returns (%)	<b>3.68</b>	2.26	3.58	3.55	5.15
Forecast accuracy (%)	<b>81.25</b>	75.53	84.40	81.68	80.15
C2C (days)	<b>9.49</b>	20.29	n.a.	19.00	21.77

Sources: : Survey data; World Bank logistics performance surveys; Banomyong, Huang, and Ha 2014.

Reliability is the most important issue for manufacturers in Cambodia, at 38 percent of the overall logistics performance. Cost is also important but high logistics cost is a by-product of low logistics reliability. If reliability is not improved, then cost issues cannot yet be given priority in the country. At the end of the day, high costs tend to be further transferred back to either customers or suppliers. In improving logistics, cost is still important but the level is highly affected by the obtained reliability.

Reliability is the main driver of logistics performance in the country and must be given priority when policies are designed to help improve logistics performance in the country. Table 11 describes the overall logistics performance of the respondents. A number of KPIs have been selected to reflect overall logistics performance in the country. The main KPIs are DIFOT, damage rate, customer complaint rate, ratio of returns, forecast accuracy, and the C2C.

A comparison of these KPIs against selected ASEAN countries shows that Cambodia is performing relatively well. Cambodia's C2C is shorter compared to other countries. It is possible because the country is still a cash economy where payment is often made upon delivery of goods and services. The country's DIFOT capability is slightly better than Indonesia. However, it is still one of the key weaknesses of the Cambodian logistics system.

**Cambodia's ratio of returns is the second highest, with the Philippines having the highest at 5.15 percent.** The accuracy of forecast in Cambodia is better than in Vietnam but worse than in Thailand. The various KPIs reflect different aspects of logistics performance. However, the focus of these KPIs is output based and they do not reflect inputs or processes. The C2C is the only indicator that reflects the financial dimensions in logistics while the other KPIs are all outputs of logistics activities.

**It is important to have the overall logistics cost and performance of the country but logistics cost and performance is dependent upon the industrial sectors.** One of the main components of logistics performance is DIFOT. Table 12 compares DIFOT capability of key industrial sectors in Cambodia and selected ASEAN countries. DIFOT is a critical KPI that reflects the output of a given logistics system.

**Table 12: Comparative assessment of DIFOT**

DIFOT in %	Cambodia	Vietnam	Thailand	Indonesia	Philippines
Automotive	<b>95.25</b>	98.00	82.45	83.75	97.18
Chemical products	<b>85.00</b>	100.00	87.57	81.17	85.71
Food	<b>74.92</b>	100.00	89.41	91.14	88.02
Textile and garments	<b>84.38</b>	80.00	90.66	93.75	91.55

Sources: : Survey data; World Bank logistics performance surveys; Banomyong, Huong, and Ha 2014.

**The DIFOT level for automotive is the highest in Cambodia.** This is probably due to the nature of the automotive industry where just-in-time practices are the norm. It should also be noted that the textile and garment sector has a relatively low DIFOT level compared with Indonesia and Thailand but higher than Vietnam. This is interesting as this sector is still considered competitive compared to Vietnam even though there is not much difference in terms of logistics costs/sales. Food produce suffers from lower DIFOT compared with other selected ASEAN countries.

#### **4.1 COMPARING THE RESULTS AGAINST THE WORLD BANK'S LPI**

**The LPI is a benchmarking tool created to help countries identify the challenges and opportunities they face in trade logistics and what they can do to improve their performance. The LPI 2016 allows for comparisons across 160**

**countries.** The LPI is based on a worldwide survey of operators on the ground (global freight forwarders and express carriers), providing feedback on the logistics 'friendliness' of the countries in which they operate and those with which they trade.

**Based on the surveys in this study, there is a difference in perception between the outsiders who provided data for Cambodia's LPI score and the respondents in this study who are physically located in the country.** The respondents were asked the same questions in these surveys as those in the World Bank's LPI survey. The objectives are to explore if there are gaps between the external and internal perception of logistics performance. It is important to note that the LPI score for Cambodia came from respondents who are outside the country while the obtained results in this report came from respondents who are physically located and operating in Cambodia. The highest score is 5 out of 5.

**Table 13: Perceived performance of Cambodia's logistics performance**

	<b>World Bank LPI 2016 perceived by respondents in major trading partners of Cambodia</b>	<b>Domestic respondents on international performance</b>	<b>Domestic respondents on domestic performance</b>
Logistics score	2.80/5	3.47/5	3.31/5
Country (equivalent based on scores)	Cambodia	Malaysia	Bahrain

Sources: : LPI database and data from the logistics users and services providers' surveys.

**On average, the Cambodian respondents' scores (3.47 for international and 3.31 for domestic logistics) are higher than Cambodia's LPI score of 2.8.** The highest gap is related to the effectiveness of customs and other authorities in customs services as well as the quality of logistics services and competence of service providers. The perception from respondents outside the country in the World Bank LPI is that these performance dimensions are low while the Cambodian respondents tend to assign higher scores for each performance dimension. The variation may be explained by the survey

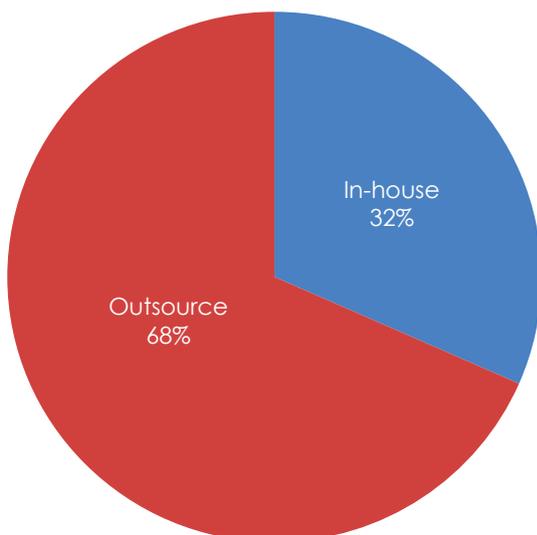
respondents' better familiarity and knowledge in handling these logistics performance dimensions compared to those that are outside the country. In the case of international logistics, the obtained score enables the country to be at the same rank as Malaysia, which is considered a logistics-friendly country and is the second highest ranked ASEAN country. The domestic logistics perception is at the same level as Bahrain, which has been classified as a 'consistent' performer in logistics. This means that the domestic logistics system is adequate but could still be further improved.

# 5

## OUTSOURCING AND LOGISTICS SERVICE PROVIDER CAPABILITY

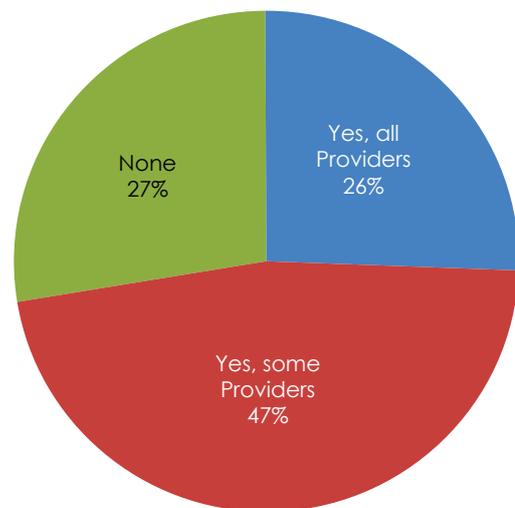
The ratio of logistics outsourcing in Cambodia is as high as 68 percent. The management of logistics can be done either in-house or outsourced. The trend in Cambodia is to outsource logistics activities (Figure 3). This is in line with the data obtained from Vietnam and Thailand where outsourcing is the common way of managing logistics. The rationale behind outsourcing may be varied such as trust in the capability of LSPs from the perspective of users or because the administrative procedures are too complex to be done in-house. Outsourcing does help firms focus on their core business and use LSPs as partners in sustaining competitive advantage.

**Figure 6: Outsourcing ratio**



Sources: Authors' estimates based on data from Logistics Users and Service Providers' Surveys in 2017.

**Figure 7: Service-Level Agreement**



Sources: : Authors' estimates based on data from Logistics Users and Service Providers' Surveys in 2017.

**In Cambodia, the most outsourced logistics activities are international transport, customs brokerage, and domestic transport.** Transport-related activities are the most outsourced activities as it is a burden for the manufacturers to manage their own vehicle fleet and ocean vessels. However, value-added logistics services and logistics information technology (IT) systems are mostly done in-house. International logistics activities tend to be more outsourced as respondents do not own the main means of transport whereas domestic logistics can often be handled in-house. Table 14 describes the main outsourced logistics activities and the extent of their outsourcing.

**Table 14: Level of outsourcing (%)**

Dimensions/Percentage of outsourcing	0 percent	1 to 25 percent	26 to 50 percent	51 to 75 percent	76 to 100 percent
Domestic transportation	9.5	20.6	15.0	24.1	16.3
Domestic freight forwarding	9.5	20.6	5.0	13.8	17.0
International transportation (including international freight forwarding)	5.4	5.9	10.0	17.2	22.7
Warehouse and inventory management	24.3	14.7	30.0	10.3	9.2
Value-added services, such as product finishing and customization	24.3	14.7	20.0	6.9	7.1
Logistics IT systems	18.9	14.7	10.0	6.9	12.1
Customs brokerage	8.1	8.8	10.0	20.7	15.6
Total	100	100	100	100	100

Sources: Survey data.

**The results are quite surprising as more than one quarter of respondents do not have any type of SLAs with their service providers.** It is important for users of LSPs to have SLAs in the provision of logistics services. However, this is probably because outsourced logistics is often done on an ad hoc basis based on the current need and is not considered of strategic value but more of an expense that needs to be reduced. Figure 6 also describes that one out of four respondents has SLAs with all his/her service providers. This ratio is quite low. Almost half have SLAs with some of their providers.

**The capability of service providers in Cambodia is not so different from other ASEAN countries.**

Table 15 details information on the logistics

performance of LSPs in Cambodia and selected ASEAN countries. The most important KPI is the DIFOT KPI, which reflects the overall capability to deliver in full and on time as per customers' instructions. The C2C for Cambodia is 6 days and this seems to be even better than in other countries. However, the trend is that this C2C will increase in terms of time due to higher levels of customers' expectations in the provision of logistics services. LSPs in Cambodia are subject to a number of constraints that affect their capability to provide their services efficiently and effectively. This is described in figure 7. Survey data show that delays in customs processes are considered the most problematic.

**Table 15: Comparative assessment of logistics performance of service providers**

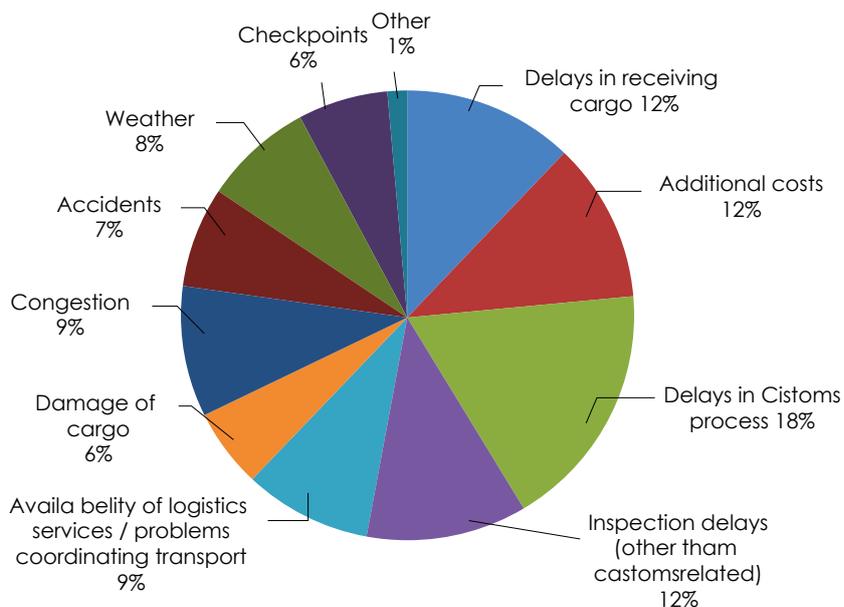
KPIs	Cambodia	Vietnam	Thailand	Indonesia	Philippines
Average order cycle time (days)	<b>6.48</b>	6.35	7.13	10.27	8.71
Transportation lead time (days)	<b>4.16</b>	4.35	n.a.	9.06	4.97
C2C (days)	<b>6.03</b>	16.10	13.09	13.85	12.29
DIFOT (%)	<b>85.84</b>	93.70	86.6	81.13	85.12
Damage rate (%)	<b>2.86</b>	n.a.	n.a.	3.71	2.37

Sources: Cambodia LSP survey data; World Bank logistics performance surveys; Banomyong, Huang, and Ha 2014.

**Other inspection delays when combined with customs delays represent almost a third of the most common problems faced by local LSPs.** Apart from delays in processes, traffic congestions and the weather also affect the

performance of surveyed providers. These are issues that are outside the control of the service provider; some are fabricated such as delays but some are natural such as the weather.

**Figure 8: Most common problems faced by LSPs**



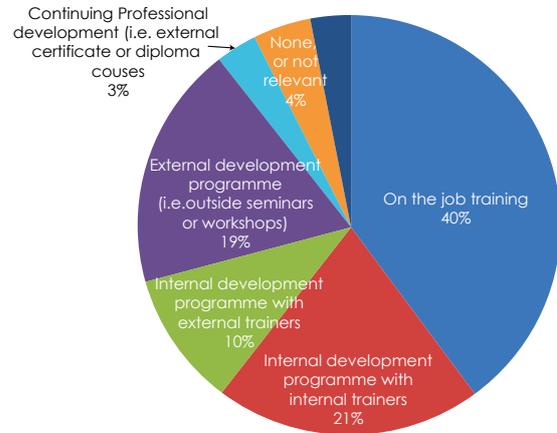
Sources: Cambodia LSP survey data.

# 6

## LOGISTICS HUMAN RESOURCES

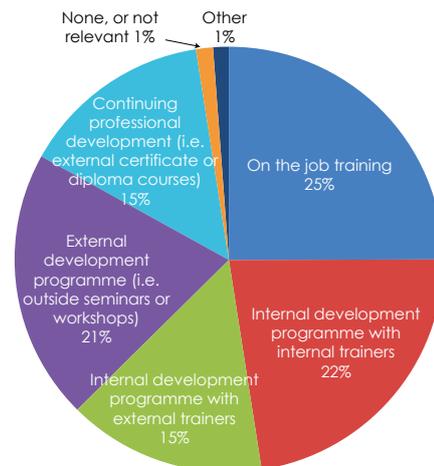
**Logistics human resources development in Cambodia is not considered a major issue from both manufacturing and LSP respondents.** When asked about the availability of finding logistics talent, most respondents perceived that most logistics skills were easily available (illustrated in figure 8 and figure 9). This is quite interesting as in most of the ASEAN countries, logistics human resource is difficult to find, especially those who are qualified. However, observation on the ground and discussion with specific LSPs highlighted some human resource issues as in the case of truck drivers. It is true that there is an availability of truck drivers in the country but they are not skilled and one of the identified priorities is to professionalize the logistics labor force. Even though this is based on anecdotal evidence, logistics jobs are still considered more operational than strategic and therefore are less attractive to the workforce. It is interesting to note that most firms still have to provide on-the-job training to their logistics-related staff, which means that there is a lack of formalized logistics training in the country and more is needed to further develop the logistics competency of the Cambodian workforce.

**Figure 9: Logistics skills development in Cambodia perceived by manufacturing firms**



Sources: Manufacturing survey data.

**Figure 10: Logistics skills development in Cambodia perceived by LSPs**



Sources: Source: LSP survey data.

# 7

## MONITORING AND EVALUATION FRAMEWORK FOR CAMBODIA LOGISTICS MASTER PLAN

**The Cambodia Logistics Master Plan should include infrastructure, institutions, LSPs, shippers/consignees, people, processes, and systems working together to support an efficient and effective logistics system in the country.** Controls are normally put in place to monitor weaknesses, poor designs in implementation strategies, and improper actions. Based on continuous monitoring, these weaknesses or shortfalls against targets or objectives set can then be corrected or revised to continually improve logistics performance. This reduces the risk of exposure and strengthens the response to needs.

**Monitoring and evaluation are integral parts of policy deployment and provide a link between planning and implementation.** While monitoring focuses on the activities and outputs, evaluation focuses on the outcome and goals. Monitoring needs to be initiated during the conceptual phase of the Cambodia Logistics Master Plan and needs to be built into the design of the assessment and planning phases of each logistics development strategies. It focuses on inputs and outputs and tracks and assesses implementation of the five logistics strategies. It is the continuous process of gathering logistics and strategy deployment information to measure against preset KPIs, benchmarks, or previous baseline indicators that are aligned to the goals and objectives of the Cambodia Logistics Master Plan.

**Evaluation, like monitoring, is a continuous process. The evaluation of the quality of the**

**output should be undertaken in such a way that shortcomings can be identified and corrected.** Evaluation should also feed into the planning process continuously so that the planned method of the intervention can be modified to take into account realities and conditions on the ground. Evaluation provides a tool for management to ensure that focus is maintained.

### Box 1: Definition

For GDL at the MPWT, M&E may be defined as follows:

**Monitoring.** To review on a continuous basis the degree to which the logistics action plan is completed and if targets are being met. This allows corrective actions to be taken.

**Evaluation.** To analyze progress toward meeting established objectives and goals. It can be done on an ad hoc or yearly basis. Evaluation provides feedback on whether strategies have been met and the reasons for success or failure. It should also provide direction for future strategies.

**Performance management should align the performance metrics to the objectives and the strategies of the Cambodia Logistics Master Plan.** Together monitoring and evaluation provide the basis for performance management. Aligning performance metrics ensures that M&E is targeted and does not disrupt the program. Without alignment, it is difficult to know what to monitor or how to evaluate it.

### Box 2: Objective of monitoring and evaluation

Monitoring and evaluation has several purposes:

- To provide information to policy makers on the logistics capability of Cambodia
- To make an objective evaluation of logistics services and activities
- To identify problems in the national logistics system
- To determine what measures are needed for improving logistics
- To understand the need to increase or decrease resources
- To evaluate performance of individual logistics performance dimensions

The obtained KPIs are used to measure the proposed five strategies<sup>18</sup> developed for the Cambodia Logistics Master Plan. By doing this, both quantitative and qualitative measures can be monitored for the national logistics system. The high-level secondary indicators and the

empirical KPIs need to be aligned with the key developed logistics strategies. Table 16 aligns the identified indicators to be used in the M&E system as per the strategies developed for the Cambodia Logistics Master Plan.

**Table 16: M&E framework for the proposed Cambodia Logistics Master Plan**

		Baseline indicators' score	Source
<b>Strategy 1</b>	<b>Development of Economic Corridors and International Gateways</b>		
<b>Programs</b>	Road Transport Capacity Enhancement	Quality of roads: 3.2 out of 7	2nd Pillar GCR-WEF
	Promotion of Railways as an Emerging Mode	Quality of railroad infrastructure: 1.6 out of 7	
	Inland Water Transport Improvement	Quality of port infrastructure: 3.7 out of 7	
	Sihanoukville and Phnom Penh Port Development	Road fatality rate <sup>19</sup> (%) (2013): 17.4	World Health Organization (WHO)
		Access to road transport networks (%): tbd	MPWT
		Fuel cost as a percentage share of total transport costs (%): tbd	
		CO2 emissions from transport (% of total fuel combustion) (2014): 63.61	World Development Indicators (WDI)
		Container port traffic (TEU: 20-foot equivalent units: thousand): 482	
<b>Strategy 2</b>	<b>Development of Logistics Hubs for Multimodal Transport</b>		
<b>Programs</b>	Bavet Border Area Improvement	Quality of overall infrastructure: 3.4 out of 7	2nd Pillar GCR-WEF
	Poi Pet Border Area Improvement	Quality of air transport infrastructure: 3.7 out of 7	
	Logistics Complex Development		
	Air Cargo Development		
	Urban Transport Facilitation		
	Regional Development Support		
<b>Strategy 3</b>	<b>Realization of Seamless Border Management</b>		

18 The five strategies are presented in table 6.

19 Estimated road traffic death rate (per 100,000 population) by WHO: <http://apps.who.int/gho/data/node.main.A997>.

<b>Programs</b>	Port Management Enhancement Introduction of Cambodia National Single Window Trade Support Trade Compliance Improvement Optimization of CamControl and Procedures	Irregular payments and bribes: 3 out of 7 Burden of government regulation: 3.4 out of 7 Efficiency of legal framework in settling disputes: 2.9 out of 7 Efficiency of legal framework in challenging regulations: 2.8 out of 7 Transparency of government policy making: 3.2 out of 7	1st Pillar GCR-WEF
		Efficiency of customs and border clearance: 2.62 out of 5	LPI
<b>Strategy 4</b>	<b>Capacity Enhancement of Logistics Service Providers</b>		
<b>Programs</b>	Establishment of Logistics Technical Training Center Public-Private Dialogue Logistics Business Modernization Introduction of Modern Logistics Technology	Competence and quality of logistics services: 2.6 out of 5 Timeliness: 3.3 out of 5	LPI
	Market Mechanism Enhancement	Local supplier quality: 3.6 out of 7 State of cluster development: 4 out of 7 Nature of competitive advantage: 3.2 out of 7 Value chain breadth: 3.6 out of 7 Control of international distribution: 3 out of 7 Production process sophistication: 3.1 out of 7	11th Pillar GCR-WEF
		Ability to track and trace consignments: 2.7 out of 5	LPI
		Average order cycle time: 6.48 days Transportation lead time: 4.16 days C2C: 6.03 days DIFOT: 84.84% Damage rate: 2.86%	LSP Survey
		Outsourcing ratio: 68% SLAs: 26% DIFOT: 82.32% Damage rate: 3.46% Customer complain rate: 5.8% Ratio of returns: 3.68% Forecast accuracy: 81.25% C2C: 9.49 days	User survey
		Percentage of service firms (excluding retails) identifying an inadequately educated workforce as a major constraint (2016): 14.5% Percentage of manufacturing firms identifying an inadequately educated workforce as a major constraint (2016): 20.3%	World Bank Enterprise Survey
<b>Strategy 5</b>	<b>Strengthening of Legal and Institutional Framework</b>		

<b>Programs</b>	Capacity Development of GDL	Prevalence of trade barriers: 4.1 out of 7 Trade tariffs (% duty): 9.3%	6th Pillar GCR-WEF
	Facilitation of Trade Agreements	Prevalence of foreign ownership: 4.5 out of 7	
	Enhancement of Borderless Transportation	Business impact of rules on FDI: 4.4. out of 7 Burden of customs procedures: 3.2 out of 7	
	Optimization of Logistics Costs	Time to Export (Border Compliance): 48 hours Cost to Export (Border Compliance): US\$375 Time to Export (Documentary Compliance): 132 hours Cost to Export (Documentary Compliance): US\$100 Time to Import (Border Compliance): 8 hours Cost to Import (Border Compliance): US\$240 Time to Import (Documentary Compliance): 132 hours Cost to Import (Documentary Compliance): US\$120	TAB Doing Business
	Ease of arranging competitively priced shipments: 3.11 out of 5	LPI	
	Logistics cost/sales: 20.52%	User Survey	

**The proposed improvement targets for Cambodia are based on the requirements that by 2020, the country would need to achieve at least the mean score for each indicator that is under the mean.** For those indicators that are over the mean, it is important that their score increase by at least one unit. The 2025 targets should be based on at least another unit increase for each of the indicators. For the TAB indicators, it is necessary to reduce the time and cost by at least 10 percent for the year 2020 and a further 10 percent by the year 2025.

**A comprehensive breakdown of the key scores and targets that Cambodia will need to achieve is proposed.** Table 17 provides the baseline and proposed targets of each area that Cambodia will need to review and include in the Cambodia Logistics Master Plan. The advantage of using this reference table is that data are available on a yearly basis from the GCR-WEF as well as from the Doing Business database. The ranking data from the LPI will only be available every two years and the overall objective for Cambodia is to become a country with 'consistent' logistics as a short- to

medium-term goal instead of being just a partial performer as identified by the current version of the LPI. Improvement in the obtained score will be derived from the successful implementation of the five logistics development strategies devised for the Cambodia Logistics Master Plan.

**These improvement targets are compiled based on the current logistics performance of key ASEAN countries with the best in class being used as a target.** However, for certain KPIs it might not be possible to improve their score due to the nature of the sector or the economy. The empirical KPI data will also need to be collected on a regular basis. The proposed time period between surveys should be one year and achievable targets should be devised to render logistics in Cambodia more competitive. Both surveys should be conducted by GDL with assistance and cooperation from the key private sector stakeholders and local academia. Table 19 is the M&E framework for Cambodia based on the five logistics strategies of the proposed Cambodia Logistics Master Plan with targets to be achieved to realize Cambodia's SMART Logistics Vision 2025.

**Table 17: Improvement target scores for Cambodia**

Dimension	Indicators	Baseline in 2017	2020	2025
<b>Infrastructure</b>	WEF (out of 7)			
	Quality of overall infrastructure	3.4	3.5	4
	Quality of roads	3.2	3.5	4
	WHO/MPWT: Road fatality rate <sup>20</sup> (%) (2013)	17.4	16.50	16.00
	MPWT: Access to road transport networks (%)	tbd	tbd	tbd
	MPWT: Fuel cost as a percentage share of total transport costs (%)	tbd	tbd	tbd
	WDI: CO2 emissions from transport (% of total fuel combustion) (2014)	63.61	62.00	61.00
	Quality of railroad infrastructure	1.6	3.5	4
	Quality of port infrastructure	3.7	4	5
	WDI: Container port traffic (TEU: 20-foot equivalent units: thousand)	482	530	600
	Quality of air transport infrastructure	3.7	4	5
	<b>LPI (out of 5)</b>			
	Quality of trade and transport infrastructure	2.36	2.5	3
<b>Institutional and Policy Framework</b>	<b>WEF (out of 7)</b>			
	Irregular payments and bribes	3	3.5	4
	Burden of government regulations	3.4	3.5	4
	Efficiency of legal framework in settling disputes	2.9	3.5	4
	Efficiency of legal framework in challenging regulations	2.8	3.5	4
	Transparency of government policy making	3.2	3.5	4
	Prevalence of trade barriers	4.1	5	6
	Trade tariffs (% duty)	9.3	8	7
	Prevalence of foreign ownership	4.5	5	6
	Business impact of rules on FDI	4.4	5	6
	Burden of customs procedures	3.2	3.5	4
	TAB			
	Time to Export (Border Compliance - Hours)	48	43	38
	Cost to Export (Border Compliance - US\$)	375	338	304
	Time to Export (Documentary Compliance - Hours)	132	118	106
	Cost to Export (Documentary Compliance - US\$)	100	90	81
	Time to Import (Border Compliance - Hours)	8	7	6
	Cost to Import (Border Compliance - US\$)	240	216	194
	Time to Import (Documentary Compliance - Hours)	132	118	106

20 Estimated road traffic death rate (per 100 000 population) by WHO: <http://apps.who.int/gho/data/node.main.A997>.

	Cost to Import (Documentary Compliance - US\$)	120	108	97
	<b>LPI (out of 5)</b>			
	Efficiency of customs and border clearance	2.62	3	4
<b>LSPs</b>	<b>LPI (out of 5)</b>			
	Competence and quality of logistics services	2.6	3	4
	Timeliness	3.3	4	5
<b>Shippers/ Consignees</b>	WEF (out of 7)			
	Local supplier quality	3.6	4	5
	State of cluster development	4	5	6
	Nature of competitive advantage	3.2	3.5	4
	Value chain breadth	3.6	4	5
	Control of international distribution	3	3.5	4
	Production process sophistication	3.1	3.5	4
	<b>LPI (out of 5)</b>			
	Ease of arranging competitively priced shipments	3.11	3.5	4
	Ability to track and trace consignments	2.7	3.5	4
<b>Human Capital</b>	World Bank Enterprise Surveys			
	Percentage of manufacturing firms identifying an inadequately educated workforce as a major constraint (2016)	20.3	19	18
	Percentage of service firms (excluding retails) identifying an inadequately educated workforce as a major constraint (2016)	14.5	13	12

**Table 18: Improvement targets for firm- and industry-level logistics performance**

Survey	KPIs	Baseline in 2017	2020	2025	Unit
Users of Logistics Services	Logistics cost/sales	20.52	16	11	%
	DIFOT	82.32	85	90	%
	Damage rate	3.46	2	2	%
	Customer complain rate	5.80	2	2	%
	Ratio of returns	3.68	2	2	%
	Forecast accuracy	81.25	85	90	%
	C2C	9.49	10	10	Days
	Outsourcing ratio	68	75	80	%
	Warehousing and storage costs	9.69	7.00	5.00	%
	SLAs	26	50	80	%
LSPs	Average order cycle time	6.48	6	6	Days
	Transportation lead time	4.16	4	4	Days
	DIFOT	85.84	90	95	%
	Damage rate	2.86	2	2	%
	C2C	6.03	6	6	Days

**Table 19: Cambodia's M&E framework with targets**

		Indicator	2017	2020	2025
<b>Strategy 1</b>	<b>Development of Economic Corridors and International Gateways</b>				
<b>Programs</b>	Road Transport Capacity Enhancement	WEF: Quality of roads	3.2	3.5	4
		WHO/MPWT: Road fatality rate <sup>21</sup> (%) (2013)	17.4	16.50	16.00
		MPWT: Access to road transport networks (%)	tbd	tbd	tbd
		MPWT: Fuel cost as a percentage share of total transport costs (%)	tbd	tbd	tbd
		WDI <sup>22</sup> : CO2 emissions from transport (% of total fuel combustion) (2014)	63.61	62.00	61.00
	Promotion of Railways as an Emerging Mode	WEF: Quality of railroad infrastructure	1.6	3.5	4
	Inland Water Transport Improvement	WEF: Quality of port infrastructure	3.7	4	5
Sihanoukville and Phnom Penh Port Development	WDI: Container port traffic (TEU: 20 ft equivalent units: thousand)	482	500	620	
<b>Strategy 2</b>	<b>Development of Logistics Hubs for Multimodal Transport</b>				
<b>Programs</b>	Bavet Border Area Improvement	LPI: Quality of trade and transport infrastructure	2.36	2.5	3
	Poi Pet Border Area Improvement	LPI: Quality of trade and transport infrastructure	2.36	2.5	3
	Logistics Complex Development	LPI: Quality of trade and transport infrastructure	2.36	2.5	3
	Air Cargo Development	WEF: Quality of air transport infrastructure	3.7	4	5
	Urban Transport Facilitation	LPI: Quality of trade and transport infrastructure	2.36	2.5	3
	Regional Development Support	WEF: Quality of overall infrastructure	3.4	3.5	4
<b>Strategy 3</b>	<b>Realization of Seamless Border Management</b>				
<b>Programs</b>	Port Management Enhancement	WEF: Irregular payments and bribes:	3	3.5	4
	Introduction of Cambodia National Single Window	WEF: Burden of government regulation	3.4	3.5	4
	Trade Support	WEF: Efficiency of legal framework in settling disputes	2.9	3.5	4
	Trade Compliance Improvement	WEF: Efficiency of legal framework in challenging regulations	2.8	3.5	4
	Optimization of Camcontrol and Procedures	WEF: Transparency of government policy making	3.2	3.5	4
		LPI: Efficiency of customs and border clearance	2.62	3	4

21 Estimated road traffic death rate (per 100,000 population) by WHO: <http://apps.who.int/gho/data/node.main.A997>.

22 World Development Indicators (WDI) at <http://wdi.worldbank.org>.

Strategy 4	Capacity Enhancement of Logistics Service Providers				
Programs	Establishment of Logistics Technical Training Center	LPI: Competence and quality of logistics services	2.6	3	4
		LSP: Average order cycle time (days)	6.48	6	6
		LSP: Transportation lead time (days)	4.16	4	4
		LSP: C2C (days)	6.03	6	6
		LSP: DIFOT (%)	84.84	90	95
		LSP: Damage rate (%)	2.86	2	2
		World Bank-Enterprise Surveys (ES): Percentage of service firms (excluding retails) identifying an inadequately educated workforce as a major constraint (2016)	14.5	13	12
	Public-Private Dialogue	WEF: Efficiency of legal framework in challenging regulations	2.8	3.5	4
		WEF: Transparency of government policy making	3.2	3.5	4
	Logistics Business Modernization	User: Outsourcing ratio (%)	68	75	80
User: SLAs (%)		26	50	80	
User: DIFOT (%)		82.32	85	90	
User: Damage rate (%)		3.46	2	2	
User: Customer complaint rate (%)		5.8	2	2	
User: Ratio of returns (%)		3.68	2	2	
User: Forecast accuracy (%)		81.25	85	90	
User: C2C (days)		9.49	10	10	
World Bank-ES: Percentage of manufacturing firms identifying an inadequately educated workforce as a major constraint (2016)		20.3	19	18	
Introduction of Modern Logistics Technology	LPI: The ability to track and trace consignments	2.7	3.5	4	
Market Mechanism Enhancement	WEF: Local supplier quality	3.6	4	5	
	WEF: State of cluster development	4	5	6	
	WEF: Nature of competitive advantage	3.2	3.5	4	
	WEF: Value chain breadth	3.6	4	5	
	WEF: Control of international distribution	3	3.5	5	
	WEF: Production process sophistication	3.1	3.5	5	

<b>Strategy 5</b>	<b>Strengthening of Legal and Institutional Framework</b>				
Programs	Capacity Development of GDL				
	Facilitation of Trade Agreements	TAB: Time to Export (Border Compliance) (Hours)	48	43	38
		TAB: Cost to Export (Border Compliance) (US\$)	375	338	304
		TAB: Time to Export (Documentary Compliance) (Hours)	132	118	106
		TAB: Cost to Export (Documentary Compliance) (US\$)	100	90	81
		TAB: Time to Import (Border Compliance) (Hours)	8	7	6
		TAB: Cost to Import (Border Compliance) (US\$)	240	216	194
		TAB: Time to Import (Documentary Compliance) (Hours)	132	118	106
		TAB: Cost to Import (Documentary Compliance) (US\$)	120	108	97
		TAB: Time to Import (Documentary Compliance) (US\$)	4.1	5	6
		WEF: Prevalence of trade barriers	9.3	8	7
		WEF: Trade tariffs (% duty)	4.5	5	6
		WEF: Prevalence of foreign ownership	4.4	5	6
		WEF: Business impact of rules on FDI	3.2	3.5	4
		WEF: Burden of customs procedures			
Enhancement of Borderless Transportation	LPI: Ease of arranging competitively priced shipments	3.11	3.5	4	
Optimization of Logistics Costs	User: Logistics cost/sales (%)	20.52	16	11	
	User: Warehousing and inventory costs (%)	9.69	7.00	5.00	

# 8

## SUMMARY AND RECOMMENDATIONS

**Logistics cost over sales in Cambodia is higher compared to other ASEAN countries such as Vietnam and Thailand.** However, it needs to be understood that logistics cost over sales depends highly on the sector under study. Low sectors tend to have lower logistics cost as it is not surprising to find within the same sector a range of different logistics cost over sales due to the value-added activities included in the production of the goods. It is true that the logistics cost over sales in Cambodia is overall higher than those of other countries, but the context of each country is also different.

**This high logistics cost is not only a by-product of the country's geography but also because of logistics reliability issues.** Low levels of logistics reliability indirectly affect the level of logistics cost as it forces manufacturers to have higher levels of inventory. Uncertainties in the national logistics system have a negative impact on the overall performance of logistics in the country. This forces manufacturers, producers, and traders in the country to carry more inventory. The higher the inventory level, the higher the inventory carrying cost, thus affecting the overall logistics cost in the country.

**There are variations in sectors in terms of logistics performance and cost.** This is not surprising as different sectors have different requirements related to logistics performance. There is also a need to better understand the commodity flows to and from origins and destinations in the country to improve not only logistics but also to reduce the cost of access. A reliable domestic logistics network is a first step in the right direction.

**From the perspective of users of the country's logistics system, reliability is the dominant logistics performance issue. Low level of reliability directly affects logistics capability.** This forces the users to rely more on inventory and warehouses. Relying on inventory and larger

warehouses to keep the goods directly increases logistics cost for the users. Manufacturers in Cambodia require that logistics should be reliable to be able to plan efficiently and rely on a more consistent logistics system.

**The focus of logistics outsourcing is still on traditional logistics activities whereas the outsourcing of value-added activities is not widespread in the country.** This is probably because most respondents are not familiar with the types of value-added services that are offered by LSPs in the country. Logistics outsourcing can be expanded but this needs to be supported with LSP quality assurance scheme.

**The logistics performance of the country, based on the same methodology as the World Bank's LPI, is perceived to be higher than the World Bank's LPI score and ranking.** This result is valid for both international and domestic logistics. The rationale behind the higher score is because respondents who are directly dealing with logistics issues in the country are much more familiar with the logistics context in Cambodia than those who are answering the World Bank's LPI from outside the country. There is a need to harmonize the domestic's logistics with international logistic standards to enable seamless connectivity between domestic and international logistics.

**There is a need to further explore and understand supply chain issues in both the best and worst performing sectors.** Lessons can be learned, and best practices transferred to other less-performing sectors. This is part of the peer group methodology approach that enables logistics knowledge transfer. The studies of domestic logistics corridors would also be necessary to identify waste in the system.

**The focus in terms of logistics improvement therefore needs to be on assuring the reliability and the removal of uncertainties in the logistics system in Cambodia.** If reliability of logistics improves in the country, then local manufacturers and LSPs can design and plan more optimized logistics systems and consequently become more competitive. This will also mean that logistics costs of key sectors

in the country can be reduced. Focus can then move to time-based competition to sustain the country's competitiveness.

**To move forward, it is necessary for GDL to continuously use an appropriate M&E system such as the one proposed here.** There is a need for GDL to not only have the institutional authority over the M&E system but also to develop a logistical statistical system that will compile the data and highlight areas for improvement. The purpose of M&E is not only to monitor and evaluate the national logistics master plan but also to collect key data that will be used for further policy decision making related to transport and logistics issues.

**In terms of data collection frequency, GDL will need to collect the firm-level data at least once per year to reflect the ever-changing logistics situation in Cambodia.** The first six months of the year could be used to collect data from users of logistics services and the last six months of the year could be used to collect LSPs' data. GDL may consider collecting logistics performance data from specific sectors based on national priorities.

**GDL will be the secretariat of national logistics council (NLC) and national logistics steering committee (NLSC) the lead agency and focal point for the logistics sector, including the**

**planning and development of the logistics-related policies.** Therefore, GDL responsibilities should include the maintenance of a logistics database that will reflect the developed M&E system. GDL will have to compile data from the WEF and the Doing Business database on an annual basis, collect data from the LPI on a biennial basis, and conduct their own surveys related to the performance of users of logistics and LSPs in the country. For the data collection to be sustainable, GDL should establish Memorandums of Understandings (MoUs) with key private sector associations and academia to be successful in the collection of the necessary data.

**Collecting data will not be sufficient in itself and the development of a computerized system for logistics statistics will enable further in-depth analysis that will support the development of more targeted logistics policies.** GDL would need to further explore the possibility of establishing an IT system for transport and logistics related statistics. Table 20 describes the list of key actions needed for GDL to be able to monitor and evaluate the Cambodia Logistics Master Plan and other logistics-related policies in a sustainable manner. Table 20 provides indications related to which actions will have the highest impact on the sustainability of the logistics M&E system for Cambodia

**Table 20: Action plans for sustainability of Cambodia's logistics M&E system**

	<b>Benefit</b>	<b>Cost</b>
<b>Short Term (2020)</b>		
• Train GDL staff to understand LPI methodology	High	Low
• Train GDL staff to understand WEF methodology	High	Low
• Train GDL staff to understand TAB methodology	High	Low
• Train GDL staff to deliver and analyze 'Users of Logistics Survey'	High	Low
• Train GDL staff to deliver and analyze 'LSP Survey'	High	Low
• Assign focal person for M&E system deployment	High	Low
• Establish MoUs with key business associations for data collection	High	Low
• Establish MoUs with other government agencies (such as Ministry of Commerce, Customs)	High	Low
• Train GDL staff to understand IMD methodology	Medium	Low
• Roadshow of Cambodia's 2017 logistics performance data	Medium	Medium
<b>Medium Term (2025)</b>		
• Establish Cambodia Logistics Statistical System (CLSS)	High	Medium
• Collect updated logistics statistics for CLSS	High	Medium
• Develop IT system for CLSS	High	High
• Revise and update Cambodia Logistics Master Plan	High	Medium
• Publish Cambodia's logistics report	High	Medium
• Establish MoU with IMD for inclusion in Competitiveness Report	Medium	High

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# ANNEX 1: PROPOSED INTEGRATED M&E FRAMEWORK

The development of an M&E framework is an integral part of policy deployment and provides links between planning and implementation. While monitoring focuses on activities and outputs, evaluation focuses on the outcome and goals.

Monitoring needs to be initiated during the conceptual phase of the Cambodia Logistics Master Plan and needs to be built into the design of the assessment and planning phases of each logistics development strategies. The M&E framework will focus on inputs, outputs, and outcomes. It will track and assess implementation of the five key national logistics strategies. It is the continuous process of gathering logistics and strategy deployment information to measure against preset KPIs, benchmarks, or previous reference indicators that are aligned with the goals and objectives of the Cambodia Logistics Master Plan.

In terms of data/information gathering, there are four key levels to be considered.

**Table 1.1: Four key dimensions**

<p><b>(1) Project Level</b> (project inputs, outputs, and outcomes)</p>	<p><b>(2) Sector/Strategic Level</b> Sector-specific factual data (for example, roads, ports, and railways)</p>
<p><b>(3) Firm Level</b> Firms' perceptions, logistics performance, logistics issues, proposed solutions (perceptions and factual)</p>	<p><b>(4) Macroeconomic Level</b> Macroeconomic statistics, international indexes (for example, LPI, WEF, Doing Business)</p>

## 1. PROJECT-LEVEL M&E

- **Inputs/activities.** Project inputs are often financial resources and human resources.

Inputs could be raw materials, but it is hard to monitor. For monitoring the Logistics Master Plan, the prime focus is to check that project activities are completed as originally planned or delayed. For example, feasibility study was completed or delayed; procurement was successfully completed or delayed. If external donors are involved, the amount of disbursements could be monitored. Monitoring can be done through the use of a completion rate ratio that tracks the project over its life cycle.

- **Outputs.** Outputs are often physical infrastructure, such as kilometer of roads constructed, port terminal constructed, or any other physical facilities to be built with master plan projects. In line with procurement plans, the approximate completion date can be targeted (that is, baseline) and the success/failure can be measured against the preset target. The completion and usage of the obtained tangible asset can be used to monitor the outputs.
- **Outcomes.** Outcomes can be the level of traffic, volumes of cargo, time and cost reductions, customer satisfaction, and so on. These outcome targets are slightly remote from the specific project. Sometimes outcome targets can be achieved without building the infrastructure or vice-versa (that is, outcome targets cannot be achieved despite the project completion in time). This is often because macroeconomic conditions have changed, or the level of the private sector demand was not in line with what was assumed in the feasibility study.

There are two types of outcomes from projects:

- (a) Outcome specific to the project itself such as increase in average speed in case of new road network
- (b) Overall outcome such as GDP growth or improved global efficiency ranking

## 2. SECTOR- AND STRATEGY-LEVEL M&E

The detailed list of actions under each strategy needs to be monitored under the M&E system. In total, there are 25 programs that will need to be implemented under five key strategies. Under each program, there will be a number of actions that will need to be implemented. Some strategy focuses on one sector (that is, Strategy 3 focuses on CIQ) while other may focus on more than one sector such as Strategy 1 that includes roads, railways, and ports).

## 3. FIRM-LEVEL M&E

The logistics sector is private sector led and it is always good to communicate with the private sector. Traditionally, public-private dialogue focuses on key logistics issues raised by the private sector and possible solutions that both parties can agree to. Apart from formalized public-private dialogue, it is necessary to conduct surveys because surveys can be conducted on a confidential basis and tend to provide both quantitative and qualitative data. The sample number is important to make the results statistically robust rather than having just one voice representing the whole business community in question.

## 4. MACRO-LEVEL MONITORING AND EVALUATION

Policy makers need to see the impact of logistics improvements at the macro level. Results can come from two different levels.

- Macroeconomic indicators. It is important that logistics improvements lead to improved macroeconomic indicators of

Cambodia such as enhanced GDP or gross national product (GNP) growth. If these enhancements take place, then the country will become more attractive to foreign investors and possibly would lead to more manufacturing production in Cambodia and consequently leading to higher economic growth. Improvements in the logistics system would also result in more trade activities with more import and export. Such macroeconomic statistics can be identified by industry (for example, agriculture, industry) and by location (for example, exports from PoiPet and Bavet separately).

- International indexes. The second monitoring level is international logistics indexes. These indexes are often perception indicators by foreign logistics professionals, which may not actually reflect improvements on the ground but are still useful to monitor the changes in scores and rankings. These indicators are defined to cover all four dimensions of the national logistics system. These indicators have been defined to measure
  - o Quality of transport and communication infrastructure;
  - o Efficiency and effectiveness of public institutions and policy framework for trade and logistics;
  - o Quality and reliability of logistics services; and
  - o Performance and competitive advantages of industry actors: shippers and consignees.

Key indicators for the four levels can be defined to rely on some existing sources to update and analyze the quality and performance of a national logistics system. Table 1.2 defines key indicators and data to update them when available on an annual basis except for the LPI data which are published on a biennial basis.

**Table 1.2: Key monitoring indicators for M&E framework**

	<b>Phase I (Monitored in 2020)</b>	<b>Phase II (Monitored in 2023)</b>	<b>Phase III (Monitored in 2026)</b>	<b>Key Indicators</b>
<b>Strategy 1</b>	<p><b>Outputs</b></p> <ul style="list-style-type: none"> <li>• Central subcorridor upgrading (roads) completed</li> <li>• Intercorridor link and southern coastal corridor (roads) upgrading completed</li> <li>• Northern line (rail) completed</li> <li>• Mekong River basic improvements made with sound regulatory framework</li> </ul> <p><b>Outcomes</b></p> <ul style="list-style-type: none"> <li>• Road traffic increase</li> <li>• Reduction of travel time</li> <li>• Railway cargo traffic increase</li> <li>• Inland water transportation traffic increase</li> </ul>		<p><b>Outputs</b></p> <ul style="list-style-type: none"> <li>• Completion of central subcorridor and intercorridor link and local links</li> <li>• Additional railway lines to be constructed</li> </ul> <p><b>Outcomes</b></p> <ul style="list-style-type: none"> <li>• Further increase of road traffic volumes</li> <li>• Further reduction of travel time</li> <li>• Increase in trade volumes of rural areas/ provinces</li> <li>• Increased agricultural exports</li> </ul>	<p><b>Key Logistics Data</b></p> <ul style="list-style-type: none"> <li>• Reduced time of travel (by corridor)</li> <li>• Improved road safety level (by corridor)</li> <li>• Railway cargo volumes (by line)</li> <li>• Inland water cargo volumes</li> <li>• Reduction of unit costs of logistics</li> </ul> <p><b>2nd Pillar GCR-WEF</b></p> <ul style="list-style-type: none"> <li>• Quality of roads: 4 out of 7</li> <li>• Quality of railroad infrastructure: 4 out of 7</li> <li>• Quality of port infrastructure: 5 out of 7</li> </ul> <p><b>WHO</b></p> <ul style="list-style-type: none"> <li>• Road fatality rate<sup>23</sup> (%) (2013): 17.4</li> </ul> <p><b>MPWT</b></p> <ul style="list-style-type: none"> <li>• Access to road transport networks (%): tbd</li> <li>• Fuel cost as a percentage share of total transport costs (%): tbd</li> </ul> <p><b>WDI</b></p> <ul style="list-style-type: none"> <li>• CO2 emissions from transport (% of total fuel combustion) (2014): 63.61</li> </ul>
<b>Strategy 2</b>	<p><b>Outputs</b></p> <ul style="list-style-type: none"> <li>• Port investment implementation</li> <li>• New policy on PP truck restrictions</li> <li>• New less than container load (LCL) pilot project implemented</li> <li>• Water taxi starts operations</li> </ul> <p><b>Outcomes</b></p> <ul style="list-style-type: none"> <li>• Port handling volumes</li> </ul>	<p><b>Outputs</b></p> <ul style="list-style-type: none"> <li>• Port investment implementation without delays</li> <li>• Expansion of air cargo warehouse</li> </ul> <p><b>Outcomes</b></p> <ul style="list-style-type: none"> <li>• Border crossing time reduced</li> <li>• Border crossing cost reduced</li> </ul>	<p><b>Outputs</b></p> <ul style="list-style-type: none"> <li>• PP logistics complex completed</li> <li>• Agricultural logistics center completed</li> </ul> <p><b>Outcomes</b></p> <ul style="list-style-type: none"> <li>• PP local transportation costs reduced</li> <li>• PP transit time to be reduced</li> </ul>	<p><b>Key Logistics Data</b></p> <ul style="list-style-type: none"> <li>• Port handling volumes</li> <li>• Modal shift policy (%)</li> <li>• Land border handling volumes</li> <li>• Border crossing time</li> <li>• Border crossing costs</li> <li>• Transit time in PP</li> <li>• Transit volumes through Cambodia</li> <li>• Time to access main ports/land borders</li> <li>• Cost to access main ports/land borders</li> </ul>

23 Estimated road traffic death rate (per 100,000 population) by WHO: <http://apps.who.int/gho/data/node.main.A997>.

	<b>Phase I (Monitored in 2020)</b>	<b>Phase II (Monitored in 2023)</b>	<b>Phase III (Monitored in 2026)</b>	<b>Key Indicators</b>
	<ul style="list-style-type: none"> <li>Port safety records</li> <li>Border crossing time</li> </ul>			<b>2nd Pillar GCR-WEF</b> <ul style="list-style-type: none"> <li>Quality of overall infrastructure: 4 out of 7</li> <li>Quality of air transport infrastructure: 5 out of 7</li> </ul> <b>WDI</b> <ul style="list-style-type: none"> <li>Container port traffic (TEU: 20-foot equivalent units: thousand): 482</li> </ul>
<b>Strategy 3</b>	<b>Outputs</b> <ul style="list-style-type: none"> <li>EDI and port management system (phase I) completed</li> <li>Best trader initiative improved</li> </ul> <b>Outcomes</b> <ul style="list-style-type: none"> <li>Reduced time of obtaining approvals</li> <li>Reduction of errors in customs systems</li> <li>Improved efficiency of border control agencies</li> <li>Reduction of waiting time at the borders</li> </ul>	<b>Outputs</b> <ul style="list-style-type: none"> <li>CNSW (phase II) completed</li> <li>AEO fully implemented</li> </ul> <b>Outcomes</b> <ul style="list-style-type: none"> <li>Reduction of time and costs of crossing borders through CNSW</li> <li>Increased number of exemptions for AEO traders</li> </ul>	<b>Outputs</b> <ul style="list-style-type: none"> <li>Port EDI fully implemented</li> <li>CNSW fully implemented</li> </ul> <b>Outcomes</b> <ul style="list-style-type: none"> <li>Significant reduction of total logistics costs related to border control agencies (official and unofficial)</li> </ul>	<b>Key Logistics Data</b> <ul style="list-style-type: none"> <li>Number of documents needed for exports</li> <li>Number of documents needed for imports</li> <li>Reduced time to obtain government approvals</li> <li>Reduced border crossing costs</li> <li>Improved efficiency of border control agencies</li> <li>Reduction of waiting time at the borders</li> <li>Ratio of official versus unofficial</li> </ul> <b>1st Pillar GCR-WEF</b> <ul style="list-style-type: none"> <li>Irregular payments and bribes: 4 out of 7</li> <li>Burden of government regulation: 4 out of 7</li> <li>Efficiency of legal framework in settling disputes: 4 out of 7</li> <li>Efficiency of legal framework in challenging regulations: 4 out of 7</li> <li>Transparency of government policy making: 4 out of 7</li> <li>Efficiency of customs and border clearance: 4 out of 5 (LPI)</li> </ul>
<b>Strategy 4</b>	<b>Outputs</b> <ul style="list-style-type: none"> <li>Basic education programs established</li> <li>TWG (with the private sector) established</li> </ul>	<b>Outputs</b> <ul style="list-style-type: none"> <li>Sustainable education system to be established</li> <li>Grading system established</li> </ul>	<b>Outputs</b> <ul style="list-style-type: none"> <li>Grading system is established</li> <li>Outcomes</li> <li>Quality of LSPs to be improved significantly</li> </ul>	<b>Key Logistics Data</b> <ul style="list-style-type: none"> <li>Numbers of truck drivers with certification</li> <li>Average age of trucks</li> <li>Market liberalization level</li> <li>Number of public-private joint initiatives</li> </ul>

	<b>Phase I (Monitored in 2020)</b>	<b>Phase II (Monitored in 2023)</b>	<b>Phase III (Monitored in 2026)</b>	<b>Key Indicators</b>
	<p><b>Outcomes</b></p> <ul style="list-style-type: none"> <li>• Increased skills of truck drivers</li> <li>• Modernization of trucks</li> </ul>	<p><b>Outcomes</b></p> <ul style="list-style-type: none"> <li>• Quality of LSPs to be improved</li> <li>• Increased competition (and reduced costs) among LSPs</li> </ul>		<p><b>11th Pillar GCR-WEF</b></p> <ul style="list-style-type: none"> <li>• Local supplier quality: 5 out of 7</li> <li>• State of cluster development: 6 out of 7</li> <li>• Nature of competitive advantage: 4 out of 7</li> <li>• Value chain breadth: 5 out of 7</li> <li>• Control of international distribution: 4 out of 7</li> <li>• Production process sophistication: 4 out of 7</li> </ul> <p><b>LPI</b></p> <ul style="list-style-type: none"> <li>• Competence and quality of logistics services: 4 out of 5</li> <li>• Timeliness: 5 out of 5</li> <li>• Ability to track and trace consignments: 4 out of 5</li> </ul> <p><b>LSP Survey</b></p> <ul style="list-style-type: none"> <li>• Average order cycle time: 6 days</li> <li>• Transportation lead time: 4 days</li> <li>• C2C: 6 days</li> <li>• DIFOT: 95%</li> <li>• Damage rate: 2%</li> </ul> <p><b>User Survey</b></p> <ul style="list-style-type: none"> <li>• Outsourcing ratio: 80%</li> <li>• SLAs: 80%</li> <li>• DIFOT: 90%</li> <li>• Damage rate: 2%</li> <li>• Customer complain rate: 2%</li> <li>• Ratio of returns: 2%</li> <li>• Forecast accuracy: 90%</li> <li>• C2C: 10 days</li> </ul> <p><b>World Bank Enterprise Survey</b></p> <ul style="list-style-type: none"> <li>• Percentage of service firms (excluding retails) identifying an inadequately educated workforce as a major constraint (2016): 14.5%</li> <li>• Percentage of manufacturing firms identifying an inadequately educated workforce as a major constraint (2016): 20.3%</li> </ul>

	<b>Phase I (Monitored in 2020)</b>	<b>Phase II (Monitored in 2023)</b>	<b>Phase III (Monitored in 2026)</b>	<b>Key Indicators</b>
<b>Strategy 5</b>	<p><b>Outputs</b></p> <ul style="list-style-type: none"> <li>• Institutional framework for MP implementation established</li> <li>• All trade and transport agreements ratified</li> </ul> <p><b>Outcomes</b></p> <ul style="list-style-type: none"> <li>• Increased number of cross-border transport permits</li> <li>• Reduction of state-controlled logistics costs</li> </ul>	<p><b>Outputs</b></p> <ul style="list-style-type: none"> <li>• Institutional framework for MP implementation fully functional</li> <li>• All trade and transport agreements enforced</li> </ul> <p><b>Outcomes</b></p> <ul style="list-style-type: none"> <li>• Increased number of cross-border transport permits and vehicles</li> <li>• Reduction of state-controlled logistics costs significantly</li> </ul>		<p><b>Key Logistics Data</b></p> <ul style="list-style-type: none"> <li>• Topics resolved after consultations</li> <li>• Implementation status of laws and regulations</li> <li>• Implementation status of international agreements (that is, IWT with Vietnam)</li> <li>• Trade volumes (bilateral and nationwide)</li> <li>• Increased number of cross-border transport permits</li> </ul> <p><b>6th Pillar GCR-WEF</b></p> <ul style="list-style-type: none"> <li>• Prevalence of trade barriers: 6 out of 7</li> <li>• Trade tariffs (% duty): 7%</li> <li>• Prevalence of foreign ownership: 6 out of 7</li> <li>• Business impact of rules on FDI: 6 out of 7</li> <li>• Burden of customs procedures: 4 out of 7</li> </ul> <p><b>TAB/Doing Business</b></p> <ul style="list-style-type: none"> <li>• Time to Export (Border Compliance): 38 hours</li> <li>• Cost to Export (Border Compliance): US\$304</li> <li>• Time to Export (Documentary Compliance): 106 hours</li> <li>• Cost to Export (Documentary Compliance): US\$81</li> <li>• Time to Import (Border Compliance): 6 hours</li> <li>• Cost to Import (Border Compliance): US\$194</li> <li>• Time to Import (Documentary Compliance): 106 hours</li> <li>• Cost to Import (Documentary Compliance): US\$97</li> </ul> <p><b>LPI</b></p> <ul style="list-style-type: none"> <li>• Ease of arranging competitively priced shipments: 4 out of 5</li> </ul> <p><b>User Survey</b></p> <ul style="list-style-type: none"> <li>• Logistics cost/sales: 11%</li> <li>• Warehousing and inventory costs: 9.69%</li> </ul>

# ANNEX 2: USERS OF LOGISTICS SERVICES SURVEY

## Manufacturing Logistics Survey in Cambodia 2017

### M.1. Background information

Name of company/institution: \_\_\_\_\_

Email address (if you wish to get finding report for your company): \_\_\_\_\_

Year established: \_\_\_\_\_

Type of establishment: (i) corporation (limited liability), (ii) limited partnership, (iii) others

Foreign equity participation (i) none, (ii) less than 50 percent, (iii) 50 percent and more

Number of full time employees in the firm: \_\_\_\_\_

**M.2a. Please select in which district/city your main activity is located:** \_\_\_\_\_

**M.2b. Respondent position in the firm:** \_\_\_\_\_

**M.3. Please indicate the yearly revenue of your firm for 2016:**

**(in US\$):** \_\_\_\_\_

**Percentage change** \_\_\_\_\_ (%) year on year (yoy)

**M.4. Please indicate the main sector of your firm:** \_\_\_\_\_

**M.5. Please indicate the main products manufactured by your firm:** \_\_\_\_\_

**M.6. Please indicate your main market**

Domestic	%	International	%	100%
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Please indicate, for both domestic and international, the markets you serve (tick all that apply):

1. Phnom Penh		2. North East Asia (China, South Korea, Japan)	
3. Siem Reap		4. North America (USA, Canada, Mexico)	
5. Sihanoukville		6. ASEAN	
7. Poipet		8. Europe	
9. Other domestic: _____		10. Others: _____	

**M7. Please provide an overview of the customer channels used by volume of product distributed.**

**Please indicate percentage of volume distributed by channel**

Direct to customer site or store	
To retailers or wholesalers DC	
Industrial customers	
Export	
Other: _____	
TOTAL	100%

**M.8. Please indicate the primary origin location and destination of your firm's main product**

<b>Domestic</b>		Most utilised mode of transport
Supplier Location		
Client Destination		
<b>International</b>		
Supplier Location		
Client Destination		

**M.9. Please indicate your main load type (tick box)**

		Domestic	International
a)	Unitised cargo (containers, trailers), <b>Less than Container Load</b> (LCL) and/or Less than Truck Load (LTL)		
b)	Unitised cargo (containers, trailers), Full Container Load (FCL) and/or Full Truck Load (FTL)		
c)	Break Bulk (pallets, roller cages, packages, etc.)		
d)	Air freight		
e)	Dry bulk		
f)	Liquid bulk		
g)	Express freight		
h)	mail shipping		
i)	Other:		

**M10. Please indicate the relative importance of time, cost, and reliability:**

**Please choose one preference for each question**

- If reliability is not an issue, what is more important?

	Very Important	Important	Moderate	Equal	Moderate	Important	Very Important	
Cost	4	3	2	1	2	3	4	Time

- If cost is not an issue, what is more important?

	Very Important	Important	Moderate	Equal	Moderate	Important	Very Important	
Reliability	4	3	2	1	2	3	4	Time

- If time is not an issue, what is more important?

	Very Important	Important	Moderate	Equal	Moderate	Important	Very Important	
Reliability	4	3	2	1	2	3	4	Cost

**M.11. Please indicate the logistics activities that are outsourced compared to in-house**

In-house	%	Outsource	%	100%
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**M12. Please estimate how many percent of the following logistics operations are managed by an external service provider in your firm**

	0%	1 to 25%	26 to 50%	51 to 75%	76 to 100%
a) Domestic transportation	1	2	3	4	5
b) Domestic freight forwarding	1	2	3	4	5
c) International transportation (including international freight forwarding)	1	2	3	4	5
d) Warehouse and inventory management	1	2	3	4	5
e) Value added services, such as product finishing and customization	1	2	3	4	5
f) Logistics IT systems	1	2	3	4	5
g) Customs brokerage	1	2	3	4	5

**M13. Do you have service level agreements with third party service providers? This includes KPIs that are reviewed with provider (please tick box).**

<input type="checkbox"/> 1.Yes, all providers	<input type="checkbox"/> 2.Yes, some providers	<input type="checkbox"/> 3.None
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**M.14. Please assess the following performance figures for your main customer\* in your company operations in 2016**

\* Main Customer means most important by sales generation (alternatively by weight or volume of cargo, number of truck loads/trucks, or others).

- a) What is your average lead time<sup>24</sup> from the moment your company gets the order from your main customer to the delivery of your service: \_\_\_\_\_ days
- b) What is your average lead time when transporting products to your main customer: \_\_\_\_\_ days
- c) What is the total number of shipment per month made to your main customer? \_\_\_\_\_
- d) What is the percentage of products shipped complete<sup>25</sup> per month to your main customer? \_\_\_\_\_%
- e) What is the percentage of products shipped on time per month to your main customer? \_\_\_\_\_%
- f) What is the percentage of shipments per month that arrives damaged to your main customer? \_\_\_\_\_%
- g) What was the average number of days of sales outstanding in your firm (i.e. average number of days between customer order delivery to receipt of customer payment)? \_\_\_\_\_ days
- h) What was the average number of days of payables outstanding in your firm (i.e. average number of days between supplier order receipt to order payment): \_\_\_\_\_ days
- i) What is the average number of days your firm holds its inventory before selling it? \_\_\_\_\_ days
- j) What is your customer complaint rate? \_\_\_\_\_%
- k) What is the accuracy of forecasts made regarding customer demand for your main product? \_\_\_\_\_%
- l) What is the ratio of returns for your main product? \_\_\_\_\_%
- m) Please estimate your total annual production/operation costs in 2016 \_\_\_\_\_ (US\$ and percentage change (yoy) \_\_\_\_\_ (%))

**M.15. Please estimate the following logistics costs in your firm expressed as PERCENTAGES OF FIRM'S ANNUAL SALES in 2016 (Please circle or put in actual %)**

- a) Transport and cargo handling cost (incl. transport packaging)

<sup>24</sup> The order lead time is the period between placing an order and receiving the ordered item.

<sup>25</sup> Complete means that all shipments ordered by main customer are delivered to the main customer.

1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	%
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b) Warehousing (cost of running own warehouse or buying the service)

1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	%
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c) Inventory carrying cost (incl. cost of capital tied in inventory)

1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	%
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**M16. Do you have documented logistics plan that is a subset of the corporate plan and that details objectives and performance targets? (Please tick)**

- a) Yes, updated in past 12 months\_\_\_\_\_
- b) Yes, needs updating\_\_\_\_\_
- c) No, but will do in next 12 months\_\_\_\_\_
- d) No but have logistics plan not linked to corporate plan\_\_\_\_\_
- e) No\_\_\_\_\_

**M.17. What activities occur in the development and deployment of your strategic logistics plan (Please tick all that are relevant)**

<input type="checkbox"/>	a. Operational workshops involving workforce
<input type="checkbox"/>	b. Alignment of logistics and corporate plans
<input type="checkbox"/>	c. people set targets as part of planning process
<input type="checkbox"/>	d. Operational Key Performance Indicators (KPIs) aligned with individual's objectives
<input type="checkbox"/>	e. Performance Appraisal
<input type="checkbox"/>	f. Plans not linked to operations
<input type="checkbox"/>	g. None, or not relevant
<input type="checkbox"/>	h. Other (please detail):

**M.18. Please describe the availability of skilled logistics related staff in the Cambodia**

	Not Available	Somewhat Available	Available	Easily Available	Over-Availability	Degree of Importance*
a. Truck drivers						
b. Forklift operators						
c. Warehouse operatives						
d. Customs brokerage						
e. Logistics planner						
f. Forecast planner						
g. Inventory planner						
h. Traffic planner						
i. Load planner						
j. Logistics/supply chain analyst						
k. Packing/packaging operatives						
l. Operations manager						
m. Facility manager						
n. Procurement & Supply manager						

o. Business Development manager						
p. Logistics/Supply chain manager						

On average how long does operational level staff stay in your firm? \_\_\_\_\_ days/months/year

On average how long do management level staff stay in your firm? \_\_\_\_\_ days/months/years

**M.19. Please describe your firm's human resource policy related to logistics skills development (Please tick 1 box that best describe your situation)**

<input type="checkbox"/>	a. On the job training
<input type="checkbox"/>	b. Internal development programme with internal trainers
<input type="checkbox"/>	c. Internal development programme with external trainers
<input type="checkbox"/>	d. External development programme (i.e. outside seminars or workshops)
<input type="checkbox"/>	e. Continuing professional development (i.e. external certificate or diploma courses)
<input type="checkbox"/>	f. None, or not relevant
<input type="checkbox"/>	g. Other (please detail):

**M.20. Please estimate the functioning of international logistics in Cambodia (tick box):**

	Very Poor	Poor	Neither Poor nor Good	Good	Very Good	No Answer
a) The effectiveness of Customs and other authorities in customs services						
b) The quality of transport and telecommunications infrastructure						
c) The quality of port infrastructure						
d) The quality of airport infrastructure						
e) The quality of road infrastructure						
f) The availability of logistics infrastructure (i.e. warehouse, distribution centres, etc.)						
g) The availability of reliable transport services						
h) The quality of logistics services and competence of service providers						
i) Possibility to track and trace shipments						
j) The probability of shipments arriving at the promised time						

**M.21. Please estimate the functioning of domestic logistics in Cambodia for the following (tick box):**

	Very Poor	Poor	Neither Poor nor Good	Good	Very Good	No Answer
a) The quality of transport and telecommunications infrastructure						
b) The quality of port infrastructure						
c) The quality of airport infrastructure						

d) The quality of road infrastructure						
e) The availability of logistics infrastructure (i.e. warehouse, distribution centres, etc.)						
f) The availability of domestic shipping services						
g) The availability of reliable transport services						
h) The quality of domestic shipping services						
i) The Quality of logistics services and competence of service providers						
j) Possibility to track and trace shipments						
k) The probability of shipments arriving at the promised time						

**M.22. Please indicate if there are any other logistics issues that are of concern to your organisation in your specific location that has not been reflected in the questionnaire or if existing logistics issues needs to be further expanded.**

You may provide a “wish” list of what is needed to be done to improve logistics in Cambodia

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# ANNEX 3: LOGISTICS SERVICE PROVIDER SURVEY

## Freight Forwarder and Logistics Service Provider Survey in Cambodia 2017

### L.1. Background information

Name of company/institution: \_\_\_\_\_

Type of establishment: (i) corporation (limited liability), (ii) limited partnership, (iii) others \_\_\_\_\_

Email address (if you wish to get finding report for your company): \_\_\_\_\_

L.2. Respondent position in the firm: \_\_\_\_\_

L.3. Are you currently in any long term contractual relationship to provide your services? (can tick more than one box)

(1) Part of a Network	(2) International Shipping line	(3) Domestic Shipping line
(4) Domestic Freight Forwarder	(5) International Freight Forwarder	(6) Truck operators
(7) Domestic 3PL	(8) International 3PL	(9) Airlines
(10) Custom Broker	(11) Other:	

L.3.1 Please estimate your annual sales in 2016: US\$ \_\_\_\_\_,

Percentage change (YOY): \_\_\_\_\_ (%)

L4. Please indicate the activity your firm outsource the most (tick box, multiple choices possible)

(1) Customs Brokerage	(2) Warehousing	(3) Domestic Trucking
(4) International Trucking	(5) Packaging	(6) International Air freight
(7) Domestic Air freight	(8) Domestic Ocean freight	(9) International Ocean freight
(10) Other:		

L.5. Please indicate your main load type (tick box, multiple answers possible)

		Domestic	International
a)	Unitised cargo (containers, trailers), Less than Container Load (LCL) and/or Less than Truck Load (LTL)		
b)	Unitised cargo (containers, trailers), Full Container Load (FCL) and/or Full Truck Load (FTL)		
c)	Break Bulk (pallets, roller cages, packages, etc.)		
d)	Air freight		
e)	Dry bulk		
f)	Liquid bulk		
g)	Express freight		
h)	mail shipping		
i)	Other:		

**L.6. Please indicate the main commodities your firm handles (by importance to your firm):**

Inbound: \_\_\_\_\_ Main mode of transport \_\_\_\_\_

Outbound: \_\_\_\_\_ Main mode of transport \_\_\_\_\_

**L.7. Please indicate the main origin and destination of the main commodity handled by your firm (please report main transit points):**

<b>Domestic</b>	
Origin	
Transit 1	
Transit 2	
Destination	
<b>International</b>	
Origin	
Transit 1	
Transit 2	
Destination	

**L.8. For a typical situation, please assess the following performance figures in your company operations in 2016 for your main customer\***

\* Main Customer means most important by sales generation (alternatively by weight or volume of cargo, number of truck loads/trucks, or others).

- What is the average lead-time from the moment your company gets the order to the delivery of your service (for export/import, please use lead-time to/from main port/airport): \_\_\_\_\_ days
- What is your average lead-time when transporting products to your main customer (for export/import, please use lead time to/from main port/airport):  
Origin \_\_\_\_\_ Destination \_\_\_\_\_ Days \_\_\_\_\_
- What is the total number of shipments per month made for your main customer? \_\_\_\_\_
- What is the percentage of shipments per month that arrives on time to your main customer? \_%
- What is the percentages of shipments per month that arrives in full to your main customer? \_%
- What is the percentage of shipments per month that arrives damaged to your main customer? %
- What is the average number of days between customer order delivery to receipt of customer payment: \_\_\_\_\_ days
- What was the average number of days between supplier order receipt to order payment by your firm): \_\_\_\_\_ days
- What are the main reasons you were not able to fulfil your orders (multiple answers possible)?

(1) Delays in receiving cargo	
(2) Additional costs	
(3) Delays in Customs process	
(4) Inspection delays (other than customs-related)	

(5) Availability of logistics services/problems coordinating transport	
(6) Damage of cargo	
(7) Congestion	
(8) Accidents	
(9) Weather	
(10) Checkpoints	
(11) Other (please expand)	

j) Please estimate your annual operation costs in 2016: US\$ \_\_\_\_\_,  
 Percentage change (YOY): \_\_\_\_\_ (%)

**L9. Please indicate the relative importance of time, cost, and reliability:**

- If reliability is not an issue, what is more important?

	Very Important	Important	Moderate	Equal	Moderate	Important	Very Important	
Cost	4	3	2	1	2	3	4	Time

- If cost is not an issue, what is more important?

	Very Important	Important	Moderate	Equal	Moderate	Important	Very Important	
Reliability	4	3	2	1	2	3	4	Time

- If time is not an issue, what is more important?

	Very Important	Important	Moderate	Equal	Moderate	Important	Very Important	
Reliability	4	3	2	1	2	3	4	Cost

**L10. Please estimate how many per cent of your firm's sales was generated in 2016 from**

(1) Customs Brokerage	%
(2) Warehousing	%
(3) Domestic trucking	%
(4) International trucking	%
(5) International Ocean freight	%
(6) Domestic Ocean freight	%
(7) International Air freight	%
(8) Domestic Air freight	%
(9) Packaging	%
(10) Other:	%
<b>TOTAL</b>	<b>100%</b>

**L.11. For the types of services you offer, when did you introduce them (please provide the year for all that apply for your firm):**

Service	Year Introduced	Service	Year introduced
(1) Bonded storage		(10) Distribution	
(2) Cargo agent for air transport		(11) Domestic Freight Forwarding	
(3) Cargo agent for rail transport		(12) International Freight Forwarding	
(4) Cargo agent for road transport		(13) Inventory management	
(5) Cargo agent for sea transport		(14) Order processing	
(6) Cold chain		(15) Packing, labeling	
(7) Consolidation		(16) Quality control, testing	
(8) Courier and express delivery		(17) Warehousing	
(9) Customs clearance		(18) Trucking	

**L.12. What service improvements has your firm recently introduced (please tick box for all that apply):**

	Year
(1) Introduction of IT in the firm	
(2) Entered new cooperation to increase domestic network	
(3) Entered new cooperation to increase international network	
(4) Training of employees and management staff	
(5) Get international quality certifications, e.g. ISO 9001	
(6) Using Standard Trading Conditions (STC)	
(7) Other:	
(8) Other:	

**L.13. Please estimate the functioning of international logistics in Cambodia (tick box):**

	Very Poor	Poor	Neither Poor nor Good	Good	Very Good	No Answer
a) The effectiveness of Customs and other authorities in customs services						
b) The quality of transport and telecommunications infrastructure						
c) The quality of port infrastructure						
d) The quality of airport infrastructure						
e) The quality of road infrastructure						
f) The availability of logistics infrastructure (i.e. warehouse, distribution centres, etc.)						
g) The availability of reliable transport services						
h) The quality of logistics services and competence of service providers						
i) Possibility to track and trace shipments						
j) The probability of shipments arriving at the promised time						

**L.14. Please estimate the functioning of domestic logistics in Cambodia for the following (tick box):**

	Very Poor	Poor	Neither Poor nor Good	Good	Very Good	No Answer
a) The quality of transport and telecommunications infrastructure						
b) The quality of port infrastructure						
c) The quality of airport infrastructure						
d) The quality of road infrastructure						
e) The availability of logistics infrastructure (i.e. warehouse, distribution centres, etc.)						
f) The availability of domestic shipping services						
g) The availability of reliable transport services						
h) The quality of domestic shipping services						
i) The Quality of logistics services and competence of service providers						
j) Possibility to track and trace shipments						
k) The probability of shipments arriving at the promised time						

**L.15. Please describe the availability of skilled logistics related staff in Cambodia**

	Not Available	Somewhat Available	Available	Easily Available	Over-Availability
Truck drivers					
Forklift operators					
Warehouse operatives					
Customs brokerage					
Logistics planner					
Forecast planner					
Inventory planner					
Traffic planner					
Load planner					
Logistics/supply chain analyst					
Packing/packaging operatives					
Operations manager					
Warehouse manager					
Procurement & Supply manager					
Customers service manager					
Customer service assistant					
Business Development manager					
Logistics/Supply chain manager					

On average how long does operational level staff stay in your firm? \_\_\_\_\_ days/months/year  
 On average how long do management level staff stay in your firm? \_\_\_\_\_ days/months/years

**L.16. Please describe your firm’s human resource policy related to logistics skills development (Please tick all that apply)**

<input type="checkbox"/>	(1) On the job training
<input type="checkbox"/>	(2) Internal development programme with internal trainers
<input type="checkbox"/>	(3) Internal development programme with external trainers
<input type="checkbox"/>	(4) External development programme (i.e. outside seminars or workshops)
<input type="checkbox"/>	(5) Continuing professional development (i.e. external certificate or diploma courses)
<input type="checkbox"/>	(6) None, or not relevant
<input type="checkbox"/>	(7) Other (please detail):

**L.17. Please indicate if there are any other logistics issues that are of concern to your organisation in your specific location that has not been reflected in the questionnaire or if existing logistics issues needs to be further expanded. You may provide a “wish” list of what is needed to be done to improve logistics in Cambodia**





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