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A RAPID DIAGNOSTIC OF THE GARMENT SECTOR FINAL REPORT

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A RAPID DIAGNOSTIC OF THE GARMENT SECTOR

FINAL REPORT

SUSTAINABLE ACHIEVEMENT OF BUSINESS EXPANSION AND
QUALITY (SABEQ)

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CONTENTS

INTRODUCTION AND BACKGROUND	1
Introduction	1
Background	1
SURVEY RESEARCH RESULTS	2
Main Characteristics of Garment Manufacturers	2
Exports and Production Levels	2
Diversification of Products and Export Markets	4
Employment and labor issues	5
Transportation of Workers	8
Production Costs	8
Local sourcing of raw material	9
Services	9
Areas of Assistance	9
Expansion Projects	10
Garment Business Associations	11
SUMMARY OF MAIN FINDINGS	13

INTRODUCTION AND BACKGROUND

INTRODUCTION

The purpose of this assignment is to conduct a rapid diagnosis of the garment sector in Jordan. The analysis in this report is primarily based on the survey results conducted by SABEQ consultants during the month of May/June 2007. The survey aimed at developing a concise yet detailed picture of the current profile of garment manufacturers (factory ownership, level of exports, employment, main markets, main products, production costs, challenges, and required areas of assistance, etc.). The report concludes with a summary section that serves as an abridged version of the full report.

Unlike previous reports, this report focuses on the micro analysis (at the manufacturer level) instead of giving a macro-level analysis of the garment sector as a whole.

BACKGROUND

In recent years, Jordan has become an attractive location for apparel manufacturers, thanks to the Qualifying Industrial Zone (QIZ) arrangement and the benefits offered under the Jordan-US Free Trade Agreement (FTA) signed in 2001.

Official statistics indicate that exports from QIZs increased by 17 percent for the year 2006 over the year 2005. Exports' volume for these QIZs totaled JD 836 million for 2006, compared to JD 716 million for year 2005¹.

In Jordan there are 13 QIZs, 10 of which are private and 3 are public, hosting around 50 factories with a total investment of JD 342.7 million, and total employment of around 54 thousand².

¹ Ministry of Industry and Trade, QIZ section.

² Ibid

SURVEY RESEARCH RESULTS

MAIN CHARACTERISTICS OF GARMENT MANUFACTURERS

A sample of 32 garment factories were surveyed – they are mainly located in three major QIZs (Al Tajamouat, Al-Dulayl, and Al-Hassan). Factories establishment dates ranged from as old as 1992 to as new as 2006. However, around three quarters of surveyed factories were established during the period 2000 to 2005.

The majority of surveyed manufacturing companies were found to be 100 percent foreign owned and less than a third 100 percent locally owned. Joint ventures between local and foreign investors were the least common ownership structure. Foreign investments in this sector mostly come from Eastern and Southern Asian countries such as India, Pakistan, China, Hong Kong, and Sri-Lanka, among others.

The covered companies were found to contribute to around 48 percent of the country's total national garment exports (at JD 429.6 million); to employ approximately 51 percent of employees in the QIZs (27,469 employees), and on average reach a local value added of around 55 percent³. However, it is important to note that the standard deviation of the surveyed companies in terms of their local value added stood at a high 2.8 percentage points ranging as low as 1 percent to as high as 98 percent.

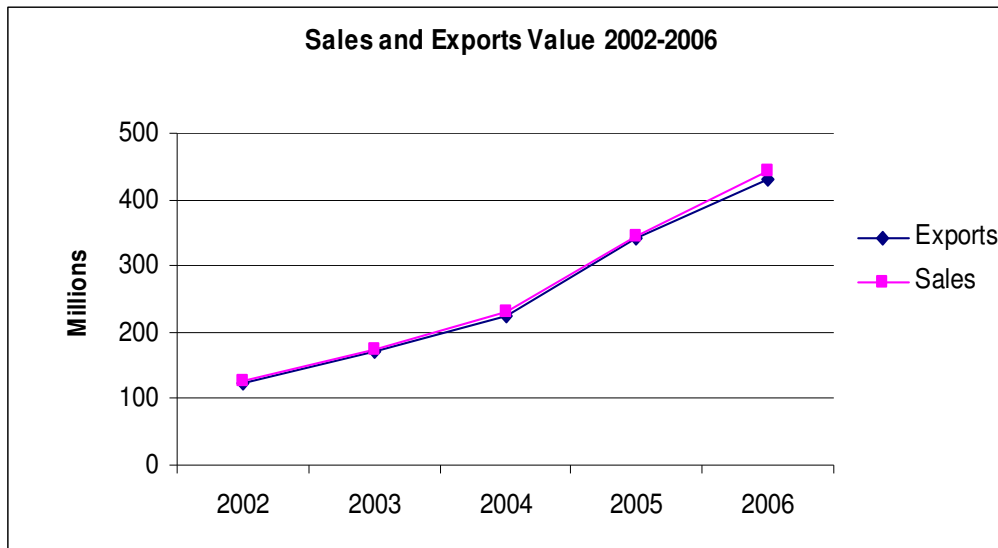
27 companies out of the 32 covered are prime contractors, albeit 4 of which work as subcontractors in times of low season. On the whole, the majority (65 percent) of the sampled companies cater to their buyers' requests independently without subcontracting downwards to other local companies. In addition, for those companies that do subcontract work, production amount subcontracted does not exceed 30 percent of annual total exports. Approximately 60 percent of these companies subcontract 1-10 percent of their annual total exports. Upon inquiring about the areas that need improvement at the subcontractor level, respondents mainly focused on production capacity and labor skills.

Approximately 40 percent of companies own their factory buildings, demonstrating commitment among these companies to have a production base in Jordan.

EXPORTS AND PRODUCTION LEVELS

The garment sector is predominantly an export sector. Approximately 80 percent of surveyed businesses are exporters, of which the vast majority (around 92 percent) export their entire production. The survey results show a year on year increase in the total value of the sales and exports; the trend lines illustrated in the graph indicate close resemblance between the value of sales and exports throughout the years.

³ As calculated by the Ministry of Industry and Trade: The total yearly expenditures excluding depreciation and any costs of imported raw material divided by the total yearly expenditures.



The survey results show that exports from the 32 companies covered have demonstrated significant growth rates between 2002 and 2006, recording a compound annual growth rate of 37 percent. This export growth has come as a combination of the growth in exports from businesses existing since 2002 and the new exports from businesses incorporated between 2003 and 2006.

13 of the 32 garment manufacturers were set up before or during 2002. Looking at the exports of those businesses, the compound annual exports growth rate was 15 percent i.e. 60 percent of the total sectors compound annual exports growth rate between 2002 and 2006 came from businesses established after 2002. This is a natural phenomenon, as newer businesses typically demonstrate higher growth rates in the beginning of their life cycle until operating capacity utilization is maximized and growth rates begin to level off.

Looking at growth rates for individual companies across the years, it is noticed that the general population witnessed growth rates every year, except during 2005. During 2005, 7 of the 30 existing businesses recorded no or negative growth rates. The slower or negative growth rates that were experienced by these companies can be attributed to the expiration of the Multifiber Agreement (MFA) on 31 December 2004 in addition to the signing of the new QIZ protocol between Egypt, Israel, and the US. However, 5 of those 7 businesses resumed growth during 2006. Despite this fact, it should be noted that the most active year for the incorporation of new businesses was also 2005, with 8 new businesses setting up shop, with the remaining 'new comers' evenly disbursed between 2003, 2004 and 2006. This fact, helped make 2005 the best performing year in aggregate exports growth, recording a 52.3 percent growth rate over 2004.

In addition, numbers show that over the years, companies' growth rates varied significantly among survey businesses, with 5 companies contributing over 50 percent of the sample turnover by the end of 2006.

It is also worth noting that Jordan's national exports witnessed a slower increase, starting 2005, that can be attributed to the above-mentioned two main occurrences that coincided in December 2004. In May 2006, the labor violations scandal surfaced causing export levels to go below the 2002-2004 period average at 18 percent and 26 percent for the total national garment industry and the sample respectively. The continuation of the effects of the MFA expiration and Egypt's QIZ in addition to the negative effects of the labor violations explain the drop in growth rate during 2006.

Table 1: Jordan's domestic exports vs. the surveyed companies' exports (in 000' JD)

	2002	2003	2004	2005	2006
Domestic Export Value	376,267	493,829	725,836	763,023	899,904
Percentage Change	66%	31%	47%	5%	18%
Sample Export Value	123,731	169,828	223,340	340,219	429,606
Sample Percentage Change	-	37%	32%	52%	26%

In fact, the negative impact of these violations on the country's exports would have been much higher if retailers had automatically withdrawn their business. Instead "many retailers said their policy was, after discovering violations, to work with a factory to improve conditions, rather than automatically withdraw their business. Wal-Mart says it gives factories a year to fix serious problems, re-inspecting them every 120 days". *JORDAN: An Ugly Side of Free Trade – Sweatshops* by Steven Greenhouse and Michael Barbaro, The New York Times May 3rd, 2006.

DIVERSIFICATION OF PRODUCTS AND EXPORT MARKETS

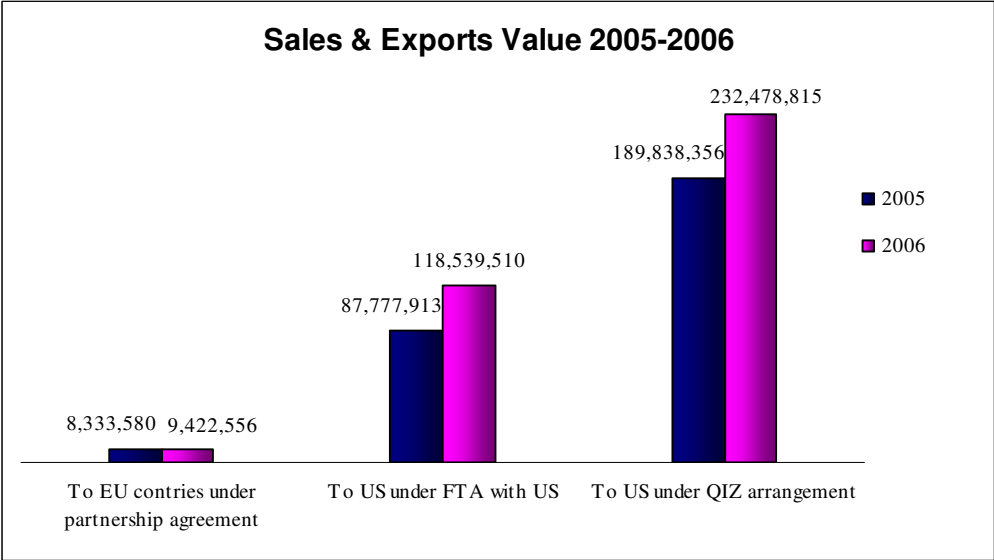
Items Jordan produces and exports range from outerwear, tops and bottoms to inner wear and surgical gowns; all of which are produced using different material of cotton, textiles fibers, synthetic fibers and wool or fine animal hair. The survey results indicate that about one quarter of the surveyed companies produce and export men's and boy's suits of wool or fine animal hair; and about one third of the surveyed companies produce and export denim garments made of cotton - shirts, dresses, shorts, and trousers which represented a relatively high percentage of the total products of these companies. Other products include Women's or girls' dresses of other textile materials, knitted or crocheted women's suites, dresses, trousers, jackets, and knitted or crocheted men's suites, dresses, trousers, and jackets, among many others.

The survey results provide evidence that Jordan's garment industry does not cater to the sophisticated consumer segment. Main buyers included the largest retailers in the United States, Wal-Mart (buyer from 7 companies), JC Penny (buyer from 7 companies), and Jones Apparel (buyer from 5 companies). Other buyers include Philip Van Heusen, Calvin Klein, Hanes, and Sears, among many others. Garment manufacturing companies in Jordan produce large volumes of identical items as opposed to exclusive luxurious items. Therefore, it is believed that the business model of companies operating in Jordan is based on traditional economies of scale, i.e. producing large volumes of identical items in order to lower the marginal product cost. Therefore, Jordan's competitiveness is more toward being price-based than being quality-based.

As for target markets, the US is receiving the lion's share of Jordan's garment exports, worth around JD 314⁴ in export value. A distant second market for Jordan's garment exports is the European Union (EU), receiving JD 8.8⁵ million in export value.

⁴ Calculated as 2005/2006 average.

The QIZ exports are nearly twice as those exports under the US-Free Trade Agreement (FTA) at JD 211 million⁶ and JD 103 million⁷ respectively. All exports to the EU were exported under the partnership agreement. The value of products exported to “other” countries is negligible at approximately JD 0.7 million. These products are exported to the EU and the US through Israel. The following figure represents the value of exports and the target market for years 2005-2006.



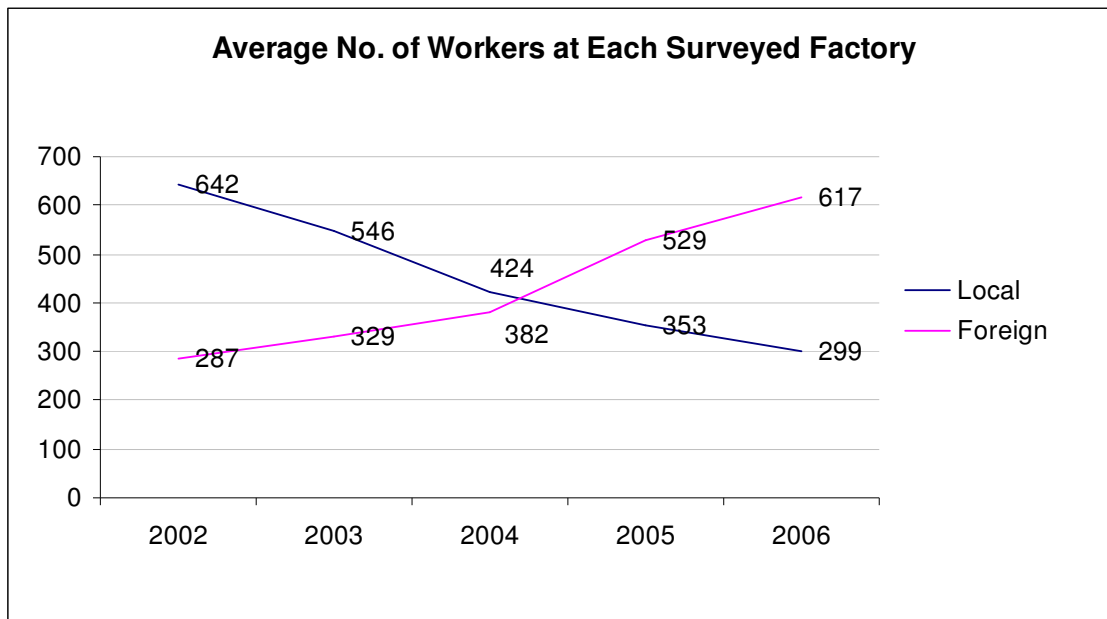
EMPLOYMENT AND LABOR ISSUES

This section of the survey revealed some distinct trends. The first of which is the declining preference of local workers as opposed to foreign labor. In 2002, 70 percent of the workforce was domestic; subsequent years show a consistent continuous decline reaching a local workforce employment level in 2006 that is 58 percent less than in 2002. This represents a replacement of an average of 342 local employees with foreign employees between 2002 and 2006 at each surveyed factory.

⁵ Ibid

⁶ Ibid

⁷ Ibid



As has always been voiced by garment industry investors, local labor is considered cheaper than imported labor, with the survey showing that, during 2006, the average skilled foreign worker cost the company 35 percent more than a skilled local worker, primarily owing to the incremental food, housing, travel costs, etc. associated with foreign labor. This primarily explains the investor community's decision to focus on the local workforce in the early stages of the Jordanian garment manufacturing industry.

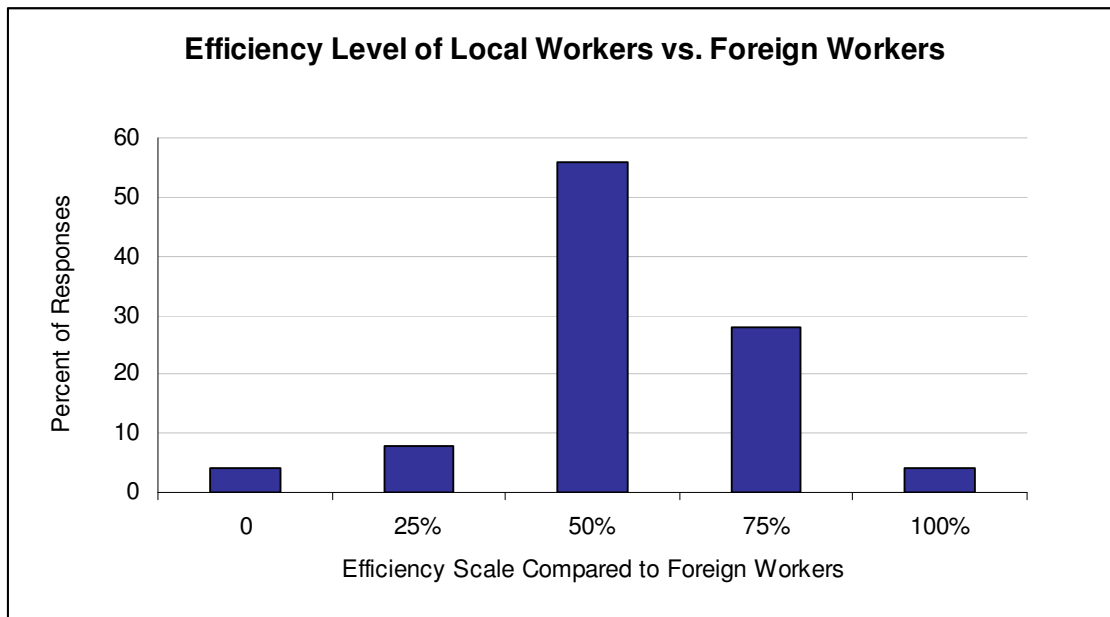
The table below illustrates the difference in average salaries paid to local and foreign workers per month according to skill level:

Table 2: Average Salaries for Skilled and Unskilled Local and Foreign Workers (in JDs)

	2006		2007	
	Local	Foreign	Local	Foreign
Skilled Total	171	230	185	247
Basic	115.32	113.69	128.70	128.00
Other	55.65	116.31	56.33	119.24
Unskilled Total	144	196	160	209
Basic	97.83	97.07	112.61	110.60
Other	45.82	98.47	47.41	98.40

Despite the direct cost advantages of the local worker, the respondents were unanimous in the survey regarding the turnover and relative inefficiency levels of local workers. Across the survey sample, local workforce turnover was 7 times higher than the turnover of the foreign workforce, averaging 22 percent. In addition, 68 percent of respondents considered the average local worker's efficiency to be at or less than 50 percent of a foreign worker, less

than a third of respondents considered it to be at three quarters of a foreign worker, and a negligible 4% considered it to be equal to a foreign worker.



On the subcontractor level, each subcontractor employed on average 68 Jordanian and 267 foreign workers in 2005 and 77 Jordanian and 300 foreign workers in 2006, which indicates an increase in business volumes.

Table 3: Average employment figures at the subcontractor's factory versus the prime contractor's factory

	2005		2006	
	Local	Foreign	Local	Foreign
Prime Contractors	353	529	299	617
Sub-contractors	68	267	77	300

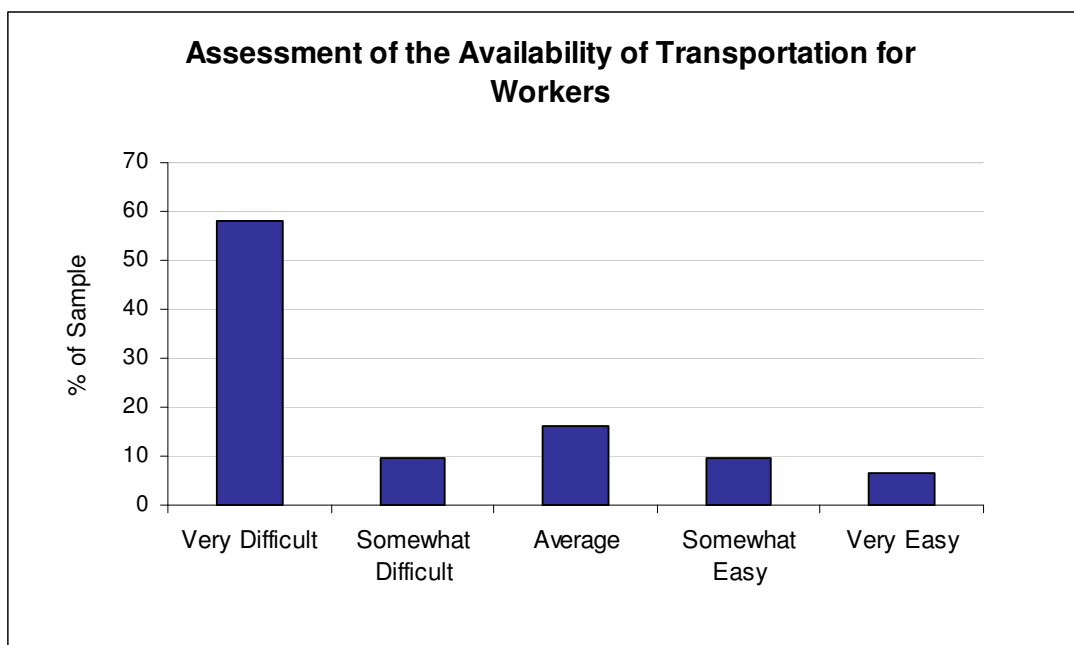
As can be noted from table 3, on average the prime contractor employs 2.5 times more workers than the subcontractor.

The vast majority (90 percent) of companies surveyed had active training programs for their employees. However, the employers' answers when inquiring about the steps needed to improve local workforce readiness to substitute part or all of foreign workers, revealed that the true problem is in the culture and mindset of the local workforce (three quarters of the sample focused on cultural issues related to the local employee mind set and work ethics).

On the facilitation role of government regarding labor procedures, 87 percent of the sample considered government processes regarding bringing-in foreign labor to be difficult or very difficult.

TRANSPORTATION OF WORKERS

On average, each company caters for the transportation of 320 employees every day, costing the company an average of JD34 per worker per month. Not only does transportation of workers incur extra costs to the company but the availability of means of transportation in itself is a problem as shown in the following figure.



PRODUCTION COSTS

Table 4 shows the average cost of selected items per company per year. As can be noted from the table below, the year 2005 witnessed the highest percentage increase in production costs.

Table 4: Average cost of selected items per company per year

	2002	2003	2004	2005	2006
Fuel	46,652	55,744	64,533	86,428	115,435
Electricity	64,922	67,801	74,980	81,163	85,354
Water	30,148	36,405	44,555	61,606	83,199
Certificates of Origin	11,069	19,135	23,644	33,666	34,246
Local transportation of goods	58,535	73,683	100,099	157,699	177,629
Costs of inputs (raw materials)	2,980,724	3,653,558	4,966,028	5,083,872	6,091,547

LOCAL SOURCING OF RAW MATERIAL

Three quarters of surveyed companies source between 1 – 10 percent of their raw material locally while none source more than 30 percent of their raw material locally. This indicates the industry's continued dependence on imports of raw material due to the lack of cotton production and textiles supply in Jordan. In fact, the rewards generated by the high export figures of the garment and textile industry in Jordan (standing at JD899.9 million) are mitigated by the high imports of textile yarn, fabrics, and made up articles. As an example, imports of textile yarn, fabrics, and made up articles comprise a high 58 percent of Jordan's garments exports.

Table 5: Total Exports and Imports of the Garment and Textile Industry (in 000' JDs)

Trade Activity	Trade Item	2001	2002	2003	2004	2005	2006
Exports	Textile yarn, fabrics, made up articles	21,223	17,053	13,657	15,839	16,605	16,321
	Clothes and footwear	205,816	359,214	480,172	709,997	746,418	883,583
	Total	227,039	376,267	493,829	725,836	763,023	899,904
Imports	Textile yarn, fabrics, made up articles	215,741	269,942	333,857	458,483	483,731	523,287
	Clothes and footwear	54,596	76,794	84,010	107,080	140,016	203,454
	Total	270,337	346,736	417,867	565,563	623,747	726,741

Source: Central Bank of Jordan, Monthly Statistical Bulletin June 2007

SERVICES

The results of the survey show that textile related infrastructure (waste-water treatment plants, shared washing facilities, etc.) are lacking within the industrial estate in which they are operating. Only 6% of the factories indicated that there are shared services in their industrial estate, such as recycling and washing facilities. However, it is important to mention that the answers were not consistent amongst the factories of the same zone; a number of factories indicated that there might be services that they are unaware of, which explains this inconsistency.

AREAS OF ASSISTANCE

There is consensus amongst industry specialists that moving towards higher value added products, diversifying export markets away from the US, and integrating vertically across the

supply chain are important elements if Jordan is to sustain and improve the benefits brought about by the local garment industry.

Nevertheless, inquiring about the need for the mentioned 'growth and sustainability' elements, the responses from companies were mixed. Approximately, one half of the respondents agreed that there is a need to move towards higher value products. Below are the areas in which these companies need assistance (to move up the value chain) listed in descending order:

- Attract buyers to Jordan/increase marketing support
- Technical/HR training and assistance.
- Attract more skilled workers.
- Structure improvement and ease of government regulations
- Financial assistance and increased funding.
- Worldwide Responsible Apparel Production (WRAP) certificate

A little over half of respondents agreed that there is a need to diversify their export markets. Of those, the majority focused on the EU as an export market. Furthermore, when those respondents were queried about what assistance would be required to help in diversifying export markets, the majority of respondents focused on the need for increased promotion on two levels. First, promoting the capabilities of the Jordanian garment manufacturing industry abroad and secondly creating local awareness on the trade agreements and regulations between Jordan and Europe.

Regarding vertical integration, 60 percent of respondents did not see a need for vertical integration to increase competitiveness. Respondents who agreed that there is a need for them to become more vertically integrated, focused on supporting industries such as (i) cutting, laundry, spinning, dying, (ii) wastewater management, (iii) logistics improvement regarding export/import lead times and (iv) printing units and embroidery machines.

EXPANSION PROJECTS

A considerable 35 percent of respondents stated that they are currently engaged in an expansion scheme or investing in a new project in Jordan. Nonetheless, about one third of the respondents (7 companies) indicated that they are considering closing shop in Jordan and moving to another location, and another 3 companies are engaged in expansion project in other locations. In fact, these 7 companies are major exporters, whose combined exports comprised an alarming 52 percent and 17 percent of the sample's and the garment national exports in 2006 respectively. Moreover, these 7 companies employ in total 7,121 employees (an average of 1,187 workers are employed at each company), of which 1,992 are Jordanians (an average of 332 Jordanians are employed at each company) constituting 22 percent and 12 percent of the sample's and the total local workforce in the sector respectively. It is worth noting that only 2 of the 7 companies considering terminating their operations in Jordan currently subcontract part of their work.

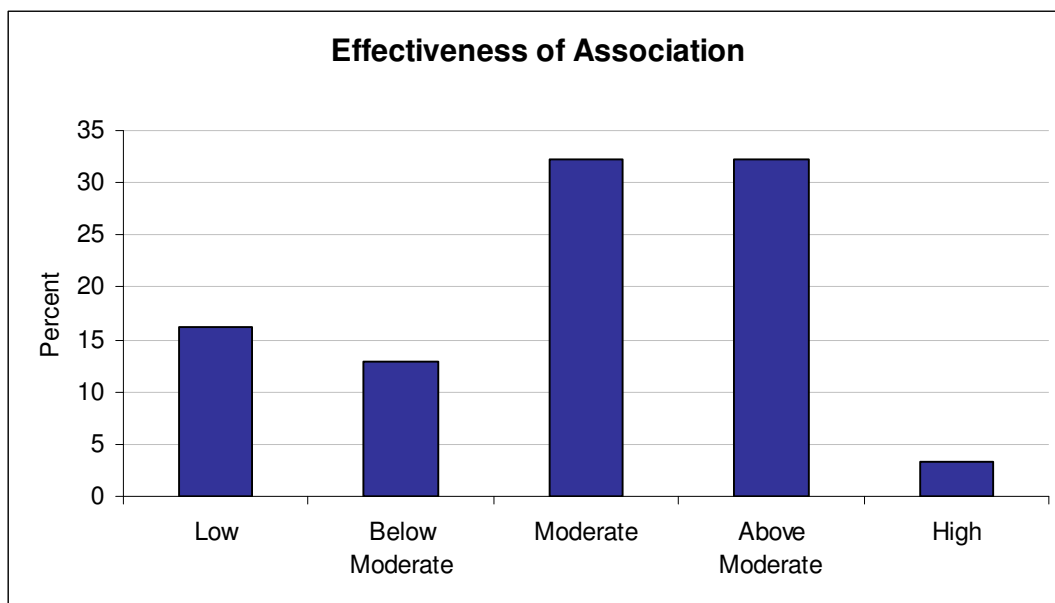
When these companies and the ones who are also considering expansion outside Jordan without closing shop in Jordan (10 companies) were asked to state the locations that they are interested in, Egypt topped the list at around 70 percent, other locations included: Cambodia, Vietnam, Tunisia, and India. The respondents were also asked to mention the advantages that these locations have over Jordan, around half of the reasons revolved

around cheaper production costs including cheaper labor costs. Below is a listing of the top reasons mentioned in respective order:

1. Cheaper local workforce, lower cost of production, and availability of local workforce (received the same level of significance)
2. Government support & policies
3. Cheaper factor costs

GARMENT BUSINESS ASSOCIATIONS

The vast majority of the surveyed companies (at approximately 97 percent) are members of a garment association – 84 percent are members of the Jordan Garments, Accessories, & Textiles Exporters' Association, JGATE, 52 percent are members of the Foreign Investors Association, FIA, (note that some companies are members of both associations, JGATE and the FIA). Respondents were then asked to rank the effectiveness of the association on a scale from 1 to 5. As shown in the following figure, around two thirds of the respondents ranked their association between moderate and above moderate.



The surveyed companies mentioned a number of recommendations that would improve the effectiveness of their association. Below listed are the recommendations mentioned from the most to the least frequent, with the first one receiving about one third of the companies' consensus.

- Lobby for more government support, particularly towards more flexible foreign labor permits
- Work toward an increased interaction between members
- Employ knowledgeable & professional staff who can better serve the association and its members
- Work toward an increased interaction between the public and the private sector
- Cooperate with other garment associations to better serve the sector

- Provide market intelligence, problem solving, and advocacy services

SUMMARY OF MAIN FINDINGS

This summary section is an abridged version of the full report; it highlights the main findings of the survey conducted during the months of May and June 2007 of 32 garment manufacturers across various industrial estates (mainly: Al Tajamouat, Al-Dulayl, and Al-Hassan). It is important to note that the majority of companies were found to be major exporters. In fact, the sample contribute around 48 percent of the country's total national exports (at JD 429.6 million), employ an approximate of 51 percent of employees in the QIZs (around 27,469 employees), and on average reach a local value added of around 55 percent.

Ownership Structure: Two third of sampled companies are 100 percent foreign owned and less than a third 100 percent locally owned. Joint ventures between local and foreign investors were the least common ownership structure. Foreign investments in this sector mostly come from Eastern and Southern Asian countries such as India, Pakistan, China, Hong Kong, and Sri-Lanka, among others.

Production and Export Levels:

- The sample's exports recorded a compound annual growth rate of 37 percent between 2002 and 2006.
- Although few of the surveyed companies have experienced a slower growth in 2005 (attributed to the MFA expiration and Egypt's QIZ), the total sample exhibits a high 52 percent growth rate due to the incorporation of new businesses in that same year. National exports grew at a slower pace of 5 percent and 18 percent in 2005 and 2006 respectively than previous years.

Product and Market Diversification:

- Production includes a wide range of traditional garment items, mainly: wool men's and boy's suits and denim garments made of cotton. The main buyers listed by the surveyed companies (Wal-Mart, JC Penny, and Jones Apparel) provide evidence that the garment manufacturing companies in Jordan produce large volumes (by Jordanian standards) of identical items as opposed to exclusive luxurious items.
- The survey results also show that the US is receiving the lion's share of Jordan's garment exports, worth around JD 314⁸ in export value. A distant second market for Jordan's garment exports is the EU, receiving JD 8.8⁹ million in export value.
- The QIZ exports are nearly twice as Jordan's exports under the US-FTA at JD 211 million¹⁰ and JD 103 million¹¹ respectively. All exports to the EU were exported under

⁸ Calculated as 2005/2006 average.

⁹ Ibid

¹⁰ Ibid

the partnership agreement. The value of products exported to “other” countries is negligible at approximately JD 0.7 million. These products are exported to the EU and the US through Israel.

Employment and Labor Issues:

- Despite the fact that the average local worker costs 35 percent less than the foreign worker, there is a declining preference among employers for local workers as opposed to foreign labor. Employment of local workers at year end 2006 was 58 percent less than at year end 2002. This is mainly attributed to the low efficiency level of the Jordanian worker compared to the foreign worker, as well as the high turnover rate of the average local worker that is 7 times higher than the average foreign worker.
- Not only does transportation of workers incur JD 34 extra cost to the company per worker per month, the availability of means of transportation in itself is a problem.

Local Sourcing of Raw Material

- Jordan’s garment industry is highly dependent on imports of raw material resulting in less trade rewards. In fact, imports of textile yarn, fabrics, and made up articles comprise a high 58 percent of Jordan’s exports of the same

Services

- Only 6% of the factories indicated that there are shared services in their industrial estate, such as recycling and washing facilities.

Areas of Assistance

- Approximately, one half of the respondents agreed that there is a need to move towards higher value products. The most prevalent areas of required assistance were: Attracting buyers to Jordan/increasing marketing support, and Technical/HR training and assistance.
- A little over half of respondents agreed that there is a need to diversify their export markets. Of those, the majority focused on the EU as an export market. Furthermore, when those respondents were queried about what assistance would be required to help in diversifying export markets, the majority of respondents focused on the need for increased promotion on two levels. First, promoting the capabilities of the Jordanian garment manufacturing industry abroad and secondly creating local awareness on the trade agreements and regulations between Jordan and Europe.
- Regarding vertical integration, 60 percent of respondents did not see a need for vertical integration to increase competitiveness. Respondents who agreed that there is a need for them to become more vertically integrated, focused on supporting industries such as (i) cutting, laundry, spinning, dying, (ii) wastewater management, (iii) logistics improvement regarding export/import lead times and (iv) printing units and embroidery machines.

¹¹ Ibid

Expansion Projects

- There are 7 companies, out of the 32 surveyed, are considering closing shop in Jordan. These companies combined comprise 52 percent and 17 percent of the sample's and the garment national exports in 2006 respectively. They employ around 22 percent and 12 percent of the sample's and the total local workforce in the sector respectively.
- Egypt topped the list of locations that investors are considering. Other locations included: Cambodia, Vietnam, Tunisia, and India. Advantages revolved around cheaper production costs including cheaper labor costs.

Associations' Effectiveness

- The vast majority of respondents are members of either JGATE or the FIA and two thirds of the respondents ranked their association services between moderate and above moderate. They also ranked advocacy and networking high on the list of services needing improvement at their association.

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