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**Textile and Apparel Supply Chain  
Corridor Diagnostics,  
SWOT Analysis, and Remediation Action Plan  
for  
Heavier-Weight Woven Cotton Fabric (HS 5209)  
Exported from Indonesia to Cambodia**

May 2009

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## 1. INTRODUCTION

In January 2005, the World Trade Organization (WTO) phased out the Multi-fibre Arrangement (MFA). The quota system stimulated investment across a number of countries, contributing to individual incomes and strengthening national economies. Virtually all of the countries in Southeast Asia participate in textile and/or apparel production, and the end of the quotas that managed global trade has already impacted the ASEAN members. None is sufficiently developed to compete with China, or the Indian subcontinent, but by increasing internal cooperation they can maximize the value of their internal markets and maintain market share in international trade.

The ASEAN Competitiveness Enhancement (ACE) Project is a task order under a five-year USAID ASEAN Development Vision to Advance National Cooperation and Economic Integration (ADVANCE) contract. ACE focuses on developing the competitiveness and integration of supply chains in two key economic sectors in ASEAN identified in the ASEAN Economic Community Blue Print: textile and apparel and tourism. In the textiles and apparel sector, the ACE Project aims to foster greater economic integration of the ASEAN countries, creating a unified common market.

Textile and textile products are among ASEAN's leading export commodities. The TTP industry involves a chain of activities that can be fragmented. It typically has an elaborate supply chain system, and every component of the supply chain exists in the ASEAN region. Yet, the degree of intra-industry trade in the TTP among ASEAN countries is relatively low.

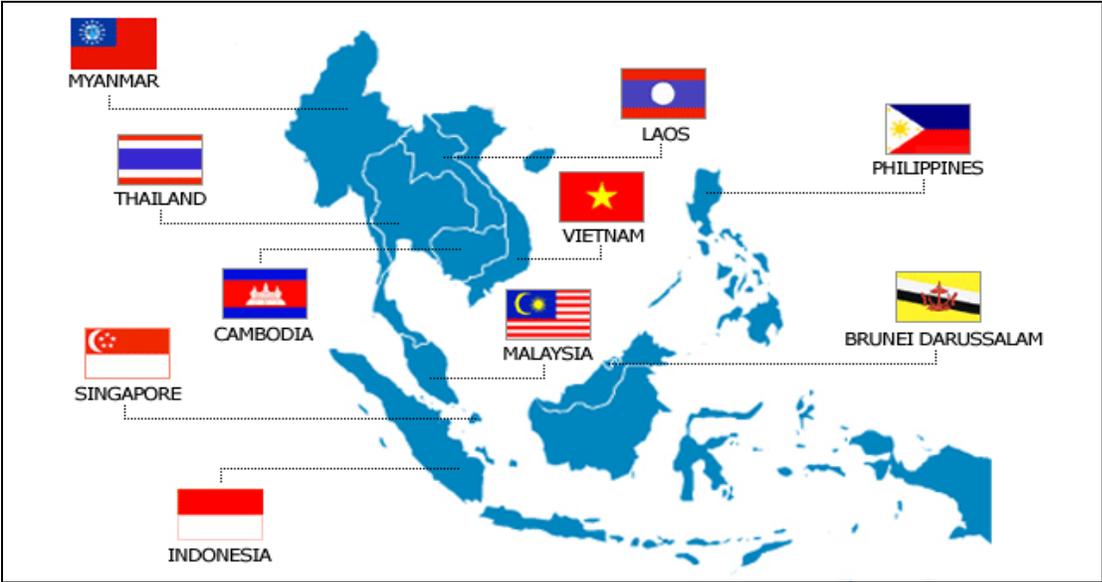
As a first initiative to identify barriers in the apparel and textile sector, ACE, together with the ASEAN Federation of Textile Industries (AFTEX), launched research projects in 4 ASEAN countries; Cambodia, Thailand, Vietnam and Indonesia, to review specific Supply Chain Corridors that reflect the objectives of the ACE project and offer opportunities for greater development. One such corridor is heavier weight woven cotton (HS 5209) exported from Indonesia to Cambodia.

This report incorporates research and reporting from Indonesia’s Centre for Strategic and International Studies (CSIS), and by BDLINK (Cambodia) Company, Ltd., on the industries and the strengths, weaknesses, opportunities, and threats (SWOT) of the HS 5209 corridor. Each country section includes recommendations, and the analysis and recommendations are incorporated into a combined action plan outlining the response by ACE.

The report is organized into three main parts, each with subcomponents:

- Indonesia
  - Trade environment and industry overview, and a review of trade in HS 5209;
  - Firm level survey results and SWOT analysis
  - Recommendations and plan of action
- Cambodia
  - Trade environment and industry overview
  - Firm level survey results and SWOT analysis
  - Recommendations
- Corridor SWOT and Action Plan

ASEAN Region



## **2. INDONESIA**

### **2.1. OVERVIEW OF THE INDONESIAN INDUSTRIAL POLICY SETTING AND ITS TEXTILE SECTOR**

#### **2.1.1. Policy Setting Affecting Indonesian Manufacturing Sector**

In order to provide a backdrop for the subsequent analysis, the following few paragraphs describe briefly the policy setting affecting industrial development in Indonesia, borrowing from AswicaHyono et.al (2008).

The policy setting for the period after the 1997-98 economic crises has at least four distinct features:

First, the country's exchange rate collapsed, and for a few years after the crisis, it displayed considerable volatility. The government shifted the formal exchange rate regime from fixed but adjustable to a managed float. Four months after the crisis hit, the Rupiah/dollar rate had fallen from 2,500 to 17,500; by far the largest depreciation among the Asian crisis-affected economies. With the partial restoration of political and macroeconomic stability in 2004, the rate has stabilized somewhat, generally within the 9,000-10,000 range. However, a weaker exchange rate did not improve competitiveness of the country's products in any significant way. This is due to, among other things, a relatively high inflation rate since the crisis. Hence, since around 2000, Indonesia's real effective exchange rate has been largely similar to that of its East Asian competitors.

Second, with regard to trade policy, Indonesia was a broadly open economy at the time of the crisis: average levels of import protection had declined since the major reforms of 1980s. Most sectors received quite low protection, except where politically influential lobby groups and individuals were able to resist the liberalization. There was further liberalization in 1997-98 as part of the Letters of Intend (LOI) to the International Monetary Fund (IMF), and, in general, the country has not turned inward since exiting the program in late 2003. Nevertheless, Indonesia is what may be termed 'precariously open', and trade policy has become both an issue of ideological debate and political patronage.

Tariffs, which are under the control of the Ministry of Finance, have remained low, while certain non-tariff barriers, particularly in agriculture, have increased.

Third, foreign direct investment (FDI) flows to Indonesia have lagged significantly behind practically all major East Asian economies since 1997. Indonesia was the only crisis-affected economy to register negative FDI flows for several years after the onset of the crisis. The proportion of 'greenfield' investment has declined, while that of Mergers and Acquisitions (M&A) increased. This is consistent with the theory of post-crisis 'fire-sale' FDI behavior (Lipsey, 2001) in which there is excess capacity and asset prices fall sharply owing to the effects of the exchange rate depreciation and the crisis.

Fourth, there have been major changes in Indonesia's labor market policies in the wake of the crisis. During the Soeharto era, labor market outcomes more or less accorded with 'East Asian norms'. Rapid economic growth generated rising real wages, with a lag. Trade unions existed, but they were heavily managed. Minimum wages were prescribed, but they were generally below market levels in the formal sector and were not enforced systematically. During the crisis, given the relatively unregulated nature of the labor market, real wages fell sharply, by more than in any other crisis-affected economy, but unemployment rose only modestly (Manning, 2000). After the crisis, powerful pro-labor pressures emerged. The constraints on trade unions were largely removed. Under successive Ministers of Manpower, the government strongly supported worker entitlements and wage claims. The regulated minimum wage increased by over 90% between 1999 and 2002. The regulatory environment has also introduced rigidities into hiring processes that discourage firms from taking on additional labor, with the result that Indonesia's labor policy has become one of the most restrictive in Asia (Manning and Roesad, 2006).

### **2.1.2. The Expiration of the Multi-fibre Arrangement (MFA)**

Indonesia's textile and garment sector did quite well immediately after the phasing out of the MFA. Indonesia's mid to high-end products were quite competitive in the global market and even outranked China. Several buyers from the US and EU continued to order from

Indonesia, and new buyers shifted their orders from China to Indonesia, as the US and EU imposed safeguard measures against China. One American buyer claimed that Indonesia's mid to high-end garment products could not be beaten, even by China, in terms of price, quality, service, and vertical integration (US Embassy Jakarta, 2005). However, despite the promising outlook, some exporters remain pessimistic. This is because they see China moving fast up the product value chain, while Indonesia is struggling to improve its competitiveness.

Meanwhile, a study by Maidir (2005) provides a warning to Indonesia's TTP industry. She argues that unless it adjusts its export strategy to the new global market environment, Indonesia is at risk of losing up to 50 percent of its market share. The removal of the quota system has produced asymmetrical impacts on exporters; some countries are seeing their market shares increase, while the others are declining. This is due to the fact that, when the quota system was still in place, not all exporting countries were able to meet their quotas.

### **2.1.3. An Overview of the Textile and Garments Industry since the 1997/98 Economic Crisis**

This subsection provides an overview of what happened in the textile and garment industry over the last fifteen years or so. The analysis in this subsection gives some background as well as some important findings regarding the performance of the industry, which relates to the main theme of this paper.

The sectoral performances varied largely in the Indonesian economy across industries/sectors during 1994-2006, which comprises the pre-crisis, crisis, and post-crisis periods.

Our particular interest here is the growth of the textile and garment industry (ISIC 32). The industry had been one of the sources of growth before the crisis, but not after the crisis (Table 1). The post-crisis growth of the textile and garment industry was only one half of that before crisis. In other words, the textile and garment industry experienced a much slower growth in the post-crisis period relative to the pre-crisis one. In contrast, the industry did not contract as deeply as the other sectors, during the peak of the economic

crisis (1997-99 period). One possible explanation for this is the boost of competitiveness from the sharp exchange rate depreciation during the period.

**Table 1: Indonesia's Sectoral Output Growth (1994-2006)**

<b>Growth</b>		<b>1994-96</b>	<b>1997-99</b>	<b>2000-02</b>	<b>2003-06</b>
31	Food, beverages, and tobacco.	17.5	5.6	1.6	3.5
32	Textile, clothes and leather industry.	8.7	-3.4	4.9	3.2
33	Wood and wood products	4.0	-14.0	2.7	-0.6
34	Paper and paper products	11.4	2.2	1.0	5.1
35	Chemicals and chemical products	10.7	-0.8	4.1	8.2
36	Non metallic mineral products	16.9	-7.0	10.4	5.2
37	Basic metal industries.	11.1	-9.2	3.6	-2.4
38	Fabricated metal , machinery, and eq.	7.3	-21.2	26.3	11.6
39	Other manufacturing industries.	10.3	-10.2	4.8	9.2
	Non-Oil and Gas Manufacturing	10.5	-6.3	7.4	6.2

Source: Indonesian Industrial Statistics

Similarly, textile and garment products are not the main source of the country's export growth. As indicated by Table 2, the growth of exports for these products declined significantly after the crisis (although not for the peak crisis period, for the reason mentioned above). Nonetheless, it is worth mentioning that the export performance of the textile and garment industry is consistent with general manufacturing export and production trends, with a large drop in the growth of labor intensive sectors and stronger growth in capital intensive sectors.

**Table 2: Export Growth of Some Labor-Intensive Industrial Products (1990-2006)**

		<b>1990-93</b>	<b>1994-96</b>	<b>1997-99</b>	<b>2000-02</b>	<b>2003-06</b>
	<b>Unskilled Labor Intensive</b>	<b>37.7</b>	<b>6.0</b>	<b>1.0</b>	<b>0.5</b>	<b>7.9</b>
821	Furniture and parts thereof	44.7	12.1	58.7	7.6	5.6
651	Textile yarn	41.7	35.3	10.9	1.8	10.1
851	Footwear	74.2	9.5	-6.4	-9.5	8.0
843	Women, girls, infants outerwear, textile, not knitted or crocheted	35.4	-0.8	7.0	4.2	6.8
845	Outerwear knitted or crocheted, not elastic nor rubberized	21.8	-1.6	10.6	3.9	16.8

\* For 1997-1999, we use end-to-end average; other periods are simple yearly average

Source: Indonesian Industrial Statistics

Table 3 provides the share of foreign ownership in Indonesian manufacturing over the period 1990-2005. On the one hand, for the manufacturing sector as a whole, there is not a clear picture on how the share has changed over the period or the likely impact of the 1997/98 economic crisis. As noted in Aswicahyono et.al (2008), this might be the result of one of two competing forces: first, as argued by Lipsey (2001), foreign ownership may rise in response to attractive buying opportunities and a more liberal FDI regime or, second, foreign ownership may fall as foreign capital is deterred by a collapsing economy and an uncertain political outlook.

On the other hand, foreign ownership in the textile and garment industry increased steadily over the period and, hence, provides a slightly different trend from that of the whole of manufacturing. This development is consistent with Lipsey's argument mentioned above as well as with our interview with the textile and garment business association. In the interviews, members of the association revealed some notable examples of mergers and acquisitions of some 'almost-bankrupt' textile and garment firms in Indonesia by foreign investors. This is one of the important findings of this study. Therefore, it is fair to say that, after the crisis, there has been an increased degree of internationalization in the Indonesian textile and garment industry, at least in terms of ownership.

The internationalization of the Indonesian textile and garment industry has made it easier for textile firms to tap into overseas banks to obtain trade finance. Since the 1998 crisis and up to this day, textile and garment industries in Indonesia have had difficulties in securing trade finance from local banks. Local banks deter from giving finance to the textile industries due to the government's sunset policy, in which textile and garment are perceived as high risk industries. However, the mergers and acquisition have assisted in securing trade finance from overseas banks by using their foreign partner's international networks. Nevertheless, against the backdrop of the global financial crisis, participation of domestic banks in trade finance becomes an urgent subject matter.

**Table 3: Foreign Ownership Share in Indonesia's Manufacturing (1990-2005)**

		1990	1993	1996	1999	2002	2005
31	Food, beverages, and tobacco	8.5	9.7	14.0	15.8	9.4	24.9
32	Textile, clothes and leather industry	17.8	21.8	29.3	37.4	32.1	32.8
33	Wood and wood products	10.1	11.7	22.9	15.8	11.6	11.2
34	Paper and paper products	30.2	14.9	33.8	23.5	46.4	29.0
35	Chemicals and chemical products	33.1	36.6	43.0	44.8	29.7	26.3
36	Non metallic mineral products	18.0	23.3	33.4	34.6	28.3	35.9
37	Basic metal industries	24.8	35.3	24.3	43.1	29.4	30.5
38	Fabricated metal, machinery, and eq.	46.1	36.4	42.4	58.0	67.6	68.3
39	Other manufacturing industries	19.5	44.4	51.9	56.1	33.7	46.9

Source: Indonesian Industrial Statistics

Table 4 provides the growth and index of unit labor cost (hereafter ULC) in Indonesian manufacturing over the period of 1991-2006. ULC provides a useful indicator for industrial competitiveness. If it rises quickly over a short period of time, there should be some labor cost-related and/or competitiveness-related issues involved, unless there has been a corresponding increase in labor productivity.

As described in Table 4, the whole of Indonesian manufacturing experienced an increase in ULC over the period, after the crisis in particular. The increase is even more pronounced in the textile and garment industry. In other words, the labor cost in the textile and garment industry increased substantially; this is particularly so during the peak of the crisis and

immediately afterward (i.e., the period 2000-02). As the last column of Table 4b suggests, the increase in ULC in textile and garment industry in 2005 is about three times higher than in 1996, and this is higher than the ratio for the whole of manufacturing, which is about 2.5 times. It may, therefore, be argued that there had been a significant decline in the competitiveness of the Indonesia's textile and garment industry during the period under consideration.

**Table 4: Index and Growth of ULC: Indonesian Manufacturing, 1991-2006**

**a. Growth in ULC**

Growth		1991-93	1994-96	1997-99	2000-02	2003-06
31	Food, beverages, and tobacco	12.8	8.1	19.3	17.5	6.4
32	Textile, clothes and leather industry	2.4	5.8	21.5	18.4	2.2
33	Wood and wood products	10.8	6.9	28.9	6.2	12.0
34	Paper and paper products	14.0	6.7	15.4	5.5	25.5
35	Chemicals and chemical products	13.9	2.7	24.4	7.9	21.4
36	Non metallic mineral products	12.4	10.2	21.0	0.1	6.3
37	Basic metal industries	22.0	-15.5	143.2	18.1	36.6
38	Fabricated metal , machinery, and eq.	16.1	-3.8	33.6	10.8	-2.2
39	Other manufacturing industries	6.6	6.1	24.4	30.5	-22.2
<b>Manufacturing</b>		<b>10.4</b>	<b>2.3</b>	<b>26.1</b>	<b>8.2</b>	<b>4.6</b>

Source: Indonesian Industrial Statistics

**b. Index of ULC**

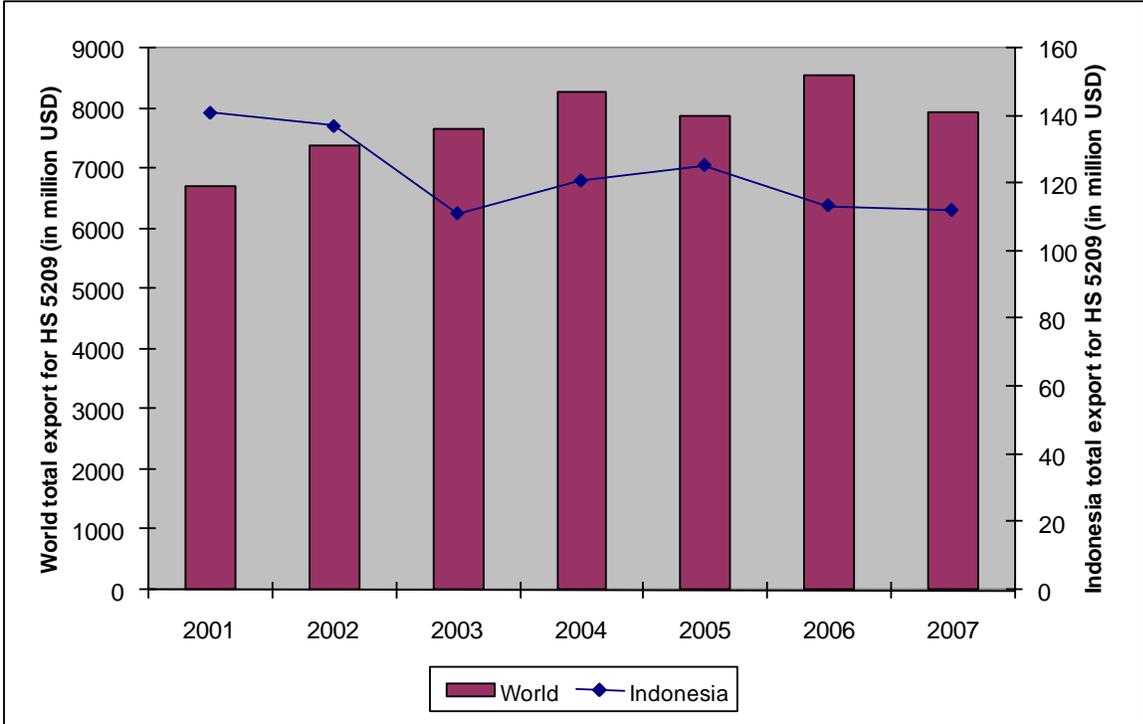
Index		1990	1996	1999	2005	05/96
31	Food, beverages, and tobacco	100.0	181.0	303.5	484.5	2.7
32	Textile, clothes and leather industry	100.0	114.4	202.7	343.1	3.0
33	Wood and wood products	100.0	160.4	315.2	507.3	3.2
34	Paper and paper products	100.0	176.5	162.4	330.8	1.9
35	Chemicals and chemical products	100.0	148.1	251.8	318.4	2.1
36	Non metallic mineral products	100.0	180.4	316.0	296.8	1.6
37	Basic metal industries	100.0	91.0	673.9	1646.7	18.1
38	Fabricated metal , machinery, and eq.	100.0	104.3	247.7	188.8	1.8
39	Other manufacturing industries	100.0	109.6	209.5	189.7	1.7
<b>Manufacturing</b>		<b>100.0</b>	<b>141.9</b>	<b>278.5</b>	<b>357.3</b>	<b>2.5</b>

Source: Indonesian Industrial Statistics

## 2.2. INDONESIA’S TRADE IN HS 5209

There is a stark contrast between the world and Indonesia’s export figures for HS 5209. This is aptly illustrated in Figure 1. The world export of HS 5209 gradually increased from 2001 to 2004. Of late, it has been on a relatively stable path, hovering between US\$ 6.7 billion and US\$ 8.6 billion, and reached its highest level in 2006. While the world export figure was increasing, Indonesia’s export figure was decreasing. It has been gradually shrinking from US\$ 140 million in 2001 to US\$ 112 million in 2007.

**Figure 1: Indonesia Total Export: HS 5209**

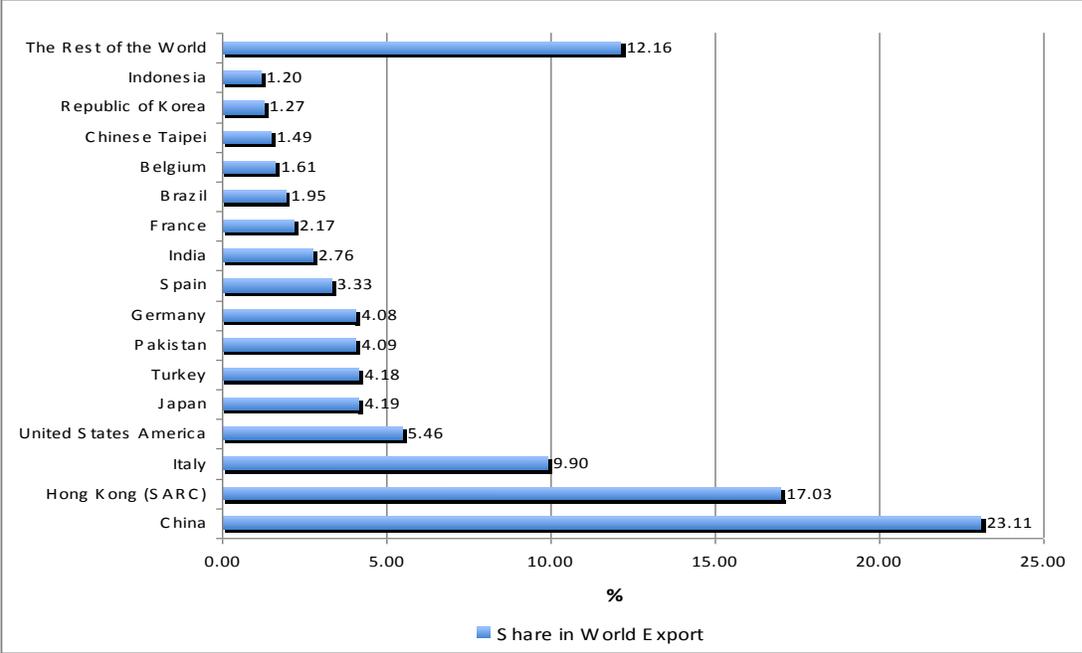


Source: UN Comtrade

The stark contrast indicates that, while there is a strong demand for HS 5209 in the world market, Indonesia has not been able to take advantage of the increase in demand. A further examination of the world export share data reveals that is, in fact, the case. As Figure 2 shows, Indonesia is only a small player in the world market for HS 5209. In 2007 Indonesia’s share in world export was a mere 1.20 percent compared to China’s 23.11

percent. Hong Kong (SARC) was the second largest exporter, with a share of 17.03 percent, while Italy came in third with 9.90 percent.

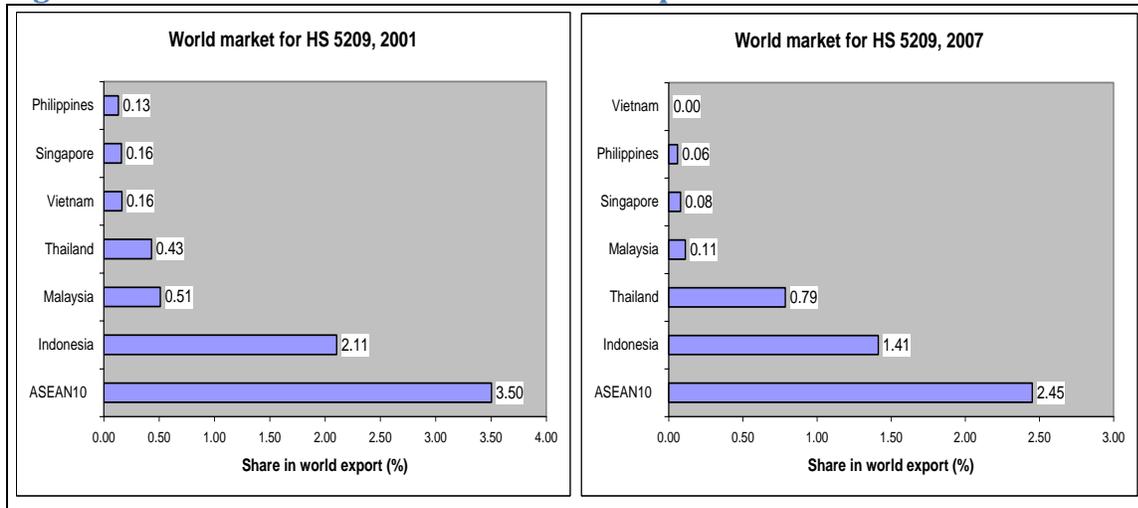
**Figure 2: Major Exporter of HS 5209 in 2007**



Source: UN Comtrade

Although its market share in the world has been declining, Figure 3 shows that Indonesia fares better than other ASEAN countries in HS 5209 export. Its market share in world export was the highest among ASEAN countries in both 2001 and 2007, at 2.11 percent and 1.41 percent, respectively. Nevertheless, note that Thailand has been gaining momentum, as its share in world export increased from 0.43 percent in 2001 to 0.79 percent in 2007. This development signals that Indonesia is having problem in maintaining its competitiveness. Figure 3 also reveals that ASEAN countries as a whole are also losing their market share in the world market, as their share fell from 3.50 percent in 2001 to 2.45 percent in 2007.

**Figure 3: ASEAN Countries Share in World Export**



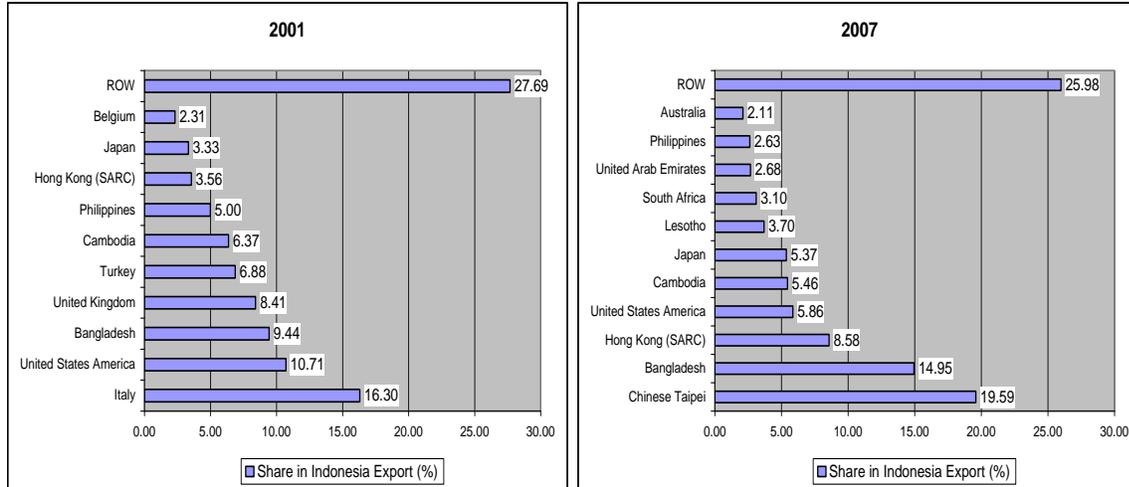
Source: UN Comtrade

It would also be instructive to examine where most of Indonesia’s export of HS 5209 goes. Figure 4 shows Indonesia’s main export destination in 2001 and 2007. In 2001, the top three export destinations were Italy, the United States, and Bangladesh, each with a share of 16.30 percent, 10.71 percent, and 9.44 percent, respectively. However, the picture completely changed in 2007. Taiwan suddenly became a major destination for Indonesia’s HS 5209 product, which constituted 19.59 percent of Indonesia’s total export. In 2001, Taiwan did not make the list of Indonesia’s major export destinations. Bangladesh and Hong Kong (SARC) came in second and third, each with a share of 14.95 percent and 8.58 percent, respectively. The US dropped to fourth place with a share of 5.86 percent, while Italy did not make onto the list.

In conjunction with the purpose of this study, Cambodia, interestingly, remained on the lists of major export destinations in both years, although its share declined from 6.37 percent in 2001 to 5.46 percent in 2007. Notwithstanding the decline, Cambodia remains the number one destination of Indonesia’s denim exports in ASEAN. Figure 5 shows that Cambodia’s share as Indonesia’s export export during 2001-06 averaged 39 percent per

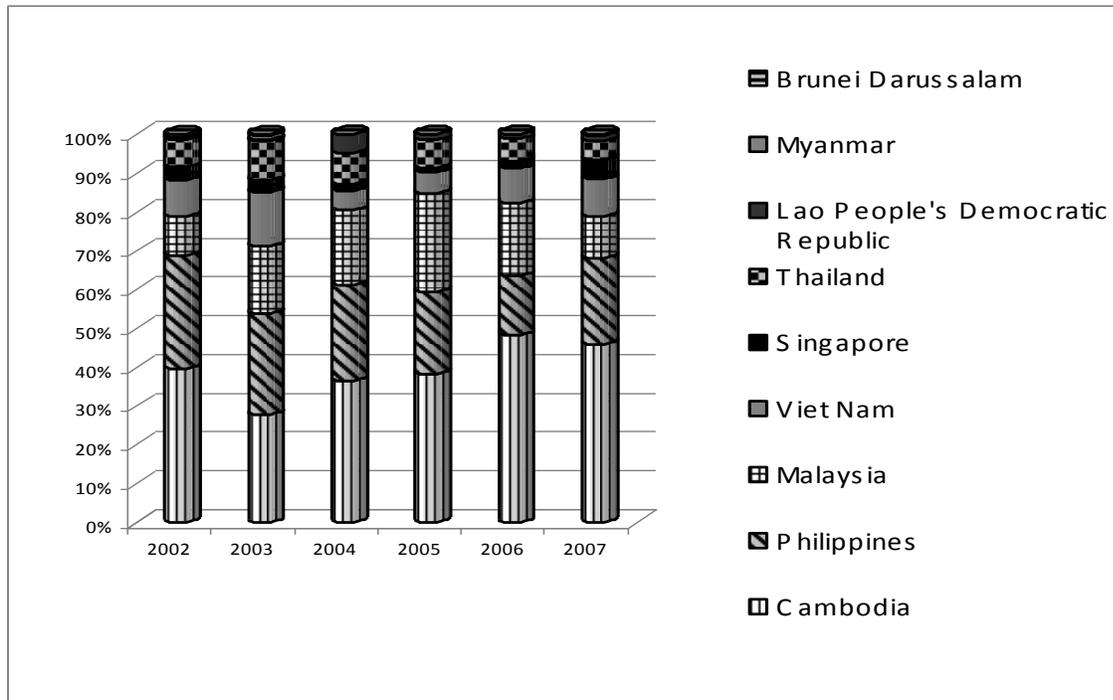
year, while, the Philippines and Malaysia took turns as the second and third main export destinations during this period.

**Figure 4: Indonesia's Main Export Destination: 2001 and 2007**



Source: UN Comtrade

**Figure 5: Indonesia's Export of HS 5209 to the ASEAN Market**



Source: UN Comtrade

A further examination of Indonesia's export to Cambodia, using the HS six digit level data, shows that HS 520942 (denim fabrics of cotton, >=85%) constituted the main export product with a value of US\$ 6.3 million in 2001. However, consistent with the foregoing discussion, Indonesia also experienced a decline in export of this specific product to Cambodia. In 2007, its export value dropped to US\$ 4.8 million relative to that in 2001 (Table 5).

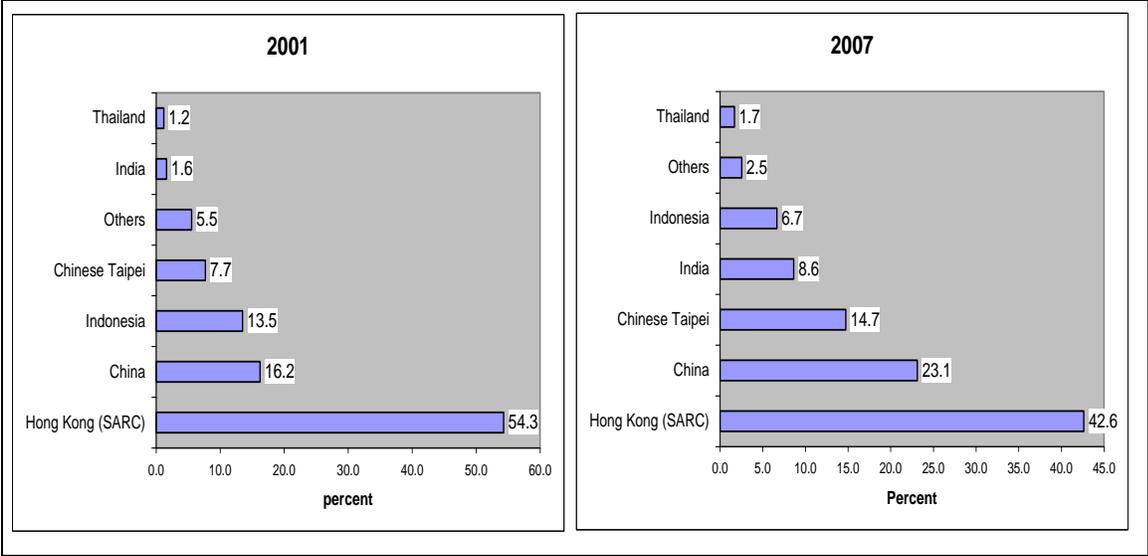
**Table 5: Breakdown of Indonesia's Export of HS 5209 to Cambodia**

(Value in thousand dollars)			
HS Code	Product Description	2001	2007
520942	Denim fabrics of cotton,>=85%, more than 200 g/m2	6,316	4,836
520932	Twill weave cotton fabrics,>=85%, more than 200 g/m2, dyed	2,110	1,229
520939	Woven fabrics of cotton,>=85%, more than 200 g/m2, dyed.	38	40
520911	Plain weave cotton fabric,>=85%, more than 200 g/m2, unbleached	320	12
520943	Twill weave cotton fab,o/t denim,>=85%,more than 200 g/m2,yarn dyed	0	5
520931	Plain weave cotton fabrics,>=85%, more than 200 g/m2, dyed	167	2
520922	Twill weave cotton fabrics,>=85%, more than 200 g/m2, bleached	0	1
520929	Woven fabrics of cotton,>=85%, more than 200 g/m2, bleached, nes	0	0
520941	Plain weave cotton fabrics,>=85%, more than 200 g/m2, yarn dyed	0	0
520952	Twill weave cotton fabrics,>=85%, more than 200 g/m2, printed	0	0
520959	Woven fabrics of cotton,>=85%, more than 200 g/m2, printed, nes	0	0
520949	Woven fabrics of cotton,>=85%, more than 200 g/m2, yarn dyed, nes	0	0
520951	Plain weave cotton fabrics,>=85%, more than 200 g/m2, printed	0	0
520921	Plain weave cotton fabric,>=85%, more than 200 g/m2, bleached	0	0
520912	Twill weave cotton fabric,>=85%, more than 200 g/m2, unbleached	0	0
520919	Woven fabrics of cotton,>=85%,more than 200 g/m2, unbleached, nes	21	0

Source: ITC and UN Comtrade

Figure 6 provides information concerning Cambodia’s main suppliers of denim. In 2001, Indonesia was the third largest supplier of HS 5209 to Cambodia, with a market share of 13.5 percent. Then, Hong Kong SAR was the largest supplier, with a share of 54.3 percent, followed by China with 16.2 percent market share. However, by 2007, Indonesia’s position was overtaken by Taiwan and India, while Hong Kong SAR remained as the dominant supplier in the Cambodian market. The erosion of Indonesia’s market share in Cambodia signals a serious problem in the country’s competitiveness. It is yet further evidence that Indonesia is lagging behind other countries in its efforts to enhance its competitiveness.

**Figure 6: Market Share in Cambodia: 2001 and 2007**



Source: UN Comtrade

Table 6 lists the intra-industry trade for HS 5209 between Indonesia and its major trading partners. Using the intra-industry trade (IIT) index to assess Indonesia’s trade integration in HS 5209, the table shows that Indonesia’s intra-industry trade with Cambodia experienced a decline over time. In 2001, Indonesia–ASEAN IIT index was 0.11, and then it fell to 0.06 in 2004, but bounced back to 0.30 in 2007. However, for the purpose of this paper, the IIT index for Indonesia and Cambodia is very small, about 0.01 in 2001 and 2004, and dropped to virtually zero in 2007.

**Table 6: Intra Industry Trade Index**

<b>Country/Region</b>	<b>IIT 2001</b>	<b>IIT 2004</b>	<b>IIT 2007</b>
World	0.53	0.37	0.40
ASEAN 10	0.11	0.06	0.30
Australia	0.95	0.00	0.02
Bangladesh	0.01	0.00	0.00
Belgium	0.01	0.06	0.00
Cambodia	0.01	0.01	0.00
China	0.30	0.28	0.17
Hong Kong, China	0.37	0.81	0.42
Italy	0.02	0.00	0.23
Japan	0.10	0.04	0.03
Lesotho	0.00	0.00	0.00
Philippines	0.01	0.07	0.00
South Africa	0.00	0.00	0.00
Turkey	0.00	0.00	0.05
United Arab Emirates	0.07	0.00	0.00
United Kingdom	0.01	0.00	0.00
United States	0.02	0.07	0.00

Source: Calculated based on UN Comtrade Data

## **2.3. FIRM LEVEL EVIDENCE**

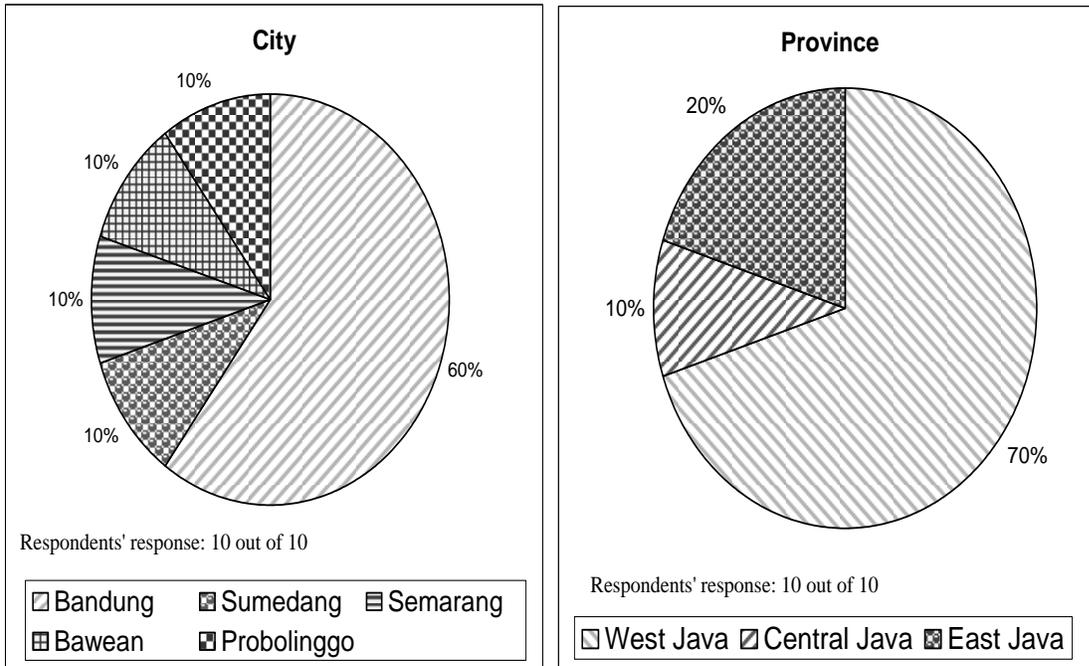
To further the analysis, CSIS conducted a survey of Indonesian firms that manufacture denim, a key product in HS 5209. Questionnaires were used to obtain important data and comments from the respondents, i.e. producers of denim. The survey team identified 15 denim mills that were willing to participate; the final survey sample consisted of 10 firms. With two thirds of the targeted companies taking part in the survey, it is reasonable to assume that the data describes relevant activities at the firm level.

This section is divided into a number of subsections to examine firm characteristics; product and supply chain description; relationships with buyers; factory performance evaluation; trade and logistics; sales, marketing; and human resources.

### **2.3.1. Firm Characteristics**

The factories of most of the companies surveyed are located in Bandung (6 companies). The rest are spread out across Sumedang, Semarang, Probolinggo and Bawean in West Java province, where most of Indonesia's textile and garment companies are situated. Bandung, the main city in West Java, is well-known throughout Indonesia for its clothing outlets which sell jeans products. In fact, these factory outlets have become the city's main attractions for tourists, attracting shoppers from nearby Jakarta and other areas. Furthermore, Bandung's TTP industry epitomizes a vertically integrated industry: textiles, garments, and clothing stores are located within the same area. Sumedang, located just 30 minutes from Bandung, also has many vertically integrated factories in the textile and garment cluster. It should be noted that factories that operate in Semarang, Central Java and Probolinggo and Bawean in East Java are in close proximity to international ports, i.e. Tanjung Perak in Surabaya, East Java and Tanjung Mas in Semarang, Central Java (Figure 7).

**Figure 7: Location of Factories**



**Figure 8: Type of Companies**

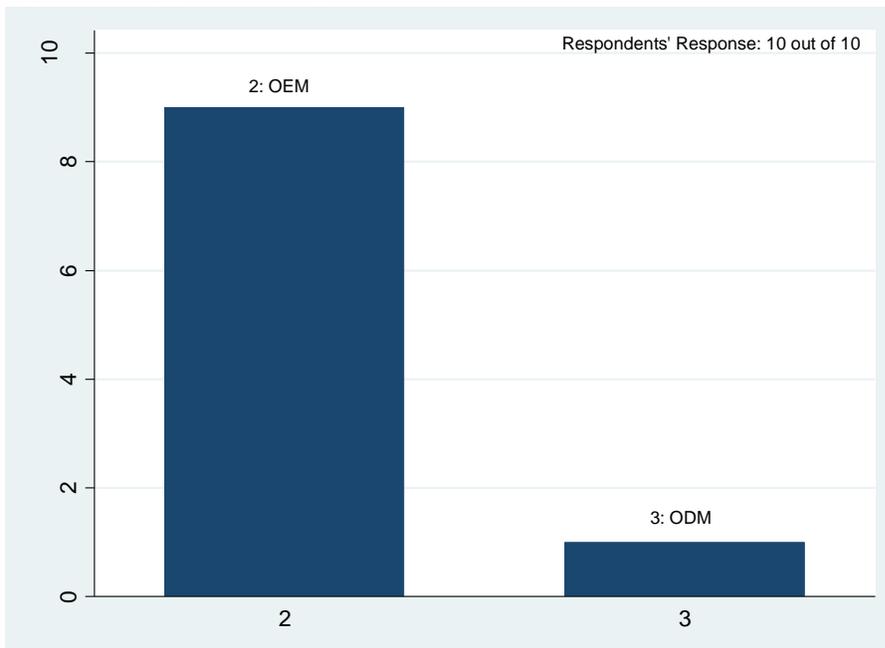
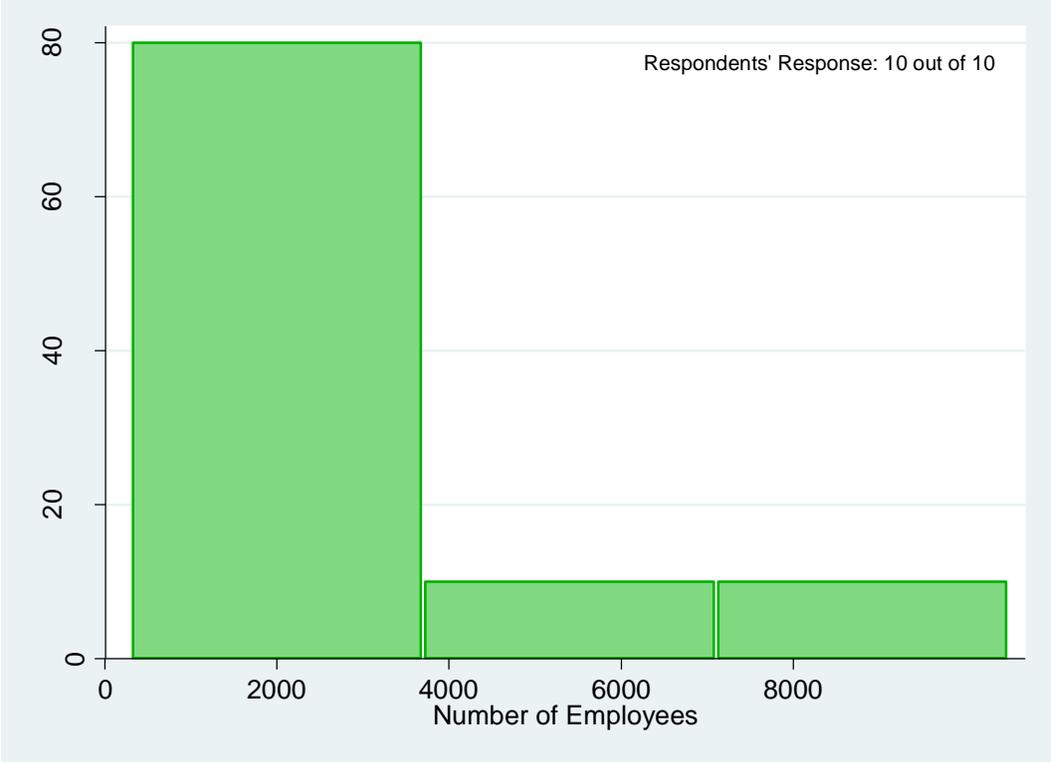


Figure 8 reveals that nine of 10 respondents are OEM (Original Equipment Manufacturer), manufacturing to order based on specifications supplied by the buyer. Only one company is an ODM (Original Design Manufacturer). This indicates that denim textile firms in Indonesia may lack design capabilities. This may become a major hurdle in the ever increasing competitive global textile market. It should be noted that most, if not all, of Indonesia’s major manufacturing industries are deficient in design and R & D capabilities.

**Figure 9: Number of Employees**



Regarding employment, eight companies have between 300 to 4,000 employees. The largest firm employs more than 8,000 workers (Figure 9).

Figure 10: Annual Weaving Sales in 2008 (US\$)

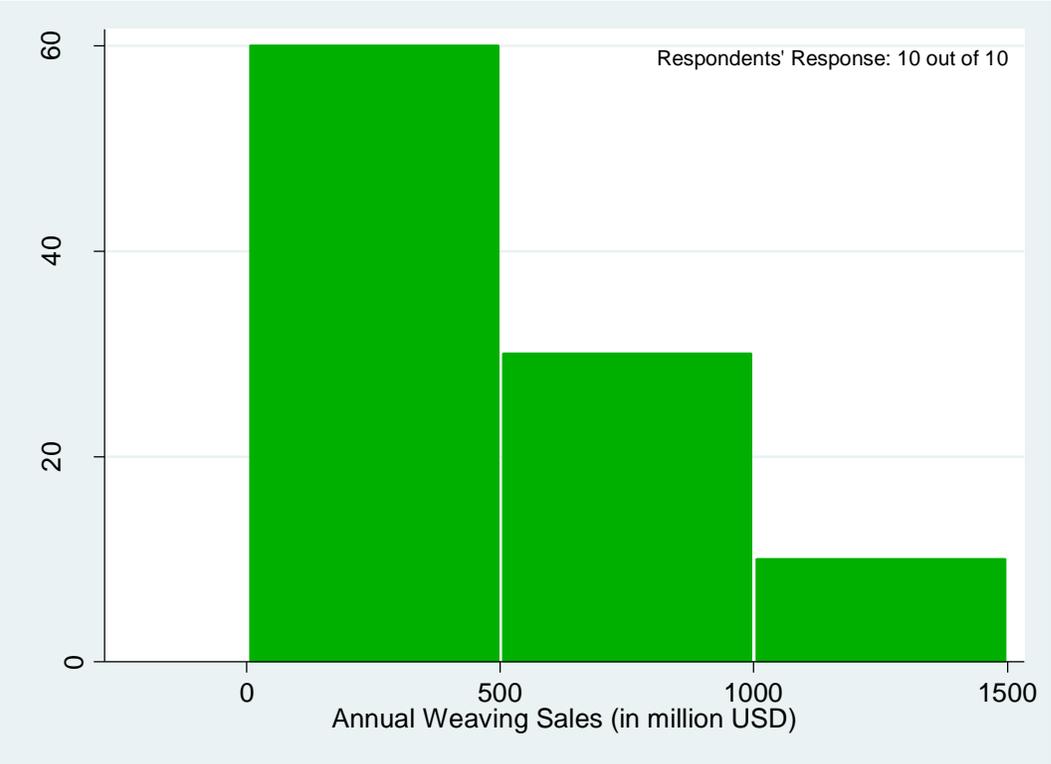
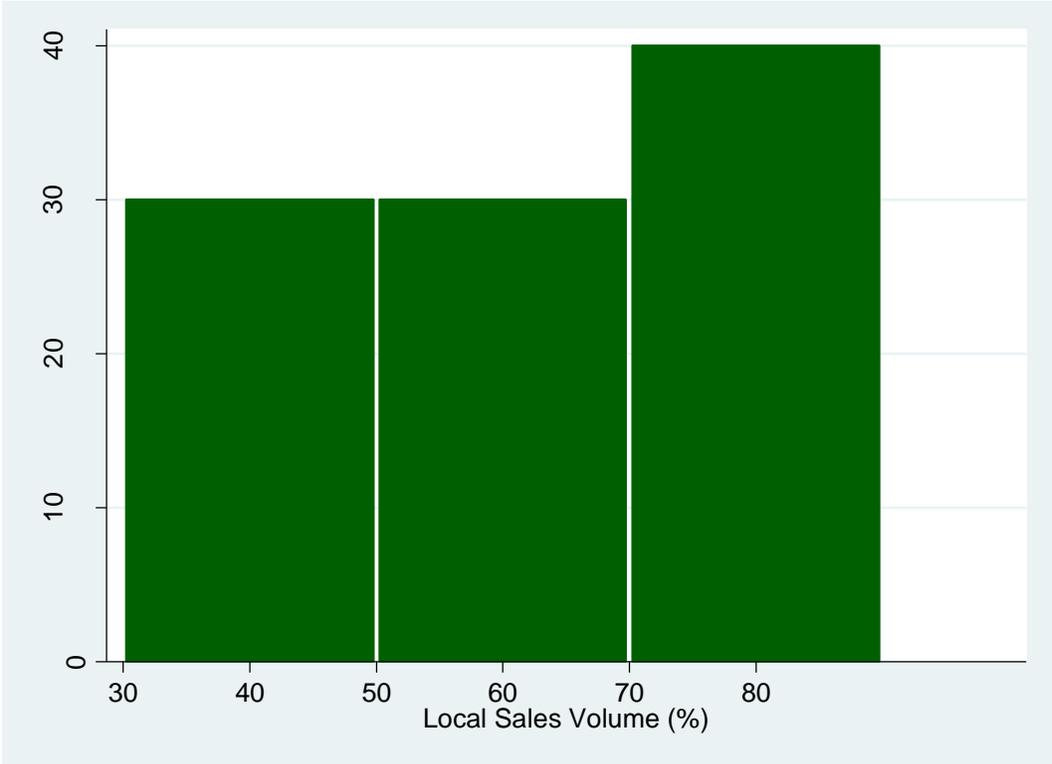


Figure 10 displays annual weaving sales in 2008. The figure indicates that 60 percent of the respondents earn up to US\$ 500 million, 30 percent earn up to US\$ 1 billion, and only 10 percent earn above the US\$ 1 billion mark. This finding is in line with the size of the companies noted above.

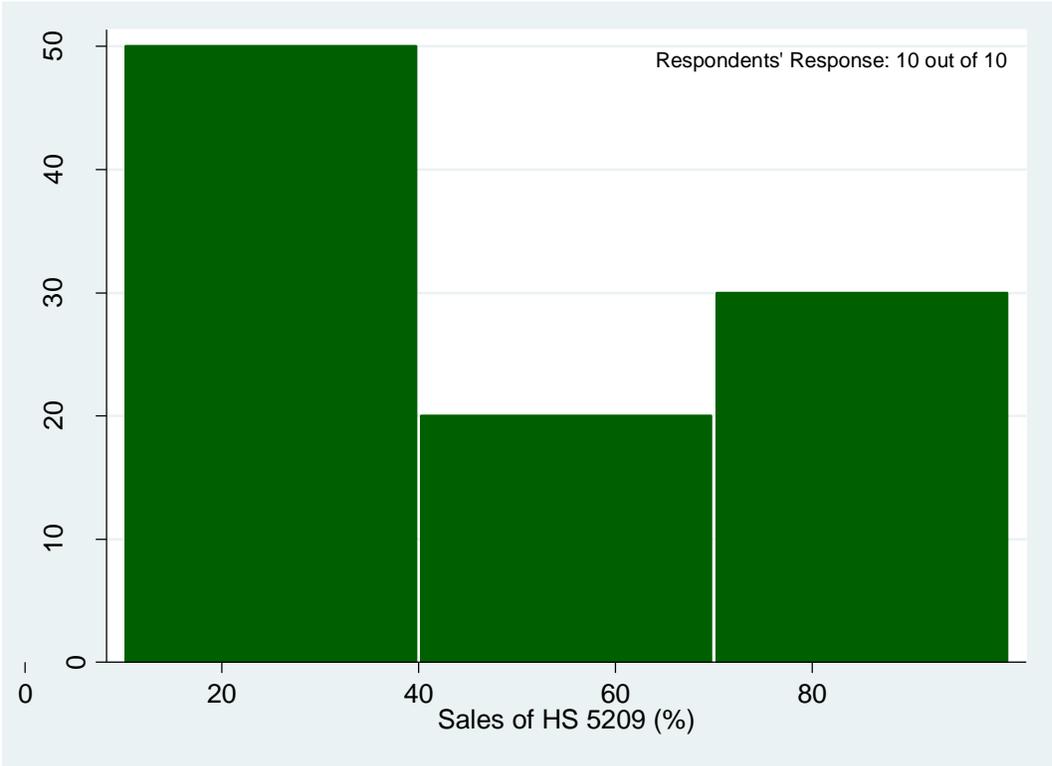
The companies were also asked the percentage of their sales that go to domestic vs. export markets. Three companies replied that between 30 and 40 percent of their sales, in terms of volume, goes to the domestic market, another three companies state that between 50 and 70 percent of their sales are domestic, and the remaining four companies supply primarily the domestic market (Figure 11). In other words, most of the firms consider the domestic market an important destination for their products. This is consistent with the vertically integrated TTP industry found in East Java.

**Figure 11: Sales Volume in Domestic and Export Markets**



Aside from producing denim (HS 5209), the companies surveyed also produce other fabrics. Figure 12 shows the HS 5209 share of total sales. Five companies report HS 5209 fabric accounts for less than 40 percent of their output, two companies produce between 40 and 75 percent denim out of their total production, and the other three companies produce between 75 percent and 100 percent denim. Accordingly, about half of the companies surveyed devote less than 50 percent of their production capacities to produce denim, while the other half produce more denim than other fabrics.

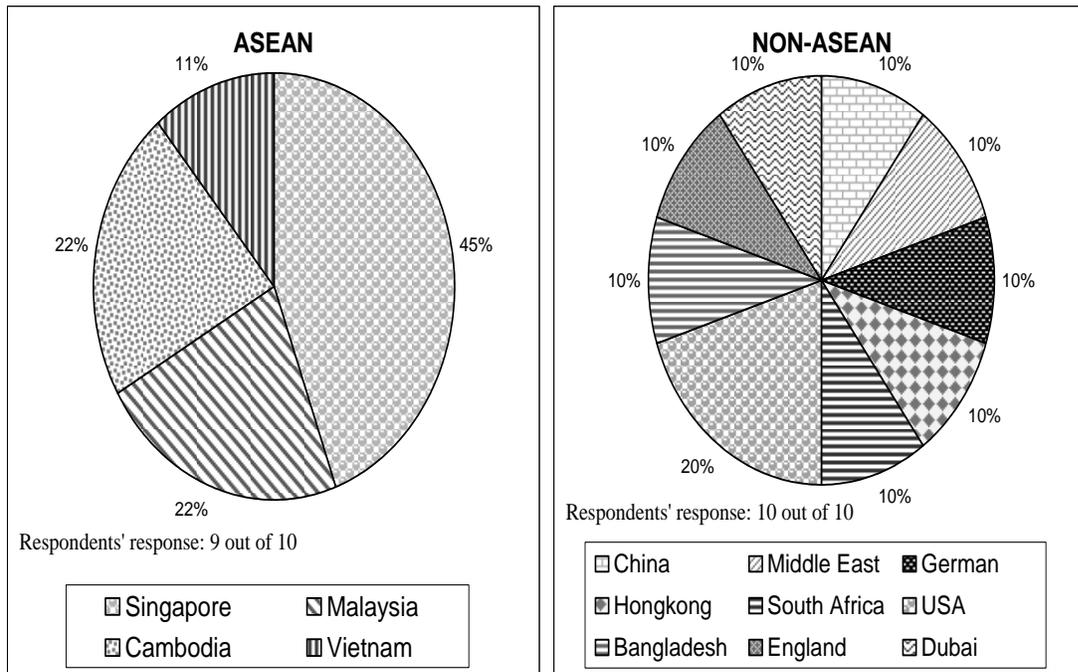
**Figure 12: Sales of HS 5209**



In the survey, the companies were also asked to identify up to three ASEAN countries and up to four non-ASEAN countries that are markets for their denim exports. Three companies export exclusively to one ASEAN country, i.e., one to Cambodia, one to Malaysia, and one to Singapore. Similarly, there is one company that exports exclusively to Hong Kong. The remaining six companies export to more than one country (Figure 13).

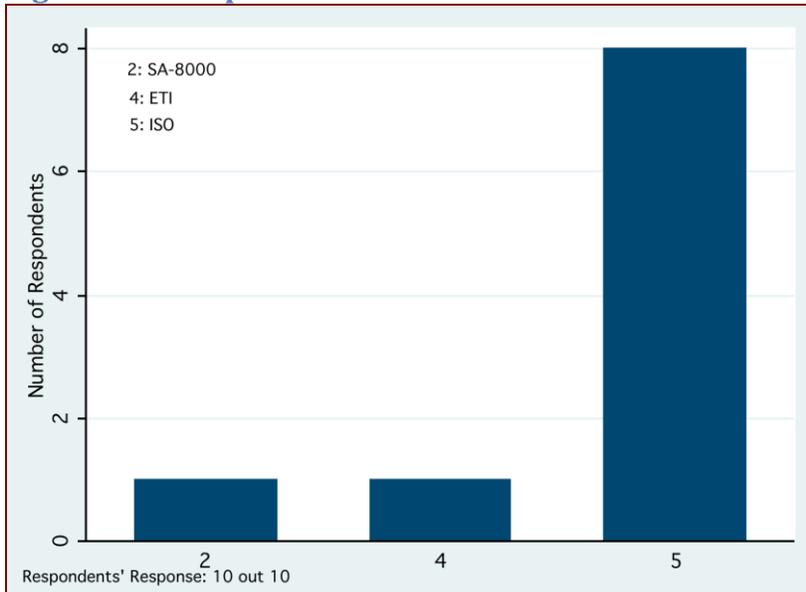
In addition to Cambodia, Malaysia, Singapore, and Hong Kong, Indonesia’s companies also export to Vietnam, the US, China, and some other countries. It is interesting to note that some companies also export denim to the Middle East, contrary to a popular belief that garments are mostly the specialties of Asian and Latin American countries and not of Dubai or the other Middle Eastern countries.

**Figure 13: Main Export Destination: ASEAN and Non ASEAN**



Given the objective of this study, i.e., to analyze Indonesia’s exports of denim to Cambodia, the pie-chart shows that Cambodia is a major export market in the ASEAN region, although its export share is only about 50% of exports to Singapore. It is suspected that the exports that went to Singapore were re-exported to other countries. Note that all of the companies interviewed are compliant with international standards required to compete in international markets. Eight companies have ISO certification, while the other two have either SA-8000 or Ethical Trading Initiative (ETI) certification. (Figure 14). Nevertheless, as noted by Minor and Feeney (2006), there are diverse standards of product in the ASEAN region, ranging from high standards adopted by the more developed countries in the region to low standards adopted by the less developed countries in the region. This diversity may potentially hamper the flow of goods in the ASEAN region.

**Figure 14: Compliance**

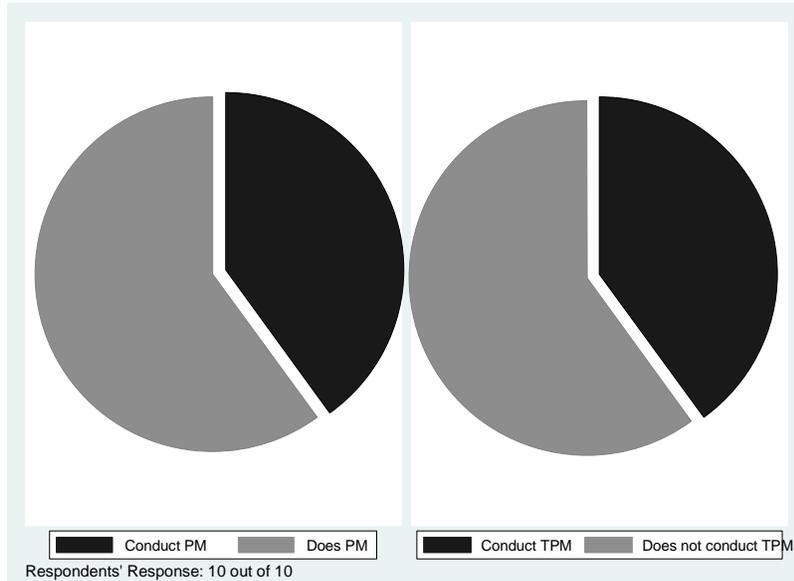


Concerning textile manufacturing equipment, most of the companies use machinery which came on line as recently as 2007, for weaving and dyeing, although a few of the firms still use machinery of 1993 vintage. Those companies that are using new machinery are striving to improve their production capacity and efficiency and, perhaps, to expand their market share. As for the maintenance of their equipment, companies use two maintenance approaches; preventive maintenance (PM) and total productive maintenance (TPM), to ensure their machines work properly. (Figure 15).

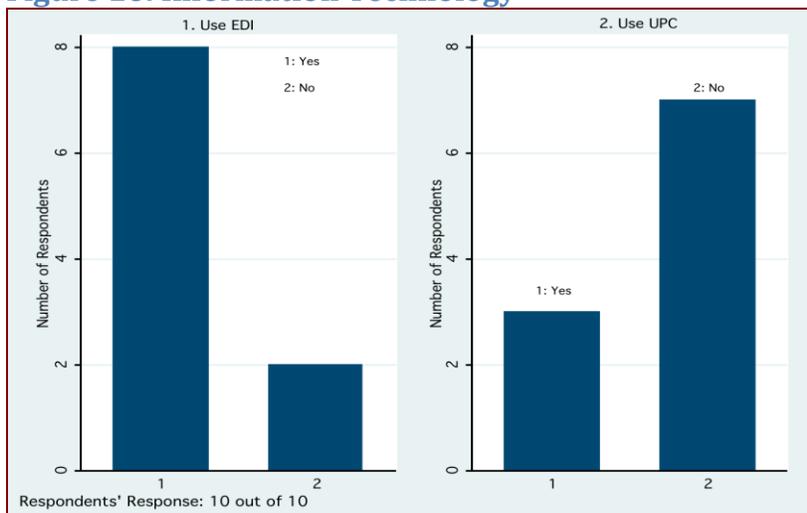
Despite the fact that most of the companies use new machinery, they still lag behind in the utilization of information technology (Figures 16). Of the various information technologies used in the textile industry in other countries, the Indonesian companies use only two of them, namely Electronic Data Interchange (EDI) and barcode (UPC). Most of the companies use EDI; only two do not. However, only three companies have installed UPC systems in their factories. This could limit the competitiveness of those companies that do not have UPC systems, because without UPC it is difficult for companies to keep track of their products. Note also that none of the companies employs Material Requirement Planning

(MRP), Customer Relation Management (CRM), or Enterprise Resource Planning (ERP) systems.

**Figure 15: Machine Maintenance System**



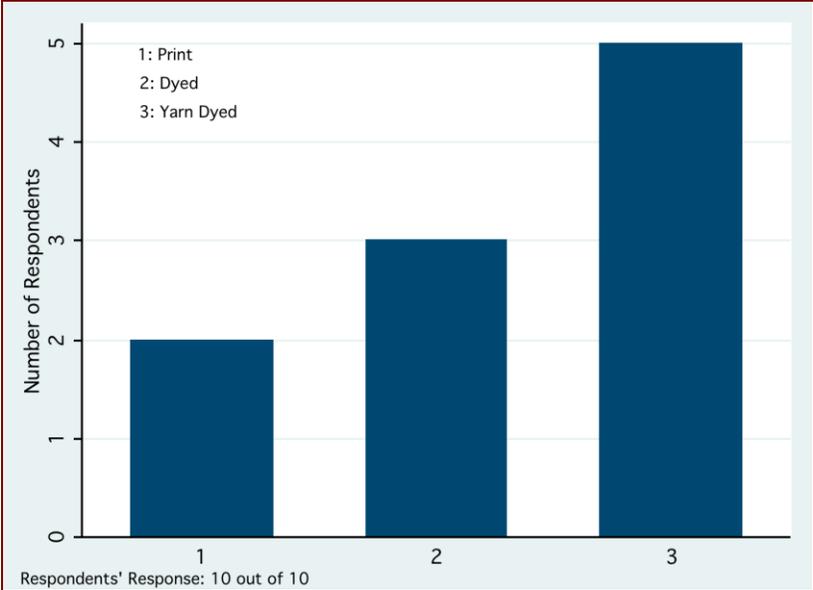
**Figure 16: Information Technology**



### 2.3.2. Product and Supply Chain Description

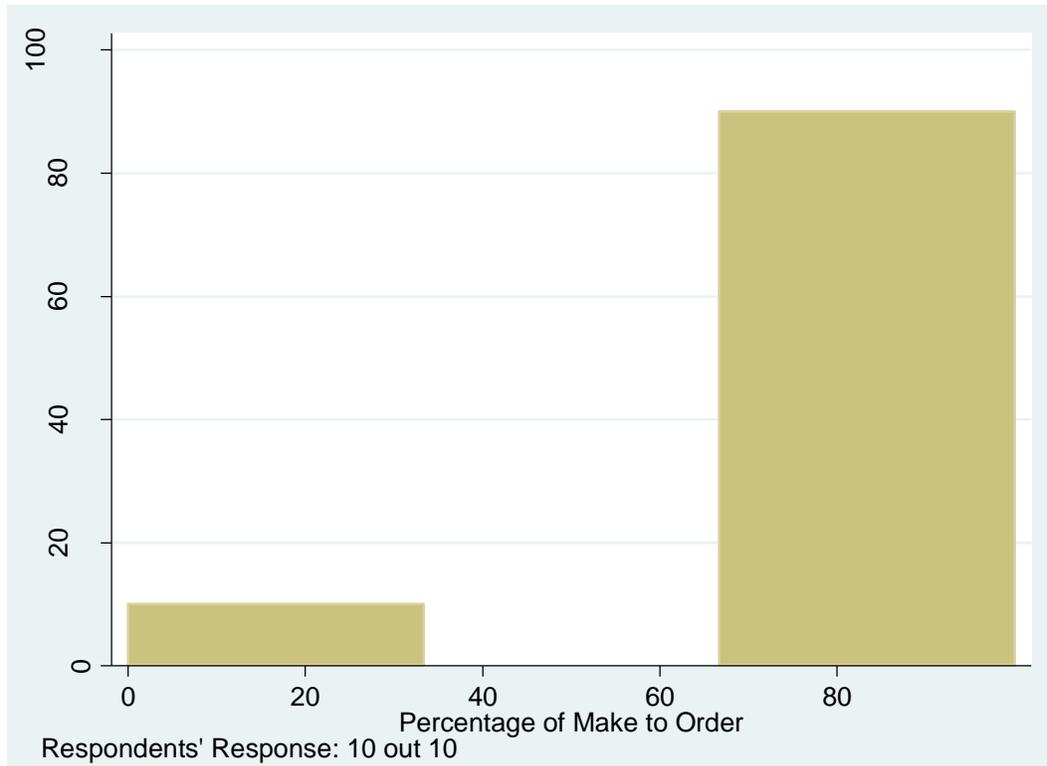
The textile companies in the survey produce two types of products; cotton fabrics and denim. The finish products are mostly yarn dyed (5 companies), dyed (3 companies), and printed (2 companies), as depicted in Figure 17. This offers buyers a wide array of finishing types for Indonesian HS 5209 products.

Figure 17: Finishing Type



Four companies devote 100 percent of their production to “made-to-order” purposes; for three companies, 80 percent of their output is made-to-order and only 20 percent are made-to-stock; and only one company devotes its entire production to made-to-stock. Two companies decline to answer this question. In Figure 18, there are no companies producing between 40-60 per cent based on made to order. The fact that most of the companies primarily use the made-to-order approach implies they want to cut down inventory carrying costs and warehouse rental for made-to-stock products. Moreover, they maintain greater efficiency, as they only produce as much as is ordered by their customers.

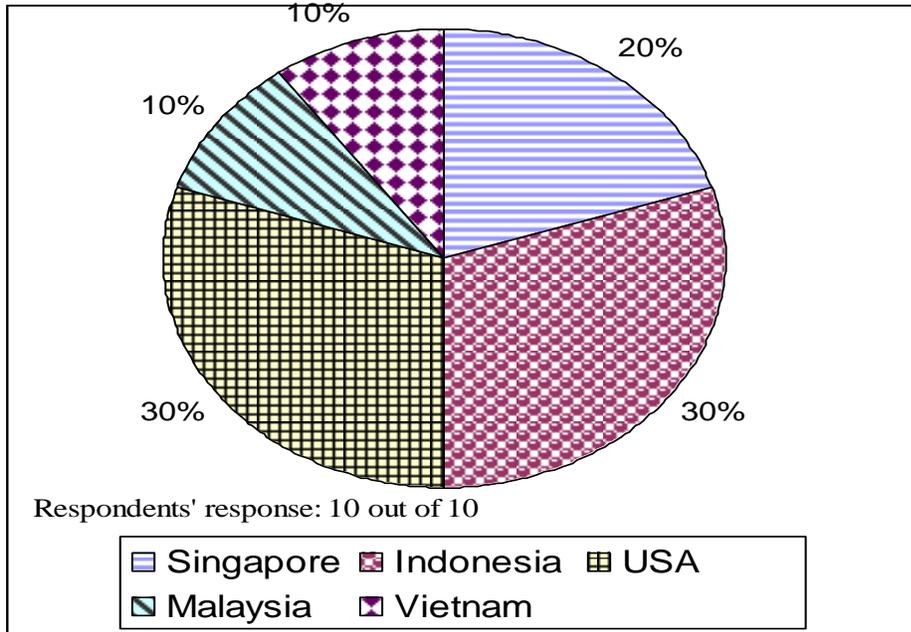
**Figure 18: Type of Production**



Another advantage of the made-to-order approach is that the mills are able to customize the product to meet customers' specifications. Therefore, rather than manufacturing various products in fixed quantities, they rely on the demand of the buyers. By doing so, they can make their production more cost efficient. Nevertheless, one important prerequisite of this approach is that the firms have to have an aggressive marketing strategy to keep orders coming in. Otherwise, they may have to run their factories at less than their optimum capacity.

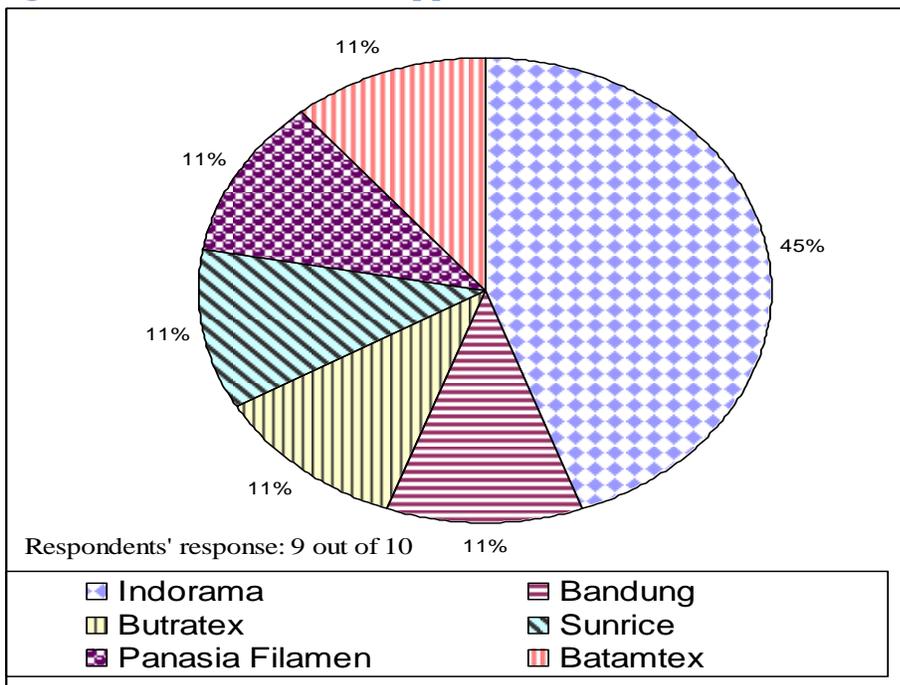
In the survey, companies were asked to name and rank their buyers. Figure 19 depicts the first tier buyers. Three companies sell primarily to the local market. One company exports exclusively to Cambodia, and another one exports exclusively to Hong Kong, as discussed previously. In addition, three firms export primarily to the United States, two to Singapore, and one each to Malaysia and Vietnam.

**Figure 19: List of First Tier Buyers**



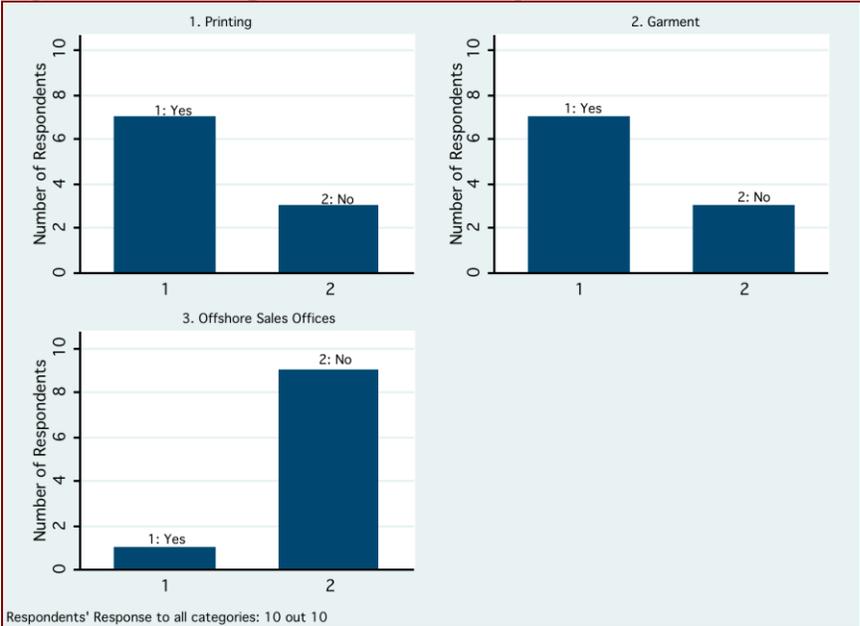
The fact that Cambodia is not included as one of the top tier markets implies that Indonesia’s companies have an opportunity to increase their export to Cambodia.

**Figure 20: Main Domestic Supplier**



Companies also were asked to identify their supplier of materials (yarn and fiber) needed for production. Four of the companies obtain inputs from Indorama and five other domestic suppliers (Figure 20). The respondents also acquire inputs from foreign sources, most notably the United States and Brazil. This reliance on imported raw materials from the United States and Brazil exposes the textile companies to exchange rate risks where a depreciation of the domestic currency could disturb the flow of raw materials.

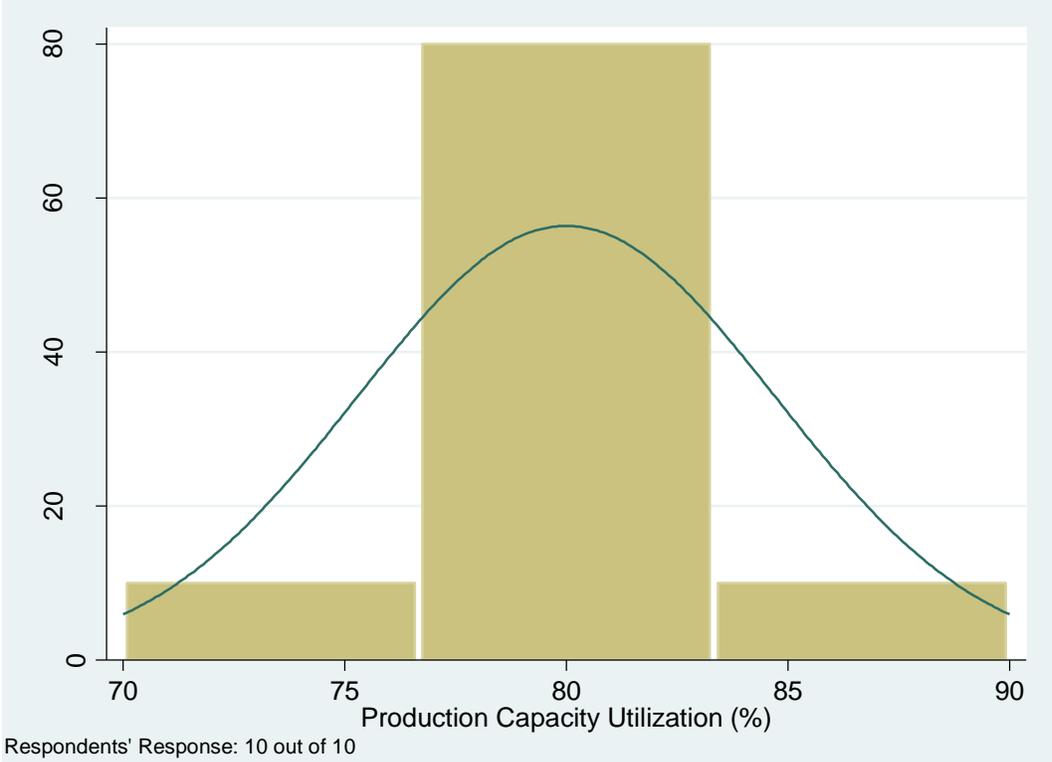
**Figure 21: Incomplete Vertical Integration**



Although the Indonesian textile industry is well-known for its vertical integration, that is not the case for the denim industry. While most of the production activities, such as spinning, weaving, dyeing, and finishing, are well integrated in the respondents' companies, they do not universally integrate three other important activities; printing, garment manufacturing, and offshore sales. Only seven companies integrate printing into their production activity. Two do not have garment manufacturing subsidiaries or affiliates, but this is not a critical issue, as they can sell the finished product to local or foreign garment companies. However, most critically, only one of the nine respondents has an offshore sales office (Figure 21). Without sales offices abroad, made-to-order firms may

find it difficult to obtain orders on a regular basis, particularly during the global economic crisis.

**Figure 22: Production Capacity Utilization**



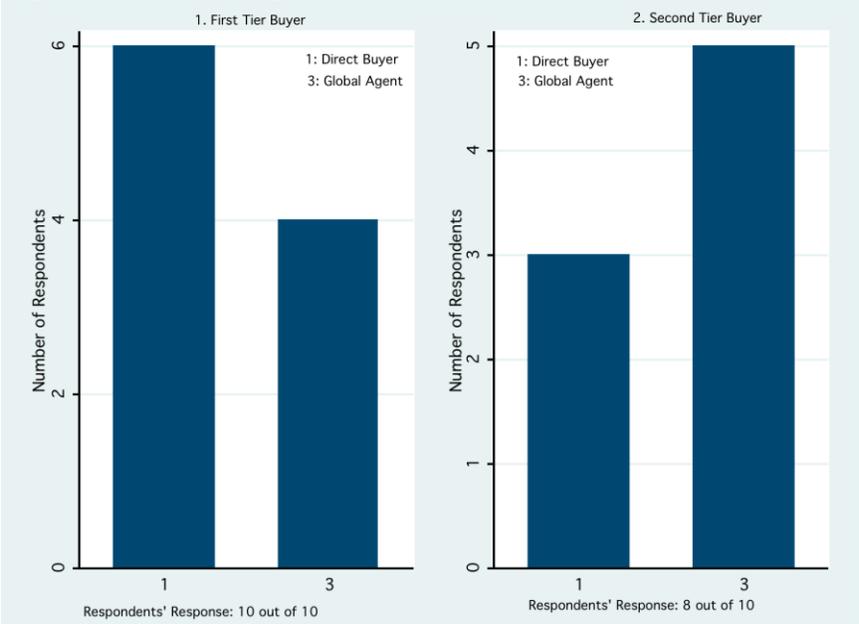
Concerning capacity utilization, eight companies run their factories, on average, at 80 percent capacity, and one firm has a production capacity utilization of 90 percent (Figure 22). These numbers indicate that the mills for HS 5209 are producing at an efficient level, but have unused capacity to absorb increasing demand for HS 5209, provided the existence of a good marketing and sales strategy.

**2.3.3. Buyer Requirements**

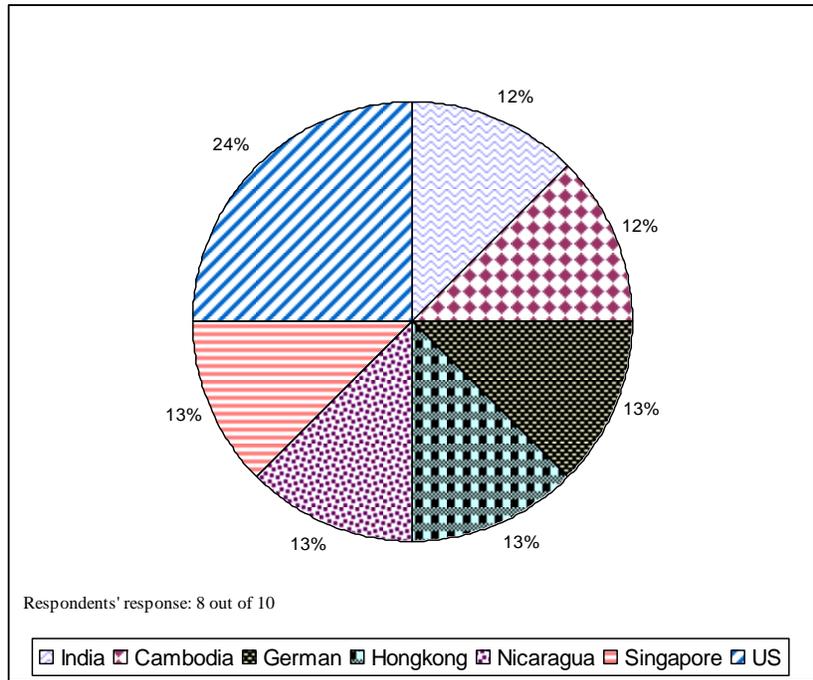
As described in Section 4.2, most of the buyers of Indonesia’s denim products are from the United States and from local companies, while ASEAN countries represent the remaining list of top buyers. Figure 23 shows that, of the first tier buyers, six companies state that buyers contact the firms directly to order textiles; whereas four companies report that

their buyers use third party or global agents to place orders. For second tier buyers, the pattern is different. Five companies report that their customers use global agents to contact them, and three companies say that their buyers contact them directly.

**Figure 23: Sourcing Model**



**Figure 24: Lists of Second Tier Buyer**



Two firms state that their second tier buyers are from United States, while the other six companies identify Cambodia, Hong Kong, Germany, India, Nicaragua, and Singapore as the location of their second tier buyers. Note that only eight companies answer the question regarding second tier buyers. (Figure 24). In addition, they also point out that the buyers from the US and Cambodia are direct buyers, while the rest use global agents. Note also that of the first tier buyers, Malaysia and Vietnam are also direct buyers. The only buyer from ASEAN that uses a global agent is the one from Singapore. Given the close proximity of the two countries, one might expect the buyer from Singapore would buy directly, rather than using global agents. One possible explanation is that Singapore's buyer is a distributor buying textiles from various sources in order to re-export them.

According to all respondents, lead-time, quality, and product development are very important factors. Improvements in these areas contribute to an increase in sales. Nine companies mention that special fabric is very important and can increase sales. One respondent did not respond to this question. In addition, eight respondents mention that volume is very important and could lead to an increase in sales, whereas two respondents did not answer the question.

#### **2.3.4. Factory Performance Evaluation**

In the ASEAN market, nine out of ten respondents point to price; lead-time, quality, product development, and volume (capacity) as the main benchmarks for their industry. Improvements in these areas lead to more customers, increased orders, and thus greater revenues and profits.

Product development lead time is summarized in Figure 25. Bar Chart 1 shows the lead time for the product to be available in customer colors or patterns. For close to 60 percent of the respondents, lead times are between one day and 14 days. This indicates the companies' ability to meet customers' demands in a relatively short time-span. Meanwhile, Bar Chart 2 describes lead time for a bulk production order, which is between 25 and 30 days for 45 percent of the respondents, and between 15 and 20 days for approximately 30 percent of the respondents. As for solid-dyed textiles, the lead time is between 5 and 15

days for roughly 60 percent of the respondents (Bar Chart 3). Finally, looking at Bar Chart 4, for close to 60 percent of the respondents, lead time for textiles to be available in stock color or mill pattern is between 5 and 14 days.

It is interesting to note that Bar Chart 1 somewhat resembles Bar Chart 4, although the difference is that, for close to 60 percent of the respondents, lead time for textiles to be available in customer colors is between 1 and 14 days, whereas lead time for the textiles to be available in mill color is between 5 and 14 days. Thus, lead time for customized textiles is somewhat faster than for standard textiles that the mills produce. This indicates that most of the textile firms in Indonesia focus more on customer demands than on their own mill colors or patterns, and production is geared towards customization to meet buyer needs rather than standardized products. This is consistent with most companies producing for made-to-order, as mentioned above.

**Figure 25: Product Development Lead Time: ASEAN (Excluding Shipping)**

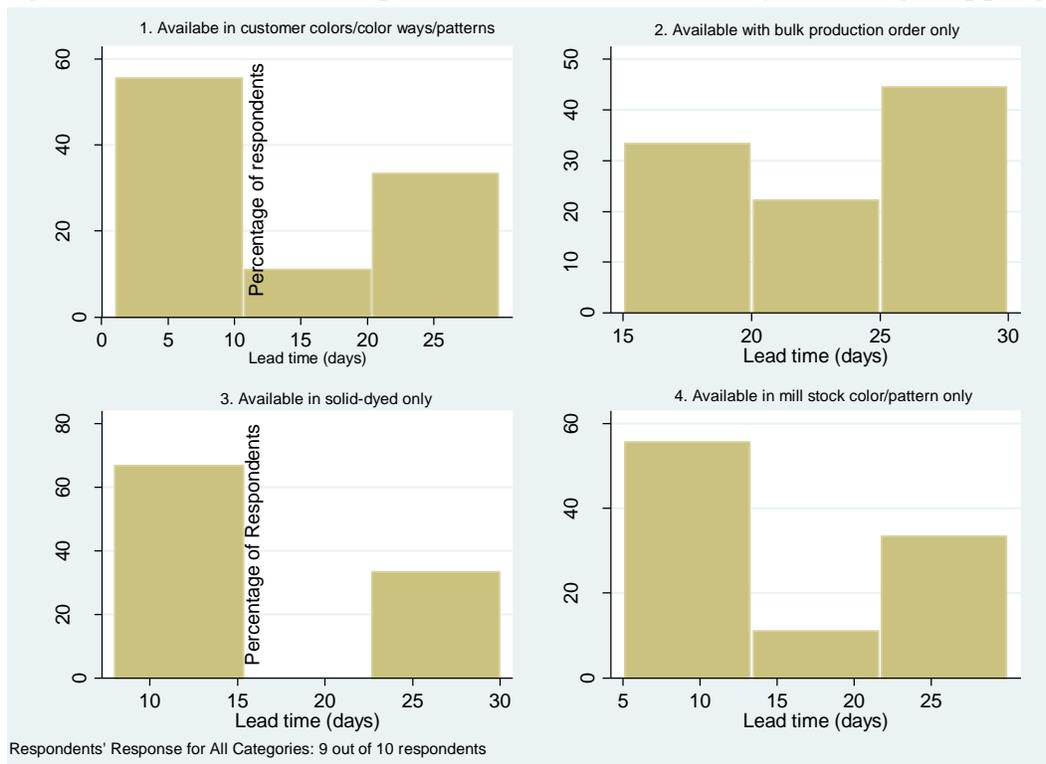
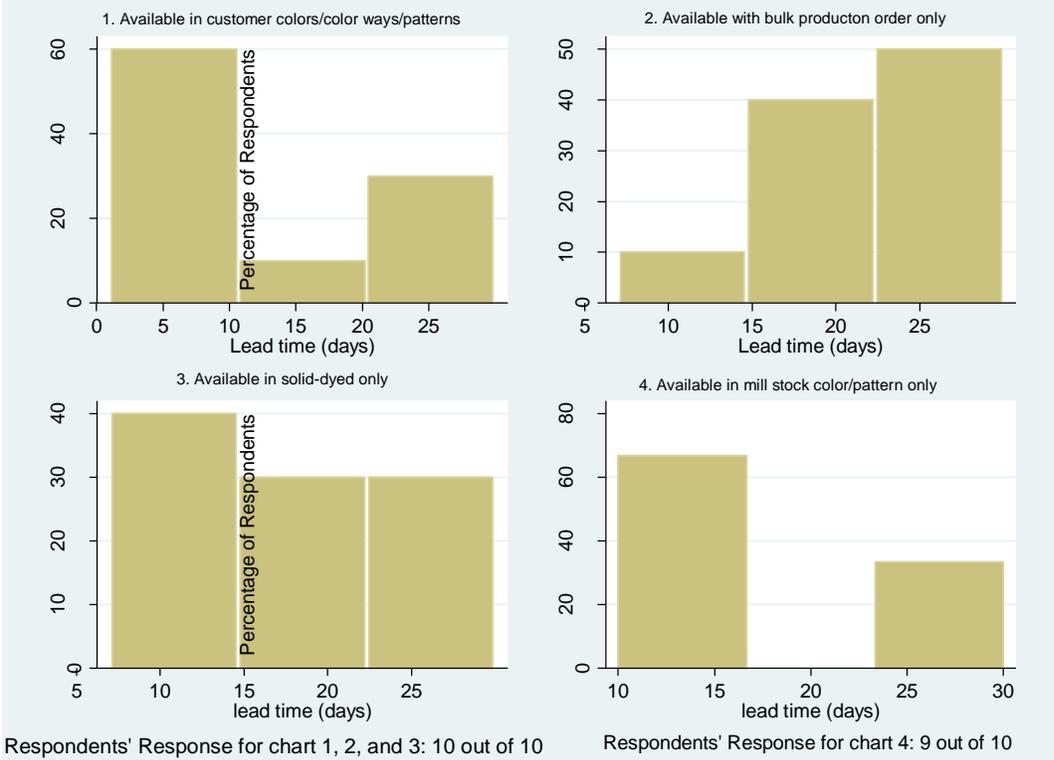


Figure 26 shows the lead time for the non-ASEAN market. Lead time for the textiles in customer colors have a similar pattern with that of the ASEAN market. The lead time for the textiles in mill stock color also reveals the same pattern, albeit without the middle range. About 60 percent of the respondents have lead times of between 10 and 14 days to have the textiles ready in mill stock color, which is much higher than the lead time for customer customization in Bar Chart 1. Once again, this confirms that Indonesian denim producers cater more to the customization of the products, as requested by buyers. This is reflected by the lower lead time for most respondents shown in Bar Chart 1 than the lead time for most respondents in Bar Chart 4.

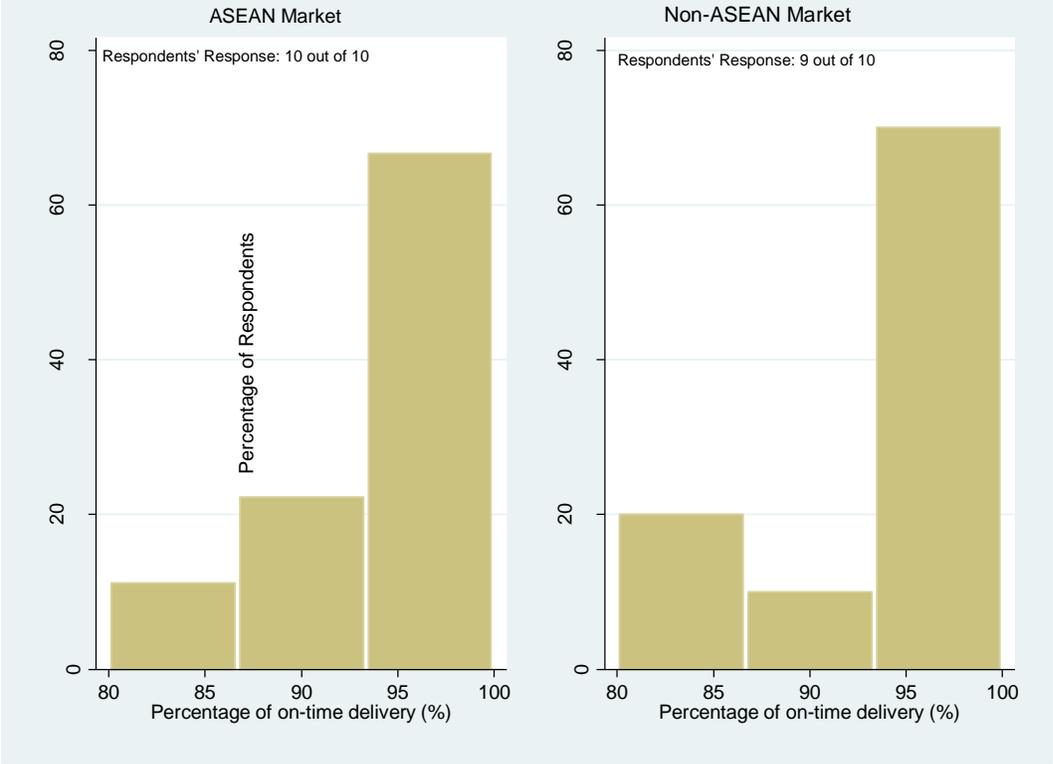
**Figure 26: Product Development Lead Time: Non-ASEAN (Excluding Shipping)**



Survey evidence indicates that shorter lead time in production translates into on-time delivery to buyers. Figure 27 shows two graphs, the one on the left is the percentage of on-time delivery in the ASEAN market, and the one on the right is the non-ASEAN market.

Clearly, most of the respondents have a high percentage of on-time delivery in both markets; between 97-100 percent of total delivery.

**Figure 27: Percentage of On-time Delivery**



The survey also requests the respondents to give comments on the strengths, weaknesses, and potential improvement in customer relations. The following are the summaries of their comments:

1. Strengths

- Most of the mills use modern machinery which improves productivity and lead time.
- Indonesia’s fabrics are made in accordance with international standards and are well known worldwide for their high quality.
- Finished products are tailored to customer specifications which entail a wide range of flexibility in production to meet buyers’ needs.

## 2. Weakness

- Lack of skilled machinery operators and equipment maintenance workers. Ineffective production or management structures in the companies (i.e. firm bureaucracy) limit productivity.

## 3. Potential improvement in customer relation

- Visit to buyer's factory to ascertain their needs.
- Provide factory visits to buyers, so that they can assess the capacity and the quality of the product in order to meet their demand and needs.
- Flexible pricing strategy to attract buyers.
- Service and quality can be upgraded to improve relationship with buyers and attract new ones.

Another issue that is brought up as a major weakness by one of the respondents in the interview is the unavailability of efficient and sophisticated denim washing factories. There are denim washing factories located in the greater Bandung area. However, they lack the technology and capacity that the denim makers need. In addition to the three factors mentioned above, high shipping costs is a problem that prompts cost-cutting measures in other areas of production. This brings us to the next section of the survey report: trade and logistics.

### **2.3.5. Trade and Logistics**

Nine out of ten respondents use freight forwarders to arrange delivery of their products, while only one respondent uses an agent. Respondents also comment on the advantages of shipping to ASEAN market, as opposed to non-ASEAN market. All respondents agree that shipping to ASEAN markets is faster and costs less than to non-ASEAN markets, mostly due to the shorter distances between Indonesian and other ASEAN countries. Sometimes, textile firms are also offered a discount rate for a certain amount of shipment by shipping companies. Hence, lower cost and closer proximity make it possible for Indonesian firms to deliver their products quicker and cheaper to their ASEAN neighbors.

All respondents cite illegal fees as a serious issue in Indonesia’s customs service. Inefficient bureaucracy and complicated shipping procedures provide ample opportunity to customs officials to extract “extra” or “unofficial” fees. Therefore, steps to eradicate these illegal fees and to simplifying shipping procedures are urgently required to improve the delivery and costs of shipping products.

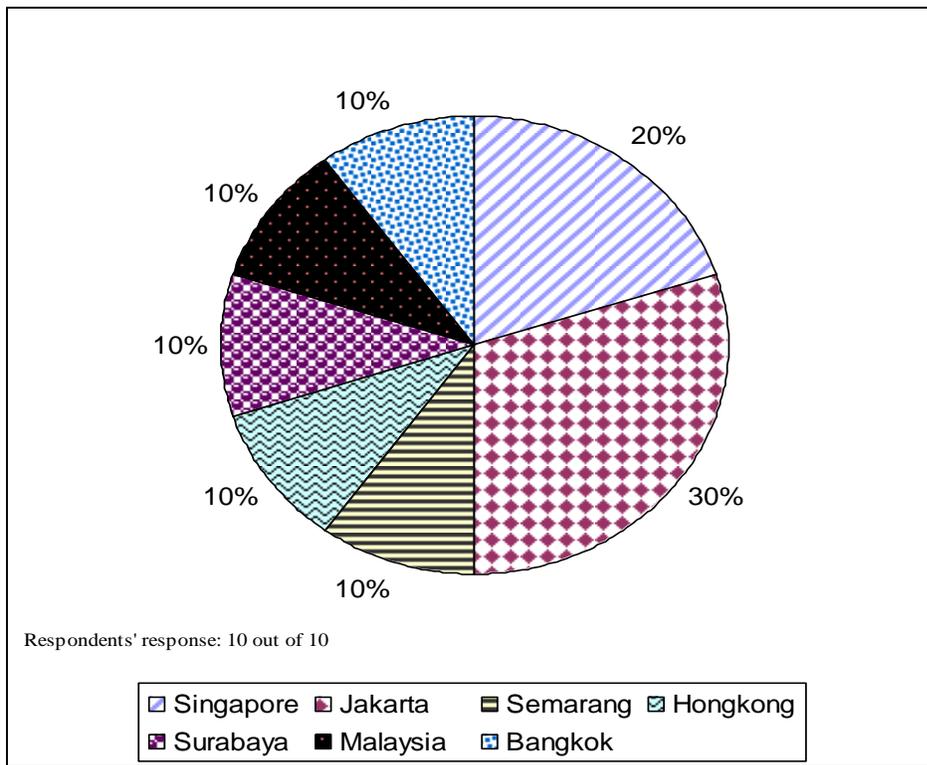
**Table 7: Terminal Handling Charge** (Values are in US Dollar)

Country	2004		2005	
	20 feet	40 feet	20 feet	40 feet
Indonesia	150	240	97	150
Singapore	110	160	110	160
Philippine	78	N/a	78	N/a
Malaysia	76	N/a	76	N/a
Thailand	40	N/a	40	N/a

Source: Global Competitiveness Report

Even without the illegal fees, shipping from Indonesia is already costly. From Table 7 above, it is clear that Indonesia has the highest terminal handling charges of all ASEAN countries, even though the rate for 2005 was lower than for 2004. More simplified shipping procedures would also help to reduce waiting time at the port. One respondent notes the importance of a more accurate weather forecast in order to optimize shipping time. Another respondent states that the Indonesian port authority should build larger container ports, which would benefit firms, as they could reduce inventory cost.

**Figure 28: Fastest and Cheapest Corridors**



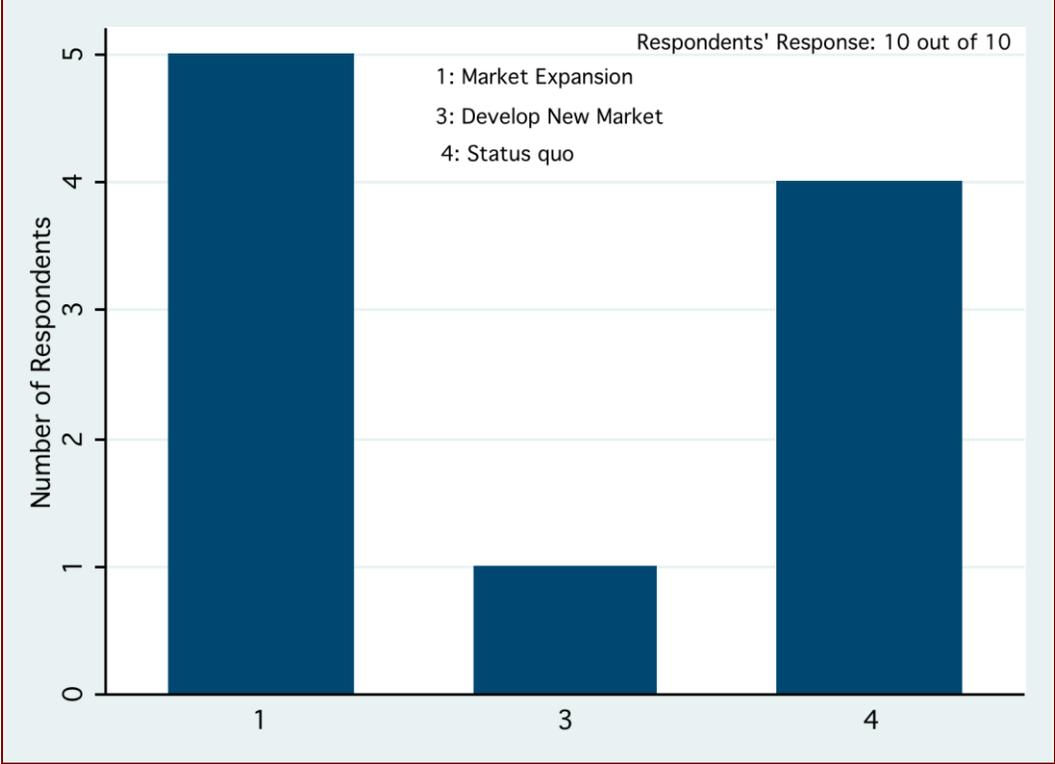
While shipping from Indonesia is in general more costly than from other ASEAN countries, there are several shipping corridors that the respondents use to ship their products fast and at low costs. The Pie Chart in Figure 28 lists shipping corridors that the companies use. As given by the Pie Chart, three respondents report that shipping from Jakarta (i.e., Port of Tanjung Priok) is the fastest and cheapest, while two respondents report that shipping from Singapore provides the lowest cost and shortest length of delivery time. One point that emerges from a discussion with one of the respondents is the unavailability of a direct shipping line to Cambodia. The existence of a direct shipping line to Cambodia could save delivery time of as much as three to five days.

### 2.3.6. Marketing, Sales and Human Resources

The survey on respondents' marketing strategies shows an interesting result. At a time when there is a threat of global slowdown in world economy, when many businesses

contract or even go bankrupt, five of the respondents are pursuing a market expansion strategy. One respondent is planning to enter new markets. On the other hand, four respondents are simply trying to survive the economic crisis (Figure 29). To summarize, six respondents are pursuing offensive strategies, reflecting that, in the midst of an economic crisis, there are several companies in Indonesia able to turn the unfavorable condition of the current market into an opportunity. Moreover, the fact that other businesses go bankrupt or reduce their output, both locally and internationally, is seen as an opportunity for these companies to expand and diversify their market.

**Figure 29: Marketing Strategy**



However, to expand and diversify their markets, these firms need information on garment factories in Cambodia and other ASEAN countries. Four out of the ten respondents state that a database on garment factories is not readily available. Internally, all of the respondents' marketing teams are highly motivated and knowledgeable in planning and control to comply with the firms' marketing strategy. They have effective communications

with their buyers, which is crucial since, as noted earlier, Indonesian textile mills are more focused on customization, which requires frequent and excellent communications with customers. All respondents reported that innovation is an integral part of their activities, since it is crucial for them to develop new products to attract more customers. However, one may be skeptical about this claim, realizing that most of the companies surveyed cater to the OEM market. One can conclude that significant R&D capabilities are limited to a small number of larger firms.

The recruitment process in all firms is selective, as they are interested in acquiring employees' skills that are specific to their individual firm's need. However, the supply of skilled workers in the textile industry is relatively scarce. Thus, firms have to conduct training programs to increase the skills of their workers. Overall, there is no critical issue in human resource management.

## 2.4. SWOT ANALYSIS

This section focuses on the SWOT analysis to determine the strengths, weaknesses, opportunities, and threats for the Indonesian side of the HS 5209 corridor, based on the elaboration in the previous sections. The SWOT was then used to develop a plan of action to build on the strengths, address the weaknesses, seize the opportunities, and minimize the threats, in order to optimize the Indonesia-Cambodia corridor for HS 5209. The following lists the strengths, weaknesses, opportunities and threats of the Indonesian denim sector, which is also summarized in Table 8.

### Strengths

- Long history of participation in the textile export market. Years of experience in the export market is an important factor to overcoming the competition in the industry, particularly in understanding the needs of buyers.
- A dominant player in the region's textile industry, as portrayed by the strong export performance in the ASEAN market.
- Integrated vertical textile industry, generally regionally within Indonesia as in the Bandung area, where most of the respondents reside.
- Relatively new investment in machinery which contributes to higher efficiency and reduced lead time, and may support innovation.
- Minimal inventory levels, because of the concentration on made-to-order production.
- All the respondents comply with international quality standards, such as ISO and ETI.
- Production activities are oriented towards meeting buyers' specifications.
- Information systems are up to par with the international best practices, although they are limited to the usage of EDI and UPC, and not production and enterprise planning.
- The average production capacity utilization is at 80 percent which indicates the textile companies in Indonesia are operating at an efficient level, yet with sufficient excess capacity to meet higher demand.

- The percentage of on-time delivery is high, ranging from 97 percent to 100 percent of total delivery.
- Strong domestic market, as revealed by the survey that a major portion of the respondents supply HS 5209 to the domestic market which protects the industry from external market fluctuations and ensures a base of employment, equipment, and skill.

## Weaknesses

- Lack of market information for other ASEAN countries – firms, products, quality, prices, etc.
- Most of the Indonesian denim producers do not have offshore sales offices to improve access to potential buyers. With regard to export to Cambodia, where garment makers typically obtain fabric from suppliers specified by their customer or by their outside headquarters offices, the absence of offshore sales representatives probably results in lost opportunities.
- Financing is difficult to obtain through local banks.
- Insufficient infrastructure, which jeopardizes the competitiveness of textile firms and their ability to obtain foreign investments.
- Trade costs, led by high terminal handling charge and “informal costs” to secure customs processing and expedite release.
- Short supply of skilled workers in the textile sector to operate and maintain the machinery used in production.
- Heavy reliance on imported raw materials, such as cotton from the United States and Brazil.
- Unavailability of efficient and sophisticated washing factories for denim.

- Lack of a direct shipping route to Cambodia which could reduce transit by 3-5 days. (Most shipments are transshipped in Singapore, although other routings are possible.)
- Relatively long product development lead time for bulk production and solid dyed stock.

### Opportunities

- Integrated supply chain in the ASEAN region, particularly between Indonesia and Cambodia, could potentially serve a larger market, such as the US and EU.
- The global economic crisis is creating opportunities for efficient, competitive firms that pursue an aggressive marketing and sales strategy.

### Threats

- Unclear and uncoordinated policies from the government that create a lack of legal certainty that can disrupt the competitiveness and productivity of the Indonesian denim sector.
- Labor disputes and distortive labor law (Manpower Law No. 13/2009) which reduce the flexibility of the labor market.
- Unfavorable macroeconomic condition, in which the depreciation of the rupiah will create obstacle in obtaining raw material, which may potentially harm production activities.
- Diverse standards of products in the ASEAN region, which will distort the free flow of goods in the region.

**Table 8: SWOT Analysis - Indonesia**

<p><b>Strength:</b></p> <ul style="list-style-type: none"> <li>• Years of experience in the export market, particularly in understanding the needs of buyers.</li> <li>• A dominant player in the region's textile industry as portrayed by the strong export performance in the ASEAN market.</li> <li>• Integrated textile industry.</li> <li>• New investment in machinery, which can reduce lead time.</li> <li>• Make to order approach in inventory management.</li> <li>• The majority of mills, if not all, has complied with international standards (ISO and ETI)</li> <li>• Ability to customize products based on buyer's specification and needs.</li> <li>• Information systems are up to par with current practice, though limited to the use of EDI and UPC.</li> <li>• Production capacity utilization is at 80 percent.</li> <li>• High percentage of on-time delivery.</li> <li>• Strong domestic market.</li> </ul>	<p><b>Weakness:</b></p> <ul style="list-style-type: none"> <li>• Lack of market information for ASEAN countries.</li> <li>• The absence of offshore sales offices makes it difficult to secure export nominations.</li> <li>• Difficulty in securing trade finance from local banks.</li> <li>• Insufficient infrastructure which hampers competitiveness and investment.</li> <li>• High terminal handling charge.</li> <li>• Short supply of skilled workers, specifically for workers in the production floor.</li> <li>• Heavy reliance on imported raw materials.</li> <li>• Unavailability of efficient and sophisticated washing factories for denim.</li> <li>• Unavailability of direct shipping line to Cambodia.</li> <li>• Product development lead time for bulk production and solid dyed stock have the longest lead time.</li> </ul>
<p><b>Opportunity:</b></p> <ul style="list-style-type: none"> <li>• Integrated supply chain in the ASEAN region can lead to opportunities of catering larger markets, such as the US and EU.</li> <li>• Market expansion strategy coupled with an efficient production system enable firms to meet increasing demand in the future.</li> </ul>	<p><b>Threat:</b></p> <ul style="list-style-type: none"> <li>• Unclear and uncoordinated policies from the government that can disrupt productivity.</li> <li>• Labor disputes and distortive labor law (Manpower Law No. 13/2009) which reduce the flexibility of the labor market.</li> <li>• Unfavorable macroeconomic condition.</li> <li>• Diverse standards of products in the ASEAN region.</li> </ul>

## 2.5. RECOMMENDATIONS FOR ACTION PLAN - INDONESIA

Based on the SWOT analysis, we can recommend an action plan that is doable and can be implemented in the short term. This action plan is aimed towards market diversification; since the SWOT analysis uncovers that the most critical issue is not in production, but rather in marketing their products and obtaining new buyers.

- *Joint Offshore Marketing Office.* The finding of the survey shows that many Indonesian firms do not have any offshore sales office, for which these firms may consider an inefficient use of funds to rent office space abroad. To avoid cost issues, Indonesian textile companies could pool their resources for a joint offshore promotional office in their major markets to facilitate more buyers. The joint promotional office could increase the chance for Indonesian manufacturers to secure export nominations. Another important aspect of this action plan is that buyers can have direct access to product samples from Indonesian manufacturers. As one respondent mentioned in the interview, one of the main reasons for not being able to obtain export nominations is the inability to provide product samples in a timely manner. To minimize coordination problem and vested interests, the Indonesian Textile Association (API) can act as the coordinator of the joint effort.

- *Provision of Database of Cambodian Garment Factories.* The survey also reveals that Indonesian firms do not have a database of garment factories in Cambodia or other ASEAN countries. Such database is important for Indonesian companies to diversify their markets. The provision of a database from the Cambodian side will complement the joint offshore marketing office as the firms' marketing team can research the market as well as offer their product directly to the garment factories. The firms should also be made aware of AFTEX and its website and how to use it to their benefit.

- *ASEAN Textile-Garment Trade Fair.* The trade fair will enhance the matchmaking process between buyers and sellers in Southeast Asia. For Indonesian firms, it will expose them to new potential buyers and would aid them in their market expansion and diversification strategy. Plus, communication between ASEAN firms would improve and

further enhance the establishment of a vertically integrated textile industry in ASEAN. Thus, this match-making event could also serve to speed up the establishment of an ASEAN textile production network. To keep up with current developments and the changing business environment, it is recommended to make the ASEAN Textile-Garment Trade Fair an annual event.

- *Across firms, management training is required to reduce lead time*, especially bulk production and solid dyed stock which have relatively long lead times. To address the issue, textile firms could pool their resources and design a managerial training program on issues to reduce lead time.

- *Government Lobby*. This is needed to address external issues that are vital to the establishment of a production network, such as good infrastructure, trade finance, logistic issues and customs. These issues have been haunting the business sector for many years. Though there are improvements, the government is deemed slow in alleviating them. API could coordinate a lobbying effort to keep reminding the government of the importance of overcoming these problems. Indonesia will undergo a presidential election this coming July (2009). After the election results have been announced would be an opportune time to address the new administration on the issues related to the textile industries in Indonesia. It is in the best interest of the new administration to take note of their concerns, and also others, in designing the administration's economic policies.

These recommended actions complement and will enhance the firms' effort to expand and diversify into new markets. They will assist in the matchmaking process between buyers and sellers. As mentioned earlier, although respondents marketing teams are highly motivated, they require further assistance in securing new clients. Government support is also crucial as it holds the key to improving the business environment as business friendly policies will benefit the government, the firms, their employees, and therefore the country. The bulk of the problem for the TTP industry is supply-side constraints, such as the slow pace of custom reforms, stringent labor regulation, trade finance, and infrastructure bottlenecks. Government policies must be directed to tackle those issues. Supply-side

improvements that enhance the competitiveness of the Indonesian textile sector would also speed up Indonesia's integration process in the ASEAN production network.

### 3. CAMBODIA

Cambodia is a “least developed” country with little industrial activity. The garment industry has been an important growth engine, generating employment and direct economic impact to impoverished provinces through salary remittances while boosting national economic indicators. Representing over 80% of export revenues, over 350,000 jobs at its peak, and close to \$3 billion in export sales, it sustains close to 14% of the population.

In the wake of the financial crises, the industry has suffered the loss of approximately 50,000 jobs by March 2009 and 61,000 jobs by June 2009. Leadership of the sector is actively pursuing initiatives to support the sector, looking at diversified markets and at the value chain for efficiencies that will contribute to competitiveness. Representing an industry heavily reliant on imported manufacturing inputs, the Garment Manufacturers Association in Cambodia (GMAC) is working closely with AFTEX and the ACE project to explore the potential for regionally oriented supply of materials.

ACE identified trade in heavy weight woven cotton fabric, including denim, classified in HS 5209 as a manufacturing input shipped from Indonesia to Cambodia. The survey team from BDLINK worked in close collaboration with GMAC and ACE to address the following principal tasks:

- Conduct a survey of garment makers using materials of HS 5209 in Cambodia
  - Interview at least 10 decision makers in Cambodia using heavier weight woven cotton fabric (HS5209), mostly denim.
  - At least four of these firms are to be companies which import the fabric from Indonesia.
  - At least six are firms which import the fabric from countries other than Indonesia.
- Analyze the information from the surveys and prepare a SWOT report for the corridor that includes findings, conclusions, and recommendations for enhancing the competitiveness of the supply chain from a Cambodia perspective.

- Review the Indonesia report and consolidate the supply chain for Cambodia and Indonesia, and provide overall findings, conclusion and recommendations for enhancing the competitiveness of the supply chain.

## Approach and Methodology

The BDLINK team divided the project into 3 phases, each briefly described below.

**Phase 1: Project Preparation:** Review and refine the survey instrument, prepare relevant administration, desk research, identify relevant samples, and train surveyors.

- Review and Refine Questionnaire:* The questionnaire was reviewed by GMAC senior staff members and Mr. Roger Tan, Secretary General, and their suggestions were incorporated.
- Prepare Administration* included obtaining letters from AFTEX and emails from GMAC to ensure that the industry was aware of the project. Although a seemingly administrative duty, to gain access to the factory managers, both the introduction and translation into Chinese were important.
- Identify Sample:* The team worked closely with GMAC in identifying relevant factories to interview. This was time consuming, because while GMAC collects data on members, the quality and depth of the database were questionable. The team contacted over 30 factories to identify 15 relevant to the corridor.
- Train Interview Task Team:* A group of three staff members were used to simplify consolidation of comments and observations.
- Desk Research* conducted during the preparation phase contributed to industry background and to other technical aspects of the survey questionnaire.
- Database Preparation:* The database was prepared in Phase 1 using a trial survey, and tested to ensure it met requirements.

**Phase 2: Survey Implementation:** All factory interviews were conducted with management personnel in Cambodia. To obtain all data, the general manager, shipping manager, administration managers, merchandiser, accountant and operations/factory

manager were variously included. Interviews lasted between 1-2 hours and were mostly conducted in the factory office. A Chinese translator was used as needed to ensure clear transfer of information and understanding.

**Phase 3: Data entry, Analysis and Report Writing:** Data were entered into the database by the interview task team to ensure accuracy and consistency of the project overall. The data were then verified by the team leader and the analysis compiled, followed by report writing.

### Challenges and Constraints

There were several challenges faced by the team that seriously delayed data collection. These are noted as “lessons learned” to guide future efforts.

1. The GMAC membership database is current, but difficult to use creating difficulties for the GMAC staff in recovering information. With the challenges in the GMAC database, the team leveraged a database from the Ministry of Commerce (MOC) which posed similar challenges. GMAC and MOC would benefit from adopting an updated, flexible data management system or, at the least, training on using the existing software. GMAC would benefit from going online with their membership database so that members can fill in their information on line so that it is easier to keep updated and track.
2. Factory managers were generous with their time and with staff time to respond to the survey. However, they were reluctant to identify decision makers at headquarters offices for follow up. If unable to get sufficient information from a factory, the team replaced it.
3. Interviews done in translation (Chinese – English) took much longer than expected or budgeted for. The questionnaire itself was not translated, only interpreted during the interview. For future studies, we suggest that the actual questionnaire be translated into Chinese, to facilitate shorter interview sessions.
4. It became clear that the factories were extremely concerned about their business operations; Cambodia has seen a 20% drop in exports in 2009 and dealing with operations issues was a priority for some. Those unable to devote the time to clarifying questions and

data were replaced in the survey to ensure quality and consistency of the outputs of the survey.

## Survey and Reporting Terminology

### Definitions for Data Interpretation

Certain statistical terms have been used to present the information following. Findings are organized into 2 parts: (1) the buyer requirement and (2) the supplier performance. The following two tables provide the definitions of statistical terms used in this survey.

**Table 9: List of Statistical Definitions Used**

Terminology	Descriptions
<b>Buyer Requirement</b>	
# Buyer data points	Number of buyer information or data points provided by factory participants. This is not the number of factory participants.
% Buyer data points	Percentage of buyer data points provided by factory participants.
Rating	The rating is from 1- 5; 1 is the highest importance for positive impact on sales; 5 is not believed to result in sales; DNK is for Do Not Know. <sup>1</sup>
<b>Supplier Performance</b>	
# Supplier data points	Number of supplier information or data points provided by factory participants. This is not the number of factories participants.
% Supplier data points	Percentage of supplier data points provided by factory participants.
Rating	The rating is from 1-5; 1 is excellent; 3 acceptable but room for improvement; 5 is poor; DNK for Do Not Know.
<b>Overall</b>	
Average	The sum of all data divided by all amount of data.
Maximum	The highest number in the data set.
Minimum	The lowest number in the data set.
Mode	The most frequently occurred value of the data set.

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<sup>1</sup> The rating on the buyer requirement and the supplier performance is extracted from the garment factory SWOT analysis questionnaire of this survey.

## Acronyms Table

**Table 10: List of Acronyms and Definitions**

Acronym	Description
ACE Project	ASEAN Competitiveness Enhancement Project
ADVANCE	ASEAN Development Vision to Advance National Cooperation and Economic Integration
AFTA	ASEAN Free Trade Area
AFTEX	The ASEAN Federation of Textile Industries
ASEAN	Association of Southeast Asian Nations. There are 10 member countries in this association; namely, Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam.
BSCI	Business Social Compliance Initiative
CDC	The Council for the Development of Cambodia (manages investment)
CEPT	Common Effective Preferential Tariff
CMT	Cut, Make, and Trim – the garment factory does the cutting, making, and trimming, often as a subcontractor and without contact with the buyer or fabric supplier.
CSDC	Cambodia Skills Development Center, an NGO training center
FDI	Foreign Direct Investment
FOB	Free on Board – An international commercial term in which title transfers to the buyer when the goods are loaded on the vessel, also denotes garment maker pays all costs up to loading on the vessel
GIPC	Garment Industry Productivity Center (an operating division of CSDC)
GMAC	Garment Manufacturers Association in Cambodia
HS5209	Harmonized System Code Heading for Woven fabric of cotton, containing 85% or more by weight of cotton, weighing more than 200 g/m <sup>2</sup>
JV	Joint Venture
MOC	Ministry of Commerce
MoLVT	Ministry of Labour, Vocational and Training.
WRAP	Worldwide Responsible Apparel Production

### **3.1. INDUSTRY BACKGROUND – CAMBODIA**

When Cambodia began to stabilize in the late 1990s after 30 years of conflict, the garment industry began to grow on a surge of foreign capital from investors whose countries had reached quota ceilings, limiting their export growth. After little more than 10 years, the industry contributes 80% of export revenues, and its nearly 300 active factories employ between 320,000 and 350,000 workers. It has become the 7th largest garment exporter to the United States, which purchases 70% of its annual output.

Cambodia's growth rate began to slow in 2007, and stalled late in 2008 when the effects of the current economic crisis hit consumer goods markets. Orders declined significantly in the first quarter of 2009, and it is estimated that the industry lost between 50,000 and 60,000 jobs by June 2009. The Ministry of Commerce (MOC) is projecting a recovery in late 2009 or 2010 and hopes to reach \$3 billion in export sales.

Cambodia has very little vertical integration and virtually no industrial fabric production. Capital requirements, and energy needs, are much lower in apparel making. In fact, the requirement for a garment industry is a large workforce, at low wage rates. As a result, over 90% of production inputs are imported. Therefore, improving the regional supply chain between fabric producers and the Cambodian factories offers significant economic opportunities on both ends of the corridor.

All exporting garment factories are members of the Garment Manufacturers Association in Cambodia (GMAC). The government and GMAC have pursued a vigorous campaign to reduce losses, emphasizing market diversification and workforce training.

One unique characteristic of Cambodia's garment industry is the emphasis on high compliance with international labor standards as a differentiating factor. The International Labour Organization (ILO) accepted a role monitoring labor standards in Cambodia in 2000, in conjunction with a bilateral agreement with the US that gave market access in exchange for progress on labor conditions. Today ILO's Better Factories Cambodia (BFC) is a model for other countries; aspects are being adopted in other countries and regions, but buyers continue to give special interest to Cambodia because of the program.

### **3.1.1. International Trade Agreements**

Cambodia, like many smaller countries, began producing garments under the protection of the global quota system that ended in December, 2004. As part of a bilateral agreement with the US, the new industry obtained special market access in the form of growth in annual quotas (17% growth per year) in exchange for progressive labor policies. The safeguards maintaining quotas on Chinese apparel until 2008 sheltered Cambodia's market in key product categories, and exports grew even after Vietnam joined the WTO in January, 2007.

Today, the global market for garments is more open and competitive than it has been for decades. Moreover, buyers are able to seek out producers not for their quota allocation, but based on the basis of service, and ability to offer price, quality, and speed to market. However, Cambodia still benefits from some trade agreements and preferences.

### **3.1.2. Regional Trade Agreements**

The main agreement covering Intra-ASEAN trade is the Common Effective Preferential Tariff (CEPT) Scheme for the ASEAN Free Trade Area (AFTA). This is known as the CEPT-AFTA Agreement. Under this agreement, ASEAN members are to apply a preferential tariff rate (of no more than 5 percent) to goods originating within ASEAN, provided those goods meet the rules of origin requirements.

While the six original members of ASEAN (Brunei, Indonesia, Malaysia, the Philippines, Thailand and Singapore) have reduced their tariffs on the intra-ASEAN garment trade, the remaining members (Cambodia, Laos, Myanmar and Vietnam) have longer timeframes to meet their AFTA commitments.

### **3.1.3. Other Trade Preferences**

As a “least developed country”, Cambodia also benefits from the Generalised System of Preferences (GSP) on exports to the EU, Japan, and Canada. GSP grants duty-free access to their markets for its garment exports when the yarn or fabric used in production is sourced from within ASEAN and the goods are exported directly to their markets. As a result, Cambodian garment producers seeking to export to the EU have an added incentive to source their raw materials from other ASEAN countries.

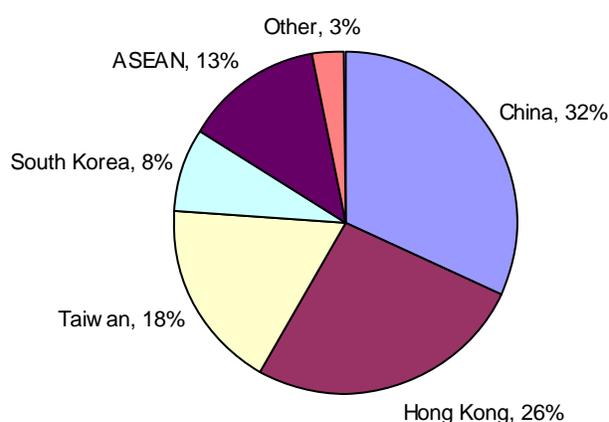
## 3.2. CHARACTERISTICS OF THE GARMENT SECTOR

### 3.2.1. Sources of Raw Materials

GMAC reports that the industry imported approximately \$1 billion of raw materials in 2008<sup>2</sup>. The majority of fibres and fabrics used in Cambodia are sourced from outside ASEAN. Precise estimates vary depending on the data source, but most materials originate in China, Hong Kong (probably imported), Taiwan and South Korea.

Figure 30 shows the value of Cambodian imports of textile fibres and fabrics by origin while Figure 31 shows the Cambodian garment factories using raw materials from each country.

**Figure 30: Cambodian Imports of Textile Fibers and Fabrics, HS Categories 50-60**



Notes: Data is for 2007 for all countries except Vietnam (2006). Data is derived from “mirror data” from partner countries (as opposed to direct data from Cambodia). There may be significant differences in reported figures between direct data and mirror data.

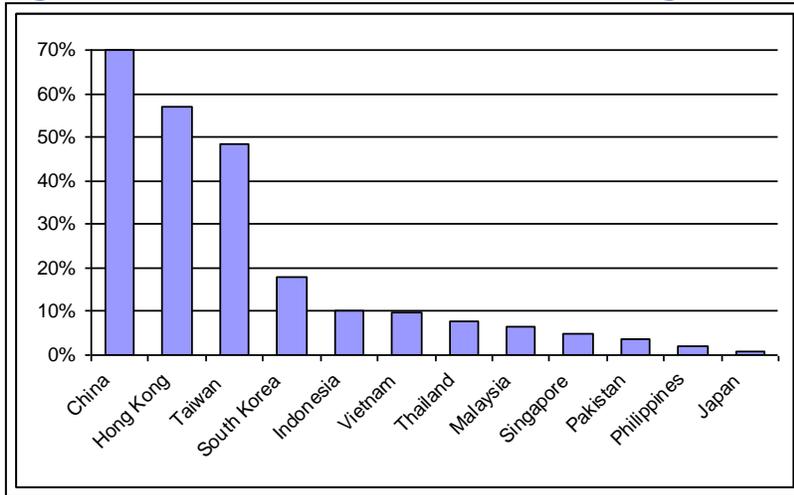
Source: BDLINK based on ITC Trademap database.

The Hong Kong share probably originates in China or Taiwan as Hong Kong does not weave materials.

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<sup>2</sup> Textile imports reach \$1b, Phnom Penh Post, 18 March 2009.

**Figure 31: % of Cambodian Factories Sourcing Raw Material from Each Country**



Note: Percentages total over 100% because many factories use fabric from more than one country.

Source: GMAC database.

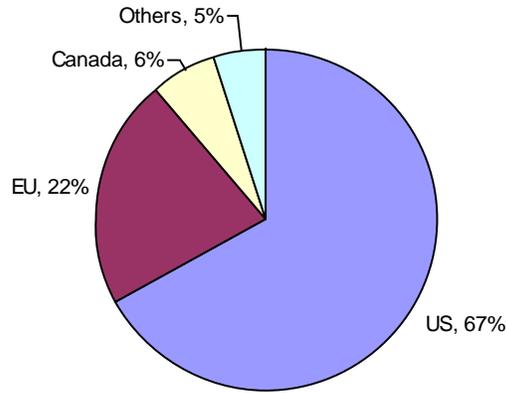
### 3.2.2. Export Destinations

Almost all of Cambodia's garment production is for overseas consumption. The US is by far the largest customer, buying around 70% of total exports. The European Union countries account for most of the remainder. (Figure 32)

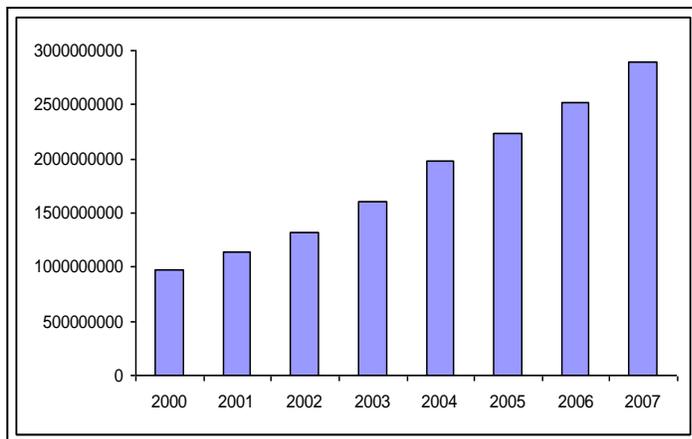
Figure 33 shows the steady pace of Cambodia's garment export growth to near \$3 billion annually. Figure 34 illustrates the effect of the current slump. The Ministry of Commerce data shows actual shipments declined 21.87% during the first quarter of 2009 compared to 2008. Orders in the first quarter of 2009 were only 60 per cent of the first quarter of 2008<sup>3</sup>.

<sup>3</sup> *Garment manufacturing in Cambodia: amid the crisis, employers urge workers to calm down*, Ka-Set [www.cambodia.ka-set.info](http://www.cambodia.ka-set.info), 3 April 2009.

**Figure 32: Exports by Destination - 2008**

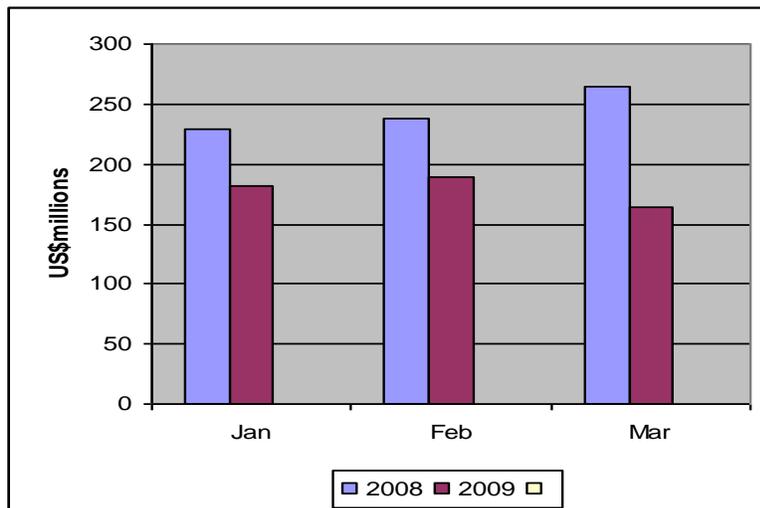


**Figure 33: Exports 2002-2007**



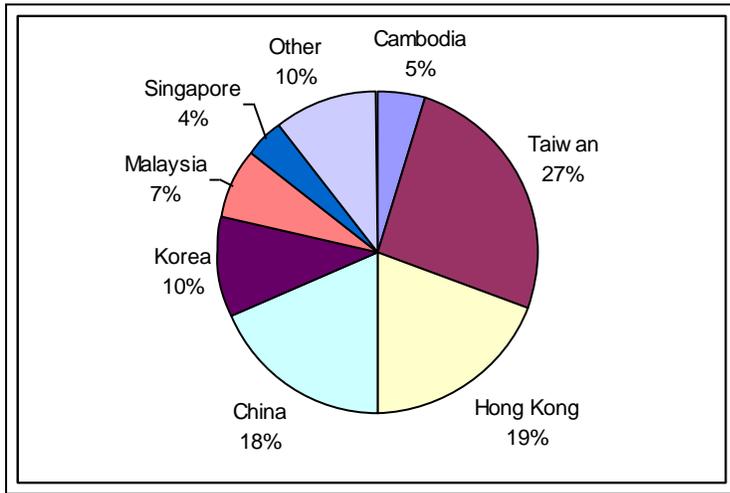
Source: WTO trade data

**Figure 34: Exports - Q 1 '08 to Q 1 '09 (MOC Data)**



### 3.2.3. Ownership & Employment Numbers

Figure 35: Ownership of Factories (GMAC Database)



It is difficult to be precise about the number of garment factories operating in Cambodia at present, as many factories have closed temporarily over the past six months and more factories are expected to do so over the remainder of 2009. As of early 2009, GMAC had 268 active member factories on its database, employing around 320,000 workers<sup>4</sup>. That reflects unofficial numbers for industry closures pegged at 70 factories since August 2008, representing 50,000 workers<sup>5</sup>.

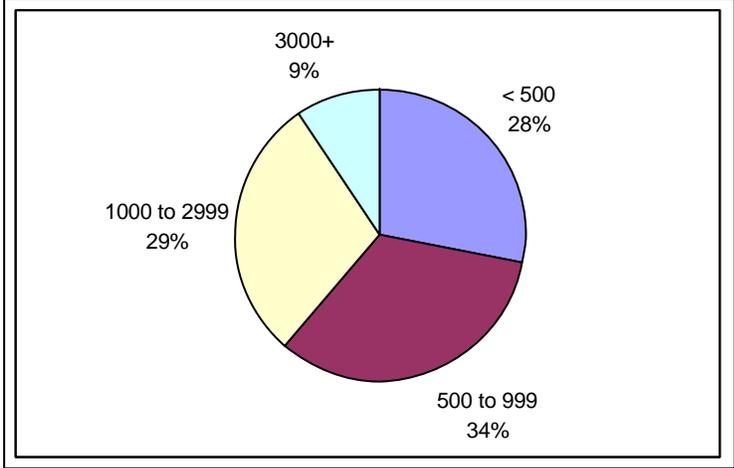
As Figure 35 shows, 95% of garment factories in Cambodia are foreign owned, most by enterprises from Taiwan, Hong Kong, China, South Korea, Malaysia and Singapore.

In terms of factory size, just over one quarter of factories employ fewer than 500 workers. Most factories employ between 500 and 3,000 workers. (Figure 36)

<sup>4</sup> GMAC Membership Database

<sup>5</sup> Cambodia expects garment sector to recover in 2nd quarter, People's Daily Online, 16 March 2009

Figure 36: Number of Employees at Each Factory (GMAC Database)



## 3.3. SURVEY FINDINGS: HEAVIER WEIGHT WOVEN COTTON FABRIC (HS5209)

### 3.3.1. Participant Profile

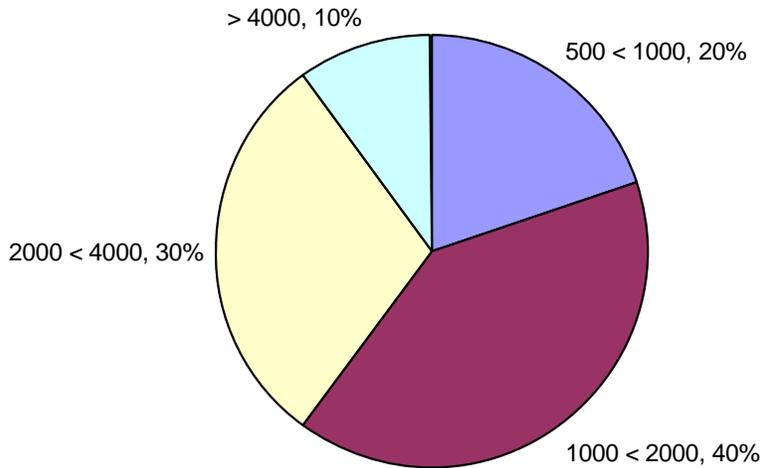
Some challenges were overcome to identify the 10 factories providing information on the use of HS 5209 (heavier weight woven cotton, such as denim or khaki). The GMAC database specifies the garment(s) produced but not the materials used, while the fabric sourcing database of the Ministry of Commerce (MoC) identifies “knitted” or “woven” but does not further disaggregate data. As a result, potential survey participants were identified and approached using the available data combined with direct contact. During the survey, a fabric sample was collected from the factory participants at the specific request of GMAC.

- **Sourcing:** None of the companies source HS 5209 from Indonesia exclusively. Five of the participants source from Indonesia and other countries, while the other five factories do not source from Indonesia. China, India and Pakistan were identified as other sources.
- **Size:** Of the 10 factory participants, 20% of factories have employees between 500-1,000, 70% have employees in the region of 1,000-4,000 and the other 10% have greater than 4,000 employees. Overall, the 10 factories in the sample pool are relatively large compared to the total population of garment factories in Cambodia, where an estimated 62% of factories have less than 1,000 employees.<sup>6</sup> Figure 37 represents the employment breakdown of the factory participants.

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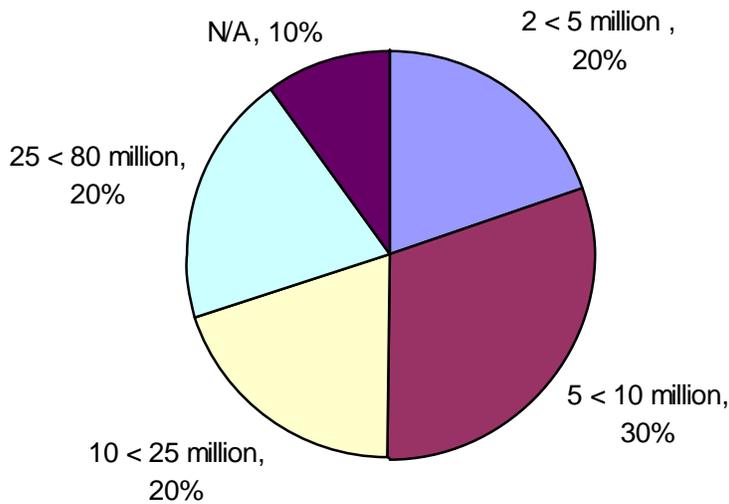
<sup>6</sup> GMAC database.

**Figure 37: Employee Breakdown of Factory Participants**



- **Annual sales:** By reassuring participants about the confidentiality of their data, the survey team obtained annual sales information (for the 2008 calendar year), at the factory level, from nine of the 10 participants. Seven reported annual sales of less than USD 25 million, two factories have annual sales between USD 25–80 million. (Figure 38)

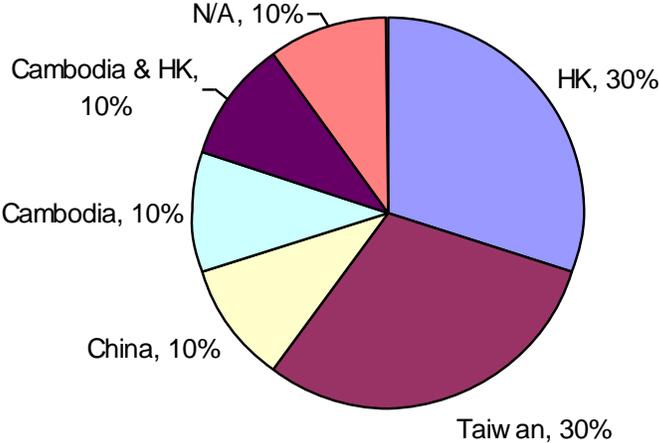
**Figure 38: Annual Sales - 2008**



- **Ownership and marketing:** All 10 participants in this survey are FDI, from China, Hong Kong and Taiwan. Most FDI factories in Cambodia do no marketing, relying on Headquarters offices to obtain orders. Only 20% of survey participants have a marketing

base in Cambodia; 60% having their marketing bases in either Hong Kong or Taiwan. Figure 39 provides a detailed breakdown of the location of the participants' marketing bases.

**Figure 39: Marketing Bases**



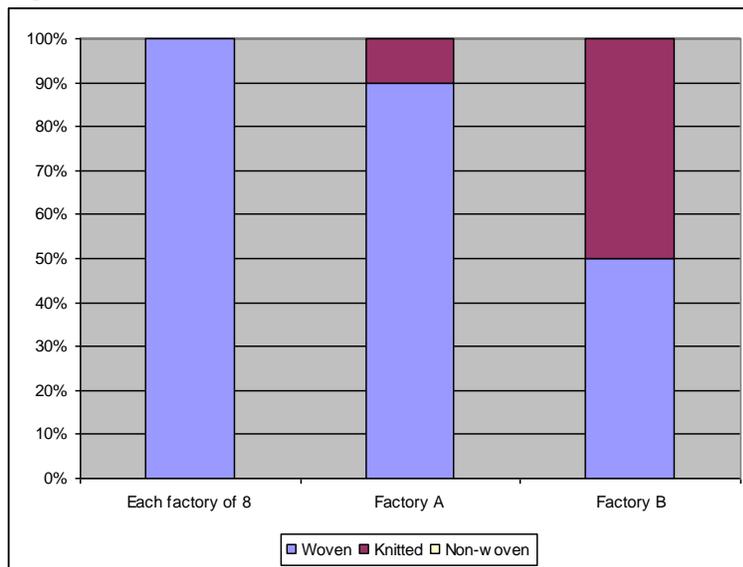
- Market level: All 10 factory participants export on Free on Board (FOB) basis. Two of these factories also work on Cut-Make-Trim (CMT) orders, but this represents less than 50% of their manufacturing. Factories producing 100% of orders on a CMT basis do not source materials and may have no contact with foreign buyers so are not included in this survey. (Note: the survey team also noted that, as CMT producers generally subcontract from other factories, they were more likely to have reduced or closed operations.)
- The 10 factory participants all produce 100% to-order (with a 2-5% reserve for defects). As is usual in Cambodia, they do not design or produce for inventory or stock. The table below provides a summary of the manufacturing type and production type.

**Table 11: Manufacturing Type and Production Type**

Manufacturing Type	# Factories	Comments
FOB Exporter	10	<ul style="list-style-type: none"> <li>- All 10 factories do FOB.</li> <li>- 8 do 100% FOB while 2 also do some CMT.</li> </ul>
CMT	2	
Production Type	# Factories	Comments
Make to order	10	<ul style="list-style-type: none"> <li>- 2 – 5% reserve for defects.</li> </ul>
Make to stock	0	

- Fabric construction:** Of the 10 factory participants, eight use 100% woven fabric; two factories (represented as Factory A and Factory B in Figure 40 below) use 90% and 50% woven fabric, and the balance is knitted fabric. Most of the woven fabric used is denim, and overall, eight factories use HS 5209 in 70-100% of their manufacturing. The other two factories use HS 5209 in approximately half their production.

**Figure 40: Fabric Construction**



- Fabric inspection:** Pre-production fabric inspection is used to evaluate the quality and quantity of goods received and is important to production planning and to efficient use of manpower and machinery. Eight of the 10 participants have specialized machinery to do fabric inspection in-house. Two factories arrange for inspection prior to fabric shipment to

them, at the request of their buyers. In general, the factories in Cambodia equip their machines to do inspection, i.e. to inspect hole, stain or color of the fabric roll by roll.

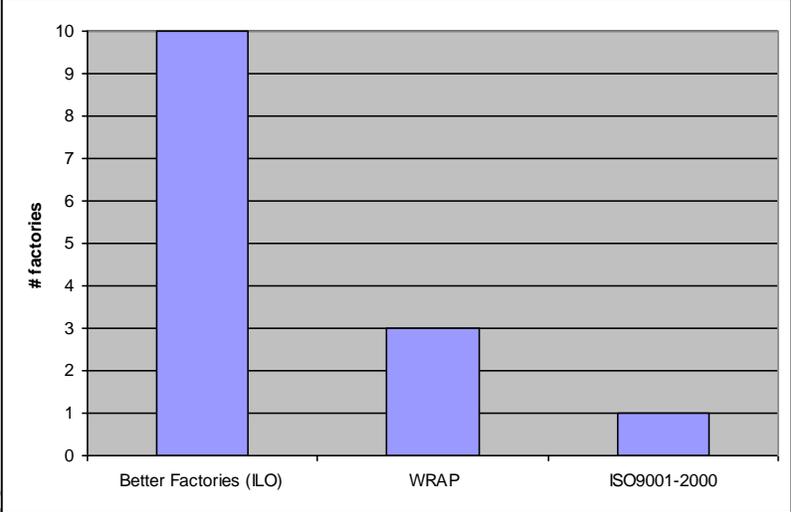
- Specialty processes and finishing: Fashion garments often include special features, such as embroidery, printing, extra washing, etc. Half of the survey participants have some in-house facilities, but also may use a combination of in-house work and outsourcing to specialty companies or other factories. Table 12 below details the information.

**Table 12: Specialty Processes and Finishing**

Embroidery		
# Factories Having In-house Facility	# Factories Outsource	Comments
5	6	One factory does embroidery through both inside and outside services.
Printing		
2	6	Two factories have nothing to do with printing in their garment production.
Washing		
5	7	Two factories do both inside and outside services. SL Garment Processing (Cambodia) Ltd. is the dominant washing service provider in Cambodia.

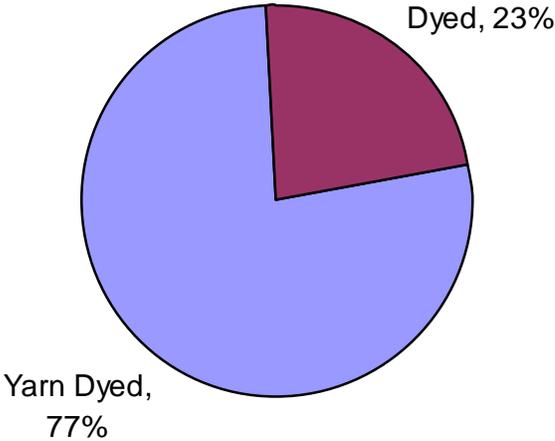
Social compliance: Cambodian garment factories must comply with the Labor Law, with the specific requirements of individual buyers, and adhere to the standards of the International Labour Organization (ILO). All 10 factory participants comply with the ILO requirements. Four of these factories have also joined WRAP, and one is ISO 9001-2000 certified. (Figure 41)

**Figure 41: Social Compliance**



- Fabric finishes:** The 10 factory participants provided information on 26 products, which means there are 26 data points on the fabric finish used in production. Most products (77%) made from heavier weight cotton fabric (HS5209) are yarn-dyed (applies to most denim) while the rest (23%) are piece-dyed. (Figure 42)

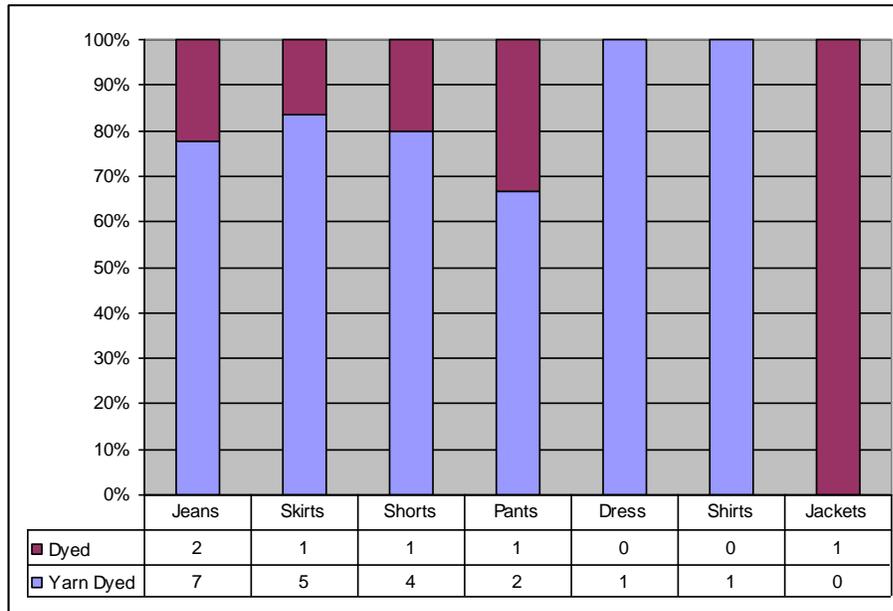
**Figure 42: Finish Fabric for Garment Production – All Products**



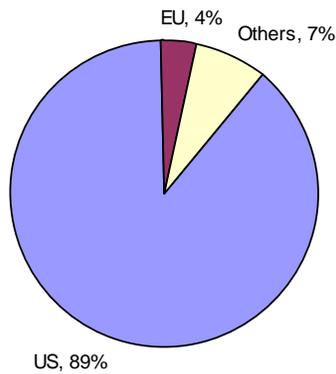
- Garment types:** Jeans (as opposed to casual trousers), skirts and shorts are the most common products for the 10 participants. The following figure provides further details, for

all 26 products, on the finish fabric for garment production in Cambodia, shown by product. (Figure 43)

**Figure 43: Finish Fabric for Garment Production – By Product**



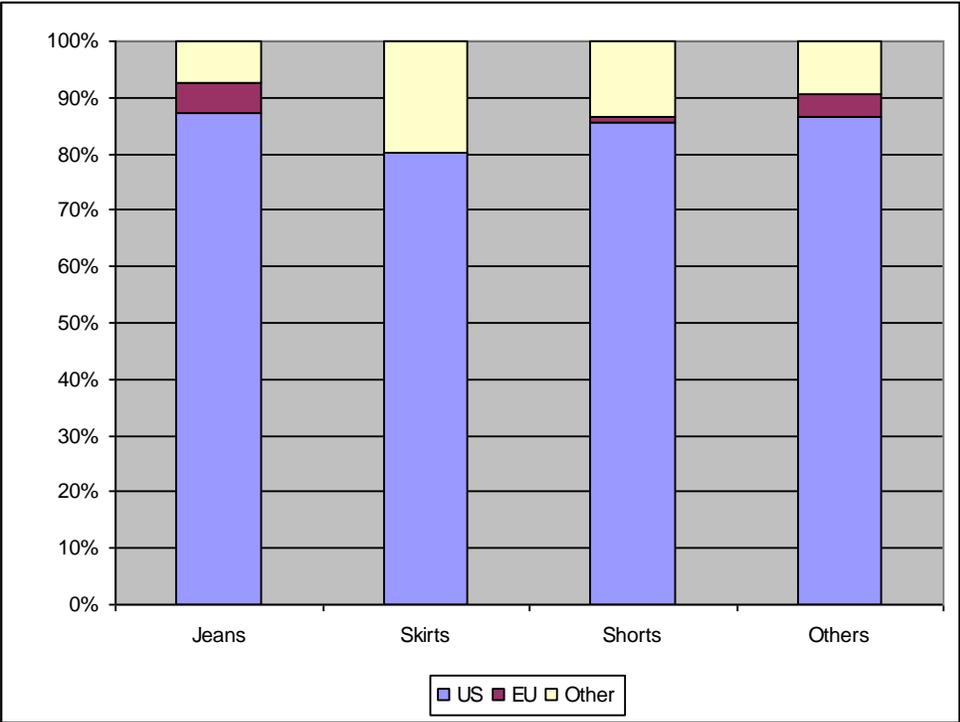
**Figure 44: Garment Destination Export Market**



Export markets: Eight of the 10 factory participants provided information on the market destination of their products. The garment export market for the eight respondents is dominated by the United States (89%), followed by EU countries (4%). The remaining 7% is made up of other countries in Latin America and Asia. (Figure 44)

Jeans comprise the majority of exports and are shipped to all markets. (Figure 45)

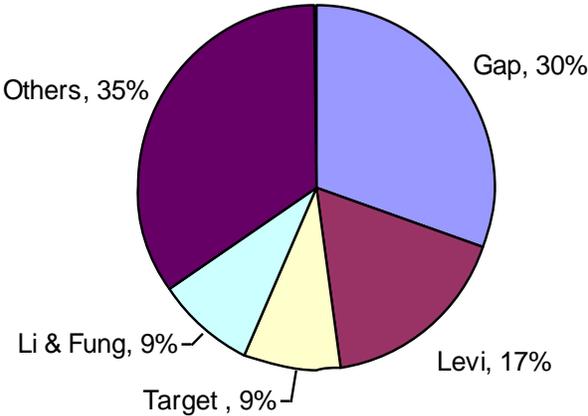
**Figure 45: Garment Export – Percentage of Products**



**3.3.2. Buyer Profile and Requirements**

The 10 factory participants provided a total of 23 buyer data points. As shown in the pie chart below, GAP accounts for 30% of sales, followed by Levi, Target and Li & Fung. (Figure 46)

**Figure 46: Buyer Profile**



## Buyer Requirements

The analysis below is based on two categories of buyer requirements: sourcing, which addresses the actual making and shipping of the garment, and product development, which is the ability of the factory to contribute to the pre-production activities. The 10 factory participants responded based on their knowledge of the requirements of a total of 23 buyers. Excluding responses marked DNK (Do Not Know), most buyer requirements have 18 data points from nine factories. For information on strike offs (that is, print samples for approval), seven factories provided a total of 12 data points.

Survey participants were presented with a list of buyer requirements and asked to give each requirement a score ranging from 1 (very important) to 5 (not important). Table 13 below provides details of their responses. As can be seen, the most common response (the mode) for each requirement was either 1 or 2, although scores from 3 to 5 were also given for some categories. The least important requirement in sourcing is “special fabrics”. As denim is a fairly basic material, this is not surprising, and could be an advantage for the ASEAN corridor development.

**Table 13: Buyer Requirements Rated**

Sourcing Requirements						
Criteria	Most Important (1)	Least Important (5)	Average Rating	Mode Rating	# Buyer data points	% Buyer data points
Price	1	3	1.6	1	18	78%
Lead Time (in days)	1	2	1.2	1	18	78%
Quality	1	2	1.2	1	18	78%
Fabric Product Development	1	5	2.3	1	18	78%
Volume (meters/order)	1	5	2.2	1	18	78%
Special fabric	1	5	2.9	1	18	78%
Corporate Social Responsibility	1	5	1.8	1	18	78%

Garment Product Development Requirements						
Product Development (Sample)	1	4	1.3	1	18	78%
Lead Time (in days)	1	3	1.3	1	18	78%
Lab dips	1	3	1.7	2	18	78%
Strike off (printed fabrics)	1	3	2.0	2	12	52%

**Buyer Requirements – Rating by Average and Mode**

The figures on the following pages provide a graphical representation of the buyer requirements by focusing on the average and mode ratings. The charts are ranked by average, from most important to least important. The first figure (Figure 47) shows that the most important sourcing requirements of buyers are lead time, quality, price and corporate social responsibilities. For all sourcing requirements, the most frequently occurring response (the mode) is 1 (very important).

**Figure 47: Buyer Requirement: Sourcing Requirements**

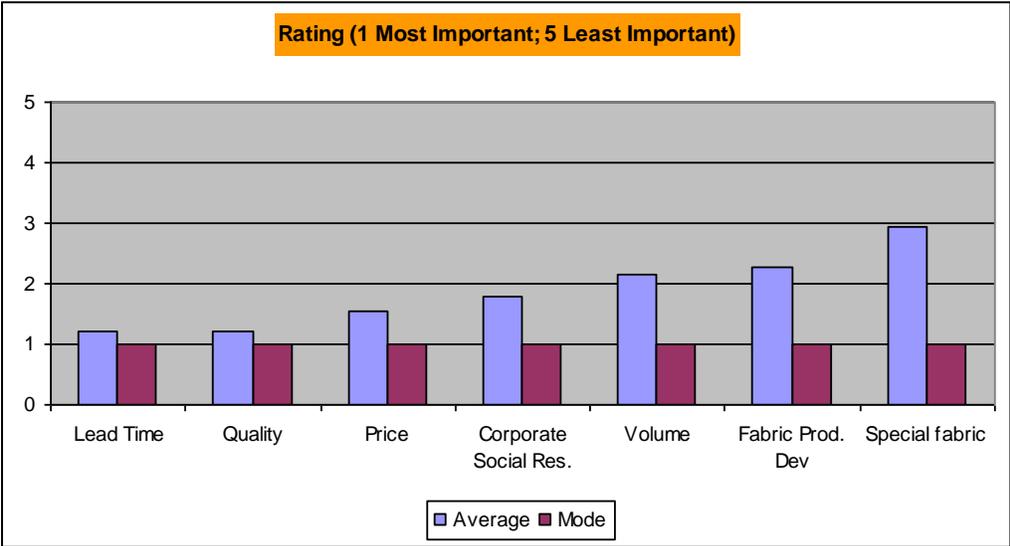
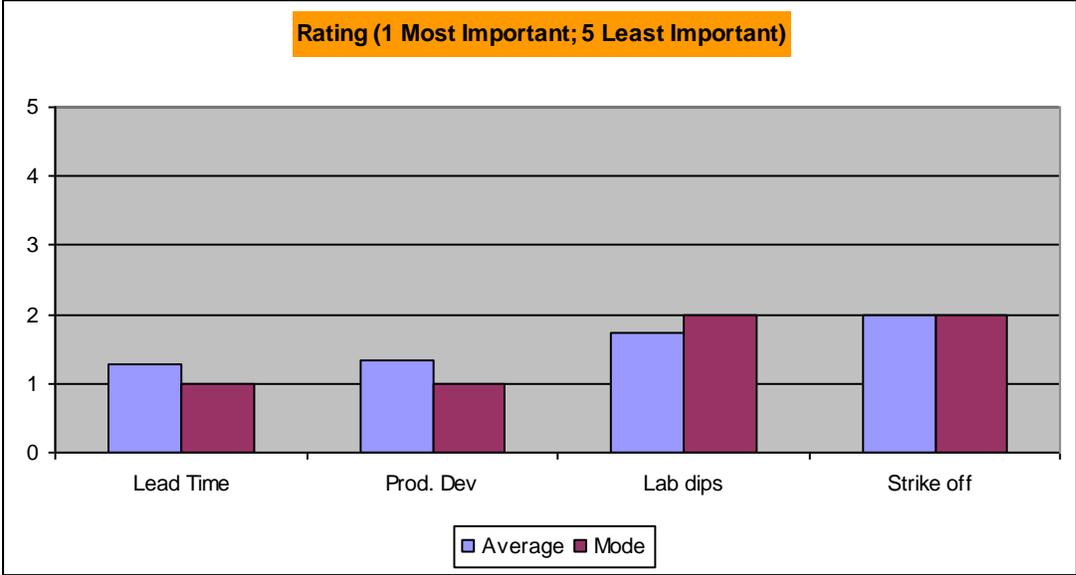


Figure 48 ranks buyer’s requirements for product development from most important to least important. All four requirements – lead time, product development (samples), lab dips and strike offs – are considered somewhat important, receiving average and mode ratings of between 1 and 2. Lead time and product development (samples) received the strongest ratings.

**Figure 48: Buyer Requirements: Product Development**



**3.3.3. Supplier Selection and Performance**

Garment factories often have more than one supplier – whether from the same country or from different countries – for reasons of competitive positioning or on-time demand fulfilment. Establishing and maintaining supply relationships is vital for all international businesses, and as an effect of its foreign ownership, the garment sector in Cambodia reflects the special emphasis on relationships that is often found in Chinese culture.

**Selection**

Each factory in the survey has at least two main suppliers of HS5209. In total, the 10 factory participants supplied information on 31 suppliers; six Indonesian suppliers were identified by five survey participants which also source fabric from other countries. Of the 25 non-Indonesia suppliers, 15 of them are from China and the other 10 are from a range of countries. (Table 14)

**Table 14: Supplier Regions**

Country of Origin	# Suppliers	# Factories	Comments
Indonesia	6	5	--
China	15	10	--
Others	10	7	Pakistan: 4; India: 2; ASEAN country (exclude Indonesia): 2, US: 1, EU: 1
<b>Total</b>	<b>31</b>	<b>10</b>	Total of 10 factory participants in this survey with 31 supplier performance information

Fabric sourcing decisions: Some garment factories in Cambodia are allowed to select fabric suppliers as long as they meet specified requirements of the buyers. In the survey, five of the sample self-source 100% of their fabric, usually through the head office (i.e., not directly by the factory and possibly not in Cambodia). Among the other factories, two purchase from buyers which nominate 100% of the materials suppliers, and two self-select some materials but also use buyer-nominated suppliers. One factory did not respond. (Table 15)

**Table 15: Fabric Sourcing**

Type of Fabric Sourcing	# Factories	Comments
Self-sourcing	5	100% self-sourcing of fabric and mostly done by Head Office.
Nominate	2	100% nominated sourcing of fabric by the buyers.
Do both	2	Mix of self-sourcing and nominated sourcing.
Other	1	No response.
Total	10	--

## Supplier Performance

Participant factories were asked to rate each of their suppliers on performance criteria. The range of possible scores was from 1 to 5, with 1 being excellent, 3 being acceptable but room for improvement, and 5 being poor performance.<sup>7</sup> (Please also refer to the definition of statistical terms used in the buyer section of this chapter.)

This section presents the supplier performance ratings in the following order:

- Indonesia supplier performance
- Indonesia versus China supplier performance – within the same factory participants
- Non-Indonesia supplier performance – separated into: all non-Indonesia, China and others
- Comparison of all supplier performance – Indonesia, all non-Indonesia, China and others.

### Indonesia Supplier Performance

Indonesia is one of the main ASEAN countries currently exporting HS 5209 to Cambodia. Table 16 below provides the ratings for the six Indonesian suppliers obtained from five survey participants. The last two columns (number and percentage of supplier data points) indicate how many of the six suppliers received a rating for that criterion.

**Table 16: Supplier Performance: Indonesia**

Criteria	Excellent (1)	Poor (5)	Average Rating	Mode Rating	# Supplier Data Points	% Supplier Data Points
Price	1	1	1.0	1	3	50%
Lead time	1	3	1.4	1	5	83%
Quality	1	2	1.3	1	6	100%

---

<sup>7</sup> Rating is extracted from the Garment Factory SWOT Analysis Questionnaire.

Volume/capacity	1	2	1.3	1	3	50%
Fabric development	1	1	1.0	1	2	33%
Provide unique fabrics & designs	1	1	1.0	--	1	17%
After sales services	1	3	1.6	1	5	83%
Handling complaints	1	3	2.0	2	4	67%
Replacement & Repair service	1	5	2.5	2	4	67%
Documentation handling	1	3	2.3	3	4	67%

Results from the five participants that source fabric from Indonesia suggest that Indonesian suppliers have generally been successful in satisfying the Cambodian factories. They received good ratings for price, quality, lead time, volume and after sales services. They received less positive ratings for documentation handling, replacement & repair service and complaints handling.

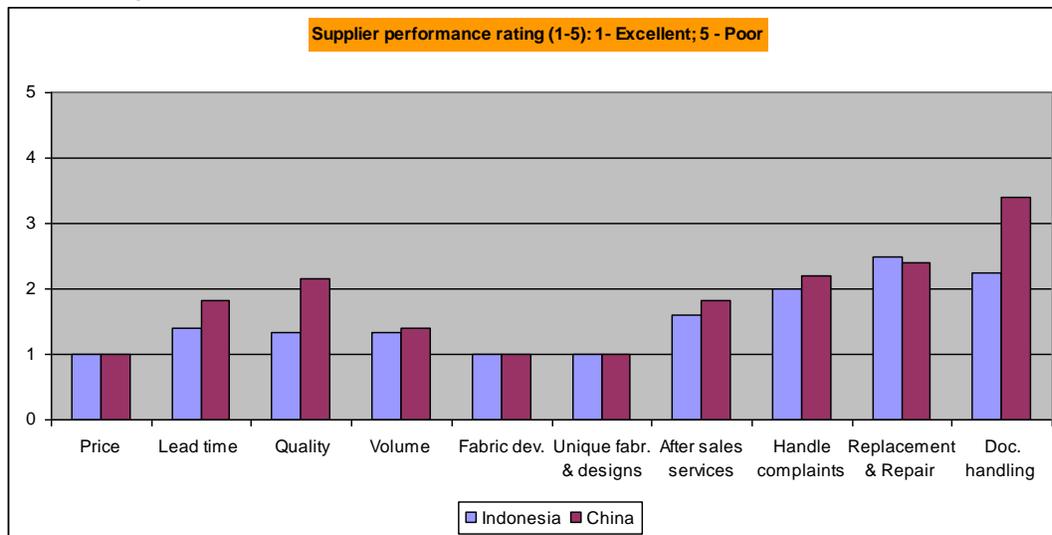
### **Indonesia versus China - Comparison within the Same Garment Factories**

All five garment factories using Indonesian fabric obtain most of the “bottom weight” woven cotton from suppliers in China. Indonesian and Chinese suppliers received similar ratings for all performance criteria, with the exceptions of lead time, quality and documentation handling. Indonesia received slightly better ratings for these three criteria. Table 17 compares the performance of the Chinese suppliers and Figure 49 compares the average ratings of the two countries.

**Table 17: Supplier Performance: China**

Criteria	Excellent (1)	Poor (5)	Average Rating	Mode Rating	# Supplier data points	% Supplier data points
Price	1	1	1.0	1	4	67%
Lead time	1	3	1.8	1	6	100%
Quality	1	3	2.2	3	6	100%
Volume	1	2	1.4	1	5	83%
Fabric development	1	1	1.0	1	3	50%
Provide unique fabrics & designs	1	1	1.0	1	2	33%
After sales services	1	3	1.8	2	6	100%
Handling complaints	1	4	2.2	2	5	83%
Replacement & Repair service	1	5	2.4	2	5	83%
Documentation handling	1	5	3.4	5	5	83%

**Figure 49: Indonesia versus China Supplier Performance (In the Same Garment Factories)**



## Non-Indonesia Supplier Performance

This section presents the findings for Non-Indonesia supplier performance. Results are shown for all non-Indonesia suppliers, disaggregated for China, and “Other non-Indonesia” which includes two from India, four from Pakistan, two from ASEAN nations, and one each from the EU and the US.

Table 18 provides the performance findings of all 25 non-Indonesia suppliers. Note, however, that for some performance criteria the number of data points is less than 25, as some respondents answered DNK (Do Not Know) for some criteria.

**Table 18: Supplier Performance: NON-Indonesia**

Criteria	Excellent (1)	Poor (5)	Average Rating	Mode Rating	# Supplier data points	% Supplier data points
Price	1	2	1.2	1	15	60%
Lead time	1	5	2.0	1	25	100%
Quality	1	3	2.0	1	25	100%
Volume	1	3	2.0	1	22	88%
Fabric development	1	3	2.1	3	17	68%
Provide unique fabrics & designs	1	4	2.8	3	14	56%
After sales services	1	4	2.1	3	25	100%
Handling complaints	1	4	2.2	2	23	92%
Replacement & Repair service	1	5	2.8	3	24	96%
Documentation handling	1	5	3.0	3	22	88%

## China Supplier Performance

As China is the dominant supplier, Table 19 below segregates the performance of Chinese mills, as rated by the survey participants. China scored well on price and capacity, but other categories (especially replacement, unique designs, and document handling) were acceptable but not highly regarded.

**Table 19: Supplier Performance: China**

Criteria	Excellent (1)	Poor (5)	Average Rating	Mode Rating	# Supplier data points	% Supplier data points
Price	1	2	1.3	1	9	60%
Lead time	1	5	2.5	1	15	100%
Quality	1	3	2.2	3	15	100%
Volume	1	3	1.9	1	14	93%
Fabric development	1	3	2.1	2	12	80%
Provide unique fabrics & designs	1	3	2.6	3	11	73%
After sales services	1	3	2.1	3	15	100%
Handling complaints	1	4	2.3	1	14	93%
Replacement & Repair service	1	5	3.0	3	14	93%
Documentation handling	1	5	2.9	3	14	93%

## All Others Supplier Performance

The table below shows the performance ratings for 10 suppliers which are from neither Indonesia nor China.

**Table 20: Supplier Performance: Others**

Criteria	Excellent (1)	Poor (5)	Average Rating	Mode Rating	# Supplier Data Points	% Supplier Data Points
Price	1	1	1.0	1	6	60%
Lead time	1	3	1.3	1	10	100%
Quality	1	3	1.5	1	10	100%
Volume	1	3	2.0	2	8	80%
Fabric development	1	3	2.0	3	5	50%
Provide unique fabrics & designs	3	4	3.3	3	3	30%
After sales services	1	4	2.2	2	10	100%
Handling complaints	1	4	2.1	2	9	90%
Replacement & Repair service	1	4	2.4	3	10	100%
Documentation handling	3	4	3.3	3	8	80%

### Comparisons of All Suppliers Performance

Based on average ratings, Indonesia performs better than all other supplier categories in almost all criteria. China has higher lead times than either Indonesia or other suppliers, but it is still within an acceptable range (i.e. below 3). Even in its least satisfactory areas – replacement & repair and documentation handling – Indonesia received scores similar to, or better than, all other supplier categories. Figure 50 compares the average performance ratings for suppliers from Indonesia (6), all non-Indonesia (25), China (15) and Others (10).

**Figure 50: Supplier Performance - By Average Rating**

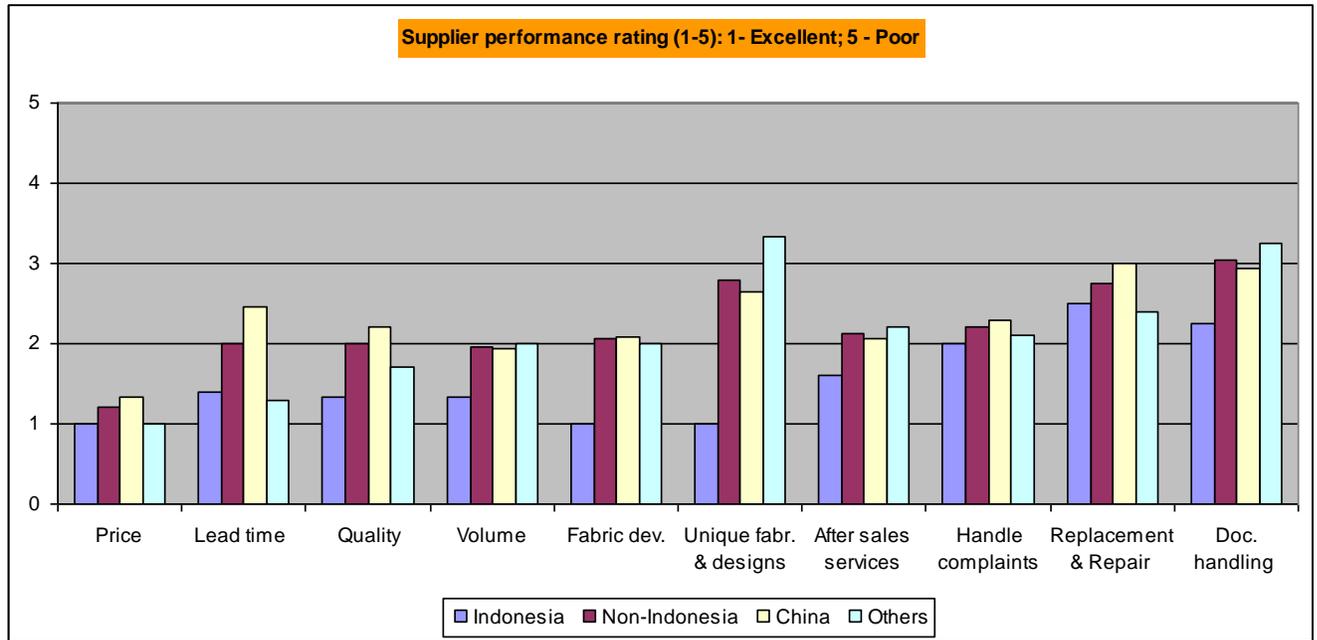


Figure 51 below compares supplier performance based on the mode (or most frequently occurring) rating. Once again, suppliers from Indonesia received mode ratings that were better than, or equal to, other supplier categories in almost all criteria.

**Figure 51: Supplier Performance Comparison - (Mode)**

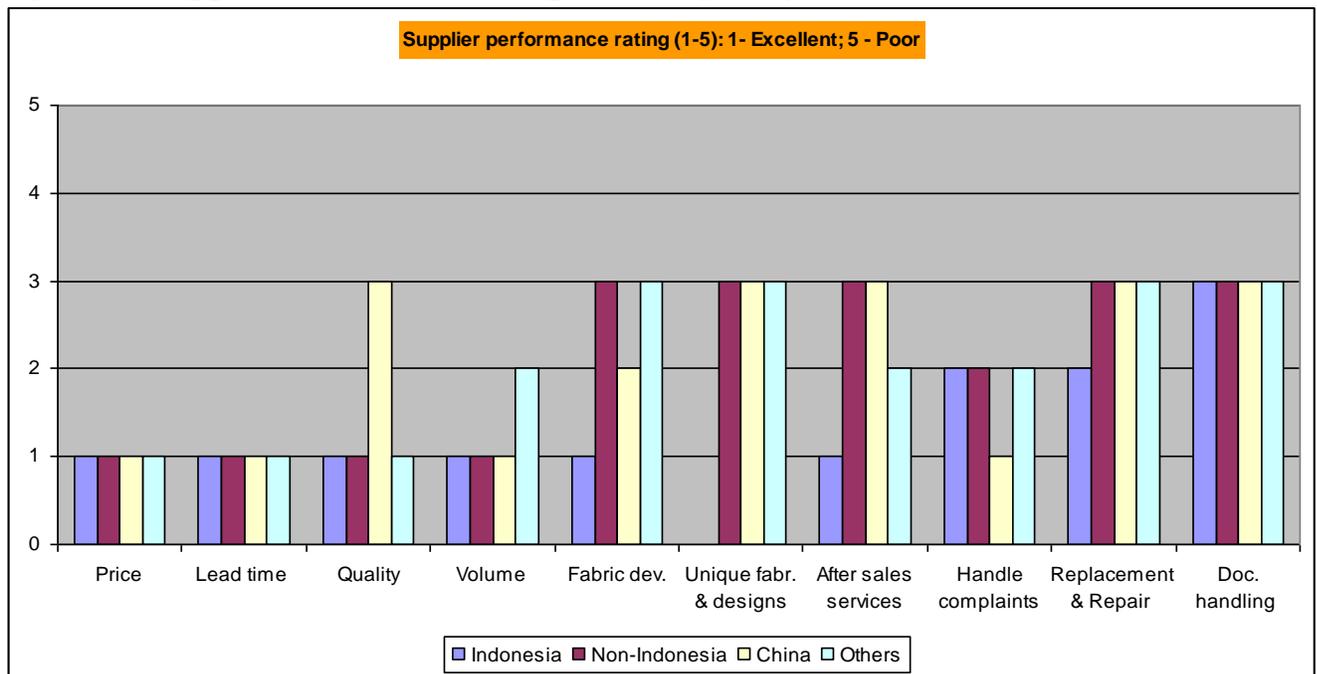


Table 21 summarizes the performance comparison of Indonesia against the other supplier categories. It shows whether Indonesia's performance is better than the other supplier categories for each criterion. **Green** = higher rating for Indonesia, **red** = lower, white = same).

**Table 21: Supplier Performance: Indonesia vs. China vs. Other Countries**

	Criteria	Indonesia vs. All non-Indonesia		Indonesia vs. China		Indonesia vs. Others	
		Average	Mode	Average	Mode	Average	Mode
<b>Is Indonesia supplier performance better?</b>	Price	Y	Same	Y	Same	Same	Same
	Lead time	Y	Same	Y	Same		Same
	Quality	Y	Same	Y	Y	Y	Same
	Volume	Y	Same	Y	Same	Y	Y
	Fabric Development	Y	Y	Y	Y	Y	Y
	Unique fabrics & designs	Y	N/A	Y	N/A	Y	N/A
	After sales service	Y	Y	Y	Y	Y	Y
	Handling complaints	Y	Same	Y		Y	Same
	Replacement & repair service	Y	Y	Y	Y		Y
	Documentation handling	Y	Same	Y	Same	Y	Same

### Supplier Performance - Delivery

On-time performance may be the most critical consideration for a fabric supplier, since the entire production process rests on timely receipt of materials. Delivery performance was evaluated for the three months leading up to the survey, i.e. from December 2008 to February 2009.

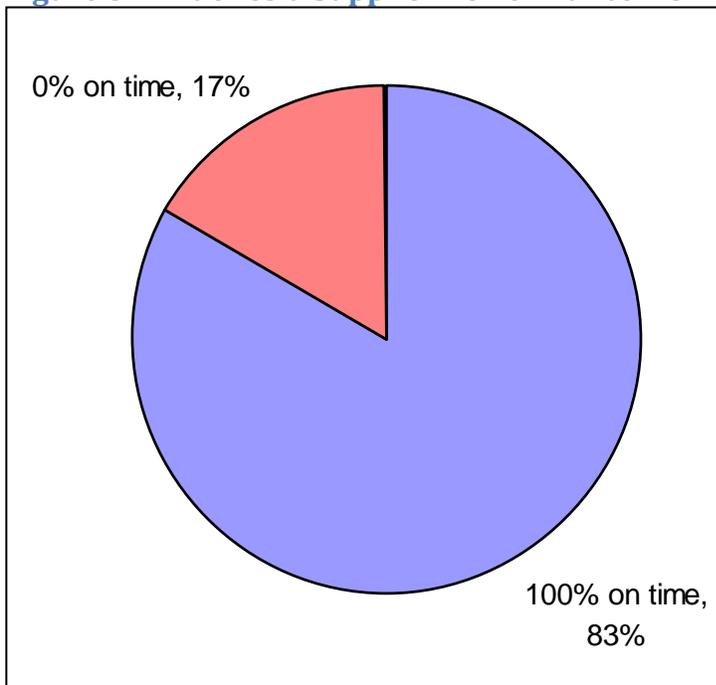
In this section, data is presented in the following order:

- Indonesia supplier performance
- Non-Indonesia supplier performance (All, China and Others)
- Comparison of all supplier categories.

### **Indonesia Supplier Performance - Delivery**

Consistent with the previous section – which showed that Indonesian suppliers do well on lead time – five Cambodian factories which use six Indonesian suppliers state that over the three month period, five of the six factories (or 83%) experienced on time delivery from their Indonesian suppliers 100% of the time. The other supplier (that is 17%) provided late delivery of 1-5 days.

**Figure 52: Indonesia Supplier Performance - On Time Delivery**

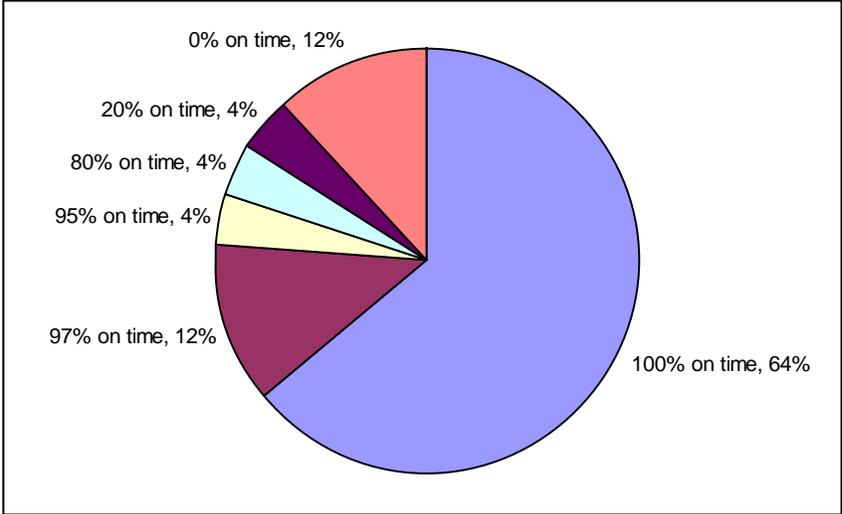


### **Non-Indonesia Supplier Performance - Delivery**

Figure 53 below shows the on-time delivery performance of all 25 non-Indonesian suppliers used by 10 factory participants. Over the last three months, 64% of these

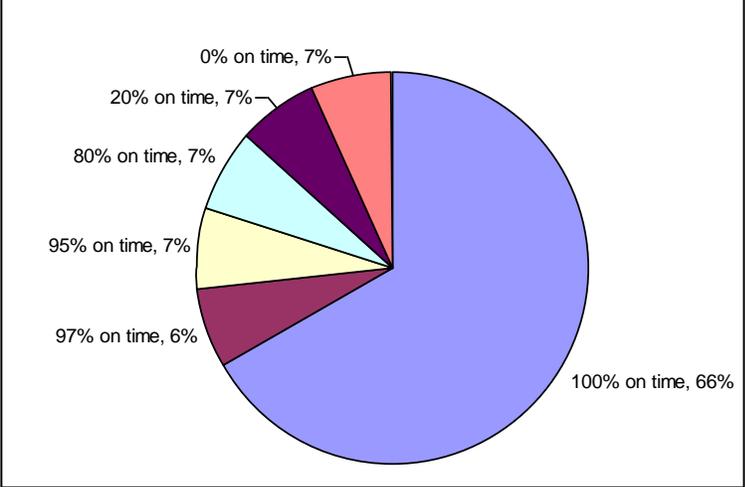
suppliers achieved 100% on-time delivery. At the other end of the spectrum, 16% of the suppliers achieved on-time delivery no more than 20% of the time.

**Figure 53: All Non-Indonesia Supplier Performance - On Time Delivery**



The next two figures illustrate results for the 15 Chinese suppliers and the 10 “other” suppliers. The two figures reveal that both supplier categories have similar 100% on-time performance rates (66% for China compared to 60% for Other). The percentage of suppliers which achieved on-time delivery no more than 20% of the time was 14% for China and 20% for Other.

**Figure 54: China Supplier Performance - On Time Delivery**



**Figure 55: Other Supplier Performance**

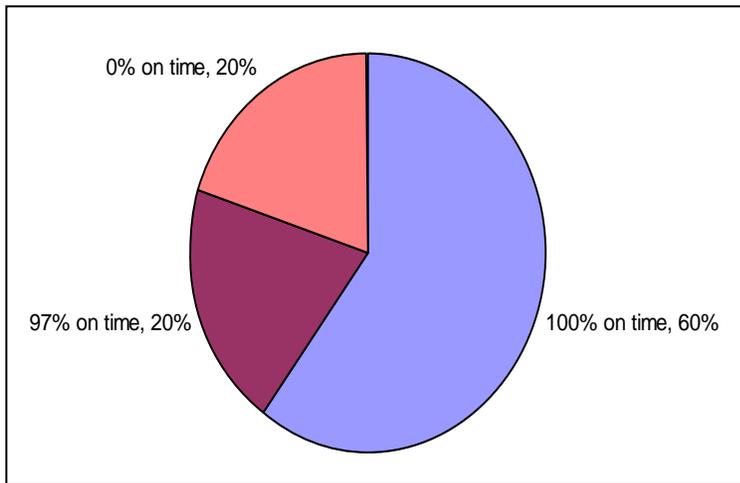
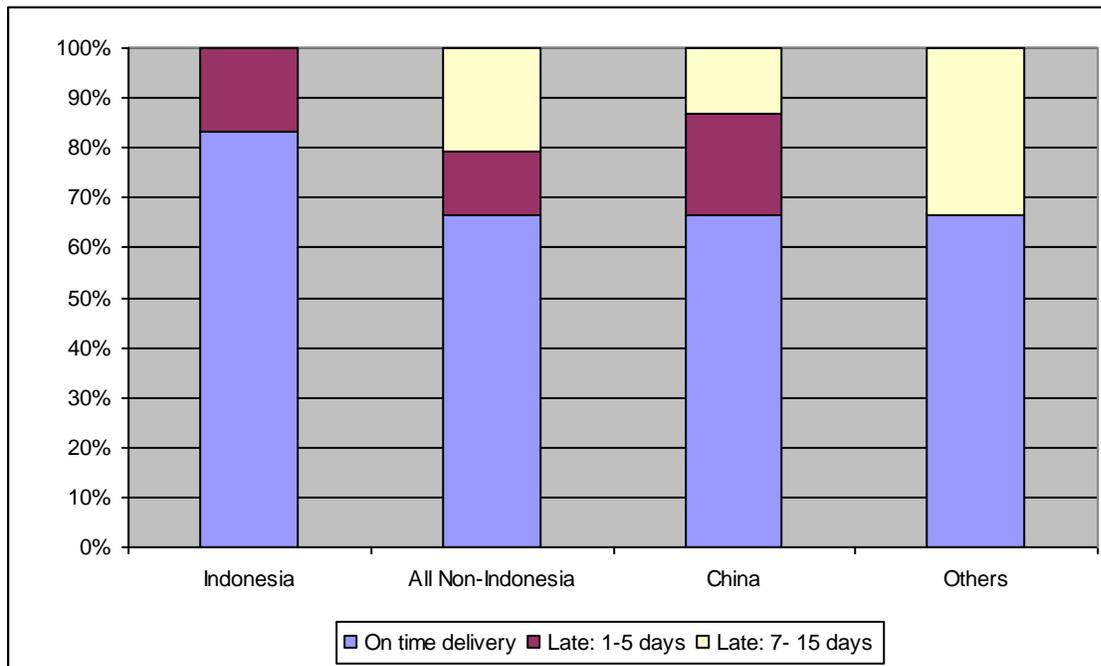


Figure 56 below compares the late delivery by all supplier categories, by duration. The single Indonesian supplier (17%) with a late delivery was between 1-5 days late. In the case of suppliers from China, 20% of suppliers were 1-5 days late and 13% of suppliers were 7-15 days late. For the Other category, all 33% of suppliers which were late were 7-15 days late.

**Figure 56: All Supplier Performance - Delivery**



## Supplier Performance – Fabric Quality

Factory participants were asked to rate suppliers on how often materials needed to be repaired, had major defects or were rejected completely. Responses were received for five of the six Indonesian suppliers and 22 of the 25 non-Indonesian suppliers.

Indonesian suppliers had a relatively good record on fabric quality over the three months period. One of the five suppliers had a consistent minor defect (which was not considered a significant problem by the garment factory). There was no issue with the other four Indonesian suppliers.

Among non-Indonesia suppliers, China was the source of most quality problems. Of the 14 Chinese suppliers, materials from eight suppliers needed some repairs (often minor) and two suppliers had parts of their shipments rejected. Of the eight Other suppliers, only a single supplier sent goods requiring some repairs. (Table 22)

**Table 22: Fabric Quality in the Last Three Months**

Suppliers	Features	Fabric Repair	Major Defects	Fabric Rejected
<b>Indonesia</b>	# supplier data points	5		
	% supplier data points	83%		
	# suppliers cause this experience	1	0	0
	Comments	1 supplier delivered product with minor defect over the 3 months.		
<b>All non-Indonesia</b>	# supplier data points	22		
	% supplier data points	88%		
	# suppliers cause experience	9	0	2
	Comments	Refer to China details below.		Refer to China details below.
<b>China</b>	# supplier data points	14		
	% supplier data points	93%		

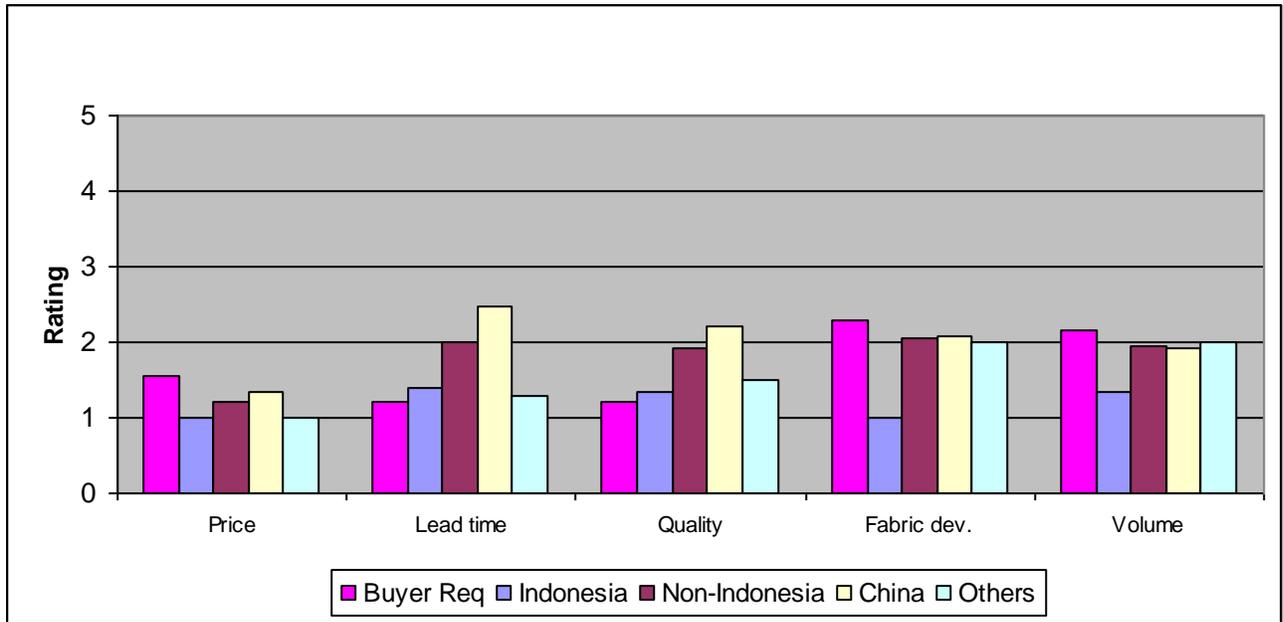
	# suppliers cause this experience	8	0	2
	Comments	6 suppliers made slight repairs to 100% of their deliveries.  In addition, 2 suppliers made repairs to only 3-8% of their deliveries.		2 suppliers had 2-8% of their fabric rejected in the last 3 months.
<b>Others</b>	# supplier data points	8		
	% supplier data points	80%		
	# suppliers cause this experience	1	0	0
	Comments	The supplier requiring fabric repair on 100% of their deliveries is from an ASEAN country.		

### 3.3.4. Buyer Requirements versus Supplier Performance

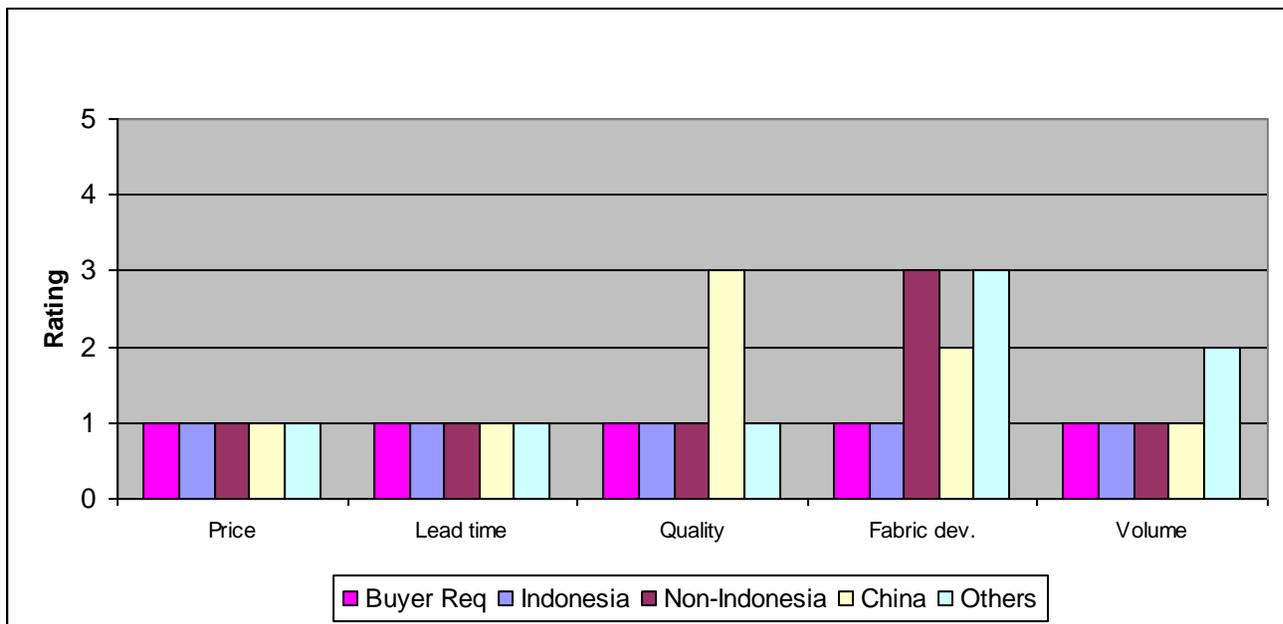
This section compares the buyer requirements and the supplier performance on criteria that are common to both groups – price, lead time, quality, fabric product development and volume.

Figures 57 below compares buyer requirements and the performance of the four categories of suppliers (Indonesia, Non-Indonesia, China and Others), based on average and mode ratings. Again, the lower the rating, the higher the importance to buyers and the better the performance of suppliers. The average ratings in the first figure highlight that, for those factors considered most important by buyers (price, lead time and quality), Indonesian suppliers perform slightly better than Chinese suppliers and similarly to other suppliers.

**Figure 57: Buyer Requirements versus Supplier Performance - By Average Rating**



**Figure 58: Buyer Requirements versus Supplier Performance - By Mode Rating**



### 3.3.5. Trade and Logistics

#### **Non-ASEAN Countries versus Indonesia: Trade benefits**

Cambodian factories rarely export within the ASEAN region, so the 10 Cambodia garment factory participants generally do not benefit from the CEPT-AFTA agreement. The participants' products are eligible for the EU's GSP preference (duty free, if qualifying). Despite this potential advantage, they ship only around 4% to the EU, compared with 89% to the US. To qualify, ASEAN inputs, such as Indonesian materials, are required. The same potential exists for exports to Japan.

This suggests there is potential for increasing participation in the existing trade agreements and preferences that call for the use of regional materials.

#### **Non-ASEAN versus Indonesia: Logistics**

Logistics –transit time, clearance formalities, handling—are critical factors influencing sourcing decisions for Cambodian garment factories. Based on the survey results, four of the five garment factories that source fabric from Indonesia negotiate with Phnom Penh-based freight forwarders to manage their shipping. The fifth garment factory provided no response to this question.

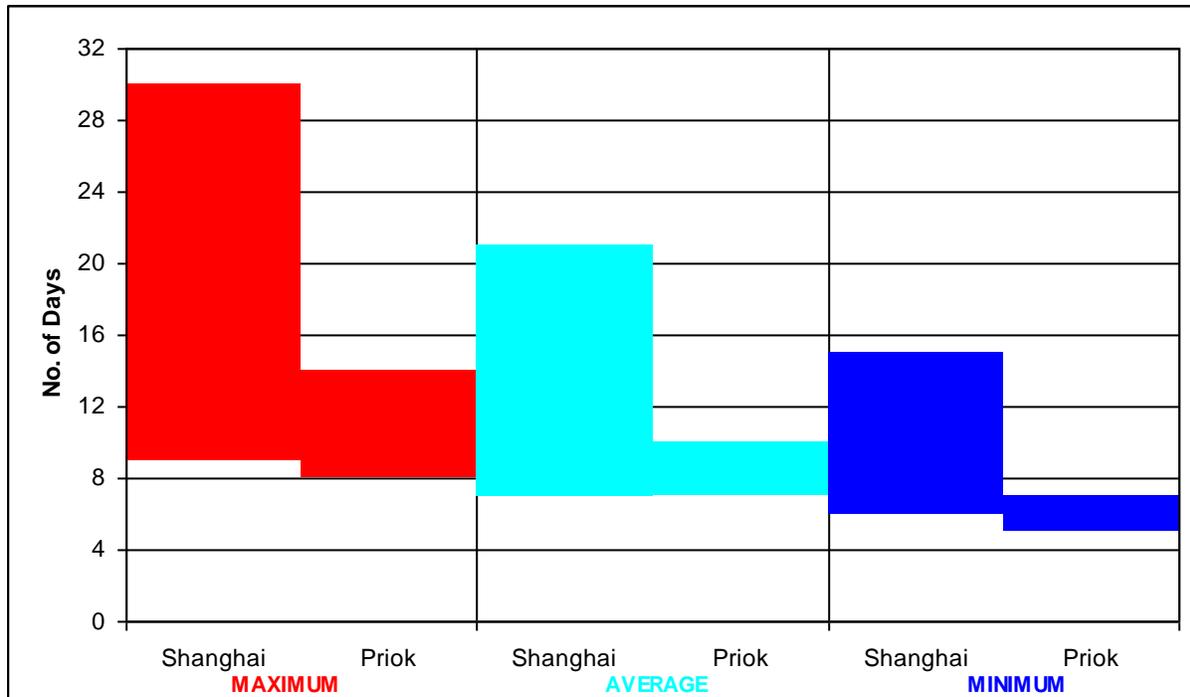
This section compares shipping and logistics times for two of the main ports used by factory participants, one when sourcing from China (Shanghai and Hong Kong ports) and another when sourcing from Indonesia (Tanjung Priok port), to Cambodia's seaport at Sihanoukville, 4-6 hours south of Phnom Penh.

Factory participants were asked about maximum, average and minimum times for ocean transit (from port of origin to port of destination) and for port to port (which includes transit plus import clearance time). There are several possible routings from Shanghai to Sihanoukville depending on the shipping companies used. However, the route from Tanjung Priok to Sihanoukville is usually via Singapore.

## Shanghai versus Tanjung Priok to Sihanoukville

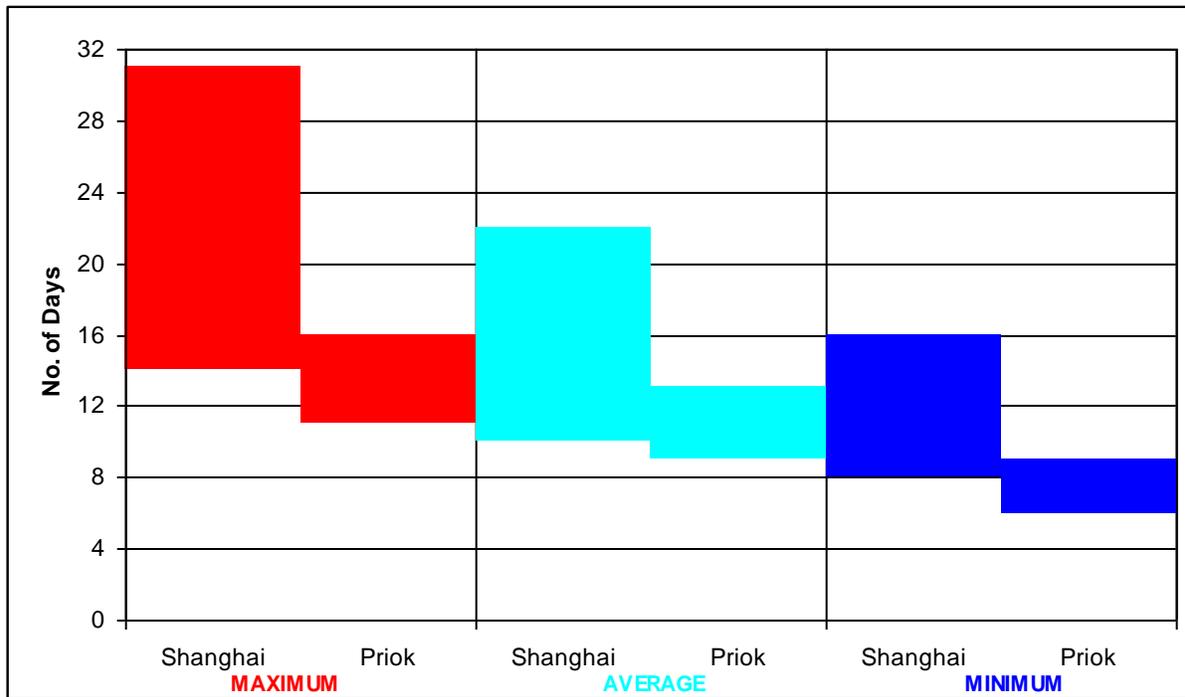
The ocean shipping and port-to-port times are considerably longer from Shanghai than from Tanjung Priok. As shown in the figure below, ocean shipping from Shanghai takes a maximum from 9-30 days, average of 7-21 days, and minimum from 6-15 days. In comparison, ocean shipping from Tanjung Priok takes a maximum from 8-14 days, average from 7-10 days, and minimum from 5-7 days.

**Figure 59: Ocean Shipping: Shanghai vs. Tanjung Priok – Sihanoukville**



Import clearance at Sihanoukville adds to transit to give port-to-port time as shown in Figure 60.

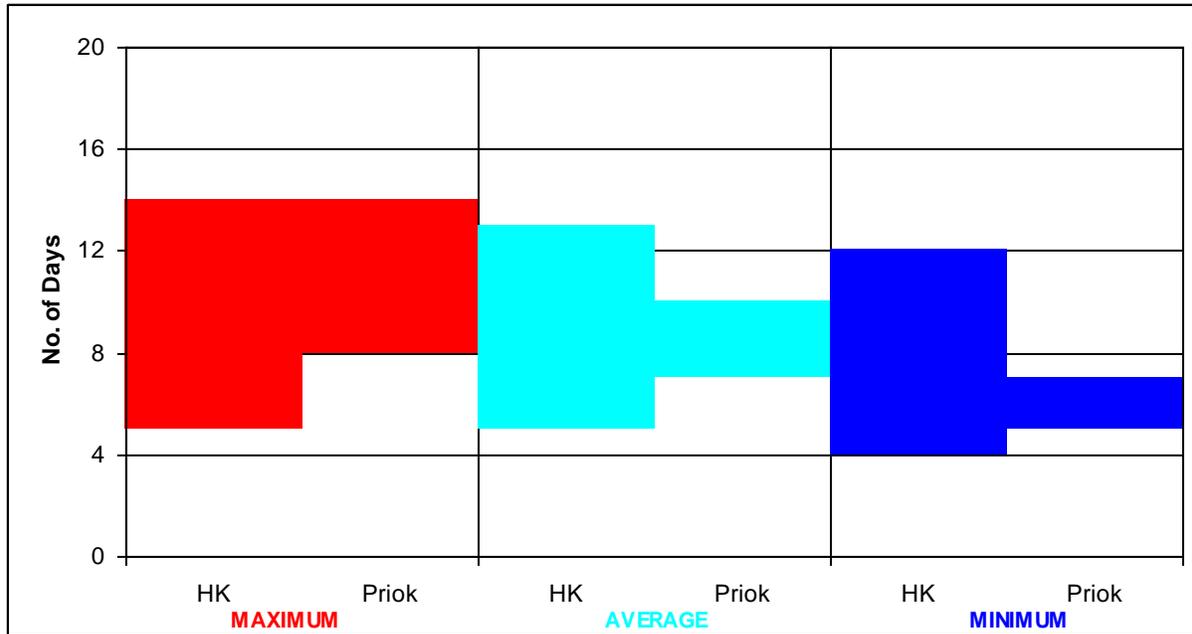
**Figure 60: Total Time from Port to Port: Shanghai vs. Tanjung Priok – Sihanoukville**



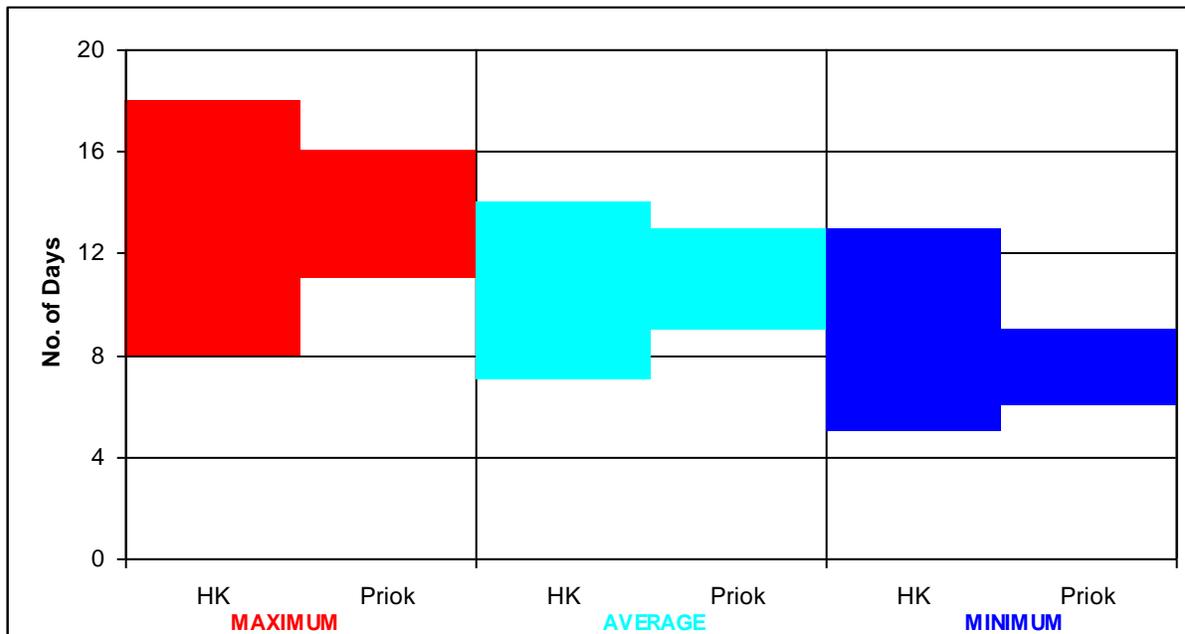
**Hong Kong vs. Tanjung Priok to Sihanoukville**

The comparison is less clear-cut for Hong Kong versus Tanjung Priok, than it was for Shanghai versus Tanjung Priok. It is clear that the maximum times are lower for Tanjung Priok than the maximum time for Hong Kong. However, the ranges of average and minimum times for Hong Kong are so wide that they are above and below the times for Tanjung Priok. In other words, it appears that shipping times from Hong Kong vary much more than from Tanjung Priok, making the Indonesia corridor more predictable. However, it is not competitive in terms of number of days.

**Figure 61: Ocean Shipping: HK vs. Tanjung Priok – Sihanoukville**



**Figure 62: Total Time from Port to Port: HK vs. Tanjung Priok – Sihanoukville**



There are clear incentives for both buyers and suppliers to think of the fastest and cheapest way to transport from one port to another. The result of the survey from a few factory participants shows that there are a couple of possibilities when shipping from China to

Cambodia. Rather than shipping from Shanghai to Sihanoukville, some suppliers may move the container to Hong Kong first and then from Hong Kong to Sihanoukville. The other option is to ship the container from Shanghai to Ho Chi Minh port in Vietnam and then truck from Vietnam directly to the garment factories in Cambodia, a route that will be greatly facilitated by new port facilities under construction.

Table 23 below summarizes transit time and clearance from the key Indonesia port to Cambodia. Please note, “Total summary” = Total time from port to port + Import processing at Frontier + time of trucking to factory gate. But, the total summary does not include the time of Export Processing at Frontier, as there is only data for Indonesia port of Tanjung Priok while the other study on other ports beside from Indonesia and Thailand are not included in this survey.

**Table 23: Transit Time and Clearance from Key Indonesia and Other Ports to Cambodia**

From	Tanjung Priok,	Tanjung Priok,	Shanghai, China	Shanghai, China	Hong Kong	Hong Kong	Bangkok	Bangkok
<b>To: Sihanoukville, KH</b>								
<b>Time from port to port (days)</b>	Min	Max	Min	Max	Min	Max	Min	Max
Min	6	9	8	16	5	13	4	4
Max	11	16	14	31	8	18	6	8
Average	9	13	10	22	7	14	4	7
<b>Export Processing at Frontier</b>	Min	Max	Min	Max	Min	Max	Min	Max
Min	2	2	N	N	N	N	N/A	N/A
Max	2	2	N	N	N	N	N/A	N/A
Average	2	2	N	N	N	N	N/A	N/A
<b>Ocean Shipping (if required)</b>	Min	Max	Min	Max	Min	Max	Min	Max
Min	5	7	6	15	4	12	3	3
Max	8	14	9	30	5	14	4	6
Average	7	10	7	21	5	13	3	5
<b>Import Processing at Frontier</b>	Min	Max	Min	Max	Min	Max	Min	Max
Min	1	2	0.5	2	0.5	2	1	1
Max	1	3	1	5	1	4	1	2
Average	1	3	0.5	3	0.5	3	1	2
<b>To factory gate<sup>8</sup></b>	Min	Max	Min	Max	Min	Max	Min	Max
Min	0.5	1	0.5	2	4 hrs	2	0.5	2
Max	1	3	1	3	5 hrs	3	1	3
Average	0.5	2	0.5	2	4.5 hrs	2	0.5	2
<b>TOTAL SUMMARY:</b>	Min	Max	Min	Max	Min	Max	Min	Max
Min	7.5	12	9	20	6 days	17	5.5	7
Max	13	22	16	39	9 dy + 5hr	25	8	13
Average	10.5	18	11	27	8	19	5.5	11

<sup>8</sup> Garment factories, in this survey, are located mostly in Phnom Penh and the nearby province which is not far from Phnom Penh.

## 4. SWOT ANALYSIS – CAMBODIA AND INDONESIA

This study has examined the supply chain corridors of heavier weight woven cotton fabric (HS5209) imported into Cambodia , both from Indonesia and from other countries, to identify the trade environment, constraints, and opportunities for regional integration. The following SWOT analysis is based on the research performed separately by BDLINK in Cambodia, and their review of the study made by the Centre for Strategic and International Studies in Jakarta, Indonesia.

### **Strengths**

- Cambodia’s labor supply is growing by 300,000 entrants each year; skills are increasing, but wages (est. \$0.338/hour) remain low compared to other ASEAN members.
- Industry position, as the only major employer of an overwhelmingly female workforce, has attracted donor interest in support for skills development and other benefits.
- A strong trade association represents the industry’s interests with the government and coordinates strategic initiatives.
- After 10 years in the global market Cambodia is a recognized and familiar resource to buying agents and buyers, exporting to major markets in the US, EU and Japan.
- All exporting factories and members of GMAC adhere to, at a minimum, ILO standards and local labour law.
- Cambodia has been improving the business environment and facilitating investment into the sector with streamlined registration procedures and other benefits.
- Cambodia has undeveloped land for industrial parks and special economic zones to increase investment and development which are in process of development.
- Cambodia is strategically located between Thailand and Vietnam and has both sea and river ports. The railway system connecting Sihanoukville and Phnom Penh is

under construction and improvement which will provide cheaper transport means in the future.

- Infrastructure improvements include a one-stop process for import and export clearance, widening of National Road 4 connecting Sihanoukville and Phnom Penh.
- Fabrics and raw materials (accessories) and machinery imported to Cambodia for garment production purpose are duty free.
- HS5209 fabric from Indonesia was rated higher quality than from China and other supplies by Cambodian garment factories, with fewer defects and fewer rejections.
- Lead time for production from Indonesia fabrics is significantly better than for China, primarily due to shorter transit time.
- Indonesian suppliers had a better record of on-time delivery to the garment factory participants in this survey over the 3 month period.

### **Weaknesses**

- Information and services from government remain limited; for example, the lack of labor market indicators for the sector is problematic for employers and new investors to guide decisions on workforce investments; lack of trade data limits ability to identify potential sources of manufacturing inputs.
- Information maintained by GMAC is insufficient to guide investor decisions or guide suppliers to potential Cambodian clients, or buyers to potential factories.
- Cambodia has around 1,600 unions for less than 300 garment factories, and a labor law which is subject to varying interpretations.
- The Cambodia garment industry is mostly foreign-owned, and foreign investors may be less motivated to invest in workforce development and in factory infrastructure.
- No fabrics and raw materials are produced in Cambodia, leaving the industry reliant on external supply, and less flexibility.
- Factories have limited independent authority and are unable to provide linkages to foreign buying and marketing contacts.

- Language barriers between workers and expatriate supervisors increase industrial relations challenges and complicate production management; most business must be done in Chinese and English which are not spoken by many Cambodians.
- Factory productivity is low, and inefficient labor is an important contributor. The poor efficiency is variously attributed to low education, insecurity regarding change, inflexible attitudes, and low pay, but all affect the result.
- Cambodia has no formal education in disciplines needed to increase the value-added potential for the industry (e.g., fashion or design, merchandising, industrial engineering).
- High infrastructure costs, especially energy (electricity and fuel) remain a challenge for the industry in Cambodia.
- Informal fees and trade processing costs are high and lack the transparency to allow improvement.
- Indonesian suppliers of HS5209 lack a visible marketing profile in Cambodia and have fewer networks with Cambodian garment factories (compared to Chinese suppliers). For example, nine of the 10 Cambodian garment factories in the survey do not know about the Indonesian supplier database.
- Indonesian companies may lack the language skills to market to Cambodia's international community (in Chinese or English).
- Indonesian suppliers ranked low on documentation handling, an essential part of exporting.

### **Opportunities**

- Cambodia has an opportunity to increase the value-added services to the buyer, including sourcing materials, producing samples, patterns and CAD markers, and beginning to move beyond CMT.
- The development of professional training centres and schools for the industry and support of those in existence, e.g. CSDC, will provide a steadily upgraded workforce with greater capability, lower cost (expatriate staff is quite costly), and improved industrial relations.

- Improvements in workforce skills and the demonstration of policies supporting textile and garment production may attract investments in value-added services, ranging from dye houses and water treatment to fabric production.
- Improvements to Cambodia’s moribund railway lines, beginning with the Phnom Penh to Sihanoukville route, will reduce transportation costs and improve the mobility of the workforce, creating opportunities for a more geographic distribution of industry.
- Special Economic Zones are being created near borders and in the Phnom Penh area, which have the potential to offer manufacturing clusters that provide a full range of services, negotiate special rates for energy, and can act as consolidated bargaining units to improve labor and management relations.
- The drop in demand from the US may encourage Cambodian factories to find alternative markets in the EU, Asia, and the Middle East.
- Indonesian fabric will provide opportunities for Cambodian producers to benefit from the trade preference programs offering duty free treatment into the EU, Japan and other markets.
- Success in publicizing the HS 5209 corridor from Indonesia to Cambodia may reveal other product opportunities for cooperation to reach new export or regional markets.
- Increase in the trade between Indonesia and Cambodia will lead to more efficient logistics in response to higher volumes.

## **Threats**

- Cambodia’s contentious organized labor movement and challenging Industrial relations are reducing production efficiency and are a disincentive to business operations.
- Wage rates are rising, especially in the Phnom Penh area, due to the high concentration of factories.
- Infrastructure costs and the high cost of doing business are obstacles to new investors, especially when compared (unfavourably) with near neighbors like

Vietnam. This is particularly important to denim manufacturers because of the extra energy needs for washing and special finishes.

- Strong business relationships between Chinese FDI in Cambodia and fabric suppliers in China may challenge the effort to increase trade with ASEAN supplies such as Indonesia, unless a significant benefit (as in the trade benefits on EU goods) can be promoted.
- The Cambodian industry is shrinking under the combined threats of competition and global recession, which may reduce the size of the industry and the demand for materials.
- Improvements in the transit time between Cambodia and China, Hong Kong, and other suppliers may erode Indonesia's advantage; may reduce the attractiveness of some of Indonesia's strength

## 4.1. ACTION PLAN: INDONESIA TO CAMBODIA CORRIDOR

### Heavier (“Bottom”) Weight Woven Cotton Fabrics (HS 5209)

Information about the trade in heavier weight woven cotton fabrics between Indonesia and Cambodia, and the scope for increasing the flow of goods through that corridor, was gathered in the studies conducted by the Centre for Strategic Information and Studies (CSIS), for Indonesia, and BDLINK (Cambodia) Co., Ltd., which surveyed Cambodian factories. The level of detail gathered may be of greatest interest to companies considering participating in the trade between Indonesian suppliers and Cambodian factories, but it illustrates the potential and the challenges of the regional integration.

Importantly, it confirms the basic premise of the ACE strategy: greater regional integration of the supply chain is possible, can be competitive, and contributes to strengthening economies in the ASEAN region. Moreover, this economic growth is achieved by replacing supply chains based on external suppliers with regional suppliers.

There are constraints on regional integration; the most important may be lack of awareness of the potential, the absence of a coordinating body to facilitate opportunities for trading partners to meet and pursue mutual interests ensuring they are able to forge the seamless flow of communications and materials needed to compete with already-vertical suppliers and regions. Some of these constraints are already being addressed by various stakeholders; others are identified and confirmed through the ACE corridor diagnostics research. The constraints will not prevent trade, but by illuminating some of the causes and beginning a series of remedial actions, ACE and the regional ASEAN Federation of Textile Associations (AFTEX), the country trade associations, private sector companies, training organizations and others, can accelerate the formation of regional trade relationships.

Not every constraint can be addressed through regional coordination and action. Industrial relations, for example, must be addressed by the stakeholders within a country. Geopolitical conflicts are also beyond the scope of these proposals for action. This plan

focuses on the areas where significant gains can be made by strategic interventions to remove the obstacles to trade.

It is organized into 3 parts:

- The S-W-O-T analysis from the corridor;
- An overall Action Plan to address the highest priority constraints and opportunities;
- A summary of the activities planned within the ACE Project for 2009-2010.

**Table 24: Strengths, “Bottom Weight” Woven Cotton Corridor (HS 5209)**

	<b>Indonesia</b>	<b>Cambodia</b>
<b>Industry and Marketing</b>	<ul style="list-style-type: none"> <li>• Mature producer and exporter familiar with buyer expectations and able to produce a range of different products.</li> <li>• Strong domestic market protects the industry from external market fluctuations and ensures a base of employment, equipment, and skill.</li> <li>• Vertical industry concentrated in manufacturing clusters in different provinces.</li> <li>• Strong interest in developing new export markets.</li> <li>• Low tariffs, which enables importing of manufacturing inputs.</li> <li>• Increases in FDI (mergers and acquisitions) is improving industry access to finance.</li> <li>• Low inventory levels, because of the concentration on made-to-order production.</li> <li>• Respondents certified by international quality and compliance standards, such as ISO and ETI.</li> <li>• Information systems are current, although they are limited to the usage of EDI and UPC and not production and enterprise planning.</li> </ul>	<ul style="list-style-type: none"> <li>• Approximately 300 factories with current exports nearing \$3 billion and around 350,000 employed.</li> <li>• Favorable labor market: rates low for ASEAN region (\$.338/hr), growing by 300,000 annually.</li> <li>• Strong industry association developing strategy and lobbying for government and donor support.</li> <li>• High labor compliance profile with ILO monitoring and verification.</li> <li>• Investment in training development with support of international donors.</li> <li>• Tax incentives and simplified registration encourage foreign investment.</li> <li>• Productivity and production management trainings through a donor supported training center have helped HS 5209 users reach 60% efficiency.</li> </ul>
<b>Product and Manufacturing</b>	<ul style="list-style-type: none"> <li>• The production capacity utilization averages 80% with excess capacity to meet higher demand.</li> <li>• Price and quality competitive.</li> <li>• Production is oriented towards meeting buyers' specifications.</li> <li>• Relatively new investment in</li> </ul>	<ul style="list-style-type: none"> <li>• Recognized resource for low cost apparel in a variety of product categories.</li> <li>• Finishing capabilities for denim include washing, printing.</li> </ul>

	<p>machinery for efficiency and shorter lead times.</p> <ul style="list-style-type: none"> <li>• Innovation and product development to client specifications.</li> </ul>	
<b>Trade Facilitation and Logistics</b>	<ul style="list-style-type: none"> <li>• The percentage of on-time delivery is high, ranging from 97 percent to 100 percent.</li> <li>• Transit times are competitive with China.</li> </ul>	<ul style="list-style-type: none"> <li>• Inputs of machinery and materials for use in export manufacturing are duty free.</li> <li>• Streamlining customs processes using ASYCUDA, single window.</li> <li>• Special Economic Zones (SEZs) offer simplified import and export protocols.</li> </ul>
<b>Customer Service</b>	<ul style="list-style-type: none"> <li>• Experienced at communication with international clients and ranked well for handling complaints and repair/return needs.</li> <li>• Responsive to client needs.</li> </ul>	<ul style="list-style-type: none"> <li>• Well known to global sourcing agents and buyers.</li> <li>• Labor compliance valued by buyers for social responsibility standards.</li> </ul>

**Table 25: Weaknesses, “Bottom Weight” Woven Cotton Corridor (HS 5209)**

	<b>Indonesia</b>	<b>Cambodia</b>
<b>Industry and Marketing</b>	<ul style="list-style-type: none"> <li>• Lack of government policy oriented to meeting industry needs.</li> <li>• Limited access to finance through Indonesian banks due to complicated structure and poor support.</li> <li>• FDI has been slow, and is based on mergers and acquisitions rather than new development.</li> <li>• Lack of design/product development and overall shortage of skilled workers in the industry.</li> <li>• Lack of market information about ASEAN regional possibilities.</li> <li>• Sells primarily through international agents rather than regionally based sales offices.</li> </ul>	<ul style="list-style-type: none"> <li>• FDI dominance inhibits investment in technology and in training.</li> <li>• Labor force is largely uneducated and sometimes unwilling to adopt new and more efficient techniques.</li> <li>• Wages are rising.</li> <li>• Reliance on expatriate supervisors and managers is costly and impedes development of local management.</li> <li>• Labor movement is large (over 1,200 unions to 300 factories) and fractious.</li> <li>• Lack of product development, merchandising and sourcing skills.</li> <li>• High energy costs (\$0.18/KWH) discourage investment in more washing and finishing capabilities.</li> <li>• Producers rely on foreign owners to market products.</li> <li>• Few factories participate in the selection of materials suppliers, obtaining supplies from mills nominated by the buyer or by the owner.</li> </ul>
<b>Product and Manufacturing</b>	<ul style="list-style-type: none"> <li>• Shortage of washing facilities for denim finishing.</li> <li>• Limited innovation and fabric development.</li> <li>• Dependence on imported fibers and yarns.</li> <li>• Relatively long development times for some fabric constructions and finishes.</li> <li>• Lack of consistent regional</li> </ul>	<ul style="list-style-type: none"> <li>• Heavy concentration on FOB/CMT production – little pre-production and sample making.</li> <li>• Most factories do long runs of basic garments and new demand is for shorter production runs.</li> <li>• Low labor productivity.</li> <li>• Limited investment in new machinery and updated technology.</li> <li>• Shortage of qualified mechanics and</li> </ul>

	technical standards.	other higher skilled workers.
<b>Trade Facilitation and Logistics</b>	<ul style="list-style-type: none"> <li>• Poor performance in documentation.</li> <li>• High terminal handling and trade facilitation costs (illegal fees).</li> <li>• Lack of direct transportation route to Cambodia.</li> </ul>	<ul style="list-style-type: none"> <li>• Informal fees drive costs up and reduce efficiency.</li> <li>• Long transit times to most markets.</li> <li>• Rail lines essentially non-functioning and a single 2-lane road to main port.</li> <li>• High shipment processing costs.</li> </ul>
<b>Customer Service</b>	<ul style="list-style-type: none"> <li>• Lack of direct presence in major markets.</li> </ul>	<ul style="list-style-type: none"> <li>• Poor customer service skills (as most do not have direct contact with buyers).</li> <li>• Poor communication skills and infrastructure.</li> </ul>

**Table 26: Opportunities, “Bottom Weight” Woven Cotton Corridor (HS 5209)**

	<b>Indonesia</b>	<b>Cambodia</b>
<b>Industry and Marketing</b>	<ul style="list-style-type: none"> <li>• Publicize high level of client satisfaction with price, quality and delivery.</li> <li>• Market more aggressively, emphasizing benefits from regional collaboration, such as GSP at global fairs.</li> <li>• Establish mechanisms for direct marketing within the region (sales offices/representation, small scale fairs).</li> <li>• Form partnerships with lower wage countries to supply materials for apparel production for regional markets (ASEAN common tariff reaches 0 in 2010 for materials to be used in production for local markets).</li> <li>• Intra-ASEAN training opportunities and trade may harmonize standards for both workforce and products.</li> <li>• Support development of an AFTEX website to provide marketing and business links to members.</li> </ul>	<ul style="list-style-type: none"> <li>• Industry and government collaborating on strategy for the industry, seeking input, and implementing needed policies.</li> <li>• EU and Japan allow duty free entry of denim apparel from Cambodia made with ASEAN inputs, but receive the lowest share of exports.</li> <li>• Provide incentives to FDI owners to invest in workforce development and measurable productivity gains.</li> <li>• Ensure support and sustainability of industry training initiatives, including the Cambodia Skills Development Center programs (independent NGO w/USAID funding) and a proposed Garment Training Institute with funds from AFD.</li> <li>• Focus on building skills needed for immediate benefit, such as pattern making, to improve quality and materials utilization; merchandising, to add materials sourcing and customer service.</li> <li>• Market opportunities for Special Economic Zones (such as reduced energy costs, simplified trade processing, single labor union) to attract ASEAN investment, and new investors from other countries.</li> <li>• Utilize AFTEX website to advertise production capability and identify new and cost effective or innovative suppliers</li> </ul>
<b>Product and Manufacturing</b>	<ul style="list-style-type: none"> <li>• Maintain competitive prices.</li> <li>• Use local market as a base to support more original design and fabric development.</li> <li>• Introduce production efficiencies to reduce lead time.</li> </ul>	<ul style="list-style-type: none"> <li>• Upgrading productivity and other skills through donors’ support.</li> <li>• Improve speed to market based on ASEAN sourcing and convert production systems to faster turns, shorter runs, to compete.</li> </ul>

		<ul style="list-style-type: none"> <li>Stimulate investment in a longer value chain, beginning with incentives to invest in washing and dyeing (possibly in SEZ).</li> </ul>
<b>Trade Facilitation and Logistics</b>	<ul style="list-style-type: none"> <li>Growing regional trade will encourage development of more efficient shipping routes.</li> <li>Seek government cooperation for simplified export procedures within ASEAN to reduce opportunities for extra costs.</li> </ul>	<ul style="list-style-type: none"> <li>New transportation initiatives include rail line from factory base to port, and widening of the main truck route.</li> <li>SEZ development includes single-window opportunity to expedite trade processing.</li> </ul>
<b>Customer Service</b>	<ul style="list-style-type: none"> <li>Improve language skills to increase marketing opportunities.</li> </ul>	<ul style="list-style-type: none"> <li>Use training opportunities to upgrade merchandising and customer management.</li> <li>Improve language skills.</li> </ul>

**Table 27: Threats, “Bottom Weight” Woven Cotton Corridor (HS 5209)**

	<b>Indonesia</b>	<b>Cambodia</b>
<b>Internal</b>	<ul style="list-style-type: none"> <li>Uncertainty of local currency could impact ability to obtain imported fibers and yarns.</li> <li>Lack of consistent government policies on industry support and future.</li> <li>Growing labor organization movement, combined with rising wages.</li> <li>Informal costs associated with import and export processing.</li> </ul>	<ul style="list-style-type: none"> <li>FDI may not make necessary investments to upgrade Cambodian factories.</li> <li>Labor relations are combative, resulting in illegal strikes.</li> <li>Lack of local supervisors and managers affects cost and industrial relations.</li> <li>Rising wages, unaccompanied by increases in productivity.</li> <li>High infrastructure costs.</li> <li>Informal costs associated with most transactions.</li> </ul>
<b>External</b>	<ul style="list-style-type: none"> <li>Global trade influences, including economic weakness and regional trade agreements, benefiting other producers.</li> </ul>	<ul style="list-style-type: none"> <li>Global trade influences, including economic weakness and regional trade agreements, benefiting other producers.</li> </ul>

## 4.2. ACTION PLAN RECOMMENDATIONS: INDONESIA-CAMBODIA CORRIDOR

### Heavier (Bottom) Weight Woven Cotton Fabrics (HS 5209)

Category	Constraint	Cause(s)	Action	Participants	Timing	ACE Intervention
<b>Industry and Marketing</b>	Lack of knowledge of opportunities to increase regional trade.	No regional competitive data and regional “brand” promotion.	<p><b>Build database of regional buyers and sellers</b></p> <ul style="list-style-type: none"> <li>Strengthen local associations and collect market information with a survey of members to gather data regarding styles, qualities and volumes used, or produced, and contact information</li> <li>Build AFTEX database and website to house the information</li> <li>Provide training on website use to local associations so they can support B2B</li> <li>Keep information current by ensuring member associations have protocols to update their information</li> </ul>	AFTEX and country trade associations	Aug-Oct 2009	Website and training
	Little use of the benefits and opportunities of regional integration in international marketing.	No coordinated source or sponsor for a “buy ASEAN brand”.	<p><b>Assemble “Buy ASEAN” materials</b></p> <ul style="list-style-type: none"> <li>Create marketing information based on these corridor reports.</li> <li>Customize for audiences (US, EU, Japan, regional authorities, etc.)</li> <li>Add success stories as available.</li> </ul> <p><b>Organize meetings and press</b></p> <ul style="list-style-type: none"> <li>Educate government investment shepherds.</li> <li>Issue press releases thru <i>Just Style</i> and similar industry-focused publications.</li> <li>Establish a protocol for sponsored trade</li> </ul>	AFTEX and country trade associations	Aug-Dec 2009  Sept 2009- Mar 2010	Provide results of corridor study  Report VVF results to AFTEX

			<p>show participation and conduct seminars for buyers at key events (MAGIC, Shanghai, target EU shows).</p> <p><b>Provide support for Indonesian textile firms on how to present/market to the companies which nominate fabric suppliers</b></p>			Assist with trade show participation
	Lack of industry strategy for integration.	Associations lack the organization and skills to support marketing.	<p><b>Upgrade association services</b></p> <ul style="list-style-type: none"> <li>Establish marketing desk in each association responsible for coordinating information for the AFTEX site.</li> <li>Review association member information and recommend upgrades.</li> <li>Coordinate information with corresponding position in partner country.</li> <li>Organize marketing workshops and seminars to improve mills' skills.</li> </ul>	<p>Indonesian Textile Association,</p> <p>GMAC</p> <p>AFTEX</p>	Sept 2009-ongoing	No
	Lack of access to decision makers.	Authority to select suppliers lies with FDI owners, or buyers.	<p><b>Market directly to FDI investors and buyers</b></p> <ul style="list-style-type: none"> <li>Identify potential target garment factories (start with this survey).</li> <li>Arrange meetings with factory management to get support and contact at head office.</li> <li>Establish marketing offices (full time or part time, possibly virtual) in selected countries with significant market potential.</li> <li>Reach out to buyers in joint marketing sessions at trade shows (E.G., MAGIC, Shanghai, ASEAN).</li> <li>Work through government agencies which work with FDI to establish links between the local association and the investors.</li> <li>Coordinate periodic meetings in Cambodia, field trips to Indonesian mills for investors and buying agents.</li> </ul>	<p>-Fabric mills</p> <p>- GMAC</p> <p>- Garment factories,</p> <p>CDC - Council for Development of Cambodia</p>	2 <sup>nd</sup> quarter 2020	AFTEX database
<b>Product and</b>	Lack of innovation in	Lack of technical training	<b>Use local association resources and AFTEX to gather information on product trends</b>	Indonesia Textile	Oct 2009 and	Indirect only

<b>Manufacturing</b>	fabric tech.	in fabric development.	<p><b>from members, and distribute</b></p> <ul style="list-style-type: none"> <li>• Assign an “innovation desk” at local trade association to coordinate information.</li> <li>• Establish regional technical standards for quality and testing.</li> <li>• Gather feedback from buyers and from mills and factories regarding finishes, fashion, or new capabilities.</li> <li>• Establish a column for new developments on the AFTEX website.</li> <li>• Lobby government for benefits to companies for innovation.</li> </ul>	<p>Association</p> <ul style="list-style-type: none"> <li>-GMAC</li> <li>-Mills and factories</li> <li>-Buyers and agents</li> </ul>	ongoing	
	Low productivity, value added, new product development.	Lack of workforce skills training.	<p><b>Ensure availability of training in core skills</b></p> <ul style="list-style-type: none"> <li>• Determine needed positions in factories and in mills.</li> <li>• Identify regional training organizations with ability to deliver training.</li> <li>• Circulate information via AFTEX website registry for training.</li> <li>• Develop programs for skills not currently taught, including cross training.</li> <li>• Establish uniform standards for competence to improve regional workforce integration, mobility and consistency.</li> </ul> <p><b>Provide incentives to mills and factories to invest in training</b></p> <ul style="list-style-type: none"> <li>• Lobby government to reward employers for training and productivity investments.</li> <li>• Ensure financial support for training organizations providing needed skills.</li> </ul> <p><b>Engage other stakeholders including labor and government</b></p>	<ul style="list-style-type: none"> <li>- Indonesia Textile Association</li> <li>- GMAC</li> <li>-Training organizations</li> <li>- AFTEX</li> </ul>	Oct 2009 and ongoing	ACE training component will include training of trainers in core skills

			<ul style="list-style-type: none"> <li>Educate labor organization leaders on benefits of regional integration.</li> </ul>			
	Lack of value added services.	<p>Shortage of facilities for denim finishing.</p> <p>Cambodia's status as an industry of subsidiaries inhibits investment.</p>	<p><b>Create model "virtual" vertical factories that will expand the range of products and attract new clients while mitigating risk</b></p> <ul style="list-style-type: none"> <li>Educate banks and other financing sources on the potential payback.</li> <li>Obtain government support (possibly loan guarantees, or channeling donor contributions) for vertical regional investment.</li> <li>Coordinate business-to-business linkage.</li> </ul> <p><b>Ensure availability of skills needed to support vertical factories: see above in workforce skills for action steps</b></p> <ul style="list-style-type: none"> <li>Build skills in pre-production services, e.g. sourcing, sample making, CAD.</li> </ul> <p><b>Support development of needed processing</b></p> <ul style="list-style-type: none"> <li>Invest in full service clusters around Cambodian Special Economic Zones.</li> <li>Pursue international development loan backing for industry investment in Indonesia and Cambodia.</li> <li>Engage training providers to provide needed courses.</li> <li>Organize marketing visits for buying agent representatives to introduce concept.</li> </ul>	<p>Indonesia mills, Cambodian factories,</p> <p>Cambodia FDI, GMAC,</p> <p>Indonesia Textile Association, Governments</p> <p>Training organizations</p> <p>Indonesia Textile Association, GMAC, Ministries</p>	<p>Oct 2009 and ongoing</p> <p>April 2010 and ongoing</p> <p>Oct 2009 and ongoing</p> <p>July 2010 or later</p>	<p>ACE support for Virtual Vertical Factories</p> <p>Training of Trainers in core skills</p> <p>Indirect; support vertical planning and training</p>
<b>Trade and Logistics</b>	Clearance and port costs.	Informal fees, expediting costs.	<p><b>Establish privileges for corridor trade</b></p> <ul style="list-style-type: none"> <li>Lobby for special processes for ASEAN trade</li> </ul>	Indonesia Textile Association,	July 2009 and ongoing	Indirect

	Long transit time	Lack of direct service to Cambodia	<ul style="list-style-type: none"> <li>• With models in place, pursue broader implementation.</li> <li>• Engage with transportation company representatives and inform of transit lane growth potential to identify carrier who might establish direct service.</li> </ul>	GMAC FDI Governments		
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### 4.3. ACE PROJECT ACTIVITIES

The analysis of interviews with fabric mills and garment makers in Indonesia and Cambodia, combined with desk research, confirms there is real potential to increase the market for Indonesian denim (HS 5209) among Cambodian factories. The Indonesian product is competitive on price, quality, and speed to market and has opportunities to improve in those areas, and create a more innovative, flexible industry. Cambodian factories are suffering in the current economic slump, and a more cost efficient, higher quality materials source combined with market diversification are important to preserving jobs in the region.

ACE has stimulated interest among the ASEAN members in pursuing a strategy for regional integration. Through close cooperation, each country can play a larger role in the internal markets of its neighbors. Moreover, they will be able to compete more effectively against other significant regional blocs, such as China and South Asia.

The ACE Project Team has planned its activities for 2009-2010 to assist the private sector in launching a number of the suggested action steps described above. The Project focus will be on the following tasks:

1. Test virtual vertical production models to demonstrate the potential for cooperation
  - Drawing on information from the corridor study, develop a program to create model regional vertical partnerships.
  - Implement the program, monitoring the results.
  - Publicize results to AFTEX and other stakeholders to stimulate additional efforts.
  
2. Improve access to market information
  - Leverage industry associations to develop accurate information about member companies.

- Link fabric producers to garment makers through an AFTEX supplier database.
- Bring fabric producers and garment makers together at trade shows and similar activities to build relationships and introduce potential partners.

### 3. Support improved skills and cost effective production

- Provide training for trainers from ASEAN member countries to build capacity in merchandising, sourcing, and other trade-related professional skills.
- Support the development of commonly recognized skill levels in production and customer service.
- Support training exchanges between regional providers to increase the number of capable organizations contributing to skills development.

### 4. Promote ASEAN branding

- Host ASEAN brand information centers at trade shows.
- Promote benefits of ASEAN products (trade preferences in EU, Japan and Canada) using AFTEX website, trade shows, and AFTEX member association websites.

## APPENDIX:

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We hope that this report will provide valuable insights and support to policy makers as well as stakeholders to develop relevant strategies to enhance intra-regional trade among ASEAN countries, as well as extra-regional trade at a more global level.

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