

*Dahab Plastics Co.*¹

AMMAN, JORDAN

Late one Thursday afternoon, Amer Dahab, the general manager of Dahab Plastics Co. (DPC), sat in his office reviewing his latest sales figures. The outlook for his company was bleak. Sales had declined, local markets had become stale, and DPC had lost market share to other competitors using PET technology.² If business continued to decline at the current rate, DPC would certainly fail.

With that sobering thought in mind, he studied the painting of his father, the founder of DPC, on the wall behind his desk. He then looked out the window at a competitor's factory and finally turned to face the setting sun descending beyond the Amman skyline. DPC was the oldest manufacturer of tableware plastics in Jordan and it had the largest production capability in the country. These two factors made DPC the pre-eminent firm in the industry. Amer had inherited DPC four years ago when his father Mahmoud had passed away and he now knew that unless he revamped his approach to business soon, DPC could follow the setting sun over the horizon.

Jordan joined the World Trade Organization (WTO) in April 2000 and many Jordanian business owners rightly feared that the competitive landscape would now change. New competitors with advanced technology were entering the Jordanian market. This fact—coupled with the overall depressed Jordanian economy—drove many small businesses to reengineer their business practices. Even with these changes, however, many businesses failed. Exhibit 1 summarizes these developments as reported in the local newspaper, *The Jordan Times*.

The Plastics Market in the Year 2001

At the beginning of 2001, the total plastic and rubber market in Jordan was JD³ 142 million in gross sales (U.S. \$200 million). The disposable tableware sector of this industry comprised just under 4% of that market. DPC remained the largest manufacturer with 50% of the disposable tableware market.

Over the past ten years the plastics market in Jordan had remained flat. The United Nations embargo imposed on Iraq had virtually eliminated Jordan's best customer. As a result of the Gulf War, the plastics industry experienced a small growth phase when many expatriate Jordanians returned to Jordan⁴ from their out-of-country assignments. Shortly thereafter, sales leveled off and did not keep pace with inflation. See Appendix 1 for a brief overview of the Jordanian economy.

The Jordanian Government maintained tariffs on imported materials. DPC imported raw materials from Saudi Arabia and was subject to these tariffs unless the finished product was subsequently exported. The typical tariff was reportedly approximately 30% of purchase price, with additional penalties for businesses caught or assumed to have understated their bill of materials. Exhibit 2 presents other Jordanian import considerations.

Background of DPC

Mahmoud Dahab (Abu-Amer⁷) and his two brothers founded DPC in 1971. DPC had grown to be the largest disposable plastic tableware manufacturing company in Jordan. Gross sales were JD 2.5 million (US \$3.55 million) annually as of 2000. DPC's sales had slipped from 65% of the plastic tableware market in the early 1990s to only 50% of market at the beginning of 2001.

Originally, the company purchased second-hand machinery from Italy to manufacture their lines of staple products described below. The seller was an Italian company that had further automated its manufacturing processes and the machinery was in good shape.

Mahmoud Dahab was the eldest of three brothers and thus the patriarch of the family. His brothers looked up to him for leadership and strategy. One of the brothers managed the factory floor and the second handled the administrative work. Shortly after Abu-Amer passed away, the surviving brothers

“Jordan’s WTO Accession Bid Held Up By Needed Reforms, Business Opposition”

by Ghadeer Taher

Jordan Times, Wednesday, April 14, 1999

AMMAN — Local industries may have to brace themselves for a new set of rules in a new playing field if Jordan manages to join the World Trade Organization before the current round of negotiations ends in the year 2000.

Jordan still has significant legal and policy reforms to implement before making the grade for membership in the 134-nation club, which aims to reduce tariff and non-tariff barriers to international trade in goods, facilitate trade in services and protect intellectual property rights.

While some officials argue that joining the WTO, whose members account for more than 90% of world trade in goods and services, is essential for Jordan to attract foreign investment, secure advantages for its exports and integrate itself into the world economy, others argue that for local industries it is “suicide.” Opponents to membership say national industries will be faced with fierce competition at home and forced to meet what some say are unattainable standards as the rules of engagement change.

“We are a small country. We cannot hope to influence world trade policy so we have to work to best adapt to economic realities rather than expect to change things,” Fanek said. “The question is not whether we want globalization; it is how do we best deal with it,” he said.

Although the number cannot be determined, it is certain that some local businesses, after enjoying privileged treatment for so long, will find they are poorly equipped to deal with fierce foreign competition even in the domestic market.

Mazen Saket, general director of the International Fabric Production, and a columnist, said it seems that the government handled efforts to join WTO in response to conditions related to Jordan’s relations with donor countries.

“Joining the WTO might facilitate business and economic exchange between countries, due to easy customs, tax and legislation procedures, but benefits of joining such an organization are limited, if they exist at all. The disadvantages are severe and will affect all productive sectors,” he stressed.

Exhibit I. Newspaper Article on the Jordanian Economy and the WTO

retired from the family business and DPC passed to their three eldest sons. Within a year, the three cousins discovered that their management styles were incompatible. Although they remained socially affable outside the office, they did not discuss business outside of the DPC offices. They finally agreed to divide the business into three distinct parts.

The original factory manufactured three types of products: tableware plastics (cups, bowls, spoons, forks, knives, and other restaurant “take away”-type plastics); dairy/food containers (yogurt, milk, cheese-type containers); and liquid containers (water, food oils type containers). The business partition was therefore along those product lines. The eldest son, Amer, inherited the principle operation—tableware plastics, including plastic cups.

Walls were erected to physically divide the three operations. Each cousin managed his portion of the business completely independently of the other two. The two cousins renamed their businesses Maroo Plastics and Ma’asah Plastics, respectively.

Much of DPC’s early successes resulted from the instability of the Middle East region. In 1973 when the Israelis entered Lebanon, factories there closed. DPC was able to takeover the former Lebanese contracts in Saudi Arabia. At this point

a second shift was added to meet the two-fold increase in production. This lasted until the Saudis commenced production of their own plastics. The Saudis vertically integrated with their raw material suppliers, making DPC uncompetitive in that market.

The war between Iran and Iraq (1980-1988) created a windfall for DPC. Iraq’s chief competitor was Syria, who supported the Iranian effort. As a result, Syria’s plastics’ output went toward the war effort, and DPC took over Syria’s civilian market until the war ended. At that point, DPC shifted its exports to Iraq. DPC performed well in Iraq until the Gulf War shut down this market.

The beginning of the Gulf War in 1990 brought an influx of Jordanians from the Gulf who in turn caused the Jordanian economy to surge. Up until the early 1990s, plastic products were not widely accepted in Jordan. To accommodate the repatriated Jordanians, several Western-style take-out, fast-food restaurants opened in Jordan. Plastic tableware became fashionable, and the local restaurateurs quickly followed suit. Once again, DPC’s business soared, but then tapered off a few years later. As Amer himself stated, “The success of DPC was really the result of regional disasters.”

Management of DPC

Mahmoud DPC set the management style of the DPC early on. His younger brothers followed his lead quiescently, and implemented every idea he suggested. Mahmoud was soft-spoken but stern with employees. To his credit, however, he paid a fair wage and provided steady employment even through slow times. Mahmoud felt the latter benefit was a fair substitute for other benefits, incentives, or health insurance plans.⁹ His employees responded with loyalty and longevity in the job.

Like many family-owned businesses in Jordan, the owners felt that their business was an extension of their family. Mahmoud's youngest brother, Omar, was in charge of the factory floor. The next oldest brother, Lu'ay, handled the business aspects of the company. Mahmoud acted as General Manager and dealt with suppliers. In addition, he provided the strategic direction for the company. Rarely would Mahmoud entertain suggestions from either of his brothers as he felt that his role was to provide the vision for the company.

Mahmoud maintained his distance as an employer. He never felt the need to allow employees to communicate directly with him regarding business ideas. He reasoned that if he treats the employees like family, then the family would naturally strive for a common goal. He was the patriarch. His employees were in his benevolent care, but he did not expect or want business advice from any of them. Neither did he want his authority questioned to the slightest degree.

Lu'ay had offered several suggestions to take advantage of market conditions, such as incorporating PET technology in their manufacturing process. However, Mahmoud's philosophy was similar to the American expression, "if it isn't broken, don't fix it."

Following the change in leadership, Amer maintained much of his father's management style. However, unlike his father, he was more in contact with the day-to-day workings on the factory floor and he enjoyed the mechanical aspects of the factory much more than management. Amer earned a degree in mechanical engineering from the University of Jordan. He

According to the Jordan Country Commercial Guide, prepared by the US Department of State, 1998⁵

There are no established rules governing customs valuation practices in Jordan. The system rewards customs officers who allegedly uncover invoice misreporting and charge penalties to the importers. Therefore, it is rare that customs valuation officers accept the exporter's price stated on the invoice. Until the law is changed, the Embassy does not see much hope for a correction customs valuation officers questioning every invoice in order to charge penalties and collect the rewards. Unfortunately, the new law continues the reward system⁶ for customs agents already in place. The established customs valuation price includes transportation and freight charges. The value of the imported goods is converted into Jordanian Dinars at an exchange rate set by the Central Bank of Jordan. Invoice or export discounts are not accepted by the customs department. The exporter should consult the local importer to determine whether discounts should be granted directly or indirectly. Although it is legal, an "agent's discount" may not be accepted by the Customs office.

In addition, Saudi Arabian raw material suppliers were selling to Jordanian companies at inflated rates compared to the prices they charged Saudi plastic manufacturers, driving Jordanian manufacturers to increase their prices on manufactured products. Now Saudi Arabian firms had begun producing plastic products. This gave them a price edge over Jordanian firms seeking Saudi customers. In the Jordanian market, Saudi manufacturers posed no real threat. Instead, they distributed most of their wares in the larger, more lucrative Gulf markets such as the United Arab Emirates.

Until the late 1990s demand within Jordan for plastic tableware was limited. DPC mainly produced take-out containers and disposable cups. Tableware was a minor item until 1992. At that time, local fast-food restaurants shifted from stoneware, glass, and metal tableware to plastic, resulting in a sudden demand for DPC's tableware products.

Jordanian manufacturers were constantly concerned about possible Israeli competition. Amer would occasionally pose as a plastics distributor to shop prices in neighboring countries. He consistently found that Israel manufacturers were able to retail their products at prices well below what Jordanian manufacturers paid for their raw materials. For example, it cost DPC JD 6 to produce a case (5000 cups) of 14ml cups. Amer could purchase the same case of finished product from Israeli manufacturers for JD 4. Amer seriously considered discontinuing manufacturing altogether and to instead become a middleman and distribute Israeli products. This, however, would have created a different problem, one that might have resulted in a serious decline in sales. Additionally, Israeli plastic companies had formed a cooperative group to purchase their raw materials in bulk. Significantly lower retail product prices were the result.

In Jordan, small companies generally purchased raw materials individually in small quantities. Typically DPC purchased one truckload at a time. In contrast, Israeli business owners purchased raw materials by the shipload. Jordanian businessmen refused to divulge their raw material usage to each other to avoid providing competitors with inside information about their production levels. This distrustful atmosphere permeated the Jordanian business community to the detriment of all plasticware manufacturers.

Exhibit 2. Jordanian Import Difficulties

had then briefly attended a graduate business program in the UK but at the end of his first semester he decided there was little for him to learn there. He felt he knew the family business better than his university professors.⁹ Amer returned to DPC and worked for two years on the factory floor as a mechanical engineer.¹⁰

After the factory was divided, many of the long-term employees continued to work at DPC out of loyalty to Amer's father. Many, though educated, were not sure that the new divisions split off from DPC would succeed. On the other hand, they had gotten to know Amer during his stint on the factory floor. In this situation, employees had to choose between alternative paths, each with some risk, and most employees leaned in Amer's direction. Amer erroneously felt that the real reason he retained most of the senior employees was that he paid higher wages than both Maroo Plastics and Ma'asah Plastics.

Even though DPC did not have an official organization chart, Amer was certain that all the employees knew who was in charge. DPC's staff consisted of five managers, two floor supervisors, one secretary and thirty-eight factory workers in various positions. The management group was comprised of Amer as the General Manager, Accounting/Finance Manager Sameer Tarawneh, and Marketing Manager Mohammad Zou'bi. Tarawneh was responsible for payroll, accounts receivable, and billing. Zou'bi was in charge of marketing and supplier relations. Zou'bi also dealt with customers and distributors, and oversaw two factory workers in the basement warehouse. Exhibit 3 presents an assumed version of the organization chart.

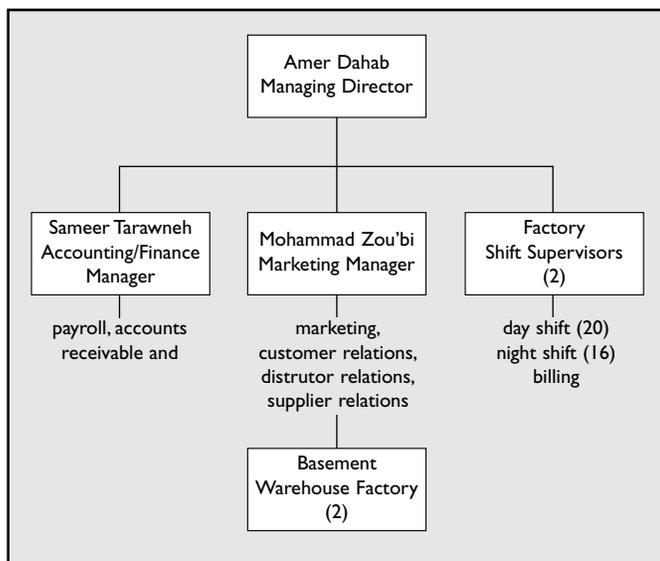


Exhibit 3. Organization Chart

Unlike his father, who relied on his brothers, Amer was more in touch with the factory floor. He loosely managed it through the two shift supervisors. Like his father, he at times

watched the activities through the large window that overlooked the factory floor. The workers had a signaling system to notify each other when Amer was watching, as the noise levels were extremely high in the production area.¹¹ From his experience as a factory worker, Amer was aware of this notification system and he knew that employees worked harder when they were watched.

The two shift supervisors had been with the DPC since 1986 and they had been friends of Mahmoud Dahab. They were responsible for twenty and sixteen employees on their respective shifts. Of the twenty who worked the first shift (0700hrs-1600hrs), six had been with the company for more than six years. The second shift (1600hrs-0100hrs) suffered from high turnover and lack of trained workers. The longest-term employee had been with the company for just under five years, and most of the rest had far less experience. Many of the second shift employees also worked other primary jobs. Furthermore, the second shift supervisor was known for his quick temper and that apparently discouraged long-term shift employment. Indirectly, this matter may have been a significant cause in the drop in quality of products made during the evening shift. The employees on the first shift earned JD 200/month and those on the second shift JD150/month.¹² The floor supervisors' wages were four times that amount, with additional benefits. Opportunity for advancement only arose when one of the senior employees retired. During the four years prior, wages in Jordan had remained flat.

In 1998, Amer hired an illegal Iraqi worker, Bassam Hadidi, to fill the position of machinist. Bassam was responsible for the maintenance, repair and innovations for all machinery. He lived in a one-room cinder block apartment in a remote corner of the factory grounds. The room, formerly used as a small storage area, was equipped with a mattress, a clothesline and a kerosene heater. Bassam used the bathroom and kitchen facilities in the factory designated for the factory workers.¹³

Bassam was over-qualified for the position. He had earned a Mechanical Engineering degree at the University of Baghdad. In Baghdad, he had managed the floor of one of the larger can manufacturing facilities. Adverse economic conditions in Iraq¹⁴ forced this former manager to relocate to Jordan to better himself. He was the sole supporter for his family of five, which remained in Iraq. Unfortunately, he was not able to get a work visa, as the Jordanian Government severely limited the issuance of work permits.¹⁵ DPC afforded him the best position he could find under the circumstances.

Despite the living conditions, Amer actually treated Bassam better than the other factory employees. He praised Bassam because Bassam appeared thankful for the opportunity Amer provided him. Bassam's education surpassed that of everyone on the floor, and his work attitude and industry were exemplary. In the evenings, Bassam would prepare drawings of all

the various parts of the old DPC machines.¹⁶ Impressed with the precision of the Bassam's drawings, Amer allowed him to perform this extra-curricular work in the office.

Production

Early in 1998, Amer purchased a new, highly automated machine that produced CFC¹⁷-free Styrene plates and bowls in a wide variety of shapes and products. For two years previously, Amer had tested what proved to be a limited market. Experimenting with many different styles of molds, he hit upon the right mix of shallow rectangular plates, Styrene cups and take-out cups for the local market. This machine only required two employees to operate and produced the same amount of product in the same amount of time—essentially reducing the work force by three. However, unlike the other machines, this machine was only operated during the first shift.

Bassam performed routine maintenance on and calibration of all machines. Despite the frequency of repairs, the maintenance cost of the thirty-year-old machines, even including Bassam's salary,¹⁸ was negligible. Bassam was capable of any needed repair. Although replacement parts were scarce, he could fashion whatever was needed from materials on hand.

Amer had purchased this machine with the reserve capital DPC maintained, essentially depleting the DPC "war chest." In the current business environment, financing projects proved to be a difficult task. Unless an individual was well connected with bank officials, bank loans were difficult to secure. Amer found that one bank was willing to finance this project but only if he provided three times the value of this new machine as security and paid an interest rate of 23%. Additionally, the bank found essentially no value in the current antiquated machinery that Amer's father had purchased thirty years earlier. Should Amer decide to further update the factory equipment, he had only the factory and land as potential collateral. The bank appraised the value of physical assets at JD 385,000.

Whenever possible, Amer purchased the maximum raw materials he could store to take advantage of supplier discounts. This also reduced the expense of trucking from the southern port town of Aqaba (See map in Appendix 2). Upon arrival, raw materials in the form of plastic pellets were off-loaded by crane and stored in the parking lot of the factory.

The organization of the factory floor lent itself to a smooth flow of raw materials into finished products. As needed, the plastic pellets were shoveled into small bags that were then hand-carried to the production floor. The portioned pellets were then dumped by hand into a hopper on one of two sheet-making machines. The machines melted the plastic pellets into a continuous plastic sheet of the specified thickness. Upon leaving the

machine, the sheet cooled immediately and was rolled onto a spool. The thickness of the sheets was imprecise and irregular due to lack of controls.

The next step in the process brought the sheet spools to one of three forming machines. After first preheating to soften the material, the forming machine then trimmed the sheet to the appropriate size, and stamped it with the required mold. The finished plasticware item then either went to the labeling machine or was packaged as a generic product. The process of sorting and packing was performed manually. The waste was sent to a shredder, mixed with new raw material, and fed back into the sheet-maker.

The labeling machine resembled the best of Rube Goldberg. Over time, workers had welded, taped and roped various contraptions onto it to improve its efficacy. Despite its appearance and antiquity, Amer argued that this machine functioned as well as any modern machine. Bassam had breathed new life into the machine and automated it as best he knew. Unfortunately, the labeling machine required the efforts of three employees to operate, whereas more modern contrivances took only one. One person loaded the plasticware onto a chute, another person monitored the quality of the labeling and levels of paint, and the third removed the plasticware and placed the containers into a box. Once full, the third man placed the box on a chute from where it slid down a ramp into the basement for packing and storage.

In the basement, two men counted the containers, placed them in plastic bags and inserted them into the sturdy DPC cartons. Both men on the day shift had been with the company for five years. They could count, bag and package the plastic-ware faster than any existing machine, six days a week, eight hours a day. Randomly, Amer would take a box to his office to check the accuracy of their count. To-date, he had never found an error. He considered these two men his best workers.

The basement was the new warehouse for DPC. The former warehouse area for raw materials and finished goods had been assigned to Maroo Plastics. Amer expanded the size of the basement to enable holding large quantities of finished goods. Husni was a third warehouse worker. He had responsibility for helping distributors load their orders onto their trucks. In addition, he tracked who received what goods and kept the floor supervisor abreast of the size of the warehouse inventory.

The inventory level determined production. Production data was logged into a spiral notebook with hand-ruled columns. This crude system had worked well enough over the years. In the face of strengthening competition, however, Amer felt the need for better information about his best-selling lines and the purchase patterns of his better customers.

A distant cousin had suggested that an activity-based cost accounting system would afford the modern techniques Amer needed. However, the estimated cost, well over JD 3,000 not including computers and training for the staff, was not palatable to Amer. The current system worked well enough for his father, and Amer rationalized that such a new system would be beyond his staff's understanding.

Quality Control

At best, quality control was crude and haphazard. In addition to counting the random sample of packages, Amer conducted other quality checks. Once every hour, the product being produced was brought to his office and weighed on a digital scale. Any item within four percent of the design weight was acceptable. This was the extent of the firm's quality control.

Marketing

Marketing manager Mohammad Zou'bi, under the close scrutiny of Amer, had responsibility for moving the inventory. Amer required Mohammad to account for his whereabouts and activities by reporting on an hourly basis. Mohammad maintained relations with all the distributors and customers of DPC. Rarely in the office, Mohammed's primary task was to visit customers, follow up on orders and take new orders, thereby insuring product flow. In effect, Mohammed was the entire sales force. Mohammad maintained excellent relations with the majority of long-term customers even though DPC prices were higher than those of competitors.

DPC offset its higher prices with timely product deliveries and volume discounts. DPC also maintained excess inventories so that they were never out of stock on any product. Even when demand was low, production continued unabated. Amer was forced to store his vast, excessive inventory in the basement of his and his mother's house. Fortunately, DPC soon received a large order that depleted this imprudent reserve.

On-time delivery was made possible by a helter-skelter but effective distribution system. Most of DPC's customers were in Amman, but all of Jordan was within three hours delivery from the DPC plant. DPC owned only two vans, so it relied on a group of twenty-six independent distributors to help fulfill orders. A motley crew of vehicles thus served up timely deliveries with assuring regularity.

DPC did not advertise in the Jordanian media. However, once familiar with the well-designed DPC logo and distinctive packaging, one could readily see the reach of DPC. DPC packaged its products in high quality cardboard boxes imported at a premium from Saudi Arabia. The boxes from local manufacturers crushed easily¹⁹ and did not portray the same quality image that DPC liked to convey. Amer was unwilling to com-

promise DPC's high quality image, built up over many years, merely to save a few dollars on what he termed "cheap Jordanian packaging."

In the late 1990's, DPC's market was limited to Jordan. Amer looked to expand into Europe and the United States, but lacking connections in either area, he knew this would be an expensive proposition.

When Amer bought the new styrene machine, the German embassy provided him with data and contacts²⁰ about exporting to their country. Amer calculated that other companies selling similar products in Germany were charging 10% more than DPC, although many of the European distributors purchased in large quantities.²¹ Because of shipping costs, Amer realized that only container-sized orders (Amer calculated a ship container could hold 760 cases of his products) would be profitable. He was not sure that his present production capability, operating at 70% of capacity over two shifts, would suffice to meet the demand if he undertook international commitments.

The German styrene machine was more versatile than the older Italian machines. This machine had the ability to manufacture seven different styles of disposable tableware at the same time. The design capacity of this machine was ninety-four items per minute.

Human Resources

DPC was typical of many small businesses in Jordan—family owned, passing from one generation to the next. There was little consideration given to the working environment and the well being of the workers. Amer's Human Resource strategy extended no further than paying his workers a sliver more than his competitors to retain the best people. Large orders with significant time pressures often required overtime work. Amer gave no rewards or incentives to employees for this additional work. These employees were happy to have steady work and received no compensation at all for these extra hours of work. Amer felt that the assurance of a steady job was sufficient recompense.

The company was driven in a top-down management style. Employees merely did what they were told by the supervisors. Amer occasionally walked around the factory floor. He felt that his employees would respect him for showing an interest in the factory. However, Amer rarely acknowledged the rank and file. Further, supervisors immediately jumped to greet him to ensure that none of the factory workers made contact. The supervisors took full credit for meeting goals and keeping the factory on an even keel. One supervisor observed:

"Without me this factory would be nothing, I keep the workers productive by driving them hard, I tell them what to do, how to do it and when to do it. If I didn't,

they wouldn't do anything and we would all be out of work. I have a reputation for being tough, but that is how I get the job done... I remember when Amer was just a boy; now he is the boss. I have to listen to my boss, but really I'm the person who the workers really respect. I'm the person who is running this factory. I have forgotten more about this business than Amer will ever know..."

Despite the supervisor's boast, Amer considered firing this particular supervisor, who clearly lacked leadership skills. Employees followed the supervisor's direction only out of fear of losing their jobs. Several customers had complained about the quality of product that came from his department. Rumor had it that minor sabotage was the employee response to mismanagement by the supervisor.

Local Competitors

Given the soft labor market in Jordan, labor rates were static and hence labor costs remained flat. Manufacturers were able to maintain prices on plastic goods. Over the past two decades, Jordan had experienced virtually no economic growth. The Gross Domestic Product per capita remained constant.

DPC and three main competitors controlled 90% of the total market, while importers catering to multinational businesses, such as McDonalds, controlled the remaining 10%. Maroo Plastics was DPC's closest competitor with 20% of the market. Maroo originally produced yogurt and containers and milk bottles. Under the direction of Lu'ay, Maroo expanded its business to produce several of the more popular products that DPC manufactured. Maroo kept its main product lines as before and added a third shift to handle the new line of products.

Other competitors decided that the plastic tableware market was a profitable arena. Many began copying DPC molds and entered the market by undercutting DPC by a small percentage. Initially, this did not worry Amer. He remarked,

"Even my cousin at Maroo Plastics will not be able to compete with me in the long run. Dahab Plastic's distribution network is much stronger than his....I am the market leader, and nobody can compete with me. When I change my design, all my competitors change their designs to match... The quality plastics that I produce are the standard for all Jordanian manufacturers...I am ISO.²²

Amer was aware that in Jordan, many companies were becoming ISO certified. (See Appendix 3 for information about ISO.) He neither understood the significance of ISO nor how it could benefit DPC, but he vaguely associated the term with higher quality and thus his claim of "being ISO."

Despite Amer's claims of market leadership, he came to the realization that he would have to set his pride aside in order to save DCP, to bring his company into the new millennium. A measure of his earnestness in this direction was his new move to investigate the intricacies of becoming ISO-compliant.

On a broader plane, Amer and his contemporaries grappled with similar problems. The exigencies of the new millennium were forcing one and all to realize that what was good for their fathers would no longer sustain the business in an increasingly complex world. Foreign competition compels even local businessmen to reexamine each facet of their trade, to maximize their effectiveness to ensure their survival. By taking the first halting steps, Amer was gradually becoming aware of the changes required to remain in business.

Appendix 1

BACKGROUND ON JORDAN

Note taken from the following website:
<http://www.cia.gov/cia/publications/factbook/geos/jo.html>

Introduction

Background: For most of its history since independence from British administration in 1946, Jordan was ruled by King HUSSEIN (1953-1999). A pragmatic ruler, he successfully navigated competing pressures from the major powers (US, USSR, and UK), various Arab states, Israel, and a large internal Palestinian population, through several wars and coup attempts. In 1989 he resumed parliamentary elections and gradually permitted political liberalization; in 1994 a formal peace treaty was signed with Israel.

Geography

Location: Middle East, northwest of Saudi Arabia

Geographic coordinates:

31 00 N, 36 00 E

Map references:

Middle East

Area: total: 89,213 sq km

land: 88,884 sq km

water: 329 sq km

Area - comparative:

slightly smaller than Indiana

Land boundaries:

total: 1,619 km

border countries:

Iraq 181 km, Israel 238 km, Saudi Arabia 728 km, Syria 375 km, West Bank 97 km

Coastline: 26 km

Maritime claims:

territorial sea: 3 nm

Climate: mostly arid desert; rainy season in west (November to April)

Terrain: mostly desert plateau in east, highland area in west; Great Rift Valley separates East and West Banks of the Jordan River

Elevation extremes:

lowest point: Dead Sea -408 m

highest point: Jabal Ram 1,734 m

Natural resources:

phosphates, potash, shale oil

Land use: *arable land:* 4%

permanent crops: 1%

permanent pastures: 9%

forests and woodland: 1%

other: 85% (1993 est.)

Irrigated land:

630 sq km (1993 est.)

Environment - current issues:

limited natural fresh water resources; deforestation; overgrazing; soil erosion; desertification

Environment - international agreements:

party to: Biodiversity, Climate Change, Desertification, Endangered Species, Hazardous Wastes, Law of the Sea, Marine Dumping, Nuclear Test Ban, Ozone Layer Protection, Wetlands

signed, but not ratified:

none of the selected agreements

People

Population:

4,998,564 (July 2000 est.)

Age structure:

0-14 years: 38% (male 968,579; female 925,987)

15-64 years: 59% (male 1,568,615; female 1,374,303)

65 years and over: 3% (male 79,748; female 81,332) (2000 est.)

Population growth rate:

3.1% (2000 est.)

Birth rate:

26.24 births/1,000 population (2000 est.)

Death rate:

2.63 deaths/1,000 population (2000 est.)

Net migration rate:

7.4 migrant(s)/1,000 population (2000 est.)

Life expectancy at birth:

total population: 77.36 years

male: 74.94 years

female: 79.93 years (2000 est.)

Total fertility rate:

3.44 children born/woman (2000 est.)

Nationality:

noun: Jordanian(s)

adjective: Jordanian

Ethnic groups:

Arab 98%, Circassian 1%, Armenian 1%

Religions: Sunni Muslim 96%, Christian 4% (1997 est.)

Languages:

Arabic (official),

English widely understood among upper and middle classes

Literacy: *definition:* age 15 and over can read and write
total population: 86.6%

male: 93.4%

female: 79.4% (1995 est.)

Government

Country name:

conventional long form:

Hashemite Kingdom of Jordan

conventional short form:

Jordan

local long form:

Al Mamlakah al Urduniyah al Hashimiyah

Government type:

constitutional monarchy

Capital: Amman

Administrative divisions:

12 governorates (muhafazat, singular - muhafazah); Ajlun, Al 'Aqabah, Al Balqa', Al Karak, Al Mafraq, 'Amman, At Tafilah, Az Zarqa', Irbid, Jarash, Ma'an, Madaba

Independence:

25 May 1946 (from League of Nations mandate under British administration)

National holiday:

Independence Day, 25 May (1946)

Constitution:

8 January 1952

Legal system:

based on Islamic law and French codes; judicial review of legislative acts in a specially provided High Tribunal; has not accepted compulsory ICJ jurisdiction

Executive branch:

chief of state:

King ABDALLAH bin al Hussein (since 7 February 1999);
Crown Prince HAMZAH bin al Hussein (half brother of the King, born 29 March 1980)

head of government:

Prime Minister Abdur-Rauf RAWABDEH (since 4 March 1999)

cabinet: Cabinet appointed by the prime minister in consultation with the monarch

elections: none; the monarch is hereditary; prime minister appointed by the monarch

Legislative branch:

bicameral National Assembly or Majlis al-'Umma consists of the

Senate (a 40-member body appointed by the monarch from designated categories of public figures; members serve four-year terms) and the House of Representatives (80 seats; members elected by popular vote on the basis of proportional representation to serve four-year terms)

elections: House of Representatives - last held 4 November 1997 (next to be held NA November 2001)

Judicial branch:

Court of Cassation; Supreme Court (court of final appeal)

Political pressure groups and leaders:

Council of Professional Association Presidents [Ahmad al-QADIRI, chairman]; Jordanian Press Association [Sayf al-SHARIF, president]; Muslim Brotherhood [Abd-al-Majid DHUNAYBAT, secretary general]

Flag description:

three equal horizontal bands of black (top), white, and green with a red isosceles triangle based on the hoist side bearing a small white seven-pointed star; the seven points on the star represent the seven fundamental laws of the Koran.

Economy

Economy - overview:

Jordan is a small Arab country with inadequate supplies of water and other natural resources such as oil. The Persian Gulf crisis, which began in August 1990, aggravated Jordan's already serious economic problems, forcing the government to shelve the IMF program, stop most debt payments, and suspend rescheduling negotiations. Aid from Gulf Arab states, worker remittances, and trade contracted; and refugees flooded the country, producing serious balance-of-payments problems, stunting GDP growth, and straining government resources. The economy rebounded in 1992, largely due to the influx of capital repatriated by workers returning from the Gulf. After averaging 9% in 1992-95, GDP growth averaged only 2% during 1996-99. In an attempt to spur growth, King ABDALLAH II has undertaken limited economic reform, including partial

privatization of some state-owned enterprises and Jordan's entry in January 2000 into the World Trade Organization (WTO). Debt, poverty, and unemployment are fundamental ongoing economic problems.

GDP: purchasing power parity - \$16 billion (1999 est.)

GDP - real growth rate: 2% (1999 est.)

GDP - per capita: purchasing power parity - \$3,500 (1999 est.)

GDP - composition by sector:

agriculture:

3%

industry: 25%

services: 72% (1998 est.)

Population below poverty line:

30% (1998 est.)

Inflation rate (consumer prices):

3% (1999 est.)

Labor force:

1.15 million

note: in addition, at least 300,000 workers are employed abroad (1997 est.)

Labor force - by occupation (1992):

industry 11.4%

commerce, restaurants, and hotels

10.5%

construction

10%

transport and communications

8.7%

agriculture

7.4%

other services

52%

Unemployment rate:

15% official rate; actual rate is 25%-30% (1999 est.)

Budget: revenues: \$2.8 billion

expenditures: \$3.1 billion, including capital expenditures of \$NA (2000 est.)

Industries:

phosphate mining, petroleum refining, cement, potash, light manufacturing, tourism

Industrial production growth rate:

-3.4% (1996)

Electricity - production by source:

fossil fuel: 99.51%

Agriculture - products:

wheat, barley, citrus, tomatoes, melons, olives; sheep, goats, poultry

Exports: \$1.8 billion (f.o.b., 1999 est.)

Exports - commodities: phosphates, fertilizers, potash, agricultural products, manufactures

Exports - partners:

Iraq, India, Saudi Arabia, EU, Indonesia, UAE, Lebanon, Kuwait, Syria, Ethiopia

Imports: \$3.3 billion (c.i.f., 1999 est.)

Imports - commodities:

crude oil, machinery, transport equipment, food,
live animals, manufactured goods

Imports - partners:

Germany, Iraq, US, Japan, UK, Italy, Turkey, Malaysia,
Syria, China

Debt - external:

\$8.4 billion (1998 est.)

Economic aid - recipient:

ODA, \$850 million (1996 est.)

Currency:

1 Jordanian dinar (JD) = 1,000 fils

Exchange rates:

Jordanian dinars (JD) per US\$1 = 0.7100
(August 2001)

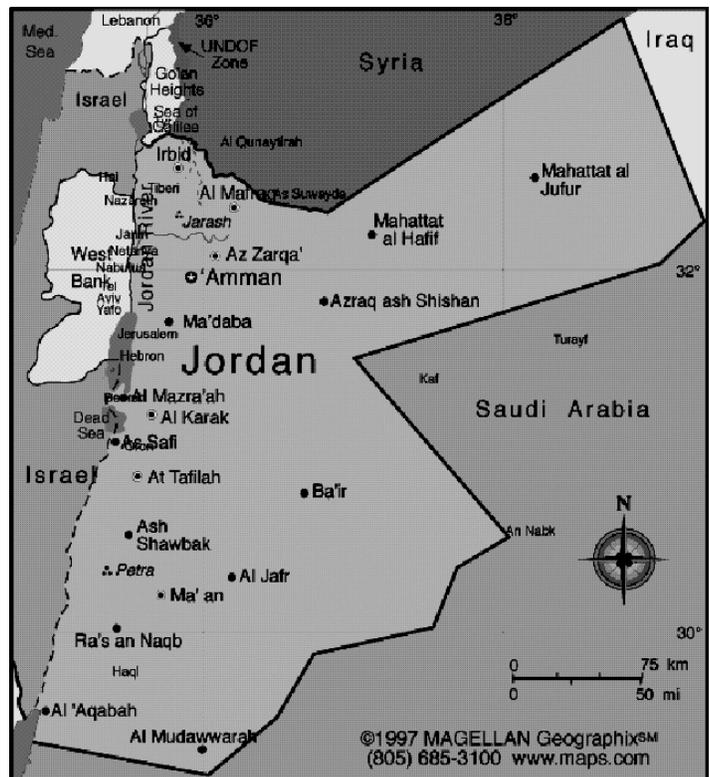
Note:

since May 1989, the dinar has been pegged to a
group of currencies

Appendix 2



Map of Middle East Region



Map of Jordan and Its Neighbors

Appendix 3

WHAT ARE ISO 9000 AND ISO 9001?

International Standards for Quality Assurance

ISO 9000 is a set of five universal standards for a Quality Assurance system that is accepted around the world. Currently 90 countries have adopted ISO 9000 as national standards. When you purchase a product or service from a company that is registered to the appropriate ISO 9000 standard, you have important assurances that the quality of what you receive will be as you expect.

The most comprehensive of the standards is ISO 9001. It applies to industries involved in the design and development, manufacturing, installation and servicing of products or services. The standards apply uniformly to companies in any industry and of any size.

Why are the Standards so Important?²³

Many companies require their suppliers to become registered to ISO 9001 and because of this, registered companies find that their market opportunities have increased. In addition, a company's compliance with ISO 9001 insures that it has a sound Quality Assurance system, and that's good business.

Registered companies have had dramatic reductions in customer complaints, significant reductions in operating costs and increased demand for their products and services.

ISO 9000 registration is rapidly becoming a must for any company that does business in Europe. Many industrial companies require registration by their own suppliers. There is a growing trend toward universal acceptance of ISO 9000 as an international standard.

1. This case was written by Andrew Goldkuhle of College of William & Mary under the supervision of Professor Richard Linowes. It is intended as a basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation.

2. Polyethylene Terephthalate, a plastic resin and a form of polyester. PET is the type of plastic labeled with a #1 code on or near the bottom of bottles. It serves as a popular package for food and non-food products because it is inexpensive, lightweight, resealable, shatter-resistant and recyclable.

3. Jordanian Dinar, the national unit of currency. In 2001, the JD was worth about \$1.41 (1 JD = US\$1.41).

4. 300,000 workers returned from the Gulf countries to Jordan. During the first two years of their return, Jordan grew in economic terms because this large influx of people created a building boom and caused an increase in demand for local goods and services. The wages in the Gulf countries were typically four times that of Jordan, meaning that workers who returned had capital to infuse into Jordan. However, two years later this money was exhausted.

5. From the Jordan Country Commercial Guide authored by the U.S. Embassy in Amman Jordan and published by the United States Department of State. This excerpt was taken from the 1998 report.

6. According to an unofficial statement by a foreign service officer in the American Embassy, the "reward system" did not pay the customs official directly, but rather with benefits such as being promoted.

7. Arabic expression meaning "the father of Amer"

8. A large number of workers preferred to have steady work rather than benefits with no guarantee of long-term employment.

9. During an interview with Amer's cousin at Maroo plastics, the cousin suggested that Amer struggled in business school, barely passing the courses he attended.

10. In Jordan, many of the machinists were over-qualified Mechanical Engineers.

11. The noise that the machines made prevented effective conversation. The workers communicated with one another using signals. None of the workers wore hearing protection, safety glasses, steel-toed boots or hard hats. DPC provided cloaks to be worn over street clothes.

12. Minimum Wage in Jordan was JD 80/month. The monthly pay for a floor worker ranged from JD 100 to JD 350. Men in their forties occupied the more senior positions.

13. The conditions of the kitchen and bathroom in the factory were extremely unsanitary and in horrendous need of cleaning. During the author's visit, Amer, slightly embarrassed, suggested that the facilities remained exactly as the workers left them. "If they want to have a clean bathroom, they need to clean it themselves. I am not here to clean up after my employees....That is their job."

14. Since the late nineties, Iraq continued to suffer from the sanctions imposed by the UN Security Council. Average monthly salary for a factory worker in Iraq in 1999 was US \$2.00.

15. Officially the Jordanian Government reported an unemployment rate of 13.6% for FY 1998. However, noted Jordanian economist Dr. Raid Khoury suggested that this rate is largely understated, and that the real rate was closer to 27%. For this reason, there were political pressures restricting the number of work permits issued to non-Jordanians.

16. Bassam did this more out of a hobby and boredom than anything else. Amer failed to recognize that these inventory drawings helped account for Bassam's efficiency.

17. CFC = Chlorofluorocarbon.

18. Bassam worked for JD 80 per month.

19. An additional attractive feature of the higher quality boxes was their stackability, which made storage easier. Since the cousins split the business, warehouse space was limited. The strong Saudi boxes allowed DPC to stack inventories from floor to ceiling.

20. Upon DPC successfully obtaining ISO certification, European distributors were interested in purchasing Amer's products. In particular, one European distributor expressed a keen interest in committing to purchase 2,500 cases/year of various styrene products. With the current pricing scheme, Amer calculated that he would earn JD 1.5 per case.

21. In addition to the large quantities, a majority of wholesalers in the EU required ISO certification.

22. International Standards Organization. In Jordan, a manufacturer's claim "I have ISO" equates to having been certified to be ISO 9000, 9001, 9002 or 14000-compliant.

23. (Source: website www.isoeasy.org on March 13, 2000)

