

**WEST BANK/GAZA**

**Investor Targeting Strategy for Industrial  
Estates in the West Bank and Gaza**

**TSG-SITE Project**

USAID Contract No. 294-C-00-98-00110-00

November 1999

Prepared for:

**United States Agency for International Development  
Palestinian Industrial Estates and Free Zones Authority**

Prepared by:

**Sheri Pitigala  
Can Tutuncu**

**The Services Group, Inc.**  
2300 Clarendon Blvd. Suite 1110  
Arlington, VA 22201  
Tel: (703) 528-7444  
Fax: (703) 522-2329

# **Executive Summary**

---

## **1. Project Background**

The Services Group (TSG) was contracted by the U.S. Agency for International Development (USAID), under the TSG-SITE program, to develop a foreign investment promotion program for the West Bank and Gaza Strip (WBG). Specifically, the consultants were asked to assist management of the Palestinian Industrial Estates and Free Zones Authority (PIEFZA) in developing a comprehensive promotion program to attract inward foreign direct investment (FDI) in specific industries and sub-sectors that have demonstrated high growth potential. The objectives of the program were two-fold:

- To identify industries that can be promoted by PIEFZA in the international investor marketplace in the next two years; and
- To develop a marketing strategy for PIEFZA that outlines the appropriate promotion mix for the defined target market and investor group.

This foreign investor targeting strategy is based on work undertaken by two TSG consultants, Ms. Sheri Pitigala and Mr. Can Tutuncu, between September and November 1999; a three-week fact-finding mission to WBG was undertaken in September 1999. During that mission extensive interviews were conducted with more than 60 individuals operating in the identified industry sectors, including private-sector industrial leaders, entrepreneurs and sector associations and unions throughout West Bank and Gaza, as well as key stakeholders within the relevant Ministries and other government agencies. In addition, this study has drawn upon the findings of the feasibility study for the Khadoury Technology Development Center, for which more than 60 interviews were conducted in the Information Technology and Electronics sectors.

---

## **2. ITS Methodology**

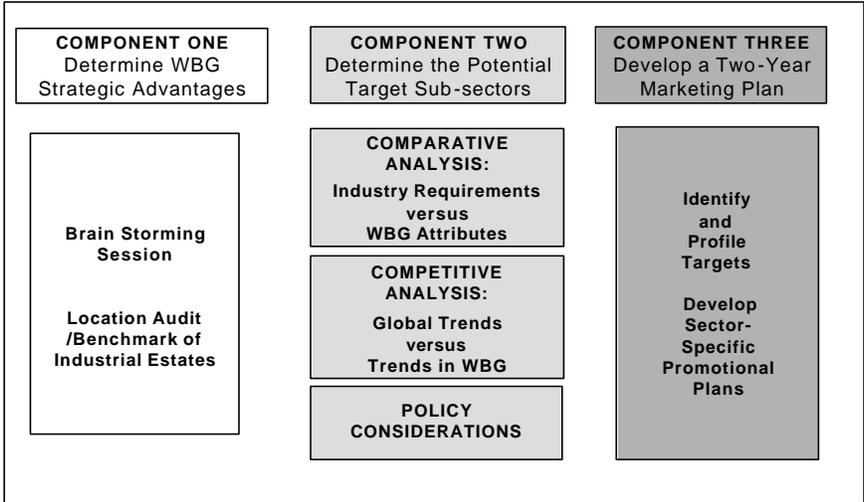
TSG's investor targeting strategy for WBG is designed to focus PIEFZA's investment promotion resources on the most promising industry sectors for inward investment in the Gaza Industrial Estate and other planned industrial estates in the West Bank and the Gaza Strip. TSG's investor targeting methodology examines selected industries in light of the industrial estates' comparative

and competitive advantages, as well the Palestinian Authority's broader policy objectives. The end result is a tailor-made marketing program for the promotion of investment into the WBG industrial estates.

Following is a brief outline of the investor targeting strategy (also see Figure 1 below):

- Component 1, the *Determination of WBG's Strategic Advantages*, is composed of two sub-components:
  - A *Brainstorming Session* with PIEFZA assisted in the evaluation of WBG's industrial base and the selection of industry sectors for analysis; and
  - the *Location Audit/Comparative Benchmarking* exercise evaluates the industrial estates' comparative advantages and disadvantages vis-à-vis other potential investment sites in the region.
  
- Component 2, the *Determination of Target Sub-Sectors*, identifies a short-list of industries in which the WBG industrial estates possess a high degree of potential, based on their comparative and competitive advantages, and fulfillment of government policy objectives.

**Figure 1: Investor Targeting Strategy Methodology**



- Component 3, the *Marketing Strategy*, profiles the targeted industry sub-sectors and presents an action-oriented marketing program for PIEFZA that can produce the maximum results with its limited budgetary and human resources.

---

### **3. Location Audit/Comparative Benchmarking**

This section presents the results of the location audit/comparative benchmarking exercise, which examines, from a site-seeker's perspective, the competitiveness of the GIE and proposed industrial estates in West Bank and Gaza Strip as potential investment locations vis-à-vis its potential competitors in the Middle East.

The factors selected for evaluation include:

- Access to Markets
- Political Risk
- Investment Environment, including taxation and investment incentives
- Human Resources
- Transportation Facilities
- Utilities, including electricity, water, and waste disposal
- Telecommunications
- Access to Capital

The GIE and other proposed industrial estates are compared, where appropriate, to several locations in the Middle East region. The following sites in WBG were selected for evaluation, in consultation with PIEFZA management: the GIE and Rafah in the Gaza Strip; Jenin, Qalqilya, Tulkarem, Nablus, and Tarkumiya in the West Bank.

The following sites in the Middle East region, all of which have demonstrated a high degree of success in attracting inward investment, were selected for comparative purposes:

- Al-Hassan Industrial Estate, Irbid, Jordan
- Matam Technology Park, Israel
- Jebel Ali Free Zone, Dubai, United Arab Emirates (UAE)
- Aegean Free Zone, Turkey
- Port Said Free Zone, Egypt

### Overview of Results

The analysis evaluated each selected factor independently and on a cross-sectoral basis. The following sections provide a summary of the results of this analysis, and also put these factors in a context that illuminates the West Bank and Gaza Strip's potential to attract investment into broad industry categories, given its advantages and disadvantages. Table 1 provides a summary, factor-by-factor, of the WBG's competitive position, relative to the selected comparator locations in the Middle East region.

The comparative benchmarking study reveals that the GIE and other proposed industrial estates possess several of the key locational requirements for successful industrial development:

- **WBG is an attractive platform for exporters to North American, European and regional markets.** WBG has entered into a number of trade agreements, which provide WBG-based producers with preferential access to North American, European, and regional markets. While others in the region – including Israel, Egypt and Jordan – have similar access to some of these markets, only WBG can offer such comprehensive access to the major export markets.
- **WBG offers a growing pool of skilled and productive workers at competitive labor rates.** WBG can offer investors a growing pool of skilled workers who have direct experience in a more advanced industrial economy (*i.e.* Israel) across a wide spectrum of industry sectors. While wage rates are higher in WBG for lower-skilled labor categories, *vis-à-vis* competing locations such as Egypt and Jordan, WBG is more cost-competitive in higher skill categories. In addition, the Palestinian workforce has benefited substantially from its historical ties to Israeli industry, which has resulted in relatively high productivity rates *vis-à-vis* lower-cost production centers, such as Egypt and Jordan, which, in turn, reduce overall labor costs.
- **WBG has access to world-class transportation and power infrastructure.** The WBG industrial estates, given their proximity to Israel, have the potential for bulk connections to the Israeli power grid, as well as access to high-quality transportation (including Ashdod and Haifa sea ports and Ben Gurion airport). In addition, while it is unlikely that the Gaza

**Table 1: Comparative Benchmarking Summary**

COMPETITIVE	UNCOMPETITIVE
<ul style="list-style-type: none"> <li>▪ <b>Preferential market access</b> to U.S., Europe and region, though access shared by others as well</li> <li>▪ <b>Availability of high-skilled, productive workforce</b> – more productive than Egypt, Jordan, Turkey and Dubai</li> <li>▪ <b>High-skilled labor costs</b> – competitive with others in region</li> <li>▪ <b>Port Infrastructure and Facilities (Haifa &amp; Ashdod)</b> – high quality comparable with others in region</li> <li>▪ <b>Airport Infrastructure and Facilities (Ben Gurion)</b> – high quality comparable with others in region</li> <li>▪ <b>Power Infrastructure (thru Israeli grid)</b> – high quality comparable with others in region</li> <li>▪ <b>Telecommunications Infrastructure</b> on par with Egypt and Jordan, though not competitive with Israel</li> <li>▪ <b>Access to Capital</b> – potential access to capital markets is growing but not competitive with Israel</li> <li>▪ <b>Sea Transport Costs</b> among lowest in region</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Political Risk</b> – higher perceived risk than others in region due to uncertain political status</li> <li>▪ <b>Import/Export Procedures</b> – longer delays than others in region</li> <li>▪ <b>Lower-skilled labor costs</b> – though lower than Israel and Turkey, significantly higher than Egypt and Jordan</li> <li>▪ <b>Cost of Electricity</b> higher than other locations</li> <li>▪ <b>Cost of Air Transport</b> higher than Jordan, Egypt and Dubai</li> <li>▪ <b>Cost of Advanced Telecommunications</b> higher than others for advanced services</li> <li>▪ <b>Cost of Land and Building</b> higher than Israel, Jordan, Egypt and Turkey</li> <li>▪ <b>Cost of Water</b> higher than all other locations, except Jordan</li> <li>▪ <b>Water Infrastructure</b> – water shortages shared by Israel and Jordan</li> <li>▪ <b>Investment Incentives</b> – benefits restricted by lack of double taxation agreements</li> </ul>

Port will be completed within the next two to three years, it is likely that the cargo facilities at the new Rafah international airport will become operationalized, enhancing the industrial estates' access to transportation.

- **Investors to WBG can benefit from a growing pool of project financing opportunities.** For multinational corporations, numerous opportunities exist for project financing in WBG, from both bilateral and multilateral agencies. In addition, the local financial sector in WBG, though in its nascent stages, can provide some opportunities for project financing to local Palestinian companies, primarily through the local stock exchange and the large holding companies, such as PADICO, that have the necessary capital. WBG's proximity to the booming Israeli venture capital market,

and its long-time links with Israeli industry, can promote investment, particularly in the technology-oriented sectors.

In order to maximize their potential in attracting foreign investment, however, the government policies as well as the industrial estates themselves can mitigate against some existing comparative disadvantages:

- **Perceptions of political risk need to be allayed.** WBG is located in a region of the world that is generally considered to be a moderate-risk environment. However, WBG's unique political circumstances can create a perception of high political risk. PA government investment policies – including guarantees against confiscation, the right to repatriate profits, and freedom from exchange rate controls – can provide a level of stability in areas over which the PA has political autonomy.
- **Bilateral agreements are required to ensure that investors benefit from favorable investment incentives.** Overall, the investment environment of WBG's industrial estates is relatively competitive with most of the other locations under review, particularly in terms of corporate and personal taxation and related incentives. However, the conclusion of double taxation agreements with Israel, the U.S. and key European countries will be required in order to ensure that foreign investors can benefit fully from these incentives.

However, there are a few key factors in which the WBG industrial estates are likely to maintain a comparative disadvantage:

- **WBG is, in general, a relatively high-cost production center.** Production costs are, in general, higher in WBG than in Egypt and Jordan, including the costs of lower-skilled labor, electricity, water, land and building, sea transport, and advanced telecommunications. While these costs can be allayed, to a certain extent, within the industrial estate environment, WBG is likely to remain a higher cost production center than Egypt and Jordan.
- **Import/export procedures can negatively impact investment.** The difficulties associated with the import and export of goods from the West Bank and the Gaza Strip can strongly impact the attractiveness of industrial estates as investment locations for particular activities, such as those that

depend on the rapid movement of goods, for instance “just-in-time” manufacturing and location-based services such as warehousing and logistics. While the construction of the Gaza Port (which is not expected to be completed in the short-term) and the introduction of cargo operations at Rafah Airport (which is likely to happen within the timeframe of this study’s action plan) would relieve some of the logistical difficulties facing WBG-based enterprises, more streamlined procedures will be required to ensure the efficient movement of goods.

- **Water shortages limit investment potential in selected sectors.** WBG, like much of the region, is constrained in its development by a lack of adequate water resources. Therefore, the level of water use, as well as environmental impact, of certain industries would be incompatible with the need to conserve this scarce resource.

---

*Implications for  
Industry Targeting*

Given WBG’s comparative advantages and disadvantages, industry targeting should focus on those sectors that can take advantage of one or more of the following attributes:

- **Preferential access to key export markets.** WBG benefits from preferential *market access* to U.S., European, and regional markets, including Israel, making it a promising platform for export-oriented industries.
- **Competition based on quality more than cost.** Competition in the marketplace is driven by both quality and cost, to varying degrees, depending on the product. Given the relatively high factor costs in WBG, industry targeting should focus on those niche product categories that compete more on quality than cost. In general, the more differentiated the product, the more it tends to compete on quality rather than cost.
- **A high proportion of skilled labor.** A focus on niche industries producing higher quality, differentiated products, in turn, points to the need to focus on industries utilizing a relatively high proportion of skilled labor. In addition, wage rates in the higher skilled labor categories are more competitive with others in the region.

- **WBGs linkages with Israeli industry.** WBG has the unique advantage, vis-à-vis lower-cost production centers such as Egypt and Jordan, of direct participation in and experience with a dynamic and modern industrial base. Many WBG workers have been trained in Israeli industry and have been exposed to higher levels of technology and industry requirements. WBG can take advantage of its historical ties to Israeli industry to forge links with industry across the Green Line, including both Israeli companies and Israel-based multinationals.
- **Do not depend on rapid transportation by sea.** Given the present delays associated with importing and exporting, in the short-term, the WBG will not be able to meet the requirements of just-in-time production or other industries that depend on the efficient movement of goods, particularly those dependent on sea transport. While there is potential in the short-term that Rafah’s air cargo facilities will become operational, the lack of a seaport will be an ongoing impediment. Therefore, industry targeting should focus on those niche activities that *do not depend on the timely movement of goods via sea transportation* for success.

---

*Implications for Industry Targeting*

The above analysis points to particular types of niche activities that should be the focus of the industry targeting analysis. The following provides an overview of the implications for three broad industry categories: light industry, professional services and location-based services.

Light Manufacturing

Light manufacturing includes industries such as apparel, electronics, food processing, plastic packaging, and furniture. The GIE and other planned industrial estates in the West Bank and Gaza Strip possess several locational advantages that make them potential platforms for light manufacturing, including preferential access to key export markets and a productive labor force with industry experience.

However, several disadvantages in WBG, particularly high production costs, can negatively impact on the bottom-line, particularly in lower quality, commodity-style products, where market competition is based primarily on price. In addition, the difficulties associated with the import and export of goods from WBG industrial estates can negatively impact the attractiveness of

industrial estates in the West Bank or the Gaza Strip, such as those that depend on the efficient movement of goods by sea, for instance “just-in-time” manufacturing.

Therefore, industry targeting should focus more on differentiated, higher quality products that take advantage of local skilled labor and industry experience, including ties to the Israeli market. Examples include higher-end apparel manufacturing and finished consumer electronics and electrical appliances for the regional market.

**Professional Services** Professional services include the information technology related sectors, such as software development, call center and help desk services, and data conversion. The primary factor driving investment in the professional services industries is the availability of high-skilled labor. WBG can provide access to a skilled and trainable workforce, including engineers and technicians. As other locations, such as Egypt and Jordan, can offer lower cost engineers and technicians, industry targeting should focus on those niche activities that can take advantage of WBG’s proximity to the high-technology cluster in Israel and its long-standing links to Israeli industry. Potential niche activities include “offshore” software conversion and customization, vector conversion, and technical help desk services.

**Location-based Services** Location-based services, such as logistics and warehousing and are largely demand-driven. However, other factors can impact on investment, such as the availability of good quality transportation infrastructure, as well as the timely movement of goods. The absence of a seaport in WBG eliminates, in the short-run, the potential for large-scale warehousing and logistics, as such operations are located at the existing ports in Israel. However, provided that the Rafah airport cargo facilities will become operational in the near future, along with more streamlined import/export procedures, new opportunities can emerge for small-scale location-based services, such as logistics handling for cut flowers and other products that can be transported via air.

**4. Results of Industry Screening**

The industry screening process is a two-step process, including an initial filtering, or “pre-screening”, which eliminates the least promising industry sectors from the analysis, and the final screening process of the remaining industries. Following is the initial list of industries selected for evaluation.

- Apparel Manufacturing;
- Bamboo Furniture;
- Call Centers;
- Consumer Electronics and Electrical Appliances;
- Cut Clowers;
- Data Conversion;
- Dead Sea Mineral-based Cosmetics;
- Olive Oil and Related Products;
- Plastic Products;
- Software Development; and
- Stone and Marble

These industries were selected on the basis of a brainstorming session conducted by TSG consultants with PIEFZA management and staff.

---

*Industry Pre-screening*

The following three sectors were eliminated from the final analysis, based on local and international industry trends, as well as the experience of similar industrial estate development worldwide.

- Bamboo Furniture. The Bamboo Furniture industry has been excluded from further analysis based on several factors. Most important, bamboo furniture is typically produced in the same location in which the raw material is sourced. Malaysia, Indonesia and China are leading producers, all of which have a significant cost advantage over WBG. Based on industry interviews the small size of the local industry in WBG and limited worker experience restrict the scope for further industry development. Lastly, cross-border investment flows in this niche sector are very small and limited to bamboo-producing regions. Overall, the potential to attract foreign investment in this sector is extremely limited.

- Dead Sea Mineral-based Cosmetics. The Dead Sea Mineral sector has been excluded from further analysis based on two key factors. First, while the WBG has permission to mine Dead Sea materials, including mud and salt, direct access to the Dead Sea is currently limited by the Israeli authorities. Dependence on Israeli sources for raw material inputs would limit the industry’s appeal. Second, the majority of raw materials are exported with minimal processing (in the form of bath salts and mud treatments), further limiting the potential for value-added processing in the WBG. While there may be potential for Israeli producers to shift production to WBG, in order to take advantage of lower wages, the lack of local industry experience would limited Palestinian participation to lower-skilled, and therefore, lower value-added activities – activities in which WBG would find it difficult to compete with lower-cost Jordanian labor.
  
- Handicrafts. The handicrafts industry – which includes the production of olive wood figurines, glass figurines, mother-of-pearl ornaments, and ceramics – has been excluded from further analysis for several reasons. While these sub-sectors are all active in the WBG market, the potential for foreign investment is limited. With the exception of the olive wood, none of the raw materials are sourced locally, which can significantly raise production costs. In addition, the handcraft industries are, by definition, indigenous traditional industries. Manual labor, with limited use of basic machinery, is the main production process. These are aspects that provide their products with consumer appeal that cannot be duplicated by foreign investors. Nevertheless, these sectors may attract a limited number of small-scale investments in light of the upcoming Bethlehem 2000 activities, which would provide an unparalleled, but potentially one-off, marketing opportunity.

---

*Final Screening Process*

The following sections present the results of the final industry screening process, including the evaluation of each remaining sector’s comparative and competitive advantages and/or disadvantages, as well as harmonization with the PA’s policy objectives.

*Apparel Manufacturing*

The high-end apparel sector is a promising target for investment into the WBG industrial estates, with both comparative and competitive trends, as well as policy objectives, in its favor.

In terms of overall industry requirements, the industrial estates - particularly those located in the Gaza Strip and the northern districts of the West Bank (Nablus, Tulkarem, Jenin and Qalqilya) – can provide a favorable environment for high value-added apparel manufacturing, including a highly experienced and productive workforce at competitive salary rates (vis-à-vis alternative locations in region); preferential access to key export markets in the region (Israel, Jordan, Saudi Arabia, Egypt) and internationally (North America, Europe); and geographic proximity to European markets, which would enable relatively fast delivery to consumer markets.

In addition to providing the necessary factor requirements for the apparel industry, competitive trends in the industry indicate that WBG would provide a favorable production platform given its “fit” with the industry’s market strategies:

- Apparel manufacturers typically “follow market access”, selecting locations that provide either quota access or preferential tariff access to key export markets;
- European manufacturers of high-end apparel have been moving into neighboring markets to take advantage of lower labor costs;
- Asian producers of high-end apparel have been moving into the Middle East in order to access European and North American markets.

The apparel industry meets several of the selected policy objectives, including the potential for employment generation, the expansion of exports, as well as some potential for technology transfer and skills upgrading. In addition, this sector is environmentally friendly, with low water use and a low production of waste.

Call Centers

The call center industry is a promising target for investment promotion into the Palestinian industrial estates, particularly the Khadoury TDC in Tulkarem, with both comparative and competitive trends, as well as policy objectives, in its favor.

In terms of overall industry requirements, the industrial estates – the Khadoury TDC, in particular – can provide a conducive

operating environment for the call center industry, particularly inbound telemarketing and technical help desk services. For inbound telemarketing, the West Bank offers a large pool of educated, and often unemployed, workers that could be trained to provide telemarketing services both locally and regionally. For help desk services - such as technical support for computer hardware, software, and electronics – offers a growing pool of qualified programmers and technicians.

The potential for the Khadoury TDC to attract either of these activities will, however, be strongly dependent on the deregulation of telecommunication services within the park, which would provide it with the opportunity to offer world-class telecommunication services at competitive prices.

Competitive market trends also favor investment by the call center industry in the Palestinian industrial estates. Key trends favoring investment include: the decentralization of the global call center industry; an emerging regional market for call center services; and growing interest by Israeli call centers to expand into WBG.

The call center industry meets several of the selected policy objectives, including the potential for employment generation and the potential for technology transfer and skills upgrading. In addition, the industry, which is service-oriented, is environmentally friendly, with no water use and a low production of waste.

Consumer Electronics/  
Electrical Appliances    The electronics and electrical appliance sector is a promising target for investment promotion into the Palestinian industrial estates, with both comparative and competitive trends, as well as policy objectives, in its favor.

In terms of overall industry requirements, the industrial estates, particularly those in the West Bank, can provide favorable locations for the consumer electronics and electrical appliance sector, particularly for manufacturing and repair/maintenance activities. While the potential for product design and engineering remains low in the short-term, based on existing skills and experience, as local experience develops over time, there would be greater potential for local design and engineering, as well as pilot manufacturing of prototypes adapted to regional market requirements.

Competitive market trends strongly favor investment by consumer electronics and electrical appliance manufacturers in the Palestinian industrial estates. Key trends include:

- Proximity to a large and growing electronics sector in Israel, which is in search of lower-cost production alternatives;
- A large regional market for electronics and electrical appliances, with potential for import substitution; and
- Growing interest in multinational “point-of-sales” plants in the Middle East region to replace imports.

Together, these trends point to the strong potential for the industrial estates to attract both Israeli and multinational investment in the electronics and electrical appliance sector, with a focus on those products that are already being imported into the region.

The electronics and electrical appliance sector meets several of the selected policy objectives, including the potential for employment generation, the expansion of exports, and technology transfer and skills upgrading. In addition, this sector is environmentally friendly, with low water use and a low production of waste.

Data Conversion

The data conversion industry is a promising target for investment promotion into the Palestinian industrial estates in the short run. The region’s human resource assets, the potential of the Khadoury TDC to provide the required infrastructure, and the stated policy objectives support the development of a data conversion industry, in the short-run, though it will largely be driven by the data conversion needs of the PA.

In terms of overall industry requirements, the industrial estates – the Khadoury TDC, in particular – can provide a conducive operating environment for data conversion, including basic data entry, vector conversion and other back office services. For basic data entry and back office projects, the West Bank offers a large pool of educated, and often unemployed, workers that could be trained to provide keyboarding services both locally and regionally. For vector conversion, the West Bank offers a growing pool of engineering graduates that can be successfully to train for vector conversion. The growing number of qualified hardware and

software technicians in the West Bank can ensure that data conversion companies located at the Khadoury TDC will have access to the required technical support.

In addition, the presence of a deregulated telecommunications environment at the Khadoury TDC site can further improve the operating environment for data conversion.

Global trends do not strongly favor investment by American or European investors into the data conversion industry in the short run. Instead, investment into the data conversion industry into WBG will be largely driven by the needs of the PA and its willingness to outsource these tasks to private companies. In the short run, it is likely that this demand would be fulfilled by local Palestinian and/or Israeli companies interested in expanding across the Green Line.

The data conversion industry fulfills several of the indicated policy objectives, including employment generation and skills upgrading. In addition, the industry, which is service-oriented, is environmentally friendly, with no water use and a low production of waste

Logistics for  
Cut Flowers

In terms of overall industry requirements, the industrial estates – particularly those based in the Gaza Strip – can meet many of the key requirements of the flower forwarding industry, including close proximity to the main flower production center in Gaza, preferential access to key export markets, as well as proximity to the new Rafah Airport. The operationalization of Rafah’s cargo facilities will be essential in order to attract logistics providers. Without such facilities, there will be no reason for a flower forwarder to locate in Gaza.

In addition, the Gaza Strip industrial estates can, in terms of competitive market trends, provide new opportunities for investment in Gaza-based flower forwarding operations. The Gaza market can meet the demands of logistics providers with the growing supply of Gazan cut flowers and the relatively high demand for carnations in the European flower market. However, the still small-scale of local production, vis-à-vis other production locations such as Israel, indicates that, in the short-term, one logistics provider would be sufficient to meet the transportation needs of Gazan flower producers.

However, the flower forwarding industry meets only one of the main policy objectives: the stimulation of direct exports from WBG. The industry fails to meet any of the other indicated policy objectives

While competitive trends favor the establishment of the flower-forwarding industry in the Gaza Strip, the scope for investment is likely to be small given the limitations on the potential expansion of production capacity. In addition, the industry is unable to meet the key policy objectives. Under these circumstances, the flower forwarding industry is not a favorable target for investment promotion. However, the operationalization of the Rafah cargo facilities, and the assistance of the EU-funded project to stimulate direct exportation of Gazan cut flowers through Rafah, at least one investment in flower forwarding can be expected to occur, even in the absence of an active promotion strategy.

Olive Oil and  
Related Products

While the Palestinian industrial estates, particularly those in the northern districts of the West Bank, can offer several advantages to prospective olive oil producers – including access to key export markets, a relatively low-cost and highly trainable workforce, and an attractive package of incentives - in terms of overall industry requirements, the industrial estates do not provide a very favorable environment. The most critical factor affecting WBG’s potential to attract olive oil and related product manufacturers is the inconsistent supply of raw materials.

On the other hand, competitive trends in both the edible olive oil and olive oil soap sectors favor investment in the olive oil industry in WBG. They key factors favoring investment in edible olive oil are rising global consumption and the desire of the major olive oil producers to move production to lower-cost production centers. In the olive oil soap industry, growing consumption of nature-based beauty care products is the key factor driving investment. WBG, with its relatively low labor costs (versus other olive production centers), has the potential to fit into the industries’ global market strategies.

The olive oil industry meets several of the key policy considerations, including increased employment, the diversification of exports, and the upgrading of technology

While competitive trends, as well as policy considerations, favor investment into the olive oil industries, including both edible olive

oil and olive oil soap, local production trends, which are characterized by an inconsistent supply of raw materials, severely restrict the potential for foreign investment into the industry in WBG. However, should local production trends improve in the future (*i.e.* if the industry can reach “mass” production every year), then the potential for foreign investment in both sub-sectors would emerge.

Plastic Products

The plastic packaging and construction material sectors are not recommended for active promotion as WBG does not offer any clear comparative or competitive advantages and the industry does not meet most of the indicated policy objectives.

Despite the presence of a workforce experienced in the selected plastic industry sub-sectors and access to a reasonably large market, the Palestinian industrial estates cannot provide a favorable location for investment, particularly in comparison to alternative locations in the region, such as Egypt and Jordan, where production costs are considerably lower – a critical factor for the production of a low-value product requiring relatively low-skilled labor.

Furthermore, competitive trends in plastics indicate that, while there is significant potential for outward investment from leading producers of plastic product, including packaging and construction materials, the WBG is not a likely destination, given the wage structure and limited industry experience. For lower-tech product categories, WBG would find it difficult to compete with alternative investment locations in the region, such as Egypt and Jordan. Lack of experience in high-tech applications limits the WBG’s ability to attract investment in other niche sub-sectors of the plastics industry.

In addition to the lack of clear comparative or competitive advantages, the plastics industry meets only one of the key policy considerations: increased employment in the productive sector. The local market-orientation of output would do little to increase exports from the WBG and the low-levels of technology required and focus on lower-skilled labor would limit the opportunities for technology transfer or skills upgrading.

Software Development

The software development sector is a promising target for investment promotion into the Palestinian industrial estates, particularly the planned Khadoury TDC in Tulkarem, with both

comparative and competitive trends, as well as policy objectives, in its favor.

In terms of overall industry requirements, the industrial estates – the Khadoury TDC, in particular – can provide a conducive operating environment for software development, including:

- A surplus supply of computer programmers at relatively competitive cost, vis-à-vis other locations in the region;
- The potential to provide low-cost, high-quality telecommunications through an on-site teleport and deregulated environment within the Khadoury TDC; and
- Sources of venture capital and other funding for start-ups, as well as joint ventures.
- Proximity to an existing IT cluster across the Green Line

Competitive market trends also strongly favor investment by the software development industry – including both software houses and electronics companies with software development needs - in the Palestinian industrial estates, particularly the Khadoury TDC site in Tulkarem. Key trends favoring investment include:

- proximity to Israel's booming hi-tech corridor, which is experiencing labor shortages;
- growing trend toward offshore software development; and
- increasing interest by software developers in accessing the growing Arabic-speaking regional market.

The software development sector, while not a source of employment generation, meets the other selected policy objectives of the PA, including the potential for technology transfer and skills upgrading; and the potential for the expansion of exports, both to the region and to the United States and Europe. In addition, the industry, which is service-oriented, is environmentally friendly, with no water use and a low production of waste.

Stone & Marble

Provided that an appropriate, dedicated site is located in the Hebron region, the potential for the promotion of the stone and

marble industry is very high. With both comparative and competitive trends in its favor, as well as its ability to meet many of the policy objectives, the stone and marble industry should be targeted for investment. However, given the time required to locate a site, to conduct the required feasibility study, and, finally, to put in place the necessary infrastructure, this sector should be promoted in the latter part of the short-term marketing program.

In terms of comparative advantage, WBG can provide a very favorable environment for investment in the stone and marble industry, provided that a suitable site in proximity to the Hebron quarries can be identified and promoted. Key comparative advantages include: the availability of high-quality stone and marble; an experienced workforce with knowledge of modern cutting and finishing techniques; and preferential access to leading export markets in Europe and the United States.

While WBG has not been a target for investment, its superior quality stone with its own unique characteristics, has the potential to attract foreign investment. While competitiveness of Palestinian building stones in the region have been undermined by heavy price competition from Jordan, large export markets in Europe, which is in relative proximity to WBG provides an opportunity for the export of high-quality dimension stones – a market niche that Jordan cannot match in terms of quality. Investors from other stone and marble producing countries – particularly Italy and Spain – are the most promising targets for investment.

The stone and marble industry also meets many of the main policy objectives, including the potential for employment generation, the opportunity to increase direct exports to world markets, and the potential for some degree of technology transfer. However, the environmental impact of these activities, including dust and noise, is a negative factor that needs to be addressed. The relocation of this industry into a dedicated site, far from existing residential centers, and careful planning of such a site can eliminate the negative environmental impact on both residents and other industry sectors.

---

**5. Target Markets and Sub-Sectors**

This section presents the list of core industry sectors and target markets for promotion into the Palestinian industrial estates. These targets represent the most promising opportunities for investment in the short-term, based on the attributes of the

Palestinian industrial estates, competitive industry trends, and the key policy objectives identified by PIEFZA for the identification of industries for promotion.

**Table 2: Summary Matrix of Targets**

Industry Sector	Target Activities	Target Markets
Apparel	High-end apparel in the following categories: <ul style="list-style-type: none"> <li>▪ Trousers of woven textile fabrics;</li> <li>▪ Shirts of woven textile fabrics;</li> <li>▪ Women’s or girls’ blouses of knitted or crocheted textile fabrics;</li> <li>▪ Women’s or girls’ lingerie, brassieres, panties, etc. of woven, knitted or crocheted textile fabrics; and</li> <li>▪ Sweaters, knitted or crocheted.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Israel, UAE</li> <li>▪ Italy, France, UK</li> <li>▪ Hong Kong, Korea, Taiwan</li> <li>▪ Palestinian Diaspora</li> </ul>
Consumer Electronics and Electrical Appliances	<ul style="list-style-type: none"> <li>▪ White goods (clothes washers and dryers, refrigerators, dishwashers),</li> <li>▪ Small kitchen appliances,</li> <li>▪ Televisions and radio receivers,</li> <li>▪ Personal care appliances (shavers, hairdryers),</li> <li>▪ Telephone sets</li> <li>▪ Small office appliances (adding machines).</li> </ul>	<ul style="list-style-type: none"> <li>▪ Denmark, Italy</li> <li>▪ U.S.</li> <li>▪ Japan, Korea</li> <li>▪ Israel</li> <li>▪ Palestinian Diaspora</li> </ul>
Call Centers	<ul style="list-style-type: none"> <li>▪ Inbound telemarketing (customer service)</li> <li>▪ Technical help desk services</li> </ul>	<ul style="list-style-type: none"> <li>▪ Israel (incl. Israel-based multinationals)</li> <li>▪ U.S.</li> <li>▪ Palestinian Diaspora</li> </ul>
Data Conversion	<ul style="list-style-type: none"> <li>▪ Data entry</li> <li>▪ Vector conversion</li> </ul>	<ul style="list-style-type: none"> <li>▪ Israel (incl. Israel-based multinationals)</li> <li>▪ Palestinian Diaspora</li> </ul>
Software Development	<ul style="list-style-type: none"> <li>▪ Offshore programming of packaged and customized software</li> <li>▪ Arabization/conversion of packaged software</li> </ul>	<ul style="list-style-type: none"> <li>▪ Israel (incl. Israel-based multinationals)</li> <li>▪ U.S.</li> <li>▪ UK, Germany</li> <li>▪ Palestinian Diaspora</li> </ul>
Stone & Marble	<ul style="list-style-type: none"> <li>▪ Cutting and finishing of high-quality dimension stones</li> </ul>	<ul style="list-style-type: none"> <li>▪ Italy, Spain</li> </ul>

**6. Marketing Strategy**

A two-year marketing program is recommended to promote the industrial estates in WBG to markets targeted as a result of the industry assessments in the chapters presented before. The Marketing Program has three major components:

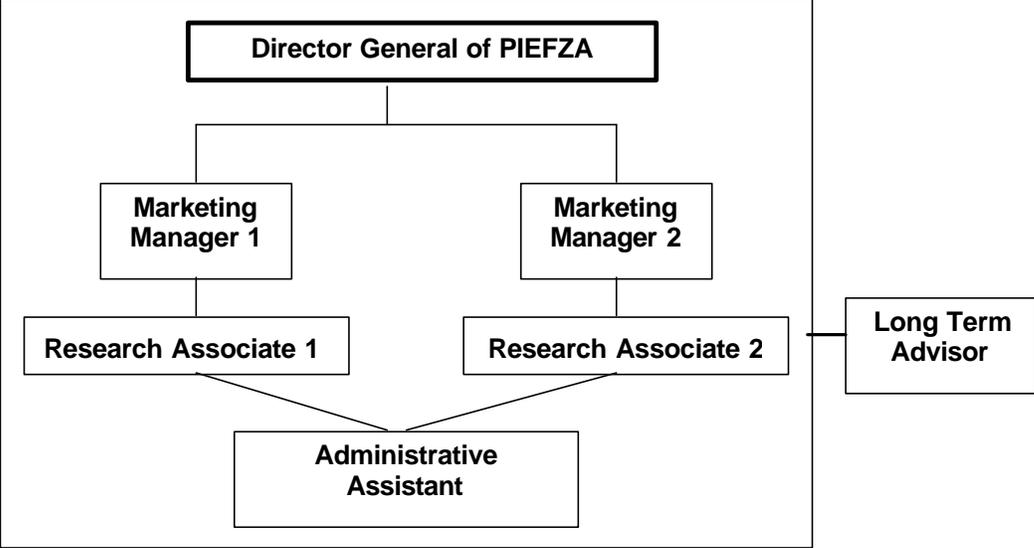
- General Image-Building Campaign. While the General Image Building Component should concentrate on replacing the negative image of WBG in the investor’s minds with a positive one, it also should aim to capture the attention of the investors in the targeted sectors and the Diaspora.
- Targeted Initiatives. The Targeted Initiatives Component focuses on marketing the targeted industry sectors to the targeted markets.
- Diaspora Initiative. The Diaspora Component aims to reach out to the Palestinians living abroad and identify potential investors among them for the targeted sectors and keep them informed about the investment environment, opportunities and advantages in the industrial estates in WBG.

All three components play an essential role for the success of the marketing plan. It is important to note that all Components should be pursued in parallel to ensure success.

*Marketing Department*

In addition, it is important that PIEFZA develop the institutional capacity to implement this marketing program, including a new Marketing Department that is dedicated to the promotion of investment into the industrial estates program. The structure of the proposed Marketing Department is presented below:

**Figure 2: Proposed Structure for PIEFZA Marketing Department**



The two Marketing Managers will be required assume the responsibilities of leading promotion activities in the targeted sectors under the supervision of the Director General of PIEFZA. It is recommended that one manager be in charge of Electronics and Information Technology sectors, and the other be in charge of Apparel, Stone and Marble, and other light manufacturing activities. Both Marketing Managers will need to be supported by Research Associates whose main responsibilities will include backstopping the Managers on promotional, and organizational activities. PIEFZA will need to recruit an administrative assistant to handle all administrative work that the activities of the Marketing Department will require.

A long-term advisor is proposed to assist PIEFZA's newly established Marketing department with promotion tools and techniques. This person has to be a FDI Promotion expert with experience in industrial promotion, and should have good knowledge of FDI flows worldwide. In addition to the support of the long-term advisor in enhancing the knowledge and skills base of the Marketing Department members, a set of training modules provided by an international consulting firm specialized in FDI is recommended. This will be crucial in developing the skills base of the Marketing Department

Table 3 presents the annual PIEFZA investment promotion budget providing a general estimate of investment promotion costs for each of the promotion components. The total projected budget over a two-year period is US\$1,482,000. It should be noted here that this budget is indicative and does not take into account the monthly salaries of the existing PIEFZA staff.

**Table 3: Annual Budget for Marketing Program**

	<b>Annual Budget</b>
<i>Personnel Requirements</i>	\$273,800
Two Marketing Managers	\$40,000
Two Research Assistants	\$30,000
One Administrative Assistant	\$11,000
Public Relations Agency	\$140,000
Investment promotion agent in Israel	\$52,800
<i>General Image Building Campaign</i>	\$150,000
Video CD	Cost exclusive
Multimedia CD-ROM	Cost exclusive
Investor's Guide	Cost exclusive
Investment Brochure	Cost exclusive
Web Site	Cost exclusive
Posters	Cost exclusive
Translation of Printed material into Asian languages	\$15,000
Advertisement in Economics and Investment Media	\$135,000
<i>Electronics Initiative</i>	\$104,600
Promotion Activities	\$46,600
Promotion Materials	\$45,000
General and Administrative	\$13,000
<i>High-Tech Initiative</i>	\$81,000
Promotion Activities	\$23,000
Promotion Materials	\$45,000
General and Administrative	\$13,000
<i>Apparel Initiative</i>	\$69,600
Promotion Activities	\$50,600
General and Administrative	\$17,000
<i>Stone &amp; Marble Initiative</i>	\$13,000
Promotion Activities	\$10,500
General and Administrative	\$2,500
<i>Diaspora Initiative</i>	\$50,000
<b>TOTAL BUDGET</b>	<b>\$741,000</b>

Table 4 presents the promotion targets, in terms of number of projects, cumulative investment value, employment. These figures are based on two critical assumptions:

- At a minimum, the maintenance of the status quo, both economically and politically; and
- The implementation of the proposed marketing program, as outlined above.

**Table 4: Investment Targets for WBG Industrial Estates**

	Two-Year Marketing		End Year 3		End Year 6		
	Expenditures	Projects	Investment (US\$ '000)	Jobs	Projects	Investment (US\$ '000)	Jobs
<b>Core Targets</b>							
Electronics	210,000	6	12,600	420	11	27,300	910
Apparel	140,000	11	15,900	1,320	18	31,700	2,640
High-Tech	162,000	14	6,600	350	25	16,200	825
Stone	100,000	2	2,000	100	5	5,000	250
<b>Secondary Targets</b>	—	11	2,200	1,100	19	19,000	950
<b>Local Industry</b>	—	60	70,000	4,100	133	149,000	8,400
<b>General Image-Building Initiative</b>	300,000	—	—	—	—	—	—
<b>Diaspora Initiative</b>	100,000	—	—	—	—	—	—
<b>Personnel</b>	548,000	—	—	—	—	—	—
<b>TOTAL</b>	<b>1,482,000</b>	<b>104</b>	<b>130,000</b>	<b>7,400</b>	<b>210</b>	<b>250,000</b>	<b>14,000</b>

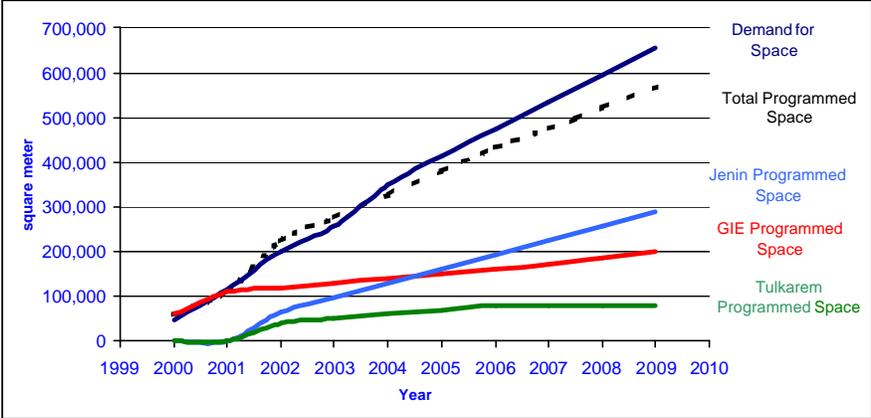
## 7. Implications for Industrial Estate Development

This section presents the implications of the above investment projections on industrial estate development in WBG. Based on the above targets, TSG projected the expected demand for space in the GIE and planned estates in Jenin and Tulkarem.<sup>1</sup> This has

<sup>1</sup> Demand for space was estimated by TSG, based on average space requirements in the specific core target sectors and other light

been plotted against the planned programmed space in these same three estates, in order to establish whether additional industrial estates will need to be developed in WBG.

**Figure 3: Demand for Space in WBG Industrial Estates**



According to the above projections, it is estimated that there will be a shortage of space by mid-2003, after which demand for space outstrips the currently programmed supply. In addition, it is likely that this gap will be substantially larger than estimated here. While the large industrial estates, such as the GIE and Jenin, will be physically able to absorb much of the projected investment, it is unlikely that all investors would be attracted to these two locations. In order to maximize the potential for foreign investment, it is important to offer investors a wider range of site alternatives. In addition, continued progress in both the economic and political spheres is likely to further increase demand, as WBG becomes a more attractive destination for investment, thereby creating a larger gap in the future. Therefore, it is recommended that further studies be carried out for the development of additional industrial estates in WBG.

manufacturing industries. These estimates are for total “built-up space”. The Nablus Industrial Estate was not included in these projections as it is envisioned to be a “Municipal Estate”, with virtually all investment to be drawn from the local market.

# 1. Introduction

---

## 1.1 Project Background

The Services Group (TSG) was contracted by the U.S. Agency for International Development (USAID), under the TSG-SITE program, to develop a foreign investment promotion program for the West Bank and Gaza Strip (WBG). Specifically, the consultants were asked to assist management of the Palestinian Industrial Estates and Free Zones Authority (PIEFZA) in developing a comprehensive promotion program to attract inward foreign direct investment (FDI) in specific industries and sub-sectors that have demonstrated high growth potential. The objectives of the program were two-fold:

- To identify industries that could be promoted in the international investor marketplace in the short term; and
- To develop a marketing strategy that outlines the appropriate promotion mix for the defined target market and investor group.

This foreign investor targeting strategy is based on work undertaken by two TSG consultants, Ms. Sheri Pitigala and Mr. Can Tutuncu, between September and November 1999; a three-week fact-finding mission to the WBG was undertaken in September 1999. During that mission extensive interviews were conducted with more than 60 individuals operating in the identified industry sectors, including private-sector industrial leaders, entrepreneurs and sector associations and unions throughout West Bank and Gaza, as well as key stakeholders within the relevant Ministries and other government agencies. In addition, this study has drawn upon the findings of the feasibility study for the Khadoury Technology Development Center, for which more than 60 interviews were conducted in the Information Technology and Electronics sectors.

---

## 1.2 Report Structure

The investor targeting methodology provides the basis of the structure for the remainder of the report:

- Chapter 2 presents an overview of the investor targeting methodology;

- Chapter 3 presents the results of the **location audit/comparative benchmarking** exercise;
- Chapter 4 presents the results of the **industry pre-screening**;
- Chapters 5 through 13 present the results of the **industry screening process**, sector-by-sector; and
- Chapter 14 presents the **marketing plan**, including detailed budgets.
- Annexures:
  - Annex A presents the **determinants of foreign direct investment**
  - Annex B provides an overview of corporate location from the **company perspective**
  - Annex C provides a format for **model contract** to appoint investment agents in target markets
  - Annex D provides a **sample multimedia location study** format by the *Corporate Location* magazine
  - Annex provides an outline for **training program** for PIEFZA

## 2. Investor Targeting Methodology

---

### 2.1 Overview

TSG's investor targeting strategy for the WBG is designed to focus PIEFZA's investment promotion resources on the most promising industry sectors for inward investment in the Gaza Industrial Estate and other planned industrial estates in the West Bank and the Gaza Strip. The identification of targets for investment in WBG industrial estates results from the implementation of a methodology based on the empirical analysis of successful investment promotion efforts in leading developing country destinations for foreign direct investment (e.g. Singapore, Thailand, Malaysia, Indonesia, Costa Rica, Jamaica). The experiences of these countries over the past decade point to the critical importance of two sets of factors that have influenced the direction and level of investment inflows: national comparative advantage and industry-specific competitive trends. TSG's investor targeting methodology examines selected industries in light of comparative and competitive realities, and ranks those industries by the amount of investment activity that can be motivated through promotional activities.

---

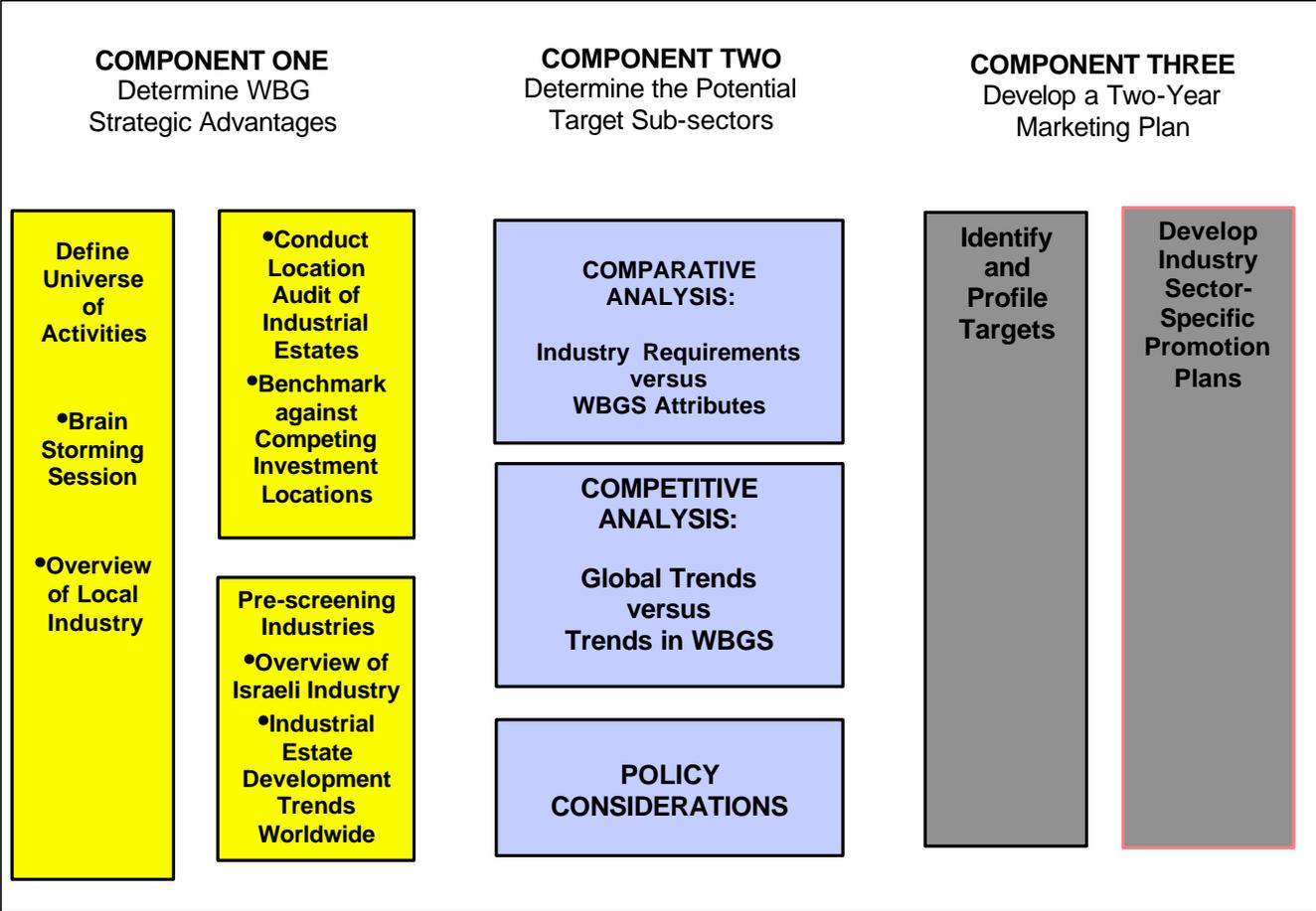
### 2.2 Determining Strategic Advantages

*Define Universe of Activities* The methodology's first step, illustrated in Figure 2.1, is to define an initial list of possible industry sectors to be considered for promotion. A "brainstorming" session on September 4, 1999, between TSG consultants and PIEFZA management and staff, was organized to define a broad list of industries to be evaluated for investment promotion into the WBG industrial estates. The finalization of this list was based on local industry structure and trends and the input provided by PIEFZA management and staff.

Following is the list of industries selected for evaluation:

- Apparel
- Bamboo Furniture
- Call Centers
- Consumer Electronics and Electrical Appliances
- Cut Flowers
- Data Conversion
- Dead Sea Mineral-based Cosmetics

Figure 2.1: Investor Targeting Methodology



- Handicrafts
- Olive Oil Processing and Related Products
- Plastic Products
- Software Development
- Stone and Marble

*Location Audit/  
Comparative Benchmarking*

Companies tend to place their production facilities in locations that can offer a macroeconomic framework conducive to private enterprise, and whose comparative resource endowments most closely match their own technical requirements in order to minimize production and transaction costs per unit of output.

While the specific factors required by an individual company vary from industry to industry, international companies often conduct a broad, cross-sectoral benchmark evaluation in the early stages of their site-selection process.

The investor targeting methodology examines this critical relationship by comparing the requirements of the selected industries to the comparative advantages of the West Bank and the Gaza Strip, as identified by a location audit and comparative benchmarking against alternative investment sites.

---

*Industry Pre-Screening*

The pre-screening process provides a broad level of analysis designed to focus the list of industry sectors for detailed analysis. The pre-screening process uses a broad range of criteria to eliminate less favorable sectors from the screening process and to provide focus to the list of industries selected for further analysis.

The selection process is based on the following factors:

- Current industry activity, which identifies those activities that display an upward growth trend in WBG and/or Israel, recent inward investment activity, and/or possible industrial linkages with WBG- or Israel-based industries; and
- International investment trends in similar industrial estates within the region and around the world.

The list was further validated by discussions with local industries for expansion into horizontal and vertical linkages to other industries. Private sector, industry-specific input has provided the necessary insight in factors that most significantly contribute to location decision-making. This has allowed the team to determine industries for which the WBG industrial estates appear to be promising investment locations.

---

**2.3 Determining Potential Sub-sectors** The industry screening process evaluates the selected industry sectors on a wide range of criteria, including industry factor requirements, international and regional competitive market trends, and policy objectives. The industry screening process is represented by Component 2 in Figure 2.1.

---

*Comparative Screen* The comparative screen evaluates the match between specific industry factor requirements and the location attributes of the WBG industrial estates, which is derived from the location audit/comparative benchmarking exercise.

This process is the first hurdle that industries must surmount in order to remain candidates for investment promotion as it firmly establishes which industries can be carried out efficiently in WBG, given its factor costs and endowments.

---

*Competitive Screen* Once it is firmly established that a particular product or service can be produced in a cost-effective manner in the West Bank and/or the Gaza Strip, it must be determined whether the location is attractive as a production platform vis-à-vis the global and/or regional competitive environment. Each industry is evaluated on the basis of a variety of competitive market trends, including:

- Basic supply and demand trends;
  - Strategic decision-making regarding customer bases, manufacturing integration, sourcing requirements, and production scales;
  - Recent investment flows;
  - Barriers to entry in the location under examination; and
  - Backward linkages, such as the presence of intermediary input suppliers, supporting industries, local research and development capacity, or skill training centers.
- 

*Policy Screen* The methodology's next screen compares each industry's structure and characteristics with a set of policy objectives

---

formulated at the outset of the investor targeting strategy. This step allows policy makers to rank industries that are good candidates for promotion in a way that ensures consistency with government objectives that go beyond attracting investment. Following discussions with PIEFZA and representatives from the Ministry of Economy and Trade, Ministry of Industry, and Ministry of Planning and International Cooperation, it was decided that this screen should target those industries that:

- foster employment generation
- increase exports
- foster the development of technology
- are environmentally friendly (low pollution, low water use)

---

*Prioritizing Target Sectors and Markets*

At the conclusion of the screening process an overview is provided of the specific activities for promotion within each sector and the most promising sources of investment. The industries and target market are prioritized according to the expected investment flows – in terms of value, employment, and relevant policy criteria.

---

**2.4 Promotional Plan**

This last step provides the focus necessary to develop an action-oriented promotional program for PIEFZA that can produce the maximum results with its limited budgetary and human resources. The promotional plan includes sector-specific promotional programs for each of the targeted industry sectors. For each sector, the plan provides a comprehensive strategy that encompasses themes, advertising programs, and promotional tools for each of the target markets, as well as an operational plan and program budget.

### **3. Location Audit/Comparative Benchmarking**

---

#### **3.1 Overview**

This chapter examines, from a site-seeker's perspective, the competitiveness of the GIE and proposed industrial estates in West Bank and Gaza Strip as potential investment locations vis-à-vis its potential competitors in the Middle East.

Companies tend to place their production facilities in locations that can offer a macroeconomic framework conducive to private enterprise, and whose comparative endowments most closely match their own industry requirements in order to minimize production and transaction costs. While the specific factors required by an individual company vary from industry to industry, international companies often conduct a broad, cross-sectoral benchmark evaluation in the early stages of their site-selection process.

The following comparative benchmarking study reveals that the GIE and other proposed industrial estates possess several of the key locational requirements for successful industrial development, including:

- preferential access to world markets, including the United States and Europe;
- a favorable investment environment, with an attractive package of incentives; and
- access to a growing pool of competitively-priced, skilled labor force.

In order to maximize their potential in attracting technology-oriented investment, however, the industrial estates will have to ensure that they can provide:

- lower cost utilities;
- concessionary land and building rates; and
- lower cost telecommunications for technology-oriented companies.

In addition, a focused investor awareness campaign is required in order to alleviate investor concerns about political risk.

---

### **3.2 Factors for Analysis**

The competitive benchmarking exercise is designed to assess the relative assets and liabilities of the Palestinian industrial estates from an investor's point of view. The process includes a series of general comparisons to regional competitor locations in factors most likely to shape the corporate location decisions of potential investors. Wherever possible, the analysis focuses both on WBG's current comparative position for a given factor, as well as issues or trends that may affect its competitiveness over time. The outcome is a clear picture of Palestinian industrial estates' comparative advantages and disadvantages as platforms for investment.

The factors selected for evaluation include:

- Access to Markets
- Political Risk
- Investment Environment, including taxation and investment incentives
- Human Resources
- Transportation Facilities
- Utilities, including electricity, water, and waste disposal
- Telecommunications
- Access to Capital

It must be noted that not all factors have an equal degree of influence on investment decisions. Small differentials in wages or utility tariffs may have only a marginal impact on investor decision-making when compared to the effects of a lack of access to key export markets. The cumulative effect of these various factors will be addressed in the conclusion.

The benchmarking exercise uses a cross-sectoral approach, *i.e.* without reference to specific industry requirements. Some factors are crucial to certain industries and, at the same time, may have little relevance for others. While the overall weighting of the selected factors will be conducted on a broad basis, the relevance to specific industry categories will be indicated wherever possible.

---

### **3.3 Comparator Sites**

The GIE and other proposed industrial estates are compared, when appropriate, to several locations in the Middle East region. The following sites in West Bank/Gaza were selected for evaluation, in consultation with PIEFZA management: the GIE and Rafah in the Gaza Strip; Jenin, Qalqilya, Tulkarem, Nablus, and Tarkumiya in the West Bank.

The following sites in the Middle East region, all of which have demonstrated a high degree of success in attracting inward investment, were selected for comparative purposes.

- **Al-Hassan Industrial Estate, Irbid, Jordan.** Al-Hassan industrial estate has been designated as a Qualifying Industrial Zone, providing it with duty-free access to the United States – a designation which has attracted new investments, particularly in light manufacturing industries. Al-Hassan was completed in 1991 and today is fully occupied. With a new expansion underway, the industrial estate will encompass 629,000 m<sup>2</sup> upon completion.
- **Matam Technology Park, Israel.** Matam R&D park is located in Haifa, at the heart of Israel's main industrial and technological region. Today, it is the largest technology park in Israel, with 4,500 employees and 45 hi-tech companies including Elron, Microsoft, Intel and IBM. More than 50 percent of the park's tenants are engaged in computer-related industries, including both hardware components and software development.
- **Jebel Ali Free Zone, Dubai, United Arab Emirates (UAE).** The Jebel Ali Free Zone is host to more than 1,300 companies from 70 countries. Of the registered companies in the Jebel Ali Free Zone, 70 percent are active in trade and distribution, 25 percent in manufacturing, and 5 percent in services. Jebel Ali's superior transportation infrastructure and strategic location make it a favorable manufacturing and services hub, servicing

the Middle East, Asian and European markets. Multinational companies include Sony, Aiwa, Black & Decker, Nissan, Honda, Coleman, Estée Lauder, Grundig, Colgate Palmolive, IBM, and Samsung.

- **Aegean Free Zone, Turkey.** The Aegean Free Zone - founded near Izmir, Turkey's second largest city and port - is the first privately developed and operated free zone in Turkey. By 1997, more than 134,000 square meters—out of a total of 500,000 square meters of serviced land—have been fully developed, with industrial, commercial and warehousing facilities. The zone houses nearly 500 companies; forty percent of firms located in the zone are production oriented. Multinational firms active in the zone include those from the United States, Germany, Holland, United Kingdom, Italy, South Korea, Sweden, Switzerland, France, and Japan.
- **Port Said Free Zone, Egypt.** The Port Said Free Zone is strategically located on the Mediterranean Sea at the northern entrance to the Suez Canal, providing its tenants with easy access to Europe. While Port Said has had only limited success in the past, in terms of attracting foreign investment, its ongoing rehabilitation and expansion efforts will provide an improved environment for investment.

It should be noted that the data collected for analysis includes a combination of location-specific, as well as country-wide statistics. Wherever possible, location-specific data was used. However, country-wide data was used instead when either:

- (a) it was the most appropriate for the given factor (e.g. trade policy, investment incentives, etc.); or
- (b) no location-specific data was available.

---

### 3.4 Access to Markets

A *Euromoney* magazine survey of multinational corporations - including leading players in FDI from Asia, Europe and North America - identified access to foreign markets, for exports, as the single most critical factor affecting the investment location decisions, and, therefore, the flow of FDI. While access to domestic markets played an important role for location decisions in the past - in an era of highly protected markets - new investments are largely driven by access to regional or global

markets for exports as sourcing opportunities and just-in-time manufacturing/inventory techniques become more widespread.

In addition, both export-oriented and domestic market-oriented investors are strongly impacted by access to imports from abroad. In a small country with few natural resources and a small industrial base, such as WBG, many domestic producers are dependent on imports of raw material and intermediate inputs.

Consequently, both low tariff walls at home and access to free or preferential trade opportunities can both provide a strong incentive to investors.

---

*Domestic Trade Policies*

At present, WBG is severely circumscribed in its authority to liberalize its trade regime by its membership in a customs union with Israel through the Paris Agreement. The agreement does not give the PA the power to decrease import tariffs, only to increase with them, with the exception of specified capital equipment, as well as specified items from other Arab countries in the region.<sup>1</sup> For the bulk of WBG's international trade, tariffs and non-tariff barriers (NTBs), including import licensing and standards, are the same across the customs union territory and are determined unilaterally by Israel.

A key issue to be resolved during the final status negotiations is whether WBG should remain in the customs union, or whether WBG should establish an independent customs territory that may or may not be part of a Palestinian-Israeli free trade area. Whatever the outcome of those negotiations may be, it appears to be generally recognized that the small Palestinian economy has the most to gain from an open and liberal trade regime, including liberal and open trade with Israel – whether in the form of a customs union, a free trade area, or an independent trade regime. However, in the short term, it can be expected that the impediments imposed by the customs union will remain in effect.

In addition to import licensing and product standards requirements provided for in the agreement, other NTBs impede Palestinian export activities and constrain access to imported materials. A recent study concluded that West Bank companies exporting

---

<sup>1</sup> Lists A1, A2, and B provided for in Article III.

through the port of Haifa face higher costs (18 percent) and longer delays (20 percent) than comparable Israeli companies. Similarly, West Bank importers incur higher costs (11 percent) and experience much longer delays (52 percent) than Israeli companies. West Bank exporters moving airfreight goods through Ben Gurion airport experience even higher costs (39 percent) and delays (78 percent). These costs and delays increase even more if one takes into account required security checks, surcharges by Israeli clearing agents, goods damaged in the transfer and security check process, and the impact of closures.<sup>2</sup>

---

*Preferential Access  
to Markets*

WBGS benefits from liberal market access to its main trading partners. The most important market access agreements are summarized in Table 3.1 below.

Several of these agreements represent extensions of existing free trade agreements that WBGS's trading partners have already established with Israel. Some agreements expand duty-free access to WBGS as an extension of agreements with Israel, while others have been negotiated exclusively with the PA. The agreement with the United States is even more complex in that the U.S. executive branch negotiated the agreement with the PA, but the U.S. Congress only recognizes it as part of the U.S.-Israel free trade agreement.

Regardless of the legal structure of these agreements, it is apparent that producers in the industrial estates in the West Bank and Gaza will have duty-free access to the vital Israeli, European, and U.S. markets. Given the political will on the part of the international community to support WBGS, it is highly likely that access to Europe and the U.S. will continue under whatever trade regime WBGS finally adopts following final status negotiations. However, as demonstrated in Table 3.1, a number of the other investment locations under evaluation benefit from preferential access to these markets.

---

<sup>2</sup> Federation of Palestinian Chambers of Commerce, Industry, and Agriculture, *The Transaction Costs Study: An Examination of the Costs of International Trade in the West Bank*, 1998.

**Table 3.1**  
**Market Access Agreements**

<b>Partner</b>	<b>Agreements with WBGs</b>	<b>Agreements with Others</b>
<b>Israel</b>	<b>Customs Union Member</b> No trade barriers, full access to Israeli market	Jordan and Egypt have preferential access for some goods
<b>Europe</b>	<b>EU Association Agreement (Euro-Med partnership)</b> Duty-free access for industrial products, quota access for agricultural goods; EU-Palestinian free trade area planned for 2001 <b>EFTA Declaration of Economic Cooperation</b> Duty-free access for industrial products; EFTA-Palestinian free trade area planned	Jordan, Egypt and Turkey have similar agreements with EU
<b>United States</b>	<b>Duty-Free Access Agreement</b> Duty-free access for all products	Israel has duty-free access for all products; Jordan has duty-free access under QIZ program
<b>Jordan</b>	<b>Protocol Trade Agreement</b> Duty-free access for 60 products	Israel and Egypt have preferential access for some goods
<b>Egypt</b>	<b>Technical and Economic Cooperation Accord</b> Preferential access for some goods	Israel and Jordan have preferential access for some goods
<b>Saudi Arabia</b>	<b>Free Trade Agreement</b> Duty-free access for all products	Jordan has agreement removing NTBs, but no reduction in tariffs

*Implications for Investment* Free access to regional and international markets provide significant opportunities to any investors locating in an industrial estate in the West Bank or Gaza Strip. However, the PA's lack of independence in setting import tariff rates and the numerous NTBs facing WBGs-based enterprises can negatively impact investment, particularly in manufacturing activities that depend on the timely import and/or export of goods.

### 3.5 Political Risk

Investors look for a degree of political stability when selecting a site for investment. Investors must be reasonably assured that future governments will not reverse the commercial and investment policies that attracted them in the first place. In addition, companies must be assured that their investments will be safe physically from political or civil unrest. This is particularly

important for those industries requiring substantial capital investments, such as heavy industry and other types of capital-intensive manufacturing.

WBG is located in a region of the world that is generally considered to be a moderate-risk environment. However, WBG's unique political circumstances can create a perception of high political risk. PA government investment policies – including guarantees against confiscation, the right to repatriate profits, and freedom from exchange rate controls – can provide a level of stability in areas over which the PA has political autonomy. However, other issues, such as the status of land and trade policies, remain outside the powers of the PA and ongoing uncertainty can dampen investor interest. In the short-term, investor perceptions will largely be driven by the progress of the ongoing peace process – the outcome of which will lead to the resolution of such issues.

---

*Implications for Investment* While the existing level of political uncertainty can negatively impact on investors, a focused image awareness campaign can lessen the negative effects. As mentioned above, PA government investment policies – including guarantees against confiscation, the right to repatriate profits, and freedom from exchange rate controls – can create a perception of stability, at least in certain areas. In addition, investment guarantees offered by bilateral or multinational organization's, such as the United States' Oversea Private Investment Corporation (OPIC) and the World Bank's Multilateral Investment Guarantee Agency (MIGA), can provide investors with the security they desire. Any promotional campaign should stress these benefits.

---

**3.6 Investment Environment**

Issues such as taxation, investment restrictions, and foreign exchange regime all form part of the regulatory framework in which businesses operate. A "business-friendly" environment boosts business confidence and attracts investment. In addition, incentives - such as tax relief schemes and duty exemptions - can provide an additional inducement to investors. Although not sufficient by itself to attract investors, incentives can "sweeten the pot" if the fundamentals are in place.

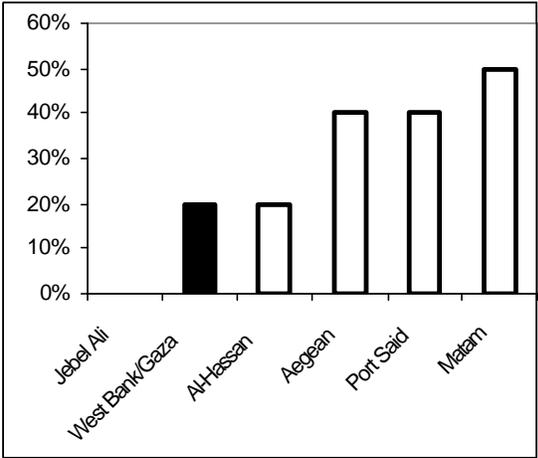
The PA places a high priority on encouraging foreign investment in the West Bank and Gaza in order to promote growth, reduce

unemployment, and support reconstruction efforts that began in 1994. The 1998 Law for the Encouragement of Investment guarantees the free transfer of all financial resources out of WBGS, including capital, profits, dividends and gains. There are no restrictions governing foreign currency accounts or official currency transfer policies. The law also prohibits expropriation and nationalization of approved foreign investments, and provides free transfer of ownership.

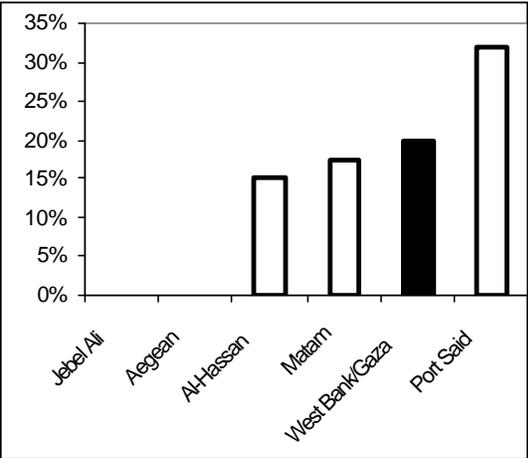
**Taxation**

The new Palestinian income tax law imposes a flat corporate income tax rate of 20 percent on net income earned in the West Bank and/or Gaza Strip, which replaces the 38.5 percent previously imposed in the West Bank and the 35.7 percent imposed in the Gaza Strip. A graduated personal income tax is imposed in four bands – 5, 10, 15, and 20 percent. These rates are substantially lower than the income tax rates in the other locations under review, with the exception of Jebel Ali (corporate and personal income) and the Aegean Free Zone (corporate income). See Figures 3.1a and 3.1b below.

**Figure 3.1a**  
**Average Corporate Income Tax Rates**



**Figure 3.1b**  
**Average Personal Income Tax Rates** (based on income of US\$15,000 per annum)



**Table 3.2: Taxation and Incentives**

	Industrial Estates West Bank/ Gaza	Matam Technology Park Israel	Nasr Free Zone Egypt	Al Hassan Industrial Estate Jordan	Jebel Ali Free Zone Dubai	Aegean Free Zone Turkey
<b>Taxation</b>						
Corporate Income Tax Rate	20%	10-25 for "Approved Enterprises"; 36% for Others	32% on exports; 40% other	15-35%	0%	30%
Personal Income Tax	5-20%	10-50% (max US\$4,600)	40%	5-30% (max US\$22,400)	0%	15-40% (max US\$109)
Activities Eligible for Preferential Treatment	All	All	All	Manufacturing, Tourism	not applicable	All
Minimum Capital Requirements	US\$100,00 for tax incentives	None	not available	US\$70,000	None	US\$100,000 (US\$50,000 for R&D)
Tax Holidays	7-10 yrs + reduced rate of 10% for 8-20 yrs, depending on size/nature of investment	2-10 years, depending on location	5-20 years if foreign capital FZ: 100% exempt Industry: 5 yrs	25-75% reduction for 10 yrs (none for services) IE: 12 yrs FZ: 12 yrs	not applicable	Aegean: 100% exemption
<b>Duty-free Privileges</b>						
Types of Operations Qualified for Duty-Free Privileges	All	not applicable		Not services	All	
Types of Goods Granted Duty-free Treatment	Fixed assets & Spare parts	None		Fixed assets & Spare parts IE: fixed assets & spare parts FZ: all goods	All goods	
<b>Other</b>						
Foreign Ownership Restrictions	49% foreign capital limit, but waivers possible	For "Approved Enterprises", foreign ownership determines tax rate	None	50% max in selected sectors	None	Limited to 20% in broadcasting and 49% in aviation & maritime transportation
Repatriation of Profits	Yes	Yes	Yes	Yes	Yes	Yes
Foreign Exchange Controls	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt

Sources: From official publications of relevant national and local promotion agencies.

Incentives

The new Encouragement of Investment Law of 1998 offers a broad range of investment incentives and tax exemptions. Tax exemptions are granted for 5 years, with reduced rates for additional years, the duration of which is determined by the value and/or nature of the project.

In addition, investors in the GIE and all proposed industrial estates, which fall under the purview of PIEFZA, will benefit from additional incentives which are provided for in a Memorandum of Understanding between PIEFZA and the Ministry of Finance, under provisions in the 1998 Industrial Estates and Free Zones Law, including:

- Any income generated by projects in the industrial zones will enjoy a seven year tax holiday (versus five years for those investments located outside one of the estates), with partial exemptions thereafter, as follows:
  - Any investment project with a paid-up capital between US\$100,000 and US\$1,000,000 is taxed at a rate of 10 percent on net profits for eight additional years;
  - Any investment project with a paid-up capital between US\$1,000,000 and US\$5,000,000 is taxed at a rate of 10 percent on net profits for 12 additional years;
  - Any investment project with a paid-up capital exceeding US\$5,000,000 is taxed at a rate of 10 percent on net profits for 16 additional years; and
  - Any investment project deemed to be “special”, either by its nature or value, is taxed at a rate of 10 percent on net profits for 20 additional years.
- Projects that source 60 percent of their components from the local market can benefit from an additional three-year tax exemption.
- All exemptions may be extended by up to five years based on economic or export performance.
- In addition, "special" incentives may be granted to local investors.

As demonstrated in Table 3.2, the industrial estates of the West Bank and Gaza Strip can provide an investment environment that is relatively competitive with the other locations, with lower corporate tax rates and longer tax holidays than most of the locations, with the exception of the Aegean and Jebel Ali free zones, where corporate income is tax-free.

Double Taxation

While Palestinian income tax rates are relatively competitive with the other locations under review, the Palestinian Authority will need to coordinate internationally if it is to effectively facilitate foreign investment. The Ministry of Finance is currently in the process of negotiating a double taxation agreement that includes a tax sparing provision with the United States, and hopes to negotiate a similar agreement with the European Union. The Ministry hopes to complete both within one year.

The Ministry of Finance is also actively working to clarify the tax relationship with Israel and Israeli investors. While the Paris Agreement calls for the development of procedures to address double taxation,<sup>3</sup> this has not been accomplished to date. Under the agreement, both sides have the right to impose direct taxes on 1) economic activities within their respective areas, and 2) residents of their respective areas, even when those residents conduct economic activity on the other side. At present, taxes paid in WBGs are credited against tax liabilities arising in Israel. The Ministry of Finance is actively pursuing a tax sparing agreement with Israel, but this may take longer to negotiate than the agreement being negotiated with the United States.

Impact on Investors

While the lack of double taxation agreements and tax sparing provisions eliminates the tax holiday incentives granted to foreign investors in the investment and PIEFZA laws, those holidays are of limited duration. When coupled with the already low corporate income tax rate applied in WBGs, the potential tax sparing benefit that could accrue to a foreign (and especially an Israeli) investor are not very large.

---

*Duty-free Privileges*

Projects located within the industrial estates also benefit from duty-free privileges. The fixed assets of the project are exempt from custom duties provided that they are brought in or imported

---

<sup>3</sup> Article V, paragraph 5.

within a set time frame. The spare parts, valuing up to 15 percent of capital and imported by the investing enterprise, are also exempt from customs duties. Such duty-free privileges are more favorable than in Matam Technology Park in Israel, where no duty-free privileges are offered to park-based projects, but falls short of the privileges offered in many of the other locations under review, which operate as free zones, providing a wider range of duty-free privileges.

While the PIEFZA law provides for the creation of free zones, with extended duty-free privileges for export processing, including duty-free imports of all equipment and materials, the free zones program cannot be implemented until proper customs control is in place, which is unlikely to occur in the immediate-term. If and when the free zones program is implemented, the duty-free privileges, at least for export-oriented projects, will be more competitive with locations such as the Jebel Ali and Aegean free zones.

---

*Implications for Investment* The PA, with the passage of the Encouragement of Investment and Industrial Estate and Free Zones laws has created a positive environment for inward investment. Overall, the investment environment of WBG's industrial estates is relatively competitive with most of the other locations under review, particularly in terms of corporate and personal taxation and related incentives. The implementation of the free zones program, with its extension of duty-free privileges, will further improve the competitiveness of WBG's investment environment.

---

**3.7 Human Resources** The availability and cost of required labor is an important factor in the site selection process, whether the need is for low-skilled labor for assembly operations or high-skilled labor, such as engineers, for technology-oriented activities.

---

*Labor Skills and Availability* The combined population of the West Bank and the Gaza Strip totaled approximately 2.8 million in 1997, with more than 1 million residing in the Gaza Strip.<sup>4</sup> The size of the labor force (population

---

<sup>4</sup> All demographic and labor data is derived from official statistics published by the Palestinian Central Bureau of Statistics, including *The Demographic Survey in the West Bank and the Gaza Strip, Final report*

aged 15 and older) is relatively small in comparison, given the high birth rate in WBG, averaging 53 percent of the population. The relative size of the labor force, vis-à-vis the local population, varies between locations under evaluation, ranging from a low 36 percent in the Gaza Strip to 48 percent in Jenin.

Despite its small size, the Palestinian labor force is among the most productive in the region. According to UNIDO, the Palestinian labor force is the second most productive in the region, primarily due to labor's strong ties, over the years, to Israeli industry (whose labor force is rated as the most productive in the region). Literacy rates are high, averaging 86 percent in the West Bank and the Gaza Strip.

However, in terms of formal education, the Palestinian labor force lags behind its neighbors. For example, in Jordan, more than 17 percent of its labor force has obtained tertiary education, while only 4.5 percent of the Palestinian labor force (population ages 15 to 64) has obtained a higher education, though the rate is significantly higher in the Gaza Strip (6.5 percent) than in the West Bank (4.2 percent). These low rates of education can, in part, be attributed to the period of the Intifada, which resulted in the closure of the Palestinian universities, as well as the low rate of tertiary education for females. Tertiary enrollment rates have grown over the last few years and approximately 30 percent of high school graduates go on to work towards a tertiary degree (20 to 30 percent attending 2-year colleges, 5 percent attending 4-year universities). Returning expatriates, many of who have studied and worked abroad, continue to supplement the local human resource pool.

In terms of skills and industry experience, there is much variation between the West Bank and the Gaza Strip, as well as between locations within these two areas of WBG. In general, there is a higher proportion of professionals (including managers, engineers, etc.) and technicians in the Gaza Strip (26.5 percent of local labor force) than in the West Bank (19 percent of the West Bank labor force). On the other hand, there is a higher proportion of skilled and semi-skilled manufacturing workers in the West Bank (9.8 percent of the West Bank labor force) than in the Gaza Strip (6.9 percent of the Gaza Strip labor force). Within the West Bank, manufacturing experience is greater in the central and southern

---

(August 1997), *Labour Force Survey, Annual report: 1997* (October 1998), and *Labour Force Survey: Main Findings* (March 1999).

---

governorates (Nablus, Ramallah, Bethlehem, Hebron) than in the northern governorates (Jenin, Qalqilya, and Tulkarem), where agriculture is the main economic activity.

In terms of information technology-related skills, the West Bank has a higher proportion of graduates with IT experience than the Gaza Strip. More than 2,000 university students in the West Bank were enrolled in IT-related programs in 1998, while only 300 students in the Gaza Strip were enrolled in such programs. Ramallah, in the West Bank, is currently the only area with a concentration of IT-related industries.

The availability of required labor, as well as wages rates (see section below) in the West Bank and the Gaza Strip is also impacted by the local unemployment and underemployment rates.<sup>5</sup> Unemployment in the Gaza Strip averages 21.1 percent, and underemployment 2.4 percent. While average unemployment levels in the West Bank are considerably lower, 9.4 percent, underemployment figures are far higher, averaging 7.1 percent. Within the West Bank localities under evaluation, the highest rates of unemployment and underemployment are in Qalqilya and Tulkarem (averaging 19.5 percent and 21.6 percent, respectively), followed by Jenin (18.6 percent and 18.8 percent, respectively). The unemployment rate is lowest in Nablus (12.8 percent); the underemployment rate is lowest in Tarkumiya (6.2 percent).

---

*Labor Costs*

Labor costs can vary significantly from location to location to location, but the largest differences are between the West Bank and the Gaza Strip. Table 3.3 depicts the average salary rates<sup>6</sup> for different skills levels in both the West Bank and the Gaza Strip.

---

<sup>5</sup> Underemployment exists when a person's employment is inadequate in relation to alternative employment, account being taken of his/her occupational skills. Underemployment rates include both (1) those who are working less than 35 hours per week or less than the normal hours of work in their occupation (visible underemployment); and (2) those working in occupations not corresponding to their qualification or with insufficient income (invisible underemployment).

<sup>6</sup> All wage data calculated by TSG, based on data extracted from database at Ministry of Industry, company surveys, and other published data.

**Table 3.3: Average Salary Ranges in the West Bank and the Gaza Strip (US\$ per month)**

	West Bank	Gaza Strip
Unskilled & Semi-skilled	200-400	150-350
Skilled	250-450	250-400
Technician	300-400	400-500
Engineer	400-600	550-650

On average, salary levels for unskilled, semi-skilled and unskilled workers are somewhat higher in the West Bank than in the Gaza Strip. In the case of engineers and technicians, the reverse is true – salaries levels are higher in the Gaza Strip than in the West Bank.

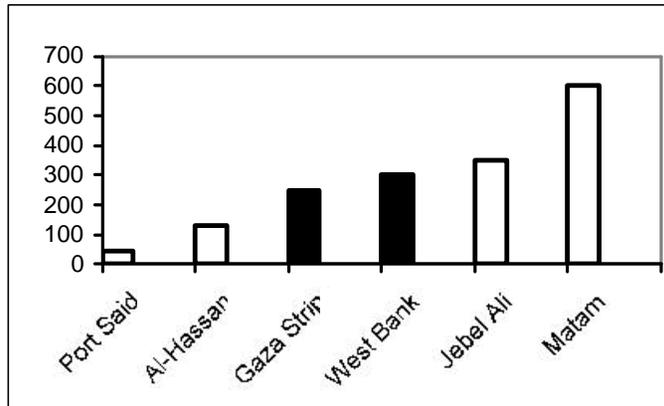
West Bank and Gaza Strip salary rates, while not the lowest in the region – wages are lower in Port Said and Al-Hassan, with the exception of engineers’ salaries – are more competitive than Matam and the Jebel Ali and Aegean Free Zones, where wage levels are substantially higher (see Figures 3.2a to 3.2d). For instance, for skilled workers, wage levels in the West Bank and Gaza Strip are 2 to 3 times higher than at Al-Hassan and 8 to 10 times higher than in Port Said, but only a fraction of wage levels in Matam or Jebel Ali, where wage rates are 2 to 3 times higher. In the case of engineers, the West Bank and the Gaza Strip have the most competitive wage rates vis-à-vis the other locations under review.

---

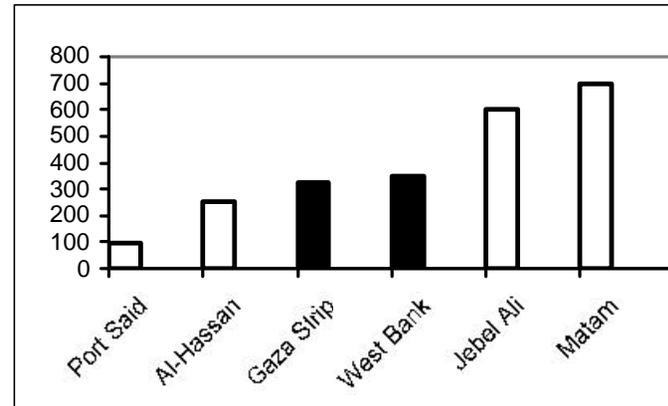
*Implications for Investment*

The GIE and the other proposed industrial estates in the West Bank and Gaza Strip, with their growing pool of high-skilled, productive labor, are in a good position to attract inward investment. While the proportion higher skilled to lower skilled workers varies between the West Bank and the Gaza Strip, the variance in underemployment across these locations indicates that both areas have a significant pool of higher skilled labor that could be accessed by potential investors. Most of WBG’s major industry clusters are found in both areas. Only in the case of IT-related skills is there a clear distinction between the West Bank and the Gaza Strip.

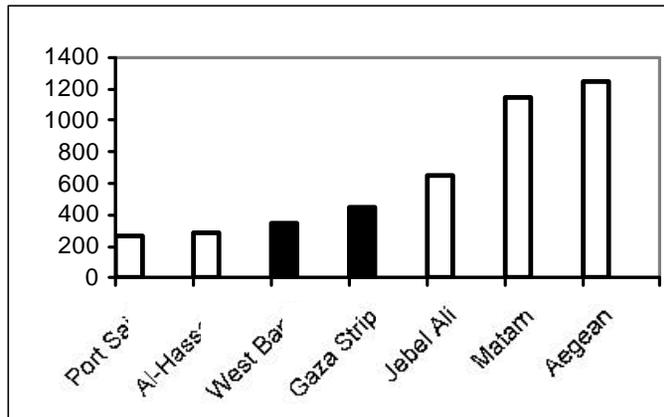
**Figure 3.2a: Average Salary Levels for Unskilled Workers (US\$ per month)**



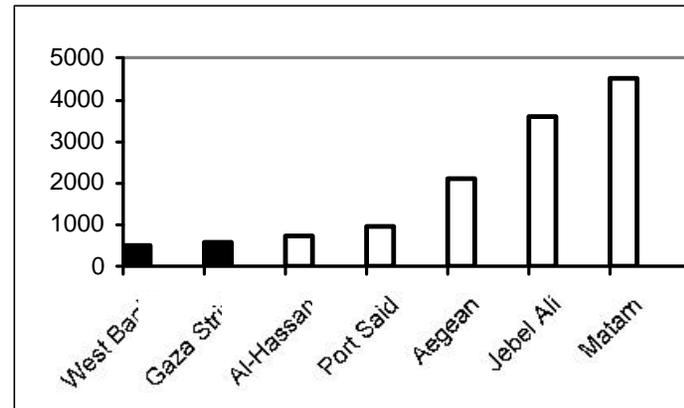
**Figure 3.2b: Average Salary Levels for Skilled Workers (US\$ per month)**



**Figure 3.2c: Average Salary Levels for Technicians (US\$ per month)**



**Figure 3.2d: Average Salary Levels for Engineers (US\$ per month)**



In terms of cost competitiveness, while wage rates in most labor categories are higher than in Port Said and Al-Hassan, they are, to a large extent, counterbalanced by the higher levels of productivity in WBGs. However, WBGs is not competitive with the low-wage manufacturing centers in East Asia.

---

**3.8 Transportation Facilities**

Because most foreign-owned operations and enterprises in developing economies are export-oriented and are also dependent on the import of capital equipment and raw materials, access to cheap and reliable transportation services can impact the ability of enterprises to meet their production requirements.

Currently, there are no sea or air ports with cargo operations in the West Bank or Gaza Strip. Although the Rafah Airport in the Gaza Strip is equipped to handle cargo, in terms of infrastructure, given the absence of customs controls on location, the airport only services passenger traffic. Given the absence of their own cargo facilities, WBGs-based enterprises must rely on Israeli facilities to meet their import and export needs. Although Israeli transportation infrastructure at these ports is good and the Palestinians have access to them, delays as a result of Israeli security checks for products entering or exiting the West Bank or the Gaza Strip are quite common, leading to increased transaction costs and, sometimes, damaged goods.

---

*Sea Transportation*

Israel has two main sea ports on the Mediterranean, Haifa in the north and Ashdod in the south. Imports to and exports from companies operating in the GIE go through Ashdod Port, as would imports to and exports from companies operating in any industrial estates located in Rafah and Tarkumiya. Imports to and exports from companies operating in Tulkarem, Nablus, Jenin and Qalqilya are more likely to transit through Haifa Port, given the closer proximity.

While regular seaport handling and freight charges the same for both Palestinian and Israeli cargo at both ports, which are competitive with most other locations in the region (see Table 3.4 below), there is an extra \$80-\$120 charge for security inspections on all imports to and some exports from the West Bank or the Gaza Strip. Additional warehousing fees are sometimes required due to delays. In addition, many Palestinian producers have suffered damage to their goods as a result of the security

inspections. As discussed earlier, these barriers can add significantly to the transaction costs for businesses operating from the West Bank or the Gaza Strip. Sea Transportation costs for Port Said in Egypt are the most economical, given the port's strategic location on the Suez Canal.

**Table 3.4: Sea Transportation Costs (per 20' container)**

	Port Said, Egypt	Industrial Estates, West Bank & Gaza Strip	Matam Tech Park, Israel	Jebel Ali Free Zone, Dubai	Aegean Free Zone, Turkey	Al Hassan IE, Jordan
Nearest Port	Port Said	Ashdod Port or Haifa Port	Haifa Port	Jebel Ali Port	Izmir Port	Aqaba Port
Average port handling charges (US\$)	65	120 (30+80 for security inspection)	30	110	75	95
Average sea freight rates (US\$)						
New York	750	1450	1450	1750	1800	2500
Rotterdam	500	400	400	800	750	650

Sources: TSG surveys of freight forwarders and cargo handlers in the selected locations.

#### *Air Transportation*

All air freight to or from the West Bank or Gaza Strip currently goes through Ben Gurion Airport near Tel Aviv. Regular air freight charges are the same for both Palestinian and Israeli goods and are relatively high compared to most of the other locations under evaluation (see Table 3.5). Freight rates to both New York and Amsterdam are cheapest from Al-Hassan Industrial Estate, followed by the Jebel Ali and Aegean free zones.

**Table 3.5: Air Transportation Costs (US\$ per kg, for packages in excess of 100kg)**

	Al-Hassan IE, Jordan	Jebel Ali Free Zone, Dubai	Aegean Free Zone, Turkey	Industrial Estates, West Bank & Gaza Strip	Matam Tech Park, Israel	Port Said, Egypt
Nearest Airport	Queen Alia, Amman	Dubai Airport	Izmir Intl. Airport	Ben Gurion, Tel Aviv	Ben Gurion, Tel Aviv	Cairo Airport
New York	1.50	1.70	1.95	2.80	2.80	3.00
Amsterdam	0.80	1.05	0.85	1.50	1.50	1.40

Sources: TSG surveys of freight forwarders and cargo handlers in the selected locations.

In addition to the higher freight rates, goods originating from the West Bank or the Gaza Strip must exit Israel on cargo planes, as transportation on passenger planes, except for small packages, are not permitted due to security reasons. Consequently, both the cost of and the time required for air transport are closely related to the availability and destination of cargo planes. Re-routing, due to unavailable equipment or destination, usually results in higher than usual costs and longer duration of transport.

---

*Implications for Investment* The difficulties associated with the import and export of goods from the West Bank and the Gaza Strip can strongly impact the attractiveness of industrial estates in the West Bank or the Gaza Strip as investment locations for particular activities, such as those that depend on the rapid movement of goods, for instance “just-in-time” manufacturing and location-based services such as warehousing and logistics. Other service-oriented enterprises, such as the majority of information technology-related activities are likely to be less affected by the difficulties in importing and exporting, given their minimal reliance on physical transportation once their fixed assets are imported.

While the construction of the Gaza Port (which is not expected to be completed in the short-term) and the introduction of cargo operations at Rafah Airport (which is likely to happen within the timeframe of this study’s action plan) would relieve some of the logistical difficulties facing WBG-based enterprises, the ongoing presence of Israeli Customs control and their required security inspections would continue to hamper the importing and exporting operations of these companies.

---

**3.9 Utilities**

Most enterprises, both manufacturing- and service-oriented, are dependent to some degree on the availability of cheap and reliable utilities. Frequent breakdowns and “pre-modern” services can hamper production and, thus, profitability.

---

*Electricity*

Power Infrastructure

Overall, the power infrastructure in the West Bank and the Gaza Strip is insufficient for large-scale industrial development. Most electrical power is sourced from Israel, though there are plans to expand local power generation. However, according to the

Ministry of Planning and International Cooperation,<sup>7</sup> service is not uniformly distributed and many locations have only partial or no service. There is no coherent national grid, leading to serious fragmentation and imbalances in the system. Most of the transmission lines are overloaded and both operation and maintenance are inadequate. Power outages are common. In addition, some municipalities have experienced extended losses of power when local governments, which distribute the power, have been unable to meet their payment obligations.

Many large manufacturers have opted to build their own power generators in order to ensure the quality and reliability of their power supply. The GIE, with the financial assistance of USAID, installed stand-by electric power generation facilities in order to ensure its tenants a reliable supply of electricity.

Cost of Electricity

The cost of electricity in the West Bank and the Gaza strip varies from locality to locality, as each has its own distributor. Tariff rates in most of the West Bank and the Gaza Strip locations under review fall within similar ranges (see Table 3.6). Tariff rates for small- to medium-size commercial users range from US\$0.90 per kilowatt hour (kWh) in Jenin to US\$0.154 per kWh in Nablus; the average tariff rate for commercial users in the West Bank and the Gaza Strip is US\$0.111 per kWh. Tariff rates for industrial users range from US\$0.10 per kWh in the GIE and Rafah to US\$0.175 in Nablus; the average tariff rate for industrial users in the West Bank and the Gaza Strip is US\$0.121 per kWh.

**Table 3.6: Average Electricity Tariffs in the West Bank and the Gaza Strip (US\$ per kWh)**

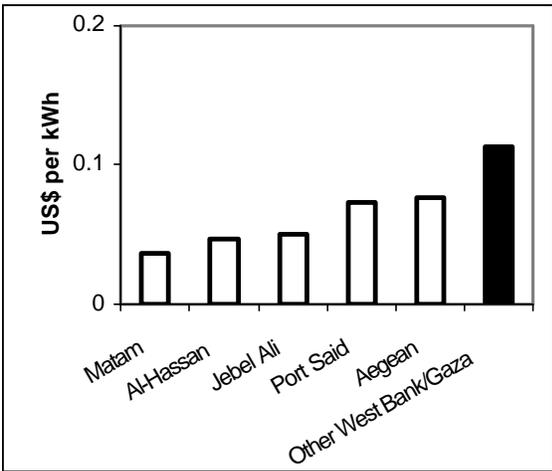
	Gaza Strip		West Bank				
	GIE	Rafah	Jenin	Nablus	Qalqilya	Tulkarem	Tarkumiya
Small to Medium Size Commercial Users	0.100	0.097	0.090	0.154	0.113	0.11	0.113
Large Industrial Users	0.100	0.101	0.138	0.175	0.113	0.11	0.113

Sources: Extracted from data provided by Mr. Hasan Abdel-Jaber, PIEFZA.

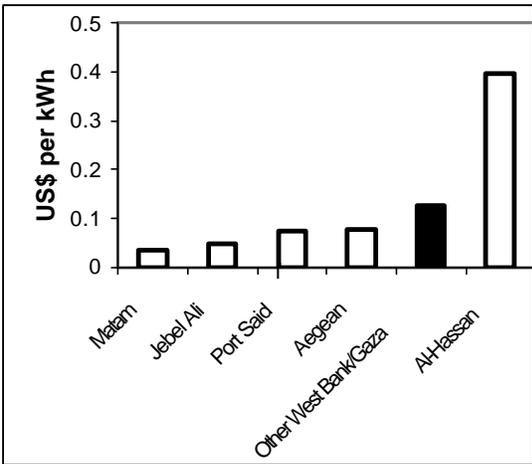
<sup>7</sup> Ministry of Planning and Economic Development, *National Policies for Physical Development*, December 1998.

When compared to the other locations under evaluation, the cost of electricity in the West Bank and the Gaza Strip is relatively high, up to two to three times higher than some other locations, including Matam Tech Park in Israel and the Jebel Ali Free Zone.<sup>8</sup> See Figures 3.3a and 3.3b below.

**Figure 3.3a**  
Average Electricity Tariff Rates for Commercial Users, US\$ per kWh (peak)



**Figure 3.3b**  
Average Electricity Tariff Rates for Industrial Users, US\$ per kWh (peak)



**Water**

**Water Infrastructure**

Like the electricity supply infrastructure, water supply infrastructure in the West Bank and the Gaza Strip is inadequate for large-scale industrial development. Water resources vary from location to location. Water resources in both the West Bank and the Gaza Strip are, by and large, controlled by Israeli authorities. While the PA is permitted to set up its own water systems in the areas it controls, such projects have yet to be completed. In the meantime, Palestinians must request permission from the Israelis to dig any new wells.

In addition, water supply is unevenly distributed between localities.<sup>9</sup> In the West Bank, most water is supplied by ground

<sup>8</sup> Electricity rates collected by TSG from relevant promotional agencies and other published data.

water sources, including aquifers, public and private wells, and cisterns. For the West Bank locations under evaluation, non-agricultural water supplies are most plentiful in the Tarkumiya region, followed by Nablus and Tulkarem. Water is most scarce around Jenin. In the Gaza Strip, water is sourced from the Gaza Aquifer, which suffers from a high degree of salinity as over-pumping has led to a drop in the water table and the intrusion of seawater. The GIE has installed water treatment facilities in order to ensure the supply of both potable and industrial water to its tenants.

Depending on the locality, water is distributed either through Mekorot Water Company (the Israeli water supplier), the West Bank Water Department, or private wells. See Table 3.7 below.

**Table 3.7: Water Distribution in the West Bank and the Gaza Strip**

Location	Water Distribution
Gaza	Mekorot
Rafah	Mekorot
Jenin	Private wells and Mekorot
Nablus	not available
Qalqilya	Private wells
Tulkarem	Private wells and Mekorot
Tarkumiya	Mekorot

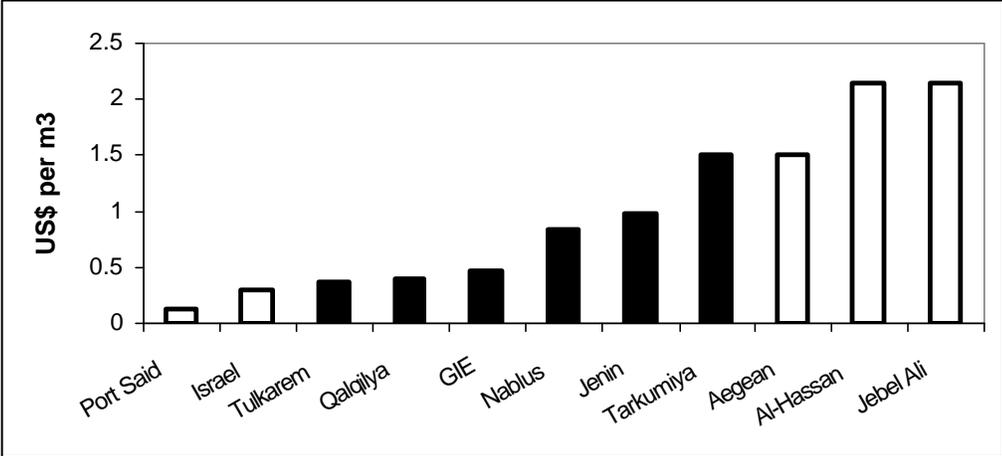
Delivery systems are also insufficient throughout most of the West Bank and the Gaza Strip. In the northern localities of the West Bank, including Jenin, Nablus and Tulkarem, significant proportions (18 to 37 percent) of the populations lack piped water supply systems. Most of the existing systems in these and the other locations in the West Bank and the Gaza Strip are in poor condition because of age and insufficient maintenance. As with electricity, the failure of local governments to meet their payment obligations occasionally results in the shut off of water supplies by Mekorot. Outside the GIE, in both the Gaza Strip and the West

---

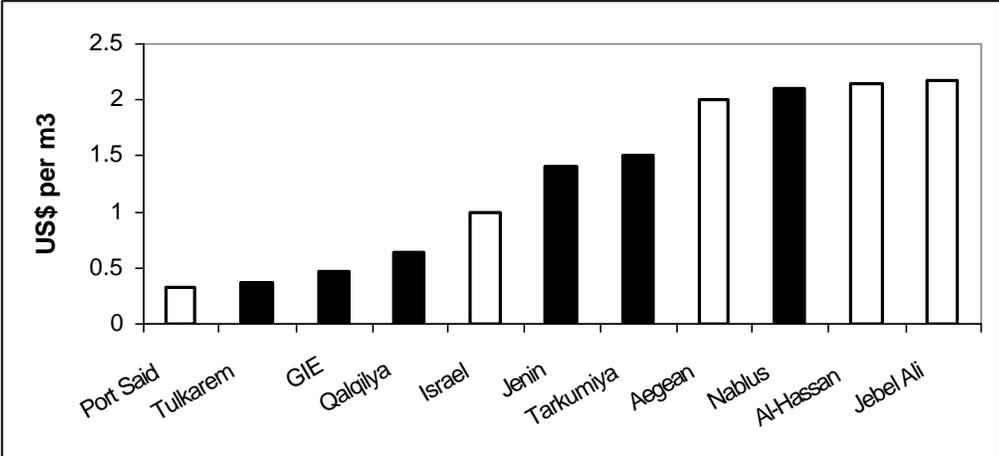
<sup>9</sup> Information on water resources and infrastructure extracted from Ministry of Planning and Economic Development, *National Policies for Physical Development*, December 1998 and *Regional Plan for the West Bank Governorates: Water and Wastewater Existing Situation*, December 1998.

Bank, many heavy water users, such as textile manufacturers, purchase tanks of water in order to ensure the required supply and quality of industrial water.

**Figure 3.4a: Average Water Tariff Rates for Small- to Medium-Size Users, US\$ per m3**



**Figure 3.4b: Average Water Tariff Rates for Large-Size Users, US\$ per m3**



**Cost of Water** The cost of water also varies significantly from locality to locality in the West Bank and the Gaza Strip.<sup>10</sup> The variation in pricing reflects both the variable resources and the differing operating costs. On average, tariff rates are cheapest in Qalqilya and Tulkarem, where shallow wells translate into low operating costs, averaging US\$0.38 per cubic meter (m3) for both potable and industrial water. Water tariffs are higher in the GIE for potable water (US\$0.64 per m3), but lower for industrial water (US\$0.29 per m3). Tariff rates are highest for heavy water users in Jenin (where water is scarcest) and Tarkumiya and Nablus (where operating costs are higher), ranging from an average of US\$1.40 in Jenin to US\$1.50 in Tarkumiya to US\$2.10 in Nablus.

Tariff rates in the West Bank and the Gaza Strip, including the higher-cost locations (Jenin, Nablus, and Tarkumiya) are competitive with most of the other locations under evaluation in the region (See Figures 3.4a and 3.4b).<sup>11</sup> Water tariff rates are highest in Al-Hassan Industrial Estate and the Jebel Ali Free Zone, averaging US\$2.14 and US\$2.16 respectively for both small- to medium-size and large-size users. However, these high rates are not competitive with rates outside the Middle East region. Port Said, where water is heavily subsidized by the Egyptian government, offers the cheapest rates for both small- to medium- and large-size users, averaging US\$0.132 per m3.

---

**Waste Disposal** Like water and electricity infrastructure, the infrastructure for both wastewater and solid waste collection are inadequate throughout most of the West Bank and the Gaza Strip.

**Wastewater Infrastructure** Most of the major urban centers in the West Bank and the Gaza Strip have wastewater collection and disposal systems, though the collection rate varies from locality to locality.<sup>12</sup> Water treatments facilities range from aerated lagoons (Jenin) to activated sludge plants (Bethlehem) to algal ponds (Tulkarem). In some locations, raw sewage is pumped directly or indirectly into the wadis. Most industrial wastewater is disposed of in the sewerage system

---

<sup>10</sup> Extracted from data provided by Mr. Hasan Abdel-Jaber, PIEFZA.

<sup>11</sup> Water tariff rates collected by TSG from relevant promotional agencies and other published data.

<sup>12</sup> Information on waste infrastructure extracted from Ministry of Planning and Economic Development, *National Policies for Physical Development*, December 1998 and *Regional Plan for the West Bank Governorates: Water and Wastewater Existing Situation*, December 1998.

without previous treatment. The Tulkarem Municipality is currently planning the construction of a treatment facility, while a new treatment facility has been constructed in Gaza City. There are currently no provisions to deal with toxic and hazardous wastes in the West Bank and the Gaza Strip.

Solid Waste Infrastructure

The major urban centers of the West Bank and the Gaza Strip have solid waste collection systems. In most localities, waste s are burnt in open dumpsites. Currently no sanitary or engineered landfill exist, though one is being planned by the Tulkarem Municipality. Currently, wastes are not separated – hazardous materials are collected with others and treated in the same way (*i.e.* burning in open sites).<sup>13</sup>

Collection Costs

Wastewater and solid waste collection costs are minimal in the West Bank and the Gaza Strip. In terms of wastewater, many locations do not impose any running fees and installation costs are relatively low, averaging US\$140 per connection. Only the GIE imposes running fees based on actual usage (US\$0.57 per m3). In terms of solid waste disposal, collection fees vary, ranging from US\$15 per year in Tarkumiya to US\$36 per year in Tulkarem to US\$50 to US\$140 per year in Qalqilya. Collection rates are highest in the GIE, where it is based on usage (US\$70 per truck or US\$ per m3 for hazardous waste).<sup>14</sup>

---

Telecommunications

The quality and cost of telecommunication services is fast becoming an important factor in investment location decisions. As enterprises become more global in scope, a well-developed communications network is often required to ensure smooth operations. In addition, state-of-the-art telecommunications infrastructure is indispensable for certain technology-oriented industries, such as information technology, that are dependent on access to “virtual transportation” and often look to industrial estates to supply the necessary services.

The Palestinian Telecommunications Company (PALTEL) is the privately-owned, national provider of all regular land-based and cellular communications in WBGS, over which it has been granted a 20-year monopoly. While the existing infrastructure is largely inadequate, PALTEL plans to significantly upgrade it over the next

---

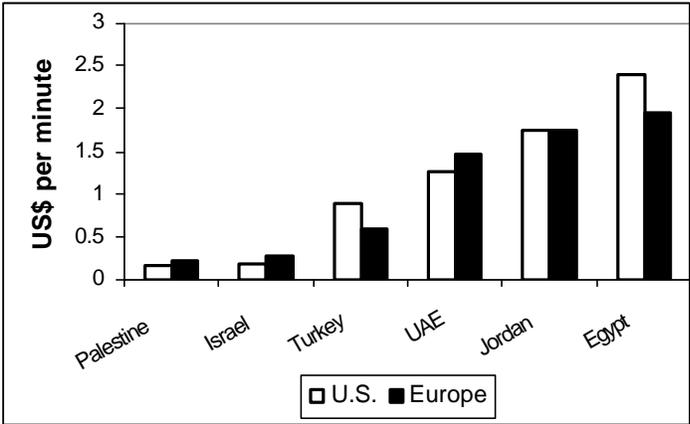
<sup>13</sup> *Ibid.*

<sup>14</sup> Extracted from data provided by Mr. Hasan Abdel-Jaber, PIEFZA.

few years – including its own international switches, an earth station, a leased digital circuits network, and high-speed backbone. Such an ambitious plan would significantly improve telecom services in WBGs. However, the Ministry of Posts and Telecommunications regulates the pricing for PALTEL’s services, which can impede PALTEL’s ability to provide competitively priced services.

Furthermore, WBGs currently has no international switches of its own and must, instead rely upon Israeli infrastructure. Both leased lines and international direct dialing is routed through Bezeq’s system (Bezeq is one of Israel’s three telecommunication companies). While direct dialing rates<sup>15</sup> to locations outside the region are relatively competitive, as demonstrated in Figure 3.5 below, direct dialing rates from the West Bank or the Gaza Strip to its Arab neighbors are inordinately high, ranging from US\$0.69 per minute to Jordan to US\$0.99 per minute to Egypt to US\$1.20 to most other countries in the region. In the future, however, the Ministry hopes to reach an agreement with four of its neighbors (Jordan, Egypt, Sudan and Qatar) to utilize their exchanges for inter-regional calls, which could reduce prices by up to 30 percent.

**Figure 3.5: Average IDD Tariffs to U.S. and Europe (peak rates)**

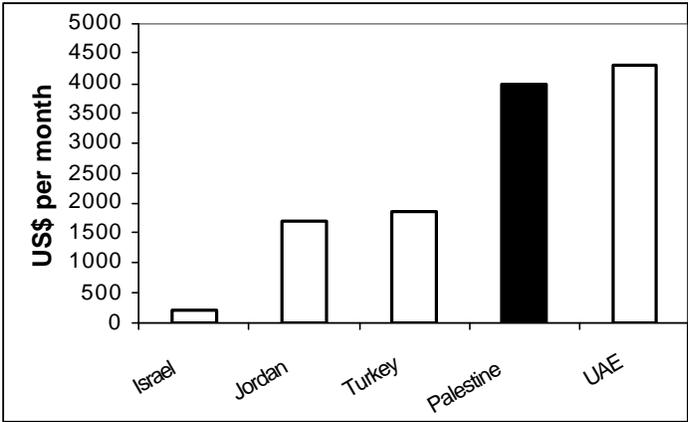


While direct dialing rates to the U.S. and Europe are relatively competitive, the cost of dedicated leased lines are substantially higher than in most of the alternative investment locations (see

<sup>15</sup> Telecommunication tariffs derived from information provided by PALTEL and the First Status Report for the IT Strategy.

Figure 3.6). While PALTEL must negotiate on behalf of individual companies with Bezeq for international leased line connections, on average a 64 kbps line to the U.S. would cost a WBG-based enterprise US\$4,000 per month, compared to US\$1,830 in Turkey, US\$1,700 in Jordan and a low US\$200 in Israel. Only in Dubai are leased lines higher than in WBG, averaging US\$4,300 per month. Similar price differentials apply to other international destinations, as well as different access speeds.

**Figure 3.6: Average Tariffs for Leased Lines to U.S.**



*Implications for Investment*

The cost and quality of utilities on offer at the industrial estates in the West Bank and the Gaza Strip will have to be significantly improved if they are to maximize their potential to attract investment. While there are planned investments for upgrading the current water and power infrastructure throughout WBG, the existing situation, with inadequate power infrastructure throughout the West Bank and Gaza Strip and the high tariff rates for electricity at the GIE, would be disadvantages for the industrial estates. Instead, the industrial estates must ensure reliable electricity and water supplies at concessionary tariff rates, closer to international standard rates.

In terms of telecommunications, while PALTEL maintains its monopoly over regular and cellular services, the construction and operation of satellite communication services are open to potential competitors. An on-site teleport at the KTDC, which aims to attract information technology industries, would be essential to ensure the required access to high-quality data and voice

communications (which would not compete with PALTEL's services outside the park). While the Ministry is unlikely to yield its right to regulate pricing of all regular telecommunication services in WBG, the Ministry would need to give a freer-hand to a KTDC-based teleport operator, particularly in terms of pricing, in order to ensure access to competitively priced, quality telecommunications.

---

**3.10 Land and Building**

The provision of fully serviced industrial estates can provide a strong incentive to investors, reducing the time and effort required to establish a physical presence and providing cost savings through various incentive schemes, and in some cases concessionary land and building lease rates.

As the GIE is the only industrial estate in operations, land and building costs in the other six locations are based on data collected for existing commercial and industrial zones in each of the districts, which provide an indication of the existing real estate market in the West Bank and the Gaza Strip. Overall, land and building lease rates are relatively high in the West Bank and the Gaza Strip when compared to alternative investment locations in the region (see Figures 3.7, 3.8, and 3.9).

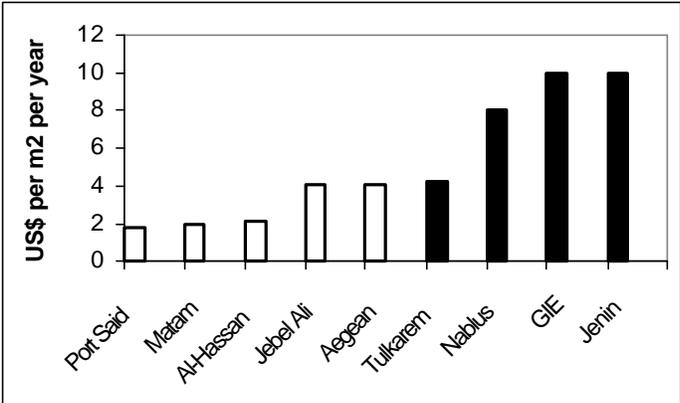
The lease rates for serviced land in the West Bank and Gaza Strip are, on average, between US\$8.00 to US\$10.00 per square meter per year.<sup>16</sup> These rates are significantly higher than all the other locations in the region.<sup>17</sup> Serviced land is approximately one-half the price in the Jebel Ali and Aegean free zones and one-quarter the price in Port Said, Al-Hassan, and Matam. However, construction costs in the West Bank and Gaza Strip are competitive with the other regions under evaluation, ranging from US\$150 to US\$250 per m2 for factory space, comparable to average rates in Matam (US\$200 per m2), Al-Hassan (US\$220 per m2) and Jebel Ali (US\$175 per m2).

---

<sup>16</sup> Land and building rates in the West Bank and Gaza Strip are based on data collected by Mr. Al-Someida Abbas, Director of Industrial Zones, PIEFZA

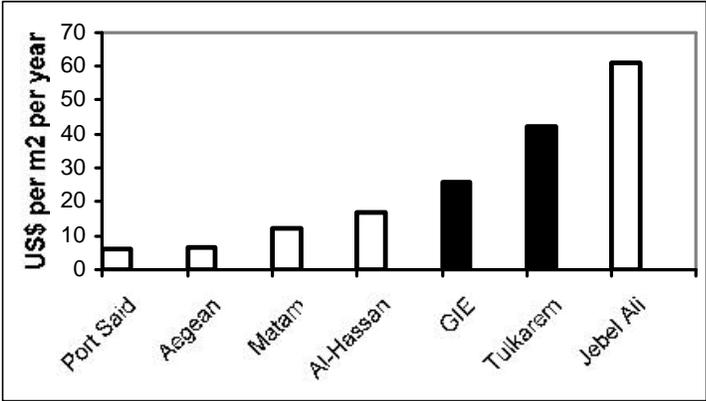
<sup>17</sup> Land and building costs collected by TSG from relevant promotional agencies and other published data.

Figure 3.7: Average Cost of Serviced Land



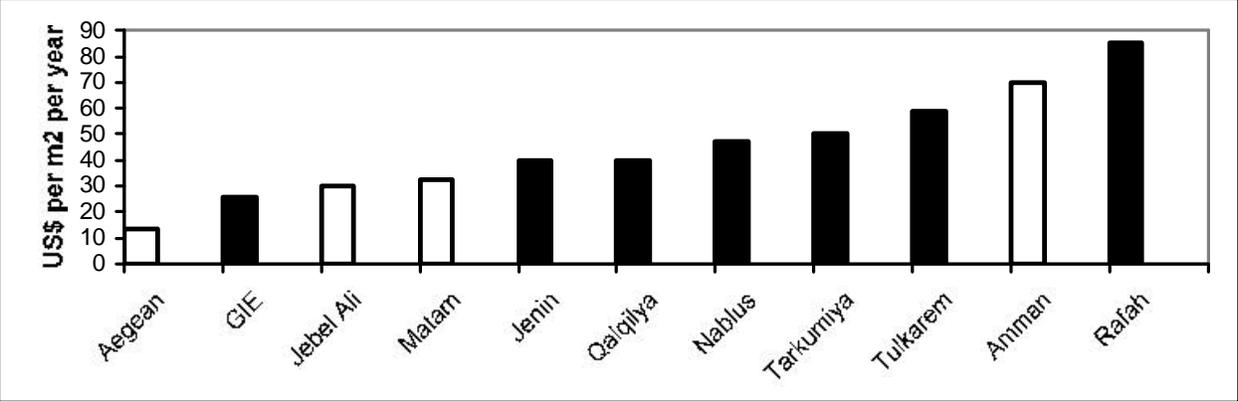
The lease rates for standard factory shells and office space are also relatively high in the West Bank and Gaza Strip (despite competitive construction costs), compared to many of the other locations under evaluation, where leases are offered at concessionary rates. In the districts under evaluation, factory lease rates range from US\$26 per m2 per annum (GIE) to US\$42 per m2 per annum (Tulkarem district), compared to an average US\$19 in Al-Hassan, US\$12 in Matam, US\$6.50 in the Aegean Free Zone, and a low US\$6 in Port Said. Only in Jebel Ali is factory space more expensive, where lease rates average US\$61 per square meter per annum.

Figure 3.8: Average Cost of Manufacturing Space



Office leases rates in the West Bank and Gaza Strip range from US\$26 per m2 per year in the GIE to US\$50 per m2 per year in Tarkumiya to US\$85 in Rafah. With the exception of the GIE, office lease rate are significantly higher in the West Bank and Gaza Strip than in all the other locations, with the exception of Amman.<sup>18</sup> In Matam Park, lease rates range from US\$20 to US\$45 per square meter per annum; in Jebel Ali, office space rents for US\$30 per square meter per year; the Aegean Free Zone, the average lease rate is US\$13.50 per square meter per year. Only in central Amman are lease rates higher than most West Bank and Gaza Strip locations, where average annual rental rates are US\$70 per square meter.

Figure 3.9: Average Cost of Office Space



**Implications for Investment** The prospect of high cost of land and building leases in the West Bank and Gaza Strip industrial estates, based on existing rates in the GIE and other districts, can discourage investment, particularly from small, local investors. In order to maximize potential investment into the industrial estates, land and buildings will need to be more competitively priced, in line with alternative locations in the region.

<sup>18</sup> In Amman, office lease rates are based on average rates in central Amman.

### **3.11 Access to Capital**

Since 1993, the Palestinian banking system has grown rapidly, albeit from a very low base. In 1993, WBG hosted 13 bank branches. By the beginning of 1998, that number increased to 89. As of December 1998, the Palestinian banking system attracted US\$2.4 billion in deposits, up from US\$219 million in 1993.

While deposits have grown substantially, the volume of Palestinian bank lending remains comparatively low. While the Loan/deposit ratio for the banking sector has been increasing, it reached only 32 percent by 1998. Over half of this loan volume consists of short-term overdraft facilities.<sup>19</sup> With such limited loan volumes and conservative lending approaches, the local banking system will remain a limited of funding for the industrial estates and their tenants.

The small Nablus stock exchange represents some opportunities for financing the industrial estates and their tenants. As of July 1999, 19 companies with a total market capitalization of US\$ 816 million were listed on the exchange. This market capitalization is dominated by financial services (12 percent), tourism and other services (55 percent) and general investment companies (29 percent).<sup>20</sup> Some of WBG's largest companies, including PADICO and PALTEL, have used the stock exchange to issue partial floats.

In terms of multinational investment, project financing Project finance is available to U.S. investors from several U.S. government agencies, including the Overseas Private Investment Corporation (OPIC), The Export-Import Bank (EXIM), and the Trade and Development Administration (TDA). The World Bank's International Finance Corporation (IFC) and the European Union's local development banks and credit agencies also provide project finance. Loans from the latter generally go to local Palestinian companies or to firms with a connection to European companies.

Private sector investment in WBG continues to be dominated by diversified investment holding companies, led by PADICO. These holding companies are large and diversified enough to take on significant debt financing. PADICO's involvement in the development of the GIE through PIEDCO is a concrete example of

---

<sup>19</sup> Palestine Monetary Authority statistics.

<sup>20</sup> Palestine Security Exchange statistics.

how these holding companies can participate in development of the new industrial estate program.

A real opportunity for at least partially funding technology-oriented projects exists in the thriving Israeli IT venture capital industry. By the beginning of 1998, the industry's 81 funds raised over US\$ 2 billion, of which 57% was invested, primarily in software, telecommunications, and computers and electronics. As the industry has matured, funds are increasing in size, and links with U.S. and European venture capital funds are becoming more common. Some of the major funds (i.e. Star, Polaris, and Gemini) manage between US\$150-250 million in capital. While these VC funds have not yet been major investors in WBGs, their focus on the Israeli IT sector suggests that VC funding may well be available for Israeli IT companies looking to move into WBGs. The Peace Technology Fund, with US\$60 million in capital, is pursuing investment opportunities in WBGs, and has already invested in PALTEL.

---

*Implications for Investment* For multinational corporations, numerous opportunities exist for project financing. The local financial sector in WBGs, though in its nascent stages, can provide some opportunities for project financing to local Palestinian companies, primarily through the local stock exchange and the large holding companies, such as PADICO, that have the necessary capital. WBGs's proximity to the booming Israeli venture capital market, and its long-time links with Israeli industry, can promote investment, particularly in the technology-oriented sectors.

---

**3.12 Conclusion**

The foregoing sections, through a comparative analysis, focused on a number of factors that generally shape the site-selection decisions of investors. The result is a clear picture of the West Bank and Gaza Strip's advantages and disadvantages as a potential investment center.

The preceding analysis evaluated each selected factor independently and on a cross-sectoral basis. The following sections provide a summary of the results of this analysis, and also put these factors in a context that illuminates the West Bank and Gaza Strip's potential to attract investment into broad industry categories, given its advantages and disadvantages.

*Overview* The GIE and other planned industrial estates in the West Bank and Gaza Strip possess several characteristics that make them particularly attractive sites for potential investors. Table 3.8 provides a summary, factor-by-factor, of the WBGs’s competitive position, relative to the selected comparator locations in the Middle East region.

**Table 3.8: GIE and Planned Industrial Estates: Comparative Benchmarking Summary**

COMPETITIVE	UNCOMPETITIVE
<ul style="list-style-type: none"> <li>▪ <b>Preferential market access</b> to U.S., Europe and region, though access shared by others as well</li> <li>▪ <b>Availability of high-skilled, productive workforce</b> – more productive than Egypt, Jordan, Turkey and Dubai</li> <li>▪ <b>High-skilled labor costs</b> – competitive with others in region</li> <li>▪ <b>Investment Incentives</b> competitive with Jordan, Egypt and Israel, but less favourable than Turkey and Jebel Ali</li> <li>▪ <b>Port Infrastructure and Facilities (Haifa &amp; Ashdod)</b> – high quality comparable with others in region</li> <li>▪ <b>Airport Infrastructure and Facilities (Ben Gurion)</b> – high quality comparable with others in region</li> <li>▪ <b>Power Infrastructure (thru Israeli grid)</b> – high quality comparable with others in region</li> <li>▪ <b>Telecommunications Infrastructure</b> on par with Egypt and Jordan, though not competitive with Israel</li> <li>▪ <b>Financial Sector</b> – potential access to capital markets is growing but not competitive with Israel</li> <li>▪ <b>Sea Transport Costs</b> among lowest in region</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Political Risk</b> – higher perceived risk than others in region due to uncertain political status</li> <li>▪ <b>Import/Export Procedures</b> – longer delays than others in region</li> <li>▪ <b>Lower-skilled labor costs</b> – though lower than Israel and Turkey, significantly higher than Egypt and Jordan</li> <li>▪ <b>Water Infrastructure</b> – water shortages shared by Israel and Jordan</li> <li>▪ <b>Cost of Water</b> higher than all other locations, except Jordan</li> <li>▪ <b>Cost of Electricity</b> higher than other locations</li> <li>▪ <b>Costs of Telecommunications</b> higher than others for advanced services</li> <li>▪ <b>Air Transport Costs</b> higher than Jordan, Egypt and Dubai</li> <li>▪ <b>Land and Building Costs</b> higher than Israel, Jordan, Egypt and Turkey</li> </ul>

Given WBG's comparative advantages and disadvantages, industry targeting should focus on those sectors that can take advantage of one or more of the following attributes:

- **Preferential access to key export markets.** WBG benefits from preferential *market access* to U.S., European, and regional markets, including Israel, making it a promising platform for export-oriented industries.
- **Competition based on quality more than cost.** Competition in the marketplace is driven by both *quality* and cost, to varying degrees, depending on the product. Given the relatively high factor costs in WBG, industry targeting should focus on those niche product categories that compete more on quality than cost. In general, the more differentiated the product, the more it tends to compete on quality rather than cost.
- **A high proportion of skilled labor.** A focus on niche industries producing higher quality, differentiated products, in turn, points to the need to focus on industries utilizing a relatively high proportion of skilled labor. In addition, wage rates in the higher skilled labor categories are more competitive with others in the region.
- **WBG linkages with Israeli industry.** WBG has the unique advantage, vis-à-vis lower-cost production centers such as Egypt and Jordan, of direct participation in and *experience with a dynamic and modern industrial base*. Many WBG workers have been trained in Israeli industry and have been exposed to higher levels of technology and industry requirements. WBG can take advantage of its historical ties to Israeli industry to forge links with industry across the Green Line, including both Israeli companies and Israel-based multinationals.
- **Do not depend on rapid transportation by sea.** Given the present delays associated with importing and exporting, in the short-term, the WBG will not be able to meet the requirements of just-in-time production or other industries that depend on the efficient movement of goods, particularly those dependent on sea transport. While there is potential in the short-term that Rafah's air cargo facilities will become operational, the lack of a seaport will be an ongoing

impediment. Therefore, industry targeting should focus on those niche activities that *do not depend on the timely movement of goods via sea transportation* for success.

---

*Implications for Industry Targeting*

The above analysis points to particular types of niche activities that should be the focus of the industry targeting analysis. The following provides an overview of the implications for three broad industry categories: light industry, professional services and location-based services.

Light Manufacturing

Light manufacturing includes industries such as apparel, electronics, food processing, plastic packaging, and furniture. The GIE and other planned industrial estates in the West Bank and Gaza Strip possess several locational advantages that make them potential platforms for light manufacturing, including preferential access to key export markets and a productive labor force with industry experience.

However, several disadvantages in the WBGS, particularly high production costs, can negatively impact on the bottom-line, particularly in lower quality, commodity-style products, where market competition is based primarily on price. In addition, the difficulties associated with the import and export of goods from the WBGS can negatively impact the attractiveness of industrial estates in the West Bank or the Gaza Strip, such as those that depend on the efficient movement of goods by sea, for instance “just-in-time” manufacturing.

Therefore, industry targeting should focus more on differentiated, higher quality products that take advantage of local skilled labor and industry experience, including ties to the Israeli market. Examples include higher-end apparel manufacturing and finished consumer electronics and electrical appliances for the regional market.

Professional Services

Professional services include the information technology related sectors, such as software development, call center and help desk services, and data conversion. The primary factor driving investment in the professional services industries is the availability of high-skilled labor. The WBGS can provide access to a skilled and trainable workforce, including engineers and technicians. As other locations, such as Egypt and Jordan, can offer lower cost engineers and technicians, industry targeting should focus on

those niche activities that can take advantage of the WBG's proximity to the high-technology cluster in Israel and its long-standing links to Israeli industry. Potential niche activities include "offshore" software conversion and customization, vector conversion, and technical help desk services.

Location-based Services

Location-based services, such as logistics and warehousing and are largely demand-driven. However, other factors can impact on investment, such as the availability of good quality transportation infrastructure, as well as the timely movement of goods. The absence of a seaport in WBG eliminates, in the short-run, the potential for large-scale warehousing and logistics, as such operations are located at the existing ports in Israel. However, provided that the Rafah airport cargo facilities will become operational in the near future, new opportunities can emerge for small-scale location-based services, such as logistics handling for cut flowers and other products that can be transported via air.

## **4. Industry Pre-Screening**

---

### **4.1 Overview**

The following sections present the results of the first steps of the industry targeting process. The first section presents the “Universe of Activities” that was defined for WBG and the results of the pre-screening process.

---

### **4.2 Universe of Activities**

This mission initiated with a “brainstorming” session on September 4, 1999, between TSG consultants and PIEFZA management and staff, in order to define a broad list of industries to be evaluated for investment promotion into the WBG industrial estates. The finalization of this list was based on local industry structure and trends and the input provided by PIEFZA management and staff.

Following is the list of industries selected for evaluation:

- Apparel
  - Bamboo Furniture
  - Call Centers
  - Consumer Electronics and Electrical Appliances
  - Cut Flowers
  - Data Conversion
  - Dead Sea Mineral-based Cosmetics
  - Handicrafts
  - Olive Oil Processing and Related Products
  - Plastic Products
  - Software Development
  - Stone and Marble
- 

### **4.3 Industry Pre-Screening**

The pre-screening process provides a broad level of analysis designed to focus the list of industry sectors for detailed analysis. The pre-screening process uses a broad range of criteria to eliminate less favorable sectors from the screening process and to provide focus to the list of industries selected for further analysis.

The selection process is based on the following factors:

- Current industry activity, which identifies those activities that display an upward growth trend in WBG and/or Israel, recent
-

inward investment activity, and/or possible industrial linkages with WBGs- or Israel-based industries; and

- International investment trends in similar industrial estates within the region and around the world.

The list was further validated by discussions with local industries for expansion into horizontal and vertical linkages to other industries. Private sector, industry-specific input has provided the necessary insight in factors that most significantly contribute to location decision-making. This has allowed the team to determine industries for which the WBGs industrial estates appear to be promising investment locations.

Following is a brief overview of the results of the pre-screening process.

---

*Sectors Selected for Further Analysis*

Apparel	The selection of the apparel industry was selected for further analysis based on three key factors. First, WBGs has a substantial apparel industry in both the West Bank and the Gaza Strip, together comprising close to 1,000 enterprises and employing more than 6,500 workers, making the industry a substantial contributor to WBGs’s industrial sector. Second, this industry has long ties with Israeli industry, providing it with the opportunity to forge new partnerships. Thirdly, the apparel sector is very active in terms of cross-border investments and a leading sector in many industrial estates worldwide. However, the existing wage structure in WBGs, which is relatively expensive vis-à-vis low-cost apparel manufacturers in Southeast and South Asia, indicates that the focus should be on higher-value added product categories.
Call Centers	The Call Center sector - which includes inbound/outbound telemarketing, answering services, and help desk services – was selected for further analysis based on three key factors. There is growing demand in the region, particularly in Israel, for such activities, either through specialized “in-house” facilities or outsourcing to a third party service provider. In addition, this sector has figured prominently in the growth of many technology parks and/or corridors in both developing and developed

countries, including Jamaica, Ireland, India, and many regions of the U.S. While this sector is virtually non-existent in the Palestinian Territories at present, there is growing demand in Arab-speaking regions throughout the Middle East.

Consumer Electronics and Electrical Appliances	The selection of the Electronics and Electrical Appliances sector for further analysis was based on a number of key factors, including local industry presence, the availability of human resources, and potential for import substitution on a regional basis. Between 1994 and 1997, the number of local establishments engaged in this sector grew from 321 to 408, while the number of qualified graduates, including both engineers and technicians continues to expand. Furthermore, while the Middle East region is currently a net importer of these products, recent investments by multinationals in the region indicate the potential for establishing “point-of-sale” production facilities to serve the Middle East market.
Cut Flowers	The Cut Flower industry has been selected for further analysis, as it is an emerging industry in the Gaza Strip. Established in 1990 to replace citrus crops, it has grown significantly. By 1996, the industry utilized more than 700 donums, with annual production reaching more than 70 million stems, virtually all being exported to European markets. Between 1992 and 1996, year-on-year growth, in terms of land under cultivation, has been approximately 100 percent. However, given the large quantity of land required for flower growing, and the inability of the industrial estates to meet industry needs, the analysis will focus on the potential to establish downstream industries, including the establishment of specialized packaging and freight forwarding facilities.
Data Conversion	The Data Conversion sector was selected based on several key factors, including the growing potential in the region, particularly Israel, for outsourcing back office activities to third party service providers – a trend that is widespread in the United States and Europe. In addition, this sector has figured prominently in the growth of many technology parks in developing countries, including Barbados, Mauritius, and India. While this sector is in its nascent stages in the Palestinian Territories, there is evidence of growing demand by Arabic speakers in both Palestine and Israel

for both basic data entry and digitization, as well as vectorization, services.

Olive Oil Processing and Related Products

Olive Oil Processing was selected for further analysis based on three key factors. First, olives are one of Palestine’s few natural resources that can be exploited for industrial development. Second, the olive oil sector is an important industry sector in the context of the WBG economy, with approximately 250 establishments and almost 1,700 people employed on the processing side. Third, food processing industries have figured prominently in the development of industrial estates worldwide, particularly in emerging economies.

Plastic Products

The Plastics sector was selected for further analysis based on three key factors. First, WBG has a well-established plastics industry, which specializes in the production of construction materials, household products, and packaging materials for the agriculture industry. In 1997, there were a total of 144 establishments in the WBG, which employed more than 1,000 workers. Second, the local workforce has long ties to Israeli industry, which provides the industry with the opportunity to exploit its experience. However, given the limited range of products currently produced in the WBG, the analysis will focus on the potential to attract investment in those specific product categories, namely construction materials, household products, and packaging materials.

Software Development

The Software Development sector was selected based on the growing number of computer science graduates from Palestinian universities and the increasing presence of computer-related enterprises in Palestine, which grew from 25 establishments in 1994 to 62 in 1997, with the majority (41) located in the West Bank. Furthermore, the Tulkarem site is located in close proximity to the booming Tel Aviv-Haifa IT-corridor across the Green Line, a dynamic environment with potential spill over effects for the KTDC and Palestine, which is evidenced by recent investments into the territory by several Israel-based companies. In general, the information technology sector has proved to be a successful industry for technology park and TDC project promotion in other locations, both in the region and beyond, including Israel, Turkey, Thailand, and India.

Stone and Marble      The Stone and Marble Cutting and Finishing sector has been selected for further analysis based on two main factors. First, it is WBGS's single most promising natural resource base, in terms of industrial development. Second, the cutting and finishing industry is the WBGS's largest contributor to the industrial sector, both in terms of output and employment. The cutting and finishing industry is made up of approximately 900 workshops, which are supplied by approximately 250 quarries. Employment in the industry is more than 10,000.

---

*Sectors Excluded from Further Analysis*

Bamboo Furniture      The Bamboo Furniture industry has been excluded from further analysis based on several factors. Most important, bamboo furniture is typically produced in the same location in which the raw material is sourced. Malaysia, Indonesia and China are leading producers, all of which have a significant cost advantage over WBGS. Based on industry interviews the small size of the local industry in WBGS and limited worker experience restrict the scope for further industry development. Lastly, cross-border investment flows in this niche sector are very small and limited to bamboo-producing regions. Overall, the potential to attract foreign investment in this sector is extremely limited.

Dead Sea Mineral-based Cosmetics      The Dead Sea Mineral sector has been excluded from further analysis based on two key factors. First, while the WBGS has permission to mine Dead Sea materials, including mud and salt, direct access to the Dead Sea is currently limited by the Israeli authorities. Dependence on Israeli sources for raw material inputs would limit the industry's appeal. Second, the majority of raw materials are exported with minimal processing (in the form of bath salts and mud treatments), further limiting the potential for value-added processing in the WBGS. While there may be potential for Israeli producers to shift production to WBGS, in order to take advantage of lower wages, the lack of local industry experience would limited Palestinian participation to lower-skilled, and therefore, lower value-added activities – activities in which WBGS would find it difficult to compete with lower-cost Jordanian labor.

Handicrafts

The handicrafts industry – which includes the production of olive wood figurines, glass figurines, mother-of-pearl ornaments, and ceramics – has been excluded from further analysis for several reasons. While these sub-sectors are all active in the WBG market, the potential for foreign investment is limited. With the exception of the olive wood, none of the raw materials are sourced locally, which can significantly raise production costs. In addition, the handcraft industries are, by definition, indigenous traditional industries. Manual labor, with limited use of basic machinery, is the main production process. These are aspects that provide their products with consumer appeal that cannot be duplicated by foreign investors. Nevertheless, these sectors may attract a limited number of small-scale investments in light of the upcoming Bethlehem 2000 activities, which would provide an unparalleled, but potentially one-off, marketing opportunity.

## **5. Apparel Manufacturing**

---

### **5.1 Industry Definition**

This chapter focuses on the potential to attract apparel manufacturing to the WBG industrial estates. The apparel industry is generally sub-divided into two categories: mass-market products and high value-added products - each with a different overall factor input mix and pricing structure, as well as different consumer markets. As a result, location decisions tend to differ between manufacturers in the two categories.

- Manufacturers in mass-market, commodity-like products – such as t-shirts, underwear, and other low-value items – compete primarily in terms of price and depend on labor-intensive production methods. In order to survive in world markets, their number one location factor is access to extremely low-cost labor. Mass-market apparel manufacturers generally locate in developing, “Third World” economies, such as South and Southeast Asia.
  
- Manufacturers of high value-added apparel - such as men's suits, women's lingerie, and more fashion-sensitive items - is instead governed by a different set of criteria. Unlike mass-market products, labor costs compose only a small portion of the product price in this market segment. While labor costs may have some influence on location decisions, other factors tend to outweigh the total cost of labor. Other factors include labor quality, proximity to destination markets (for just-in-time sourcing), access to more skilled labor, production quality, and access to preferential trade terms. Value-added apparel manufacturers generally locate in advanced economies and as well as a number of middle-income, emerging economies.

Given the level of income, and concomitant wage structures in WBG, the Palestinian industrial estates must compete for investment in the latter category. Therefore, the remainder of this chapter focuses exclusively on the potential to attract investment in higher value-added market segments of the apparel industry.

**5.2 Comparative Advantage**

The following section examines the match between the factor requirements for the high value-added apparel industry and the location attributes of the GIE and the six proposed industrial estates in the West Bank and the Gaza Strip. As demonstrated in Table 5.1, The industrial estates will provide a promising location, in terms of its attributes, for investment in this sector. The following sections focus on those factors that are most important for the site selection for apparel manufacturers, including access to labor, proximity to markets, access to markets, transportation, and labor costs.

---

*Human Resources*

Availability of Labor

While the high value-added segments of the apparel sector are relatively less labor-intensive than in mass-market, low value-added production segments, access to a higher skilled workforce with experience in the use of more sophisticated capital equipment is a critical factor for investment. The Palestinian apparel workforce has long ties and direct experience with Israeli manufacturing technologies, which tend to be more capital-intensive than those in use by the indigenous apparel industry. According to an UNIDO study on productivity levels, Palestinian workers tend to be more productive than their neighbors in Jordan and Egypt, second only to Israel in the Middle East region – a direct result of WBG’s experience in Israeli industry.

In terms of geographical distribution, most of the Palestinian garment industry is concentrated in the Gaza Strip and the border areas of the northern districts of the West Bank, including Nablus, Tulkarem, Jenin, and Qalqilya. More than 40 percent of the apparel manufacturing establishments and employment are located in the Gaza Strip; an equal proportion is distributed among the West Bank’s northern districts. These concentrations reflect the long ties to Israeli manufacturers, primarily through sub-contracting arrangements, which required easy communications and fast delivery of raw materials and end products.

WBG’s qualified and productive workforce will be a significant advantage in attracting apparel manufacturers. The long-standing relationship with Israeli industry can provide an added advantage unmatched by any other economy in the region.

**Table 5.1: Demand Profile for Apparel Manufacturing**

Factor	Industry Requirements	Location Attributes		Comparative Advantage or Disadvantage
		West Bank	Gaza Strip	
<b>CRITICAL FACTORS</b>				
Labor Availability	Trained production workers, with experience with more capital-intensive production methods	Large supply of experienced garment workers, many with experience in more capital-intensive production methods	Large supply of experienced garment workers, many with experience in more capital-intensive production methods	Advantage
Proximity to Markets	Proximity to U.S. and European markets	Located in close proximity to European markets	Located in close proximity to European markets	Advantage for European markets
Access to Markets	Require access to export markets	Preferential access to leading regional and international export markets	Preferential access to leading regional and international export markets	Advantage
<b>VERY IMPORTANT FACTORS</b>				
Transportation	Low-cost, timely sea transport of incoming materials and outgoing final products is required for time-sensitive niche product categories	Delays in importing and exporting, as well as added costs for security checks required by Israel	Delays in importing and exporting, as well as added costs for security checks required by Israel	Disadvantage for time-sensitive products
Labor Costs	Important – need to be competitive with alternative production locations	Relatively cost competitive vis-à-vis Middle East locations	Relatively cost competitive vis-à-vis Middle East locations	Advantage
<b>IMPORTANT FACTORS</b>				
Investment Incentives	Favorable package of incentives desirable	Industrial estate tenants receive favorable package of tax incentives	Industrial estate tenants receive favorable package of tax incentives	Advantage

Factor	Industry Requirements	Location Attributes		Comparative Advantage or Disadvantage
		West Bank	Gaza Strip	
Power Infrastructure and Costs	Reliable, relatively low-cost power supply required	Possible to provide reliable power supply, but at higher cost than others in region	Possible to provide reliable power supply, but at higher cost than others in region	Disadvantage
Land/building Costs	Desirable to have access to serviced land or ready-built facilities at low cost	Industrial estates provide land and ready-built facilities, but at relatively high cost	Industrial estates provide land and ready-built facilities, but at relatively high cost	Disadvantage
<b>LESS IMPORTANT FACTORS</b>				
Access to Capital	Not very important	-----	-----	-----
Telecoms Infrastructure and Costs	Not very important	-----	-----	-----
Water Infrastructure and Costs	Not very important	-----	-----	-----
<b>OVERALL</b>				Advantage

Labor Costs

While competition in the high value-added segments of the apparel industry focuses more on quality than in the mass-market segments, production costs, including labor, remain an important factor in the site selection process. WBG's wage structure is far lower than Israel's, but somewhat higher than in alternative production locations in the region, including Egypt and Jordan (see Table 5.2 below). In addition, semi-skilled wage rates are substantially higher than in South and Southeast Asia – locations that are moving up from mass-market production to the higher value-added segments of the apparel industry. At face value, these higher labor costs in WBG could prove to be a disadvantage. However, WBG's higher levels of productivity and experience more than mitigate these higher labor costs.



**Table 5.2: Comparative Average Wage Rates in Apparel Industry (US\$ per month, unburdened)**

	<b>Egypt</b>	<b>Jordan</b>	<b>WBGs</b>	<b>Israel</b>
Unskilled	80	140	<b>200</b>	650
Semi-Skilled	100	200	<b>300</b>	1,000
Skilled	250	500	<b>400</b>	1,500

Sources: MOPIC, *Building Competitive Advantage in the Palestinian Economy: Garment Industry Cluster*, 1998 and TSG industry surveys.

---

*Proximity and Transportation to Markets*

Proximity and efficient transportation to key export markets are important factors in the location decisions of apparel manufacturers, particularly those operating in the higher value-added segments, where “just-in-time” delivery is required to meet the demands of fast-changing market demands. This is most important for the more fashion-sensitive market segments, such as men’s and women’s couture fashion.

While WBGs is located in close proximity to European markets, its ability to exploit this advantage is hampered by the current transportation situation. While the cost of transportation is relatively competitive, importers and exporters sometimes experience long delays due to the security requirements of the Israeli authorities. With the growing demand for just-in-time delivery, any import and/or export delays can reduce the competitiveness of the industrial estates as platforms for the manufacture of goods. Given these constraints, WBGs should focus, in the short-term (until such constraints are removed), on those segments of the apparel industry that are less dependent on rapid delivery, such as women’s lingerie and brassieres, men’s wear, and baby and children’s wear.

---

*Access to Markets*

The apparel industry – both mass-market and value-added segments – are highly dependent on access to export markets, primarily the United States and Europe. Mass-market segments, with their low capital investment, are very mobile, often leading to “quota-hopping” as manufacturers compete to acquire access to quotas for export to U.S. and European markets. While value-added apparel manufacturers tend to be less mobile, given their higher investments in capital, preferential access to key export markets still play an important role in the site selection process. In

a sense, it is even more important. Investors with larger capital investments would prefer to have a more stable trade environment, such as preferential duties, than the ever-changing rations of quotas, which often require re-location or “quota-hopping” and are due to be phased out, in any case, by 2004.

WBG's preferential trade agreements with the United States, Europe and Israel provide it with a favorable trade environment for apparel manufacturers. However, WBG shares many of the benefits with alternative investment locations in the region. Both Israel and Jordan, through the Qualifying Industrial Zone program, duty-free access to the United States. Turkey, Jordan and Egypt all share with WBG the existing benefits offered through the Euro-Med Partnership Agreements. While some of the other countries share WBG's access to selected markets, only WBG can offer simultaneously duty-free access to such a wide range of markets.

---

*Summary of Comparative Advantage*

In terms of overall industry requirements, the industrial estates – particularly those located in the Gaza Strip and the northern districts of the West Bank (Nablus, Tulkarem, Jenin and Qalqilya) – can provide a favorable environment for high value-added apparel manufacturing, including:

- Highly experienced and productive workforce at competitive salary rates (vis-à-vis alternative locations in region, adjusted for productivity levels)
- Preferential access to key export markets in region and internationally; and
- Proximity to European markets.

---

**5.3 Competitive Advantage** The following sections evaluate the regional and international competitive market trends in the apparel industry.

---

*Local Industry Profile*

The apparel sector is one of WBG's largest industrial sectors, accounting for approximately 18 percent of all manufacturing establishments and almost 30 percent of all manufacturing employment in 1997. In terms of growth, between 1994 and 1997, the number of establishments grew 58 percent, from 1,655 to

more than 2,600; over the same period, employment grew substantially as well - 40 percent, from 12,300 in 1994 to 17,325 in 1997.

The apparel sector, as discussed in the previous section, is concentrated in two large areas – the Gaza Strip and the northern districts of the West Bank (Nablus, Tulkarem, Jenin and Qalqilya). More than 40 percent of the apparel manufacturing establishments and employment are located in the Gaza Strip; an equal proportion is distributed among the West Bank's northern districts. These two concentrations reflect the long ties to Israeli manufacturers, primarily through sub-contracting arrangements, which required easy communications and fast delivery of raw materials and end products between Israeli producers and Palestinian subcontractors. The majority of Palestinian apparel manufacturers operate – at least in part – as sub-contractors to Israeli companies. Some sources estimate that up to 90 percent of the garment workshops operate as subcontractors.<sup>1</sup> Most of these subcontracting arrangements have limited Palestinian contribution to the overall production process to, primarily, sewing and some finishing and packaging, while Israeli contracting companies carried out the higher value-added activities, such as cutting and marketing.

In terms of technology, for the most part Palestinian companies continue to rely on traditional production methods, *i.e.* electric sewing machines. A small number have introduced computer-aided production methods, for example:

- ABACO, a joint venture established with ex-patriate capital, uses computer-aided equipment to produce jeans.
- Alhuda Textile Factory, a local company in Nablus, uses computer-aided design and computer-aided flat knitting machines to produce casual knitwear.
- Farrah Brothers Company, a local company established in Ramallah, uses computer-aided embroidery machines in the production of children's wear.

---

<sup>1</sup> Textile and Garment Association in the West Bank; and Development Resource Center (DRC), Garment Industry in the Gaza Strip. Extracted from Nasr, Mohamed, *The Impact of the Peace Process on the Textile and Garment Industry in Palestine*, November 1997.

These companies are amongst the leading apparel manufacturers in WBGs. Their incorporation of computer-aided design and manufacturing, thereby introducing a higher capital-labor ratio, demonstrates that the greatest potential for investment in the apparel sector are in those product categories that can effectively utilize a higher degree of capital intensity.

---

*Regional and International Market Trends*

Israel *From subcontracting to joint ventures.* The Israeli apparel market is estimated to be US\$ 1.3 billion, with US\$650 million, approximately half of output, destined to world export markets.<sup>2</sup> These exports are, for the most part, under contract by U.S. and European apparel manufacturers, much of which has been sub-contracted to Palestinian workshops, as discussed above. According to the Statistical Abstract of Israel, in 1997, there were over 1,500 established apparel manufacturers with more than 20,000 employees in the industry.

Since the early 1990s, competition in the Israeli and regional apparel markets has increased due to lowering of customs barriers and increasing accessibility for others to the European and North American markets. In addition, labor costs in the Israeli apparel industry continue to rise. Traditionally, minimum wage industries, such as apparel manufacturing, were located in developing towns where large government financial incentives were available. Today, the industry is now relocating its manufacturing facilities to neighboring countries (WBGs, Turkey, Egypt and Jordan) in order to meet the increasing international competition from the low-wage producers.

While wages are somewhat lower in Jordan and Egypt, as outlined in the previous section, Palestinian productivity levels tend to be substantially higher, thereby mitigating the higher labor costs.

The Palestinian industrial estates have the opportunity to build on the local apparel sector's long-standing relationship with Israeli industry to forge new relationships, such as joint ventures,

---

<sup>2</sup> Israel - The Apparel Market 1999, U.S. International Trade Administration Report

enabling local industry to move from subcontracting to partnerships, where full production – from design and cutting to finishing – is carried out by the WBG-based joint venture.

*Niche product categories for investment.* The specific niche sectors that demonstrate the greatest potential for Israeli-Palestinian joint ventures are those high-value-added product areas where Israel already has a relatively high volume of exports. Following are the identified product categories:

- Men’s or boys’ trousers of woven textile fabrics;
- Men’s or boy’s shirts of woven textile fabrics;
- Women’s or girls’ trousers of woven textile fabrics;
- Women’s or girls’ blouses of knitted or crocheted textile fabrics;
- Women’s or girls’ lingerie, brassieres, panties, etc. of woven, knitted or crocheted textile fabrics; and
- Sweaters, knitted or crocheted.

International

*Developed countries lead high-end apparel imports.* The major world markets for higher-end apparel products are the developed countries, led by Europe, the United States, and Japan, which together accounted for 85 percent of total reported world imports, approximately US\$155 billion, of apparel in 1996.

*U.S. apparel imports primarily from Latin America and East Asia.* The United States imports the majority of its apparel from three main regions: Mexico and the Caribbean, Asia, and Europe. While Mexico and the Caribbean are largely focused on the production of mass-market products, both Europe and, increasingly, East Asia (see section below) are sources for higher-end apparel. Countries in both of these regions would greatly benefit from WBG’s duty-free access to the United States. The following two sections outline the potential for the Palestinian industrial estates to attract investment from these markets.

*East Asia moves toward increased access to export markets.* China, Hong Kong, Korea and Taiwan lead the world in the manufacture and export of apparel. While in the past the latter

three countries focused almost exclusively on mass-market apparel, they are increasingly shifting towards higher-end market segments, as China and South Asia continue to absorb mass-market apparel investments. At the same time, Hong Kong-, Korea, and Taiwan-based investors have set up factories in Western Europe, the United States and Canada to gain better access to these markets.

WBG's preferential access to the United States and Europe, two of the key export markets for high-end apparel, provide it with a favorable factor for investment by apparel manufacturers. In addition, WBG's proximity to Europe can provide manufacturers an additional incentive, with lower transportation costs than from East Asia.

**Table 5.3: Recent Apparel Investments in the Middle East**

	Investor(s) (Home Country)	Subsector	Investment Type (Year of Formation)	Local Partner(s)
Turkey	VF Corporation (United States)	Blue jeans	Acquisition (1998)	Mavi Ege Soke Giyim Sanayi Ve Ticaret AS Mavi Ege
Egypt	Delta Galil (Israel)	Men's, women's and children's garments	Green field (1997)	
	Dafna Rina (Israel)	Apparel, textiles	Green field (1995)	
	Benetton SpA (Italy)	Apparel	Joint venture (1995)	Egyptian Textiles Industries
Jordan	Delta Galil (Israel)	Garments	Existing investment expansion (1997)	Century Investment Group
	Delta Industries (Israel)	Lingerie, t-shirts, underwear	Joint venture (1996): Century Wear & Bra	Century Investment Group
	Polgat (Israel)	Sewing facility	Green field (1996)	
Israel	Beijing Textile (China)	Apparel	Joint venture (1994)	
	Evergreen Canada Investments (Canada)	Baby garments	Equity investment (1994)	Shilav

*European manufacturers shifting production offshore.* The EU apparel sector comprises some 56,300 firms. Italy and the United Kingdom each account for 21 percent of EU apparel employment. Investment in the EU apparel sector is relatively small, totaling \$1.4 billion in 1997, compared with \$6.3 billion in the EU textile sector. In order to lower production costs, outward processing trade (OPT) with the countries of Central and Eastern Europe and the Mediterranean rim more than doubled in value during 1990-97. The apparel manufacturers in North Africa, Middle East, and East European nations not only have comparatively lower production costs, but also have improved quality levels moving beyond low-cost apparel niches and have supplanted Western European producers in the international markets.

Western European, particularly French and Italian companies, are increasingly installing production facilities in Eastern Europe, Portugal, Morocco, Tunisia, and Turkey in order to profit from their comparatively lower production and transportation costs.<sup>3</sup> Following are some such investments:

- The French company Ozona anticipates relocating 60 percent of its manufacturing operations to countries in the regions of the Maghreb and southeastern Asia.
- The Italian firms Belfe, Benetton, and Marzotto are subcontracting the assembly aspect of their production processes to North African nations.<sup>4</sup>

This emerging trend for European apparel manufacturers operating in the high value-added sectors points to WBG's potential in attracting such investments as it possesses the three primary criteria driving such investments: comparatively low wages, skilled labor, and geographic proximity. Niche product categories are the same as those identified for Israeli-Palestinian joint ventures as they are the most promising products for export to the United States and Europe:

---

<sup>3</sup> US: Market Research Report: France: Jeans wear, January 1995.

<sup>4</sup> "International Manufacturing Strategies: Experiences from the Clothing Industry", International Journal of Operations and Production Management, November, 1996.

- Men’s or boys’ trousers of woven textile fabrics;
- Men’s or boy’s shirts of woven textile fabrics;
- Women’s or girls’ trousers of woven textile fabrics;
- Women’s or girls’ blouses of knitted or crocheted textile fabrics;
- Women’s or girls’ lingerie, brassieres, panties, etc. of woven, knitted or crocheted textile fabrics; and
- Sweaters, knitted or crocheted.

---

*Summary of Competitive Advantage*

Competitive market trends in the high-end apparel market indicate that the Palestinian industrial estates would provide a strategic location for investment, as they would provide:

- Proximity and preferential access to key export markets in Europe, as well as preferential access to the United States;
- Lower labor costs vis-à-vis the United States, Europe, and Israel; and
- An experienced and productive workforce.

---

**5.4 Policy Considerations**

The apparel industry meets several of the selected policy objectives, including:

- the potential for employment generation given the sector’s relatively labor-intensive nature;
- the potential for the expansion of exports to leading export markets in North American and Europe; and
- some potential for technology transfer and skills upgrading given focus on more capital-intensive methods of production.

In addition, this sector is environmentally friendly, with low water use and a low production of waste.

---

**5.5 Summary of Promotion Potential**

The Apparel sector is a promising target for investment promotion into the Palestinian industrial estates, with both comparative and competitive trends, as well as policy objectives, in its favor.

---

**5.6 Target Activities and Markets**

Based on the above analysis, the following niche product categories in the high value-added apparel sector demonstrate the greatest advantage for WBG, in terms of both comparative and competitive trends:

- Men’s or boys’ trousers of woven textile fabrics;
- Men’s or boy’s shirts of woven textile fabrics;
- Women’s or girls’ trousers of woven textile fabrics;
- Women’s or girls’ blouses of knitted or crocheted textile fabrics;
- Women’s or girls’ lingerie, brassieres, panties, etc. of woven, knitted or crocheted textile fabrics; and
- Sweaters, knitted or crocheted.

The most promising sources of investment into the industrial estates program include the following:

- Medium- to large-size Israeli apparel manufacturers engaged in the above-listed product categories;
- Medium- to large-size European apparel manufacturers, primarily from Italy, France, and the UK, engaged in the above-listed product categories;
- Medium- to large-size apparel manufacturers in Hong Kong, Korea, and Taiwan, engaged in the above-listed product categories.

---

*Promotion Targets*

Investment targets, including number of projects, employment, and capital investment are based on investments entering the

region and similar investment locations worldwide. The average size of investment will be between US\$1.2 million and US\$1.6 million, with employment ranging from 100 to 120 employees. Table 5.4 below displays the promotion targets, for a three-year period, in the apparel industry.

**Table 5.4: Promotion Targets for the Apparel Sector**

	<b>Promotion Targets</b>
Number of Projects	10-12
Cumulative Investment Value	US\$14.5-17.25 million
Cumulative Employment	1,000-1,200

## 6. Call Centers

---

### 6.1 Industry Definition

Call Centers are facilities that handle large volumes of incoming and outgoing calls for the purposes of sales, marketing, customer service, and technical support. Call Centers combine voice communication, data communication, data processing, E-mail, Internet ICQ, and in the future, video technology. Some companies operate their own call center operations, either in the home country of the firm, or overseas. However, the outsourcing of call center operations is a growing trend.

Many industries utilize call centers for a variety of activities. TSG analyzed the following three Call Center activities for this study.

- *Inbound Telemarketing and Reservations* include calls that a customer initiates. Companies provide toll-free numbers that are linked to either their own call facilities or those of a third-party to which it outsources and handle services such as travel reservations, catalog sales, or ticket sales.
- *Outbound Telemarketing* refers to solicitation initiated by a company either through its own call facilities or a third-party outsourced call center. Outbound telemarketing involves calling existing or potential customers with information on new products or sales.<sup>1</sup>
- *Help Desk and Customer Services* refer to activities that offer technical support, product information, or complaint assistance to customers.

---

### 6.2 Comparative Advantage

The following section examines the matches between the factor requirements for the call center industry and the location attributes of the GIE and the six proposed industrial estates in the West Bank and the Gaza Strip. As demonstrated in Table 6.1, the industrial estates will provide a promising location, in terms of its attributes, for investment in this sector.

---

<sup>1</sup> Telemarketing firms or call centers typically provide a mix of both inbound and outbound calling activities through the use of specially designed telephony software.

**Table 6.1: Demand Profile for Call Centers**

Factor	Industry Requirements			Location Attributes		Comparative Advantage or Disadvantage
	Inbound Telemarketing and Reservations	Outbound Telemarketing	Help Desk and Customer Services	West Bank	Gaza Strip	
<b>CRITICAL FACTORS</b>						
Labor Availability	Multilingual employees with English-speaking ability. Minimum skills needed are high school reading and math ability.	Employees able to speak the languages and dialects of targeted markets.	Employees trained in the technical area served by the help desk service. Some multilingual ability is helpful.	Growing supply of programmers, but need access to certification programs  Growing supply of trained technicians	Small supply of computer science graduates or technicians	Advantage for West Bank
Telecoms Infrastructure and Costs	Requires high quality, low cost telecoms - deregulated telecom market is critical	Requires high quality, low cost telecoms - deregulated telecom market is critical	Requires quality, low-cost telecoms	Possible to provide low-cost, high-quality service through on-site teleport at Khadoury site	High cost telecoms service	Advantage for Khadoury site
<b>VERY IMPORTANT FACTORS</b>						
Labor Costs	Important. Firms locate or outsource to centers with moderately low labor costs.	Somewhat important. Fluency in language and culture of customer market is of greater importance.	Somewhat important. Fluency in language and culture of customer market is of greater importance.	Relatively cost competitive vis-à-vis other Middle East locations	Relatively cost competitive vis-à-vis other Middle East locations	Advantage

Factor	Industry Requirements			Location Attributes		Comparative Advantage or Disadvantage
	Inbound Telemarketing and Reservations	Outbound Telemarketing	Help Desk and Customer Services	West Bank	Gaza Strip	
<b>IMPORTANT FACTORS</b>						
Technical Support Services	Computer hardware and software technical support	Computer hardware and software technical support	Computer hardware and software technical support	Growing supply of trained technicians in region	Limited supply of trained technicians	Advantage for West Bank
Power Infrastructure and Costs	Requires uninterrupted supply of relatively inexpensive power.	Requires uninterrupted supply of relatively inexpensive power.	Requires uninterrupted supply of relatively inexpensive power.	Possible to provide reliable power supply, but at higher cost than other locations in region	Possible to provide reliable power supply, but at higher cost than other locations in region	Disadvantage
Financial Support	Firm will not enter an unprofitable market without client base. Client provides the market and funding.	Funding necessary if customer base is not built up.	Firm will enter market with sufficient customer base. May seek outside funding sources.	Some VC and other project funding available	Some VC and other project funding available	Advantage
<b>LESS IMPORTANT FACTORS</b>						
Transportation	Not important	Not important	Not important	Delays in importing and exporting, as well as added costs for security checks required by Israel	Delays in importing and exporting, as well as added costs for security checks required by Israel	-----

Factor	Industry Requirements			Location Attributes		Comparative Advantage or Disadvantage
	Inbound Telemarketing and Reservations	Outbound Telemarketing	Help Desk and Customer Services	West Bank	Gaza Strip	
Water Infrastructure and Costs	Not important	Not important	Not important	-----	-----	-----
<b>OVERALL</b>						Advantage for Khadoury site

*Labor Availability*

Both technical and marketing skills are required for successful Call Center activities. If the outsourced service is of a technical nature, such as software or Internet support, then call center agents must have a prior background in computing, or receive this training as part of their company orientation. Both the West Bank and Gaza Strip certainly offer a large pool of skilled workers with high school education or higher. This is the minimum necessary requirement for call center agents. Additionally, there are enough graduates from technical colleges and universities in the West Bank who, with some training, would be able to fill positions in a computer hardware or software technical help desk.

In the Call Center industry, more and more emphasis is being placed on talent for marketing and service positions. Call centers are increasingly playing a consulting role, guiding clients on how to best market their products and services to the local market. Therefore, marketing and knowledge of international business are often necessary skills. However, the northern West Bank area probably lacks enough workers with marketing skills and knowledge of international business practices to carry on the consulting and marketing activities of a large-scale call center firm.

---

*Labor Costs*

Table 6.2 below compares the beginning monthly wages of call center agents in the United Arab Emirates, Turkey, Ireland, Israel, and the United States. Although cost of labor is not the single defining determinant of call center location, it can play an important role when deciding among locations that are equal in other respects. WBS's low labor costs, vis-à-vis Israel, give the industrial estates a significant cost advantage.

Table 6.2: Beginning Call Center Wages<sup>2</sup>

Country	Call Center Salary
<b>WBGs</b>	<b>US\$ 350-400/month (semi-skilled)</b>
UAE (Dubai)	US\$ 1,000 – 2,500/month (fully burdened)
Turkey	US\$ 1,000/month (basic) US\$ 1,400/month (fully burdened)
Ireland	US\$ 1,140 – 2,355/month (basic)
Israel	US\$ 1,100 – 1,600/month (basic) US\$ 1,540 – 2,240/month (fully burdened)
United States	US\$ 1,430 – 2,520/month (basic)

Telecommunications

The existing telecommunications infrastructure in WBGs, while sufficient to meet the requirements of the typical manufacturing-oriented project, falls short of the requirements for the establishment of a call center industry, which is dependent on competitively priced, specialized services for its success. The deregulation of telecommunications in Sweden in 1993, for example, fostered the growth of technical help desks and telesales operations that service Western Europe. Companies began to locate their call centers in Sweden in the early 1990s because the rest of Europe has not deregulated its telecommunications markets.<sup>3</sup>

In the absence of additional large investments and deregulation of telecommunications, WBGs will still attract some small home-grown technical help desks. However, large call center operations demand excellent and inexpensive telecommunications and sometimes satellite, or teleport, facilities. If WBGs is serious about providing the incentives necessary to attract call centers that service the entire Middle East, a deregulated telecommunications market with teleport facilities is a necessity. If communications with a large Call Center are disrupted—even for

<sup>2</sup> Call center wages depend upon skill level and experience of workers. Customer service and telesales representatives, for example, earn less than Microsoft-certified technical help desk agents. The industry also relies heavily upon part-time workers, thus reducing the fully-burdened wage in the case of countries like the United States where employers may not be legally required to provide fringe benefits like health insurance.

<sup>3</sup> C@LL CENTER Solutions. “The Two-Year Trend Toward Sweden in International Call Center Site Selection.” April 1999.



an hour—it can seriously dent a firm’s revenues as well as interrupt business.

A telephone company dedicated solely to the development of the information processing industry is needed in order to attract the type of call centers that would service the entire region. Jamaica did this for its Montego Bay call center facilities. They offer a flexible volume discount for call center companies. It would also be necessary for WBG to have toll free switched and dedicated lease lines to the Middle East markets served. That way, customers in Jeddah, Saudi Arabia, would dial a local number free of charge that would connect into the Palestinian call center. With excellent telecommunications, and call center agents fluent in local dialects, the caller would not know that he or she is talking to someone outside of Saudi Arabia. It is also very important to understand cultural differences among the customer base. Solutions must seem borderless so that a call placed in Kuwait, routed through London, and answered in WBG seems like it is answered locally.

---

*Summary of Comparative Advantage*

In terms of overall industry requirements, the industrial estates – the Khadoury TDC, in particular – can provide a conducive operating environment for the call center industry, particularly inbound telemarketing and technical help desk services.

- For inbound telemarketing, the West Bank offers a large pool of educated, and often unemployed, workers that could be trained to provide telemarketing services both locally and regionally.
- For help desk services - such as technical support for computer hardware, software, and electronics – offers a growing pool of qualified programmers and technicians.

The potential for the Khadoury TDC to attract either of these activities will, however, be strongly dependent on the deregulation of telecommunication services within the park, which would provide it with the opportunity to offer world-class telecommunication services at competitive prices.

**6.3 Competitive Advantage** The following sections evaluate the regional and international competitive market trends in the call center industry

*Local Industry Profile*

There is no current activity in the call center industry in either the West Bank or Gaza Strip. However, TSG findings indicate that the majority of IT-related companies provide, to different degrees, technical support to their clients. In 1997 there were a total of 62 computer-related enterprises in WBGS, two-thirds of which were located in the West Bank. Together, these 62 companies employed approximately 250 people. This experience can provide a strong foundation for the establishment of call centers, particularly technical help desk services.

*Regional and International Trends*

International

*The United States leads the global call center industry.* Eight of the top ten, and sixty-nine of the top one hundred IT companies are in the United States, according to Datamation Magazine's 1995 survey of technology companies.<sup>4</sup> Firms that have traditionally specialized in IT products, are now generating a higher percentage of revenues from IT services. Due to growing competition in the market, firms must find ways to differentiate themselves on a basis other than price. Therefore, they are looking to customer service to increase the overall value of their products.

The Call Center industry is a US\$ 150 billion business per year. The bulk of the activity remains in the United States, Canada, Ireland, United Kingdom, Holland, and several other sites throughout Western Europe. Many of the major call centers are operated internally by major hotel, airline, financial, and information technology companies. The largest independent call center companies tend to be based in the United States, Canada, and Western Europe. The United States leads other world markets for call center services. In 1998, call centers in the United States accounted for 53 percent of the world market, or

<sup>4</sup> U.S. Industry and Trade Outlook 1998: Information Services

US\$12.2 billion revenue.<sup>5</sup> Many North American call centers serve their clients' Middle Eastern and African customers through their European facilities. However, as the insurance, banking, credit card, and information services industries in the Middle East grow, the demand for telesales, customer service, and IT services such as technical help desks is increasing in that region.

*The decentralization of call center services favors expansion into Middle East markets.* The trend toward call center decentralization indicates that call centers will be more likely to locate in the Middle East region in the future. U.S.-based Sitel, for example, partnered with Cupola in the United Arab Emirates to develop a 200-seat call center that began operations in March 1999. However, TSG findings indicate that many North American and West European investors, particularly smaller companies, have little knowledge of the Palestinian market and opportunities in the Middle East. For North American and European firms that have considered launching call center operations in the Middle East, Dubai has emerged as a top choice.

Arab Middle East

*A growing IT market in the Middle East.* Nearly all Middle East countries now allow public access to the Internet. There is a growth in the Internet market of about 10 percent per month, thereby creating a demand for regular telephone and special broadband infrastructure. Additionally, the personal computer market is growing at an average of twenty-five percent, and as much as forty percent in some Arab states. The growth of the computer market in the Middle East, however, has not been matched by growth in IT services. Thus, a demand clearly exists in WBGs for technical help desks and other IT services provided through call centers.

*An emerging market for call center services.* While call centers, and outsourcing in general, have become established business and marketing tools in North America and Europe, the trend is new in the Middle East. Call centers are only now emerging in Turkey, Israel, and Dubai. Their presence in WBGs and elsewhere in the Middle East is soon to follow within the next five years. In the Arabic-speaking Middle East, the United Arab Emirates seems to have taken the lead in Call Center development. The telecommunications firm, Etisalat, has just

---

<sup>5</sup> "Opportunity Calls: IDC Expects Worldwide Call Center Service Revenues to More than Double to \$58.6 Billion by 2003." International Data Corporation, June 9, 1999.

established a 300-seat call center for its own internal customer service and sales requirements. However, it will also provide outsourcing call center services for other firms.<sup>6</sup>

Cupola of Dubai has recently partnered with U.S. call center giant, Sitel, to build a 200-seat multi-service outsourced call center. Cupola's parent company serves primarily as a holding company for the investments of Saudi and Emirati investors who saw the call center industry as a lucrative and untapped market in the Gulf Cooperation Council (GCC) market. Cupola eventually hopes to expand its operations to other countries in the region.

Fastlink, Jordan's mobile phone service provider runs its own internal customer service call center developed jointly between Lagan of Northern Ireland and IBM. Similarly, Bahrain Batelco operates a number of call centers providing directory assistance and technical help desk services. Batelco is currently looking to expand in the region.

Israel

*A growing industry.* The call center industry in Israel has begun to grow rapidly in the past two years. This has been fostered by the growth in telecommunications, Internet, and cellular telephone usage. As the number of Internet service providers and cellular telephone companies grew, severe competition arose in the market. Thus, companies needed a way to differentiate themselves from their competitors on a basis other than price. The solution was to offer greater customer care through call center activities. Beeper Communications is an example of a firm with a call center that initially served its own Motorola pager clients, but now accepts outsourced telesales and customer service contracts from other companies. Israeli companies are in a good position to understand the Palestinian market, and cooperative relationships have developed between the high tech business communities in Israel and WBGS.

*Opportunities for investment across the Green Line.* Several Israeli call center companies expressed interest in the Palestinian market. One in particular has included WBGS, particularly the West Bank, in its business plan. Tele-All operates a 190-seat call center in Tel Aviv that employs over 200 workers. They have plans to expand their operations, either in Tel Aviv or in the West

---

<sup>6</sup> TSG interview with Mr. Dominick Keenaghan of Insights Magazine, a publication that tracks the Call Center industry in the Middle East.

Bank, to serve the Arab-speaking Palestinian market. According to the company’s marketing director, a WBG-based call center could eventually serve other countries in the region—pending the available infrastructure and cost effectiveness of PALTEL.

TSG also interviewed Kalanit-Carmon who provides the outsourced technical help desk services for Hewlett Packard, Microsoft, Oracle, and Novell. They have very little capacity to serve the Arab-speaking market, but are interested in exploring ways to expand their help desk services.

WBGs

Some large multipurpose call centers do provide outsourced help desk services for IT companies. Initially, help desks have the most potential of all other call center activities in WBGs. Safad Engineering in Ramallah, for example, is interested in starting Hewlett Packard and Microsoft help desk services for WBGs. Eventually they could see this service expanding to serve the Jordanian market as well. This is dependent, however, on the flexibility of the telecommunications structure.

*Summary of Competitive Advantage*

Competitive market trends favor investment by the call center industry in the Palestinian industrial estates. Key trends favoring investment include:

- the decentralization of the global call center industry
- an emerging regional market for call center services
  - the expansion of insurance, banking, and related activities in the Arab Middle East favor inbound telemarketing
  - the growth in computer use in the Arab Middle East favors technical help desk services
- growing interest by Israeli call centers to expand into WBGs

**6.4 Policy Considerations**

The call center industry meets several of the selected policy objectives, including:

- the potential for employment generation given the sector’s labor-intensive nature; and

- the potential for technology transfer and skills upgrading.

In addition, the industry, which is service-oriented, is environmentally friendly, with no water use and a low production of waste.

**6.5 Summary of Promotion Potential**

The call center industry is a promising target for investment promotion into the Palestinian industrial estates, particularly the Khadoury TDC in Tulkarem, with both comparative and competitive trends, as well as policy objectives, in its favor. However, the success of this industry will be strongly tied to the provision of a deregulated telecommunications environment within the KTDC.

**6.6 Target Activities and Markets**

Based on the above analysis, the following sources of investment and niche call center activities have been identified for investment promotion into the Khadoury TDC:

- Israeli inbound telemarketing (customer service) and technical help desk services, interested in accessing the Arab-speaking markets of WBG and the Middle East. These companies are of medium-size, ranging between 50 to 100 employees.
- Israel-based IT- and electronics-oriented multinationals interested in accessing the Arab-speaking markets of WBG and the Middle East through customer service and/or technical support services.
- Local IT companies with traditional technical support services.

*Promotion Targets*

Indicative promotion targets, including employment and capital investment, are based on the average size of investments entering the region and similar investment locations worldwide. The average size of investment is expected to be between US\$600,000 and US\$700,000, with employment ranging from 40 to 60 employees. Table 6.3 below displays the indicative promotion targets, for a three-year period, in the call center industry.

**Table 6.3: Promotion Targets for the Call Center Sector**

<b>Promotion Targets</b>	
Number of Projects	2
Cumulative Investment Value	US\$1-1.5 million
Cumulative Employment	50

## **7. Consumer Electronics and Electrical Appliances**

---

### **7.1 Industry Definition**

The consumer electronics and electrical appliance sector comprises a wide range of products, including office machinery (typewriters, computers, calculators, etc.), household appliances (refrigerators, vacuum cleaners, small kitchen appliances, etc.), consumer electronics (TVs, stereos, VCRs, etc.), and telecommunications equipment (telephones, mobile phones, satellite receivers, etc.), as well as parts and components for all of the above.

As in any other manufacturing sector, the development of each of these products is composed of a number of discrete activities, including product design and engineering, manufacturing, assembly, as well as after-sales repair and maintenance. “Manufacturing” is defined as the transformation of “completely knocked-down” (CKD) kits into “semi-knocked down” (SKD) units. “Assembly” is defined as the transformation of SKDs into finished products, or “completely built up” (CBU) units.

---

### **7.2 Comparative Advantage**

The following section matches the factor requirements for the consumer electronics and electrical appliance industry with the location attributes of the GIE and the six proposed industrial estates in the West Bank and the Gaza Strip. As demonstrated in Table 7.1, the industrial estates will provide a promising location, in terms of its attributes, for investment in this sector.

#### *Human Resources*

One of the most important factors for investment is the access to qualified, relatively low-cost labor. The industrial estates, particularly those in the West Bank, will be able to provide the industry with a growing supply of qualified engineering graduates and technicians at competitive salaries. In terms of salaries, both the West Bank and the Gaza Strip offer more competitive salary rates across all skills levels than most competing locations in the region, as demonstrated in chapter 3 of this study. While Egypt and Jordan may offer cheaper workers, on average their productivity levels are significantly lower than Palestinian workers.

**Table 7.1: Demand Profile for Electronics & Electrical Appliances**

Factor	Industry Requirements			Location Attributes		Comparative Advantage or Disadvantage
	Design/ Engineering	Assembly & Manufacturing	Repair	West Bank	Gaza Strip	
<b>CRITICAL FACTORS</b>						
Access to Markets	Require access to export markets	Require access to export markets	Require access to export markets	Preferential access to leading regional and international export markets	Preferential access to leading regional and international export markets	Advantage
Labor Availability	Qualified electronic and electrical engineers	Qualified electronic and electrical engineers, technicians, and skilled labor	Qualified electronic and electrical technicians	Relative supply of engineering graduates and technicians. Few with higher levels of expertise (for product design and engineering).	Relative supply of engineering graduates and technicians. Few with higher levels of expertise (for product design and engineering).	Advantage (for manufacturing and repair)
Labor Costs	Not as important as skills	Important – need to be competitive with alternative production locations	Important – need to be competitive with alternative production locations	Relatively cost competitive vis-à-vis other Middle East locations, but higher than other locations	Relatively cost competitive vis-à-vis other Middle East locations, but higher than other locations	Advantage

Factor	Industry Requirements			Location Attributes		Comparative Advantage or Disadvantage
	Design/ Engineering	Assembly & Manufacturing	Repair	West Bank	Gaza Strip	
<b>VERY IMPORTANT FACTORS</b>						
Transportation	Low-cost, timely transport of incoming materials and outgoing finished products is of relative importance	Low-cost, timely transport of incoming materials and outgoing finished products is of relative importance	Low-cost, timely transport of incoming materials and outgoing finished products is of relative importance	Delays in importing and exporting, as well as added costs for security checks required by Israel	Delays in importing and exporting, as well as added costs for security checks required by Israel	Disadvantage
Access to Capital	Often need for venture capital funding	Not very important	Not very important	Some VC and other project funding available	Some VC and other project funding available	Advantage
Technical Support Services	Repair and maintenance for hardware	Repair and maintenance for machinery	-----	Growing supply of trained technicians	Growing supply of trained technicians	Advantage
<b>IMPORTANT FACTORS</b>						
Power Infrastructure and Costs	Reliable, relatively low-cost power supply required	Reliable, relatively low-cost power supply required	Reliable, relatively low-cost power supply required	Possible to provide reliable, power supply, but at higher cost than others in region	Possible to provide reliable, power supply, but at higher cost than others in region	Disadvantage
Land/building Costs	Desirable to have access to serviced land or ready-built facilities at low cost	Desirable to have access to serviced land or ready-built facilities at low cost	Desirable to have access to serviced land or ready-built facilities at low cost	Industrial estates provide serviced land and ready-built facilities, but at relatively high cost	Industrial estates provide serviced land and ready-built facilities, but at relatively high cost	Disadvantage

Factor	Industry Requirements			Location Attributes		Comparative Advantage or Disadvantage
	Design/ Engineering	Assembly & Manufacturing	Repair	West Bank	Gaza Strip	
Investment Incentives	Favorable package of incentives, particularly for R&D, is desirable	Favorable package of incentives is desirable	Favorable package of incentives is desirable	Industrial estate tenants receive favorable package of tax incentives	Industrial estate tenants receive favorable package of tax incentives	Advantage
<b>LESS IMPORTANT FACTORS</b>						
Water Infrastructure and Costs	Not very important	Not very important	Not very important	-----	-----	-----
Telecoms Infrastructure and Costs	Relatively important	Relatively important	Relatively important	Good quality infrastructure available, with low international dialing rates	Good quality infrastructure available, with low international dialing rates	Advantage
OVERALL						Advantage

In 1997, while only 70 graduated from relevant university engineering programs (electronic engineering, electrical engineering, information systems engineering, and computer systems engineering), almost 900 university students are currently enrolled in these programs (more than 700 in the West Bank), which will translate into a greater number of graduates in the future. However, at the technician level, in 1997, only 180 students (100 in the Gaza Strip) were enrolled at Palestinian technical colleges in the relevant disciplines (electrical engineering, telecommunications, computer technology, and technology of radio, television & video).

Throughout the course of this study, TSG consulted numerous individuals, organizations, and other studies were consulted regarding both the quantity and skills levels of WBG's engineers and technicians in WBG – including local Palestinian software houses, foreign investors familiar with Palestinian computer science graduates, and the computer science departments of local universities. TSG findings indicate that local engineers and technicians possess a solid background at the theoretical level, but need more practical experience, which can only be provided through exposure to industry. In addition, the level of expertise of local professionals is not very high, in terms of product design and engineering, which mirrors the general level of sophistication of local industry, in terms of the types of products that are being produced (mostly household appliances and basic consumer electronics). While this is discussed in more detail below, it is important to note that current skills levels and local industry experience are not oriented toward product design and engineering as much as manufacturing, assembly, and after-sales services.

---

*Access to Markets*

Given the small size of the domestic market, access to external markets is a critical factor for investment in the electronics industry where economies of scale tend to be large. Typically, electronics and electrical appliance manufacturers distribute the majority of their output on the same continent as its production facilities. Only a small proportion of output, five percent, is exported overseas.<sup>1</sup>

---

<sup>1</sup> KPMG, *The Competitive Alternatives*, 1999. For both electronics and telecoms equipment manufacturing, 95 percent of output is distributed within the same continent as their production facilities.

Therefore, the Middle East market, as well as perhaps the North African market, would be the prime focus of any electronics manufacturer establishing in the West Bank or the Gaza Strip. WBGS's preferential access to the largest regional markets, *i.e.* Israel and Saudi Arabia, is an obvious asset to potential investors in this sector, providing potential to market quantities to justify a sufficiently large production scale.

---

*Transportation*

One obstacle to investment in this sector is the difficulty associated with importing goods into and exporting goods from WBGS. While the cost of transportation is relatively competitive, importers and exporters sometimes experience long delays due to the security requirements of the Israeli authorities. With the growing demand for just-in-time manufacturing,<sup>2</sup> any import and/or export delays can reduce the competitiveness of the industrial estates as platforms for the manufacture of goods. However, given the focus of the following analysis on the potential for investment based on regional import substitution (*i.e.* to serve the regional market), potential export delays in Israeli ports would be reduced as most products would be shipped by land to their final destinations. On the other hand, delays in importing would remain an obstacle, particularly for "just-in-time" manufacturing or other time-sensitive products.

---

*Access to Capital*

Given the relatively capital-intensive nature of electronics and electrical appliance manufacturing, a high degree of equity financing is required for the initial investment, ranging from 50 to 60 percent of the project cost.<sup>3</sup> Given the nascent character of WBGS's capital markets, small local investors may have difficulty in obtaining the necessary capital. However, the experience of the Palestine Electronics and Electrical Company (PEEC) points to the potential of investment by large, expatriate-funded holding companies. In addition, any Palestinian-Israeli partnerships may be candidates for venture capital funding through the Peres Peace

---

<sup>2</sup> According to a 1998 survey of household appliance and consumer electronics manufacturers, conducted by *Appliance Manufacturers* magazine, almost 65 percent of have just-in-time delivery programs.

<sup>3</sup> KPMG, *The Competitive Alternatives*, 1999. Electronics manufacturing requires, on average, equity financing equivalent to 60 percent of the project cost while the manufacture of telecoms equipment requires 50 percent.

Technology Fund. In terms of foreign investment, multinational have adequate access to project financing - whether it be in WBG or in the United States - to ensure that the necessary financing is in place.

---

*Technical Support Services* In addition to the availability of high-quality, competitively-priced labor for production, the relatively capital-intensive nature of electronics and electrical appliance manufacturing requires access to the different technical support services, including testing, calibration, and repair and maintenance of capital equipment. The growing supply of Palestinian technicians and relatively easy access to Israeli technical support will ensure that WBG-based electronics manufacturers can readily obtain any technical services they require.

---

*Summary of Comparative Advantage* In terms of overall industry requirements, the industrial estates, particularly those in the West Bank, can provide favorable locations for the consumer electronics and electrical appliance sector, particularly for manufacturing and repair/maintenance activities. While the potential for product design and engineering remains low in the short-term, based on existing skills and experience, as local experience develops over time, there would be greater potential for local design and engineering, as well as pilot manufacturing of prototypes adapted to regional market requirements.

---

**7.3 Competitive Advantage** The following sections evaluate the regional and international competitive market trends in the consumer electronics and electrical appliances industry.

---

*Local Industry Profile* *A growing but fragmented industry.* The consumer electronics and electrical appliance sector in WBG is largely inward-looking, with virtually zero exports, except to Israel. Like its neighbors, WBG imports a relatively large quantity of consumer electronics and electrical appliances to meet domestic demand. Local industry has grown relatively fast, from approximately 85 enterprises in 1994 to close to 150 in 1997, although most of these enterprises are engaged primarily in distribution and repair, versus manufacturing or assembly. In 1997, these 150

---

enterprises employed more than 500 people, with the majority of enterprises employing less than 5 people. The PEEC project, which came into operation at the end of 1998, is the only larger-scale enterprise within the sector, with approximately 55 employees. Within the sector, local industry is oriented most toward the manufacture of household appliances, as well as some office machinery, and assembly of computers (CPUs).

---

### *Regional and International Trends*

#### Israel

*A growing domestic industry.* The Israeli consumer electronics and electrical appliance sector is relatively small. While the electronics industry – including both components and final products - is one of Israel's fastest growing sectors, a large proportion (45 percent in the case of components) is oriented toward the military, aerospace, and satellite communications sectors, sectors over which Israel maintains tight control. Nevertheless, Israel's consumer electronics industry accounts for a significant proportion of sector output. In terms of household appliances, Israeli companies supply the domestic market with more than US\$120 million of goods. Israel also supplies 25 percent of its domestic market for civilian communications equipment. Together, these three sub-sectors – consumer electronics, civilian telecommunications equipment, and household appliances – provide substantial potential for either joint ventures or sub-contracting arrangements with Palestinian companies.

*The move to offshore manufacturing driven by labor costs.* While the Israeli electronics sector has been hesitant in the past to move production and assembly activities offshore due to the sensitive nature of much of its output, a growing number are turning to overseas locations, particularly in East Asia, to control costs and focus on product design and engineering rather than manufacturing and assembly.

While WBG cannot compete with East Asia in the precision assembly of components, the proximity of the West Bank and Gaza Strip and relatively cheap pool of qualified manpower (vis-à-vis Israeli engineers and technicians, which cost three to four times as much as Palestinian engineers and technicians) makes it a competitive location for the manufacturing, assembly and repair

of final products, including consumer electronics, household appliances and telecommunications equipment, such as handsets and mobile phones. One company, Synel Industries, a leading producer of data collection and time management systems, has licensed Aljarmaq, based in Ramallah, to assemble time management terminals for the region. Such sub-contracting arrangements, as well as licensing agreements and joint ventures, can reduce the costs of product development of Israeli manufacturers.

International

*Worldwide industry structure mirrored by regional imports.* The consumer electronics and electrical appliances industry is dominated by manufacturers in Europe, Asia, and the United States. While there are literally thousands of producers in these locations,<sup>4</sup> there are only a relatively small number of brand-names that are recognized worldwide, which are also the leading suppliers to the Middle East market. Table 7.2 below provides details of the leading sources of consumer electronics and

**Table 7.2: Leading Sources of Consumer Electronics and Electrical Appliances Imports to Regional Markets (1997)**

Source of Imports	Share of Imports
Denmark	12.1%
Italy	11.1%
United States	10.1%
Japan	9.7%
Korea	9.0%
China	7.0%
Great Britain	6.4%
Netherlands	4.8%
Singapore	4.3%
Malaysia	4.2%
France	3.8%
Hong Kong	3.0%
Taiwan	2.6%
Spain	1.7%
Taiwan	1.5%

<sup>4</sup> According to the Bethesda List Center, there are more than one million producers of electronic and electric products worldwide (including components).

electrical appliances imports to several Middle East markets, which is fairly representative of the entire region.<sup>5</sup> The top five countries account for more than 50 percent of regional imports; the top fifteen countries account for more than 90 percent of imports, while the remaining 62 countries, together, account for less than 10 percent. These top countries, and their leading manufacturers, represent the most promising opportunities for investment in the region, based on the potential for regional import substitution.

In terms of product categories, leading imports into the region include: major white goods (clothes washers and dryers, refrigerators, dishwashers), small kitchen appliances, televisions and radio receivers, vacuum cleaners, personal care appliances (shavers, hairdryers), telephone sets, and some office appliances (photocopiers, adding machines).

*Leading manufacturers already moving to invest in the region.* Many of the leading consumer electronics and appliance manufacturers are already moving to supply the region through “point-of-sale” manufacturing and assembly plants throughout the Middle East. Details of recent investments into the region are included in Table 7.3 below. Most significant is the recent agreement reached between Samsung, Korea’s leading consumer electronics and appliance manufacturer, and the Palestine Electronic and Electrical Company (PEEC). PEEC will manufacture and distribute Samsung products from its production site in Nablus – including televisions, refrigerators, washers, and mobile phones – for the local and neighboring markets. The agreement fits in with Samsung’s strategy to increase its market share through an active presence in the Middle East. Other recent investments in the region indicate that other leading consumer electronics and electrical appliance manufacturers are following similar strategies. Given the relative supply of low-cost, qualified labor in WBG - combined with preferential access to the Israeli, Egyptian and Jordanian markets - the industrial estates can provide a competitive environment for other manufacturers to expand their role in the region, through either joint ventures, sub-contracting or licensing agreements.

---

<sup>5</sup> Includes Israel, Egypt, Turkey, Saudi Arabia, and Oman. Data for other markets was not available.

**Table 7.3: Electronics and Electrical Appliance Multinationals in Middle East**

Country	Investor(s) (Home Country)	Subsector	Investment Type	Local Partner(s)
Egypt	LG Electronics (Korea)	Washing machines, air conditioners, color picture tubes, other components	Greenfield	
	Fagor Electrodomesticos (Spain)	Refrigerator assembly	Joint venture	n/a
Turkey	Whirlpool (United States)	Dishwashers	Sub-contracting/licensing agreement	Arcelik
	AEG (Germany)	Electrical appliances	Equity investment	Profilo Electrical Goods
	Bosch-Siemens Hausger (Germany)	Electrical appliances	Equity investment	Profilo Electrical Goods
	Bosch-Siemens Hausger (Germany)	Washing machines and dishwashers	Existing investment expansion	Profilo Electrical Goods
	Merloni Elettrodomestici(Italy)	Refrigerators	Acquisition	Pekel
	Solac (Spain)	Domestic appliance distribution	Strategic partnership	n/a
	Derby A/S (Denmark) and Danish Industrial Fund for Developing Countries (Denmark)	White goods	Joint venture	Klimasan SA
Jordan	Goldstar (Korea)	Refrigerators, washing machines, vacuum cleaners, and color televisions	Greenfield	
Israel	Carrier (United States)	Air conditioning systems	Equity investment	Tadiran Appliances
	Samsung (Korea)	Electronics	Greenfield	
	Home Products International (United States)	Home improvement products	Equity investment/merger	ZAG Industries
	American Micro Systems Inc. (United States, Japan)	Electronics design services	Joint venture	Vectronics Ltd.
	Siemens (Germany)	Electronics	Greenfield	Siemens Israel
	n/a (Singapore)	Internet home television	Equity investment (1998)	Video Surfer (VS) Israel
WBGS	Samsung (Korea)	Televisions, washers, refrigerators, air conditioners, mobile phones, others	Licensing Agreement	Palestine Electronic and Electric Company
Saudi Arabia	Solac (Spain)	Domestic appliance distribution	Strategic partnership	n/a
	Electrolux (US)	Vacuum cleaners	n/a	n/a

Country	Investor(s) (Home Country)	Subsector	Investment Type	Local Partner(s)
Bahrain	Onida Savak (India)	Television sets, washing machines	Joint venture	Brahmco Industries, Kewal Ram and Sons, Zeng Industries
Iran	Fagor Electrodomesticos (Spain)	Washing machines	Joint venture	n/a
	Maytag Corporation (United States)	Washing machines	Sub-contracting/licensing agreement	Bayatec
	Maytag Corporation (United States)	Refrigerators and floor care equipment	Joint venture	Bayatec
	Various European manufacturers	Refrigerators and household goods	Sub-contracting/licensing agreement	Bayatec
	Matsushita (Japan)	Vacuum cleaners, small kitchen appliances	Joint venture	National Electric Industrial Co.
Yemen	Bajaj International (India)	Electrical appliances	Strategic partnership	H.S.A. Group

Source: IAC-Insite; industry publications.

*Regional sales translate into opportunities to supply after-sales services.* In addition to investment in assembly activities, there is also potential for the industrial estates to attract investment in after-sales repair and maintenance services for the regional market. Growing sales into the region will drive the need for authorized service centers – through either direct investments by manufacturers or sub-contracting/licensing agreements with third party vendors. Based on current trends in the region, the latter option appears to provide greater potential as most repair services in the region are conducted by authorized third party vendors rather than directly by the manufacturers.

WBGS

*Limited opportunities to attract local producers.* While the previous sections demonstrated the opportunities for the industrial estates to attract local producers in partnership with large Israeli and multinational manufacturers, in the short-term the industrial estates are less likely to attract indigenous manufacturers, given the very small scale of their operations and lack of export orientation, with the exception of perhaps one or two PEEC-type investments (*i.e.* by large, expatriate-funded holding companies). However, as local engineers and technicians gain experience over time, through their exposure to Israeli and multinational operations, there is potential to attract new local investment in assembly that is more outward looking, as well as upcoming entrepreneurs with the capacity to design and engineer new products for the regional market.

---

*Summary of Competitive Advantage*

Competitive market trends strongly favor investment by consumer electronics and electrical appliance manufacturers in the Palestinian industrial estates. Key trends include:

- Proximity to a large and growing electronics sector in Israel, which is in search of lower-cost production alternatives;
- A large regional market for electronics and electrical appliances, with potential for import substitution; and

- Growing interest in multinational “point-of-sales” plants in the Middle East region to replace imports.

Together, these trends point to the strong potential for the industrial estates to attract both Israeli and multinational investment in the electronics and electrical appliance sector, with a focus on those products that are already being imported into the region.

---

**7.4 Policy Considerations** The electronics and electrical appliance sector meets several of the selected policy objectives, including:

- the potential for employment generation given the sector’s relatively labor-intensive nature;
- the potential for the expansion of exports, with investment focus on strategies for regional import substitution; and
- the potential for technology transfer and skills upgrading given the technology orientation of the consumer electronics sector.

In addition, this sector is environmentally friendly, with low water use and a low production of waste.

---

**7.5 Summary of Promotion Potential**

The electronics and electrical appliance sector is a promising target for investment promotion into the Palestinian industrial estates, with both comparative and competitive trends, as well as policy objectives, in its favor.

---

**7.6 Target Activities and Markets**

In the short-term, electronics manufacturing activities will be based on the existing skills base and local industry experience, *i.e.* manufacturing and assembly of consumer electronics, electrical appliances, and basic telecommunications equipment. The industrial estates, particularly those in the West Bank, have the potential to attract both Israeli and multinational electronics manufacturers and should target:

---

- Israeli manufacturers, particularly in consumer electronics and telecommunications equipment, seeking to move their manufacturing and assembly operations to lower-cost locations “offshore”, either through direct investment/joint ventures or through sub-contracting/licensing agreements with local producers;
- Multinational (Denmark, Italy, U.S., Japan and Korea) and Israeli manufacturers interested in accessing the growing regional market through “point-of-sale” manufacturing and assembly operations, either through direct investment/joint ventures or through sub-contracting/licensing agreements with local producers.

In addition to investment in assembly activities, there is also potential for the industrial estates to attract investment in after-sales repair and maintenance services for the regional market. Growing sales into the region will drive the need for authorized service centers – through either direct investments by manufacturers or sub-contracting/licensing agreements with third party vendors. Based on current trends in the region, targeting the latter option appears to provide greater potential as most repair services in the region are conducted by authorized third party vendors rather than directly by the manufacturers.

---

*Promotion Targets*

Investment targets, including number of projects, employment and capital investment are based on the investments entering the region and similar investment locations worldwide. The average size of investment will be between US\$2 million and US\$3 million, with employment ranging from 30 to 70 employees. Table 7.4 below displays the promotion targets, for a three-year period, in the electronics and electrical appliance industry.

**Table 7.4: Promotion Targets for the Electronics Sector**

	Promotion Target
Number of Projects	4-6
Cumulative Investment Value	US\$8 -12 million
Cumulative Employment	250-400

## 8. Data Conversion and Remote Processing Services

---

### 8.1 Industry Definition

The Data Conversion industry spans a range from lower-skilled data and text entry to higher-skilled engineering use of computer-aided design (CAD). The entire industry is often subsumed under the heading “teleworking” to reflect the growing propensity of firms to outsource many of their back office operations such as data entry, payroll accounting, and digital diagram conversion. An analysis by McKinsey & Co. suggests that the untapped demand for “teleworking” services is US\$250 billion.<sup>1</sup>

For the purposes of this report, TSG has divided the sector into Alphanumeric Conversion, Vector Conversion, and Other Back Office Activities.

- *Alphanumeric Conversion* refers to changing written text such as that found in a book or airline ticket stub to digital format. The text may be converted through the use of optical character recognition (OCR) scanning and/or keying written source materials and data into specific data fields. Software packages, either proprietary or purchased commercially, aid in the conversion process. However, data entry largely remains a very manual process.
- *Vector Conversion* refers to the digital conversion of graphic data such as maps. Although heavily software assisted, vector data conversion remains primarily a manual activity at its core. Businesses, public utilities, and governments make use of vector conversion for things such as the development of geographic information systems (GIS); creation of geospatial models of electric, telecommunications, gas, and water distribution networks; digitization of electrical systems of airplanes, tanks, automobiles, or ships; creation of video games or flight simulators.
- *Other Back Office Activities* include those office operations that are necessary for the normal operations of a firm, but do not reflect that firm’s specialty. By outsourcing these activities to a data processing firm, companies can focus resources on

---

<sup>1</sup> “Teleworking.” *Business World*. June 7-21, 1999, p. 22.

their niche product or service. Examples of back office activities not included in the above data conversion categories (but often provided by the same data conversion companies) include word processing, processing payroll and billing information, credit appraisals; and transcription services.

---

*Industry Complexion*

This section briefly describes the history and structure of the worldwide alphanumeric conversion, vector conversion, and back office industry. Although each sub-sector of the industry requires different skills, training, and labor costs, they all lie some point along the value chain of remote processing services. A small company, for example, that begins operations by offering remote secretarial services or medical transcription can graduate to offering database management and alphanumeric conversion of documents for clients.

*Back Office Activities*

Remote processing of back office operations lies at the lower end of the remote processing services spectrum. Traditionally, companies located their back office operations such as payroll accounting and billing within the company headquarters to assure close supervision and quick turnaround of activities. However, rising costs and advances in optical fiber telecommunications networks in the 1980s made for greater locational flexibility as large firms began to locate their back office operations in cities with lower land and labor prices. American Express Corporation, for example, moved its back office operations from its New York City headquarters to Salt Lake City, Utah and Phoenix, Arizona where labor and land cost the company less money.

A growing trend has also been to locate back office operations offshore in countries such as India, Philippines, or the Caribbean where there is an abundance of highly skilled English-speaking workers. Remote processing is typically undertaken by companies in industries such as airlines, insurance, and publishing where there is a competitive pressure to enhance productivity. General Electric, for example, established GE Capital International Services near Delhi, India to manage the firm's payroll and accounting for its worldwide operations.<sup>2</sup>

---

<sup>2</sup> "Teleworking," *BusinessWorld*. Jan 7-21, 1999, p. 22.

---

While large corporations such as General Electric established its own remote back office operation, other organizations such as insurance companies, hospitals, law offices, and municipal bodies began to outsource these operations to companies that specialized in back office operations such as data entry, word processing, billing, and accounting. OpenWorld Data Ltd., for example, is an offshore processing center located in Zimbabwe that provides word processing, financial data extraction, and voice mail and audio/video tape transcription for companies in Europe and North America.

**Link to Call Centers** Data entry and back office activities both utilize advanced telecommunications and access to inexpensive multilingual skilled labor. Therefore, these activities often operate out of large call center operations. Call center services such as telemarketing and sales order entry are often linked to activities like customer billing and database creation. The whole call center and data entry business often follows on the heels of the financial, credit card, and insurance industries.

**Advanced Data Conversion** Alphanumeric and vector data conversion lie higher on the value chain of remote processing services. Like simpler back office operations like word processing and audio transcription, complex data conversion remains dependent on state-of-the-art telecommunications and a large pool of skilled labor.

The government, business, and education sectors are adopting GIS technology worldwide at an increasing rate because of improvements and lower prices of computer hardware and the increasing power, versatility, and sophistication of GIS software. Many data conversion firms have invested a lot of capital in the creation of their own conversion software.

Public utility companies, municipalities, and private enterprises are in large demand for data conversion services. In the United States alone, over 70,000 local and state governments are currently not served by GIS technology. These bodies will eventually convert their public utility, population, zoning, and other databases into a graphically digitized map system. Thus, there exists a huge growth potential for GIS technology throughout the

world. In the mid 1990s, the sale of GIS products was a US\$ 10 billion per year industry.<sup>3</sup>

Worldwide Market

**Figure 8.1: Estimated Worldwide Market of Data Conversion (US\$ billion)<sup>4</sup>**

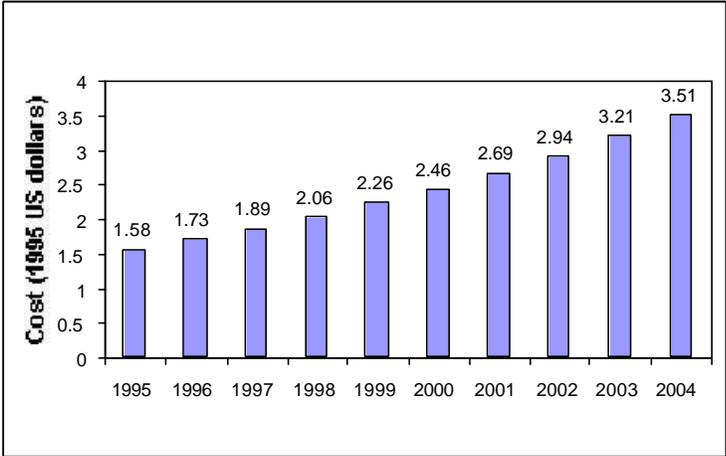


Figure 8.1 above illustrates the projected annual worldwide market for data conversion activities (in 1995 US\$ billions). By 2004, the annual market for digitizing data throughout the world will reach over US\$ 3.5 billion. Although assisted by technological tools such as optical scanners and computer-assisted design, data conversion remains a very costly and labor-intensive activity.

**8.2 Comparative Advantage**

The following section examines the matches between the factor requirements for the various segments of the data conversion industry and the location attributes of the GIE and the six proposed industrial estates in the West Bank and the Gaza Strip. As demonstrated in Table 8.1, the industrial estates will provide a promising location, in terms of its attributes, for investment in this sector. The following sections focus on those factors that are most important for the site selection for data conversion companies, including labor costs and availability, telecommunications, and business support services.

<sup>3</sup> Paula J. Stevenson, "The Problem of Data Conversion," *Geo Info Systems*, February 1995.

<sup>4</sup> Paula J. Stevenson, "The Problem of Data Conversion," *Geo Info Systems*, February 1995.

**Table 8.1 Demand Profile for Data Conversion**

Factor	Industry Requirements			Location Attributes		Comparative Advantage or Disadvantage
	Alphanumeric Conversion	Vector Conversion	Other Back Office Activities	West Bank	Gaza Strip	
<b>CRITICAL FACTORS</b>						
Labor Availability	Requires multilingual workers with basic computer skills  Some activities require recognition of language and literary patterns	Vector conversion requires technical graduates with engineering and/or drafting experience  Job training requires more than one year	Transcription and answering service activities require multilingual workforce.  Accounting and payroll jobs require accounting background	Growing supply of programmers, but need access to certification programs  Growing supply of trained technicians	Small supply of computer science graduates or technicians	Advantage for West Bank
Labor Costs	Important – must be less expensive than country of client	Most important for data entry due to lower skills levels	Must be less expensive than in country of the client	Relatively cost competitive vis-à-vis other Middle East locations	Relatively cost competitive vis-à-vis other Middle East locations	Advantage
<b>VERY IMPORTANT FACTORS</b>						
Telecoms Infrastructure and Costs	Need for low-cost, high-quality telecoms, including high-speed access	Need for low-cost, high-quality telecoms, including high-speed access	Need for low-cost, high-quality telecoms, including high-speed access	Possible to provide low-cost, high-quality service through on-site teleport at Khadoury site	High cost telecoms service	Advantage for Khadoury site

Factor	Industry Requirements			Location Attributes		Comparative Advantage or Disadvantage
	Alphanumeric Conversion	Vector Conversion	Other Back Office Activities	West Bank	Gaza Strip	
Technical Support Services	Computer hardware and software technical support	Computer hardware and software technical support	Computer hardware and software technical support	Growing supply of trained technicians in region	Limited supply of trained technicians	Advantage for West Bank
<b>IMPORTANT FACTORS</b>						
Power Infrastructure and Costs	Requires steady supply of power for multi-shift operations	Requires steady supply of power for multi-shift operations	Requires steady supply of power for multi-shift operations	Possible to provide reliable power supply, but at higher cost than other locations in region	Possible to provide reliable power supply, but at higher cost than other locations in region	Disadvantage
Financial Support	Important for local start-up firms. Not important for overseas client or parent company-owned operations.	Important for local start-up firms. Not important for overseas client or parent company-owned operations.	Important for local start-up firms. Not important for overseas client or parent company-owned operations.	Some VC and other project funding available	Some VC and other project funding available	Advantage

Factor	Industry Requirements			Location Attributes		Comparative Advantage or Disadvantage
	Alphanumeric Conversion	Vector Conversion	Other Back Office Activities	West Bank	Gaza Strip	
<b>LESS IMPORTANT FACTORS</b>						
Air Transportation	Not important if documents can be sent electronically; important if documents are in hard copy form	Not important if documents can be sent electronically; important if documents are in hard copy form	Not important if documents can be sent electronically; important if documents are in hard copy form	Delays in importing and exporting, as well as added costs for security checks required by Israel	Delays in importing and exporting, as well as added costs for security checks required by Israel	Disadvantage for those activities requiring hard copies of documents
Water Infrastructure and Costs	Not important	Not important	Not important	-----	-----	-----
					<b>OVERALL</b>	Advantage

*Human Resources*

The primary motivation for locating back office activities, such as data conversion and payroll accounting, offshore is the lower cost of labor. Other considerations such as worker productivity, skills, and labor turnover remain just as important as the wage rate. Data conversion is an activity that must be responsive to frequent changes in requests by clients. Employees, therefore, must be very flexible in order to effectively and efficiently serve their clients.

Tables 8.2 and 8.2 below show the comparative salaries of higher value vector conversion and lower value data entry in WBGs and in selected industry locations worldwide.

**Table 8.2: Vector Conversion Salaries**

Country	Higher-Value Vector Conversion Salary <sup>5</sup>
United States	US\$ 2180 – 2520/month (basic)
Israel	US\$ 1000/month (basic) US\$ 1,400/month (fully burdened)
<b>WBGs</b>	<b>US\$ 300/month (basic)</b>

**Table 8.3: Lower-Skilled Data Entry Salaries**

Country	Lower-Value Data Entry Salary
United States (Medical Transcription)	US\$ 2085/month (basic)
United States (Data Entry Keyers) <sup>6</sup>	US\$ 1000 – 2855/month (basic)
<b>WBGs (Low-skilled Labor)</b>	<b>US\$ 200 – 400/month</b>
Caribbean (Data Entry Keyers) <sup>7</sup>	US\$ 135 – 485/month
India (Medical Transcription) <sup>8</sup>	US\$ 100/month (basic)

Back office activities such as audio transcription and word processing require fluency in the language of the client company. Since North American companies remain the largest outsourcers of back office operations, fluency in English remains a

<sup>5</sup> TSG Research

<sup>6</sup> California Occupational Guide #16. Interest Area 7, 1997. March 3, 1998.

<sup>7</sup> Bibby, Andrew. "Offshore Data Processing." *Teleworker Magazine*. Dec 97/Jan. 98.

<sup>8</sup> "Teleworking." *BusinessWorld*. Jan. 7-21, 1999, p. 24 – 25.

requirement. This is one of the reasons why countries like India, Barbados, Jamaica, and the Philippines remain popular destinations for data entry operations.

For more complex conversion activities that utilize GIS technology, workers need drafting skills and an ability to read and understand drawings. In addition to a technical school education, workers need additional onsite training in order to become proficient at the job.

On-the-job training is extremely important for both back office activities and complex data conversion. Barbados, a leader in “teleworking” activities, has established a joint private sector and government-sponsored training program that prepares job applicants for entry into the information processing market. Workers require training specific to the work they are doing. Medical transcriptionists in India, for instance, require training in medical terminology and colloquial idiomatic expressions. Rigorous training in computer-aided design is required for employees that digitize the maps for electronic navigation systems and other GIS products. The Khadoury TDC, with its own market-driven training center, can play an important role in ensuring that these skills are available to potential investors.

While WBGs will not be able to compete with such low-cost sites as India, the continuing growth of this sector in the United States indicates that low labor costs are not as important as access to the right labor skills. WBGs’s high literacy rates and large pool of unemployed and underemployed, but educated and high-skilled, labor can provide WBGs-based firms with the types of skills they require.

---

*Telecommunications*

The existing telecommunications infrastructure in WBGs, while sufficient to meet the requirements of the typical manufacturing-oriented project, falls short of the requirements for IT services, which is dependent on high-quality, low-cost telecommunications for its success. While international leased lines are currently available through Bezeq, the Israeli telecommunications company, the high costs are a distinct disadvantage. As discussed in chapter 3, international leased lines from WBGs are, on average, more than twice as high as leased lines from Jordan or Turkey. However, the Khadoury site in Tulkarem, which is being planned

as a technology park, can ensure the availability of low-cost, high-quality telecommunications through a deregulated environment and the installation of an on-site teleport.

---

*Summary of Comparative Advantage*

In terms of overall industry requirements, the industrial estates – the Khadoury TDC, in particular – can provide a conducive operating environment for data conversion, including basic data entry, vector conversion and other back office services.

- For basic data entry and back office projects, the West Bank offers a large pool of educated, and often unemployed, workers that could be trained to provide keyboarding services both locally and regionally.
- For vector conversion, the West Bank offers a growing pool of engineering graduates that can be successfully to train for vector conversion. The growing number of qualified hardware and software technicians in the West Bank can ensure that data conversion companies located at the Khadoury TDC will have access to the required technical support.

In addition, the presence of a deregulated telecommunications environment at the Khadoury TDC site can further improve the operating environment for data conversion.

---

**8.3 Competitive Advantage** The following sections evaluate the regional and international competitive market trends in the IT services industry.

---

*WBGS and Israel*

*Government needs can jumpstart the data conversion industry.* TSG findings indicate that there is strong potential for data conversion and vectorization activity in a technology park in WBGS. TSG interviewed two firms that expressed interested in such a project. One is Atlas Geomatics; the other is a consortium of Israeli and Palestinian firms led by the Israeli firm Or Hi-Tec. The Palestinians will be faced with urban planning, mapping, zoning, voter registration, demographics, and related concerns. The data conversion/GIS activities described above cater to that need.

---

However, in order for the data conversion industry to take off in a Palestinian technology park, there needs to be a guaranteed stream of work—probably in the amount of about US\$500,000 per year. The PA, with its varied data conversion needs, would be an obvious client to supply that contract. A great need exists to digitally map the municipalities and rural areas of WBGS—with different “layers” depending on the needs of the government. These layers could include land ownership, population demographics, utilities, sewerage, commercial zoning, and vegetation. Both Atlas Geomatics and the Or Hi-Tec Consortium felt that this was the only way that a data conversion industry could be jumpstarted in WBGS. Eventually, smaller projects would grow around the core steady stream of work, and the business would become self-sustainable. Some have suggested that a mapping project could be initiated with funding from a multilateral lending agency.

---

*International*

*Little exposure to opportunities in the Middle East.* TSG findings indicate that the data conversion industry in the United States has had little exposure to the Middle East market and opportunities for its development. All the American data conversion firms that TSG interviewed had little interest in investing in WBGS or the Middle East. Tomahawk II, Inc. outsources some of its data conversion work to India and China, and Emery DataGraphic maintains all of its conversion work in Denver, Colorado (USA). APEX Data Services Inc. maintains its six overseas production centers in India. The firm had explored the idea of investing in Egypt about ten years ago. However, they found the Egyptian business climate to be very difficult, and not favorable for investment. When they first invested in India, it was amidst a climate of bribery and government corruption. If the firm invests overseas in the future, it does not want to relive this experience.

In the short-run, it is unlikely that WBGS will attract investment from the United States or Europe, given the still nascent nature of the industries that are likely to drive the data conversion market in the Arab Middle East (finance, insurance, etc.).

---

*Summary of Competitive Advantage*

Global trends do not strongly favor investment by American or European investors into the data conversion industry in the short run. Instead, investment into the data conversion industry into

WBGS will be largely driven by the needs of the PA and its willingness to outsource these tasks to private companies. In the short run, it is likely that this demand would be fulfilled by local Palestinian and/or Israeli companies interested in expanding across the Green Line.

- 8.4 Policy Considerations** The data conversion industry fulfills several of the indicated policy objectives:
- As a labor intensive industry, data conversion can generate employment of both lower-skilled (for basic data entry/keyboarding and back office services) and higher-skilled (for vector conversion) workers
  - Investment in the more technology-oriented activities, such as vector conversion, can facilitate the skills upgrading of the local workforce
  - In addition, the industry, which is service-oriented, is environmentally friendly, with no water use and a low production of waste

**8.5 Summary of Promotion Potential** The data conversion industry is a promising target for investment promotion into the Palestinian industrial estates in the short run. The region's human resource assets, the potential of the Khadoury TDC to provide the required infrastructure, and the stated policy objectives support the development of a data conversion industry, in the short-run, though it will largely be driven by the data conversion needs of the PA.

- 8.6 Target Activities and Markets** Based on the above analysis, the following niche activities and sources of investment should be targeted for promotion into the Khadoury TDC:
- Israel-based data conversion companies, including both basic data entry and vector conversion, interested in entering into joint ventures or other partnership agreements with local Palestinian companies; and

- Small Palestinian companies operating at the lower end of remote processing services, including back office services.

In the medium- to long-term, as the industry becomes more established and the regional market for such services grows, the KTDC will have the potential to attract investments from the U.S. and/or Europe.

*Promotion Targets*

Indicative promotion targets, including employment and capital investment, are based on the average size of investments entering the region and similar investment locations worldwide. The average size of investment is expected to be between US\$0.8 and US\$1.0 million, with employment ranging from 40 to 60 employees. Table 8.4 below displays the indicative promotion targets, for a three-year period, in the call center industry.

**Table 8.4: Promotion Targets for the Data Conversion Sector**

<b>Promotion Targets</b>	
Number of Projects	1
Cumulative Investment Value	US\$0.9 million
Cumulative Employment	50

## **9. Logistics Handling for Cut Flower Industry**

---

### **9.1 Industry Definition**

The cut flower sector is a global industry, highly dependant on efficient and sophisticated logistics services, including packaging, storage and freight forwarding. Cut flowers, given their perishable nature, must be moved to end markets in a matter of days, often thousands of miles from where they are grown. Producers, both small and large, from various parts of the world – including the Netherlands, Spain, Kenya, Zimbabwe, Israel, WBGs, Colombia, Ecuador, and Mexico – compete in a global arena to supply consumers in all major markets.

To service the growing international cut flower commerce, companies have created flower forwarding services. One of the largest in the world is the Dutch Everflora, which moves approximately 4,500 tons of flowers from 25 countries. These companies maintain contracts with air carriers that specialize in perishable transport charters or ship flowers using regular scheduled flights.

---

### **9.2 Comparative Advantage**

The following section examines the match between the factor requirements for cut flowers logistics industry and the location attributes of the GIE and the proposed industrial estates in the West Bank and the Gaza Strip. As demonstrated in Table 9.1, the Gaza Strip industrial estates provide a promising location, in terms of their attributes, for investment in this sector. The following sections focus on those factors that are most important for the site selection for logistics companies dealing in the cut flowers sector, including access to client base, transportation infrastructure, access to markets, and telecommunications.

### *Proximity to Cut Flower Industry*

Given the perishable nature of the cut flower product, logistics operations must be located in relatively close proximity to the production centers, as well as air transportation. WBGs's cut flower industry is located primarily in the Gaza Strip, with 90 percent of production located in and around the Rafah area. Although it a relatively new industry, introduced in 1990 to replace citrus crops, it has grown significantly. By 1996, the industry utilized more than 700 donums, with annual production reaching

**Table 9.1: Demand Profile for Cut Flowers Logistics Industry**

Factor	Industry Requirements	Location Attributes		Comparative Advantage or Disadvantage
		West Bank	Gaza Strip	
<b>CRITICAL FACTORS</b>				
Access to Raw Materials/ Client Base	Proximity to production centers	Few major flower growing centers in West Bank	In close proximity to major flower growing centers	Advantage for Gaza Strip
Access to Markets	Require access to export markets	Preferential access to leading regional and international export markets	Preferential access to leading regional and international export markets	Advantage
Transportation	Low-cost transport of final product to export markets is required	Exports through Ben Gurion - delays in exporting, as well as added costs for security checks required by Israel	Operationalizing cargo terminal at Rafah will reduce delays in exporting, as well as reduce costs for security checks	Potential Advantage for Gaza Strip
<b>VERY IMPORTANT FACTORS</b>				
Telecoms Infrastructure and Costs	Logistics industry requires high-quality, low-cost telecoms	Telecoms infrastructure is adequate, but costs are high	Telecoms infrastructure is adequate, but costs are high	Disadvantage
<b>IMPORTANT FACTORS</b>				
Land/building Costs	Desirable to have access to serviced land or ready-built facilities at low cost	Industrial estates provide land and ready-built facilities, but at relatively high cost	Industrial estates provide land and ready-built facilities, but at relatively high cost	Disadvantage
Labor Availability and Costs	Require supply of competitively priced, low-skilled workers	Large supply of unemployed workers, though must compete with Israeli employers	Large supply of unemployed workers, though must compete with Israeli employers	Advantage
Investment Incentives	Favorable package of incentives desirable	Industrial estate tenants receive favorable package of tax incentives	Industrial estate tenants receive favorable package of tax incentives	Advantage

Factor	Industry Requirements	Location Attributes		Comparative Advantage or Disadvantage
		West Bank	Gaza Strip	
<b>LESS IMPORTANT FACTORS</b>				
Power Infrastructure and Costs	Reliable, relatively low-cost power supply required	Possible to provide reliable power supply, but at higher cost than others in region	Possible to provide reliable power supply, but at higher cost than others in region	Disadvantage
Water Infrastructure and Costs	Not very important	-----	-----	-----
Access to Capital	Not very important	-----	-----	-----
<b>OVERALL</b>				Potential Advantage for Gaza Strip

more than 70 million stems, virtually all being exported to European markets. Between 1992 and 1996, year-on-year growth, in terms of land under cultivation, has been approximately 100 percent. Therefore, it is likely that today the figures are somewhat higher than in 1996, both in terms of land under cultivation and production. However, the limited supply of cultivable land will set parameters on the further expansion of this industry. The proximity of the GIE and the proposed industrial estate and free zone at Rafah to this growing industry is a significant advantage to these sites.

*Transportation*

The most critical factor for success in the global market place for cut flowers is transportation. Since flowers are a perishable product, with a limited shelf life, efficient logistics and adequate transport infrastructure are key elements without which an otherwise high quality product may not reach strategic markets on time.

Cut flower shipping involves two complementary modes of transportation: air freight and road transport. Flower growers require speedy road transportation to arrive at airports where the cut flowers will be shipped to other destinations. International cut flower trade originating in the Middle East or Africa requires air travel to reach European or North American markets. Flowers can reach their final destinations, after being auctioned (see section on competitive trends for description of flower auctions), in less than

two days. Further, market demand for cut flowers features sudden peaks, triggered mainly by holidays and national celebrations (such as Valentine's Day in the US, Mother's Day, Women's Day in Russia, or Easter in Italy). Hence this perishable commodity needs to be available and shipped within a few days of high-demand occasions. Growers must be able to provide "just-in-time" delivery.

An additional element in the transportation of cut flowers is the 'cold chain infrastructure'. So as to reduce their metabolism and ensure a longer transport and shelf life, flowers need to be under cooler temperatures immediately after cutting and throughout the shipment process. According to industry best practices, temperatures should be close to 3°C throughout the process. Therefore all transportation facilities need to maintain cooling facilities and flowers need to be shipped as quickly as possible. Trucks and airports active in the flower trade maintain chilling devices. According to industry experts, one weak link in the freight chain –for instance, an uncooled storage facility in an airport - will ruin the produce. The most risky component in the transportation chain is the potential for delays in customs and airport facilities.

The cut flower industry requires, as mentioned above, efficient delivery systems and low temperatures must be maintained throughout the cycle. The table below presents a detailed description of the logistics surrounding flower delivery.

Currently, the Palestinian cut flower industry is dependent on Israeli freight forwarders, as well as the Israeli transportation infrastructure at Ben Gurion International Airport, to meet its logistics needs. While this transportation outlet is available to Gazan flower growers, they suffer from a number of drawbacks that can directly impact the profitability and viability of Gaza's cut flower industry. It has been widely documented that Palestinian

**Table 9.2: Stages of Logistics for Cut Flowers**

Stage	Description	Temperature
Flower Harvesting	Flower harvested from green or hot houses and placed in water for hydration.	Outdoor temperature
Sorting and Selecting	Cut flowers sent to sorting and selecting room in less than half an hour; flower quality control and selection; flower bundles made and placed in water.	Room temperature; if outside temperature too high: pre-cooling phase, before sorting, in refrigerators to reduce flower metabolism
Storing	Storage in refrigerator for at least four hours – to reduce metabolism- and approximately less than three days.	2° - 3° Celsius
Shipping	Produce placed in carton boxes to be shipped in chilled containers on trucks to airport for subsequent air freight.	2° - 3° Celsius

products are at a disadvantage from Israeli flowers, as they are subject to several security checks during the ground transportation phase and shipments often experience delays in customs at Ben Gurion Airport. Such delays place the freshness of Palestinian flowers at risk. Further, the Israeli forwarding agents often require Palestinian producers to export production with Israeli certificates of origin, an illegal practice under European Union trade guidelines. In order to reduce their own risk, Israeli agents require deposits to cover any costs they may incur if fined for such practices.

The new international airport at Rafah has the potential to open new opportunities for logistics in the cut flower industry, providing a direct outlet for cut flower exports, which would both reduce the delays and the costs attributed to Israeli security checks, as well as enable export under Palestinian certificates of origin. An EU-funded project aims to move 70 million stems per year from Gaza through Rafah airport – start-up is expected to begin within one year. While the Rafah Airport is fully equipped with the necessary cold storage facilities, its cargo operations have yet to be operationalized. The start-up of Rafah’s air cargo facilities will be essential if the Gaza Strip industrial estates are to attract investment in the flower-forwarding sector.

*Access to Markets* Access to markets, given the global distribution of cut flowers, is an important factor driving investment in the industry, including both in actual flower production and downstream activities, such as logistics. WBGs has been granted preferential access to leading world markets for cut flowers, including Europe and the United States. Europe, however, is the main destination market for the Palestinian cut flower industry, as the distance to the U.S. is too great for such a perishable product. Under the Association Agreement with the EU, quota access is currently provided for agricultural goods. An EU-WBGs free trade area is planned for 2001, which would greatly benefit the cut flower industry. While the existing EFTA agreement, which covers many of the non-EU countries, does not grant any preferential treatment to agricultural products, EFTA is not a significant importer of cut flowers (see sections below).

*Telecommunications* The logistics industry has become increasingly dependent on quality telecommunications infrastructure for its success. Electronic Data Interchange (EDI) systems are required to efficiently move goods. For the cut flower industry, with its perishable product, requires the utilization of EDI and other similar electronic media to ensure that goods are moved as quickly as possible through the system. While the telecommunications infrastructure is improving in WBGs, increased capabilities will be required to meet the demands of logistics handlers.

*Summary of Comparative Advantage* Table 9.1 above provides an overview of the requirements of flower forwarders and the attributes of the industrial estates. In terms of overall industry requirements, the industrial estates – particularly those based in the Gaza Strip – can meet many of the key requirements of the flower forwarding industry, including close proximity to the main flower production center in Gaza, preferential access to key export markets, as well as proximity to the new Rafah Airport. The operationalization of Rafah’s cargo facilities will be essential in order to attract logistics providers. Without such facilities, there will be no reason for a flower forwarder to locate in Gaza.

---

**9.3 Competitive Advantage** The following sections evaluate the international competitive market trends in the cut flower industry.

---

*Local Industry Profile*

As discussed above, the Palestinian cut flower industry is relatively new. It was established in 1990 in response to a declining market for Gaza citrus production. The industry was founded utilizing Israeli technological assistance. All flower production in Gaza is done in greenhouses. By 1996, more than 700 donums were under cultivation, with production reaching more than 70 million stems for the year, 95 percent of which was destined to export markets, primarily the Amsterdam flower auction (see discussion on Auctions below). In 1996, almost 1,500 Gazans were employed in the industry. Between 1992 and 1996, year-on-year growth, in terms of land under cultivation, has been approximately 100 percent. Therefore, it is likely that today the figures are somewhat higher than in 1996, in terms of land under cultivation, production, as well as employment. However, the limited supply of cultivable land will set parameters on the further expansion of this industry.

Despite the rapid growth of the cut flower industry in Gaza, the local industry structure remains relatively weak, with many small separate producers, reducing the benefits from economies of scale. In addition, the industry focuses virtually all of its production on one flower type – carnations. Only 10 percent of output is made up of other flower types. Gazan carnations are, however, of very high quality, provided that they make it to market on time.<sup>1</sup> As discussed in the previous sections, current conditions hamper the ability of Gazan producers to get their product to market in a timely manner. The start-up the EU-funded project will greatly enhance the ability of Gazan flower producers to deliver their product to European markets, which would facilitate the entrance of Gaza-based flower forwarders.

---

*Israeli Market Profile*

As discussed, the delivery of Gazan cut flowers to market is handled almost exclusively by Israeli flower forwarders, including Agresco and Bickel Custom and Transportation Services, Ltd. Agresco exports approximately 1.5 billion stems per year. Israeli

---

<sup>1</sup> Mr. Frank de Groot, Import Manager for Cooperative Veiling Zuidoost in the Netherlands.

flower production covers a far wider variety of flower species. Therefore, while Gazan carnations only make up a very small proportion of their total flower exports, they make up a significant share of carnation exports. These companies maintain contracts with air carriers that specialize in perishable transport charters such as KLM, Lufthansa Cargo and IATA, or ship flowers using regular scheduled flights.

---

*International Trends*

The value of global market for flowers and plants amounted to US\$30 billion in 1998. The United States is the largest market for cut flowers and is closely followed by Japan and Europe. Both Western Europe and the United States supply most of their domestic cut flower market with imports. The Netherlands, Kenya, Israel, and Zimbabwe are the main suppliers for the European markets.

Middle East goes through the Dutch flower auction system, where produce is bought and sold and shipped until reaching the final destinations, mainly North America and other European countries. Over 80 percent of the flowers imported by Holland come from outside the European Union, particularly from Israel, Kenya, Zimbabwe and Colombia. The vast majority of these – approximately 80 percent - are re-exported after being auctioned off; most Israeli and Palestinian produce arrives in Holland before its final destination; with 85 percent for Palestinian flowers.

The Netherlands maintains seven auction houses for plants and flowers with the largest being the Vereigde Bloemenveilingen Aalsmeer (VBA) or Aalsmeer Flower Auction. VBA controls approximately 45% of the market in the Netherlands, has grounds of 1,380 hectares, and over 7,000 producers offer their cut flowers on the premises every year. In 1998 sales of plants and cut flowers at Aalsmeer totaled nearly US\$1.5 billion. Cut flower revenue reached almost two-thirds of that value. Smaller flower auctions, which also supply the European market, operate in Italy and France.

The tables below present the top 10 cut flowers traded in VBA in 1998 and the top ten cut flower destination countries.

**Table 9.3: Top Ten Cut Flowers Sold at VBA in 1998**

Flower Type	Amount (millions of stems)
1. Rose	1,618
2. Tulip	552
3. Chrysanthemum	399
4. Gerbera	241
<b>5. Carnation</b>	<b>193</b>
6. Freesia	149
7. Lily	143
8. Alstroenemeria	126
9. Iris	99
10. Gypsophila	83

Source: VBA Website

**Table 9.4: Top Ten Export Destination Countries**

Country	Amount (millions of stems)
<b>1. Germany</b>	<b>3,354</b>
<b>2. France</b>	<b>1,111</b>
<b>3. United Kingdom</b>	<b>966</b>
4. Italy	388
5. Belgium	304
6. Switzerland	262
7. Austria	256
8. United States	210
9. Denmark	187
10. Sweden	166

Source: VBA Website

To support the flower trade at Alsmeer, an entire transport and logistics industry resides at the auction, which ensures swift delivery to the airport for shipment to the final destinations. Forwarders usually have about one hour to package and load the flowers on waiting refrigerated trucks bound for the airport. These logistics providers, specialized in the efficient movement of cut flowers, are logical targets for investment in the local Gazan flower trade.

*Summary of Competitive Advantage*

The Gaza Strip industrial estates can, in terms of competitive market trends, provide new opportunities for investment in Gaza-based flower forwarding operations. The Gaza market can meet

the demands of logistics providers with the growing supply of Gazan cut flowers and the relatively high demand for carnations in the European flower market. However, the still small-scale of local production, vis-à-vis other production locations such as Israel, indicates that, in the short-term, one logistics provider would be sufficient to meet the transportation needs of Gazan flower producers.

---

**9.4 Policy Considerations** The flower forwarding industry meets one of the main policy objectives: the stimulation of direct exports from WBGS, as Gazan growers are able to bypass the existing Israeli traders and reap the benefits of cost and time savings. However, the industry fails to meet any of the other indicated policy objectives:

- The small-scale of expected investment will not stimulate much employment generation.
- The cut flower industry is a large user of Gaza’s scarce water resources.
- The industry offers few opportunities to move up the technology scale, as it relies primarily on low-skilled labor.

On the other hand, the establishment of the flower forwarding industry in Gaza will provide other benefits – it will:

- Decrease Gazan grower’s complete reliance on Israeli shipping companies;
- Ensure faster delivery to a geographically closer airport;
- Avoid various security checks along transportation chain;
- Provide adequate response to sudden international market changes, triggered by national and religious holidays;
- Enable Gazan producers to compete on equal terms with Israeli flower growers.

---

**9.5 Summary of Promotion Potential** While competitive trends favor the establishment of the flower-forwarding industry in the Gaza Strip, the scope for investment is likely to be small given the limitations on the potential expansion of production capacity. In addition, the industry is unable to meet

the key policy objectives. Under these circumstances, the flower forwarding industry is not a favorable target for investment promotion. However, the operationalization of the Rafah cargo facilities, and the assistance of the EU-funded project to stimulate direct exportation of Gazan cut flowers through Rafah, at least one investment in flower forwarding can be expected to occur, even in the absence of an active promotion strategy.

## 10. Olive Oil and Related Products

---

**10.1 Industry Definition** The following sections focus on the potential for investment in olive-related industries, including edible olive oil and non-edible olive oil products, primarily focusing on soap production.

---

*Olive oil production* Olive oil is made by crushing olive to a paste and extracting the oil by pressing or spinning the paste in a centrifuge. For the extraction of oil, an amount of heat may be applied. The highest quality oil is extracted without the use of heat; this oil is known as cold pressed. Extra virgin oil is unrefined and cold pressed.

The vast majority of olive oil is used for cooking purposes, although there is a rising demand of small, niche markets for olive oil based specialty soaps and pomace (the fibrous material left after pressing).

Olive oil production consists of several steps, from picking the olives, grinding them, pressing the pomace, to storage of oil. Table 10.1 below describes the process.

**Table 10.1: Production Process of Olive Oil**

Production Stage	Description
1. Picking the olives	The most labor intensive production stage; picking still performed manually; automated picking technologies in prototype phases.
2. Olive cleaning	Olive cleaning usually performed with automated cleaners to remove rocks, sand, stems, twigs and leaves; rocks and sand can wear down oil separator and centrifugal decanter (see below).
3. Grinding the olives to paste	Olive grinding utilizing a variety of methods: stone mills (represents high labor costs), grinders, hammermills, eccentric chamber.
4. Mixing the olive paste	20 to 40 minutes of mixing for small oil droplets to combine into bigger ones, to be removed in the next step. The paste is often heated to 28 degrees centigrade during this process. Most common mixer: horizontal trough with spiral mixing blades.
5. Separating the oil and water from the fruit	Extraction of water and oil from pomace using presses or centrifuges. Tools include: pressure press, centrifugal decanter, phase centrifuge, percolations-sinolea, water bath. Certain materials may be added to increase oil yield, such as enzymes, talc, steam, solvents or alkali.
6. Separating the oil from the water	Separation of oil and water with a centrifuge or a decanter.
7. Processing the olive oil	Refining with steam or alkali (reduce acidity and improve flavor), bleaching with synthetic sylicas or active carbon (reduce chlorophyll, carotenoids, residual fatty acids and pesticides), deodorization with active carbon.
8. Storing	Storage in metal, glass or plastic containers; ideal storage is stainless steel or metallic drums lined with epoxy resins; do not let in light as plastic or glass; light will deteriorate oil.

**10.2 Comparative Advantage**

The following section examines the match between the factor requirements for olive oil industry and the location attributes of the GIE and the six proposed industrial estates in the West Bank and the Gaza Strip. As demonstrated in Table 10.2, while the industrial estates can meet many of the factor requirements, access to raw materials – the most important factor - as well as lack of transportation and high electricity costs limit the attractiveness of the olive oil industry. The following sections focus on those factors that are most important for the site selection for data conversion companies, including labor costs and availability, telecommunications, and business support services.

---

*Access to Raw Materials*

In terms of geographical distribution, the highest concentration of planted olive trees is in the northern districts of the West Bank, including Tulkarem (29 percent), Nablus (22 percent), and Jenin (19 percent). Only one percent of the planted olive trees are located in the Gaza Strip. Only 58 percent of this production goes for pressing, either into olive oil (edible and non-edible) and oil cake, the remainder is used as table olives, which supply the local market. The northern districts put a higher percentage of their olive output towards pressing (70 percent versus 50 percent). Following pressing, approximately 24 percent of pressed olives go towards the production of edible olive oil and 6 percent towards soap production. In terms of location, the proposed industrial estates in the northern provide more favorable opportunities for olive oil production.

The West Bank and Gaza Strip, together, produce approximately 81,000 tons of green olives per year.<sup>1</sup> However, this figure is deceiving as there are wide fluctuations in annual production due to natural cycles, which are intensified by cultural practices. While in “mass” years (1986, 1988, 1990, 1992, 1994), olive oil production accounted for 20 to 30 percent of total agricultural production, in non-“mass” years (1987, 1989, 1991, 1993), olive oil production accounted for only 1.5 to 3 percent of total agricultural production. The majority of local olive oil production is

---

<sup>1</sup> Based on production figures from 1990 to 1995. Ministry of Planning and International Cooperation, *Building Competitive Advantage in the Palestinian Economy: the Olive Oil Industry Cluster*, August 1998.

**Table 10.2: Demand Profile for Olive Oil and Related Products**

Factor	Industry Requirements	Location Attributes		Comparative Advantage or Disadvantage
		West Bank	Gaza Strip	
<b>CRITICAL FACTORS</b>				
Access to Raw Materials	Access to consistent supply of olives	Small and inconsistent supply of locally-produced olives	Small and inconsistent supply of locally-produced olives	Disadvantage
Access to Markets	Require access to export markets	Preferential access to leading regional and international export markets	Preferential access to leading regional and international export markets	Advantage
Transportation	Low-cost sea transport of final product to export markets is required	Delays in exporting, as well as added costs for security checks required by Israel	Delays in exporting, as well as added costs for security checks required by Israel	Disadvantage
<b>VERY IMPORTANT FACTORS</b>				
Labor Availability	Trained production workers	Large supply of factory workers	Small supply of factory workers	Advantage for West Bank
Labor Costs	Important – need to be competitive with alternative production locations	Relatively cost competitive vis-à-vis Middle East/ Mediterranean locations	Relatively cost competitive vis-à-vis Middle East/ Mediterranean locations	Advantage
Power Infrastructure and Costs	Reliable, relatively low-cost power supply required	Possible to provide reliable power supply, but at higher cost than others in region	Possible to provide reliable power supply, but at higher cost than others in region	Disadvantage
<b>IMPORTANT FACTORS</b>				
Investment Incentives	Favorable package of incentives desirable	Industrial estate tenants receive favorable package of tax incentives	Industrial estate tenants receive favorable package of tax incentives	Advantage
Water Infrastructure and Costs	Reliable, relatively low-cost water supply required	Persistent water shortages	Persistent water shortages	Disadvantage

Factor	Industry Requirements	Location Attributes		Comparative Advantage or Disadvantage
		West Bank	Gaza Strip	
Land/building Costs	Desirable to have access to serviced land or ready-built facilities at low cost	Industrial estates provide land and ready-built facilities, but at relatively high cost	Industrial estates provide land and ready-built facilities, but at relatively high cost	Disadvantage
<b>LESS IMPORTANT FACTORS</b>				
Access to Capital	Not very important	-----	-----	-----
Telecoms Infrastructure and Costs	Not very important	-----	-----	-----
<b>OVERALL</b>				Disadvantage

required to meet domestic demands. In addition, in the olive oil soap production sector, 40 to 50 percent of the required olive oil must be imported from Italy or Spain in order to achieve the proper level of acidity for the saponification process.<sup>2</sup> Such a small and inconsistent supply of olive oil for export is a disadvantage to investment in any downstream olive production activities.

*Access to Markets*

Given the small size of the domestic market for olive oil and olive-based products, foreign investment will be dependent on access to key export markets. Historically, Jordan was WBGS's main export market for edible olive oil. Despite consumer preferences the Jordanian government banned all imports from WBGS in 1995 in order to boost its own olive oil industry.

As discussed in the sections below, the fastest growing consumption markets are located in the United States and Europe, as well as other Mediterranean markets. WBGS has been granted preferential access to Europe and the United States. Under the Association Agreement with the EU, quota access is currently provided for agricultural goods. An EU-WBGS free trade area is planned for 2001, which would greatly benefit the olive oil industry. The free trade agreement with the U.S. applies to all

<sup>2</sup> Mr. Abu Rous, Managing Director of the Abu Rous Soap and Chemical Company. Abu Rous is the only olive oil soap producer using machinery rather than traditional manual production methods.



products, including olive oil. These trade agreements can provide an inducement to investment in WBG's olive oil industry. However, the existing EFTA agreement, which covers many of the non-EU countries, does not grant any preferential treatment to agricultural products.

Currently, virtually none of the local production is destined to world markets due to the high degree of acidity resulting from the use of old machinery. The establishment of foreign investment, with more sophisticated equipment, can reduce the acidity, removing this particular constraint on increasing exports.

---

*Transportation*

One obstacle to investment in this sector is the difficulty associated with exporting goods from WBG. While the cost of transportation is relatively competitive, importers and exporters sometimes experience long delays due to the security requirements of the Israeli authorities. Such export delays can reduce the competitiveness of the industrial estates as platforms for the manufacture of goods, including olive oil.

---

*Human Resources*

Labor Availability

As a manufacturing industry, olive oil production is a labor-intensive industry and therefore dependent on access to qualified workers at competitive wage rates. In terms of availability, can offer investors an experienced workforce that is knowledgeable about olive oil production. As of 1997, there were close to 1,700 people engaged in oil production, virtually all employed in the West Bank. In addition, close to 70 percent of existing olive oil producers in the northern districts of the West Bank make use of automatic presses, providing their workers with experience in mechanized olive oil production processes. Experience is less sophisticated in the olive oil soap industry as virtually all production, which is centered in Nablus, is done manually. Currently, there is only one producer utilizing basic machinery. Nevertheless, the Palestinian workforce has proven to be a highly trainable and productive workforce, making it an attractive factor for investment.

Labor Costs

Like other food processing industries, labor typically accounts for 35 percent of the operating costs for olive oil production. In terms of labor costs, WBG can offer a relatively favorable environment when compared to the main olive oil production centers in Europe, including Spain, Italy, and Greece - as well as Israel and Turkey, two alternative production centers in the region - where average

wage rates tend to be 2 to 3 times higher than in WBGs. However, WBGs must compete for investment with lower wage producers, including Jordan, Morocco and Tunisia.

---

*Electricity* Food processing industries tend to be among the higher electricity-intensive light manufacturing industries.<sup>3</sup> A reliable, low-cost supply of electricity is important in ensuring a smooth production process. While the GIE can provide a reliable supply of electricity, which can presumably be matched by any of the proposed industrial estates through bulk connections to the Israeli grid, the cost of electricity is relatively high vis-à-vis other investment locations in the region. The cost of electricity in WBGs is approximately twice as high as in Israel and Turkey, both significant producers of olive oil.

---

*Summary of Comparative Advantage* While the Palestinian industrial estates, particularly those in the northern districts of the West Bank, can offer several advantages to prospective olive oil producers – including access to key export markets, a relatively low-cost and highly trainable workforce, and an attractive package of incentives - in terms of overall industry requirements, the industrial estates do not provide a very favorable environment. The most critical factor affecting WBGs's potential to attract olive oil and related product manufacturers is the inconsistent supply of raw materials.

---

**10.3 Competitive Advantage** The following sections evaluate the local and international competitive market trends in the olive oil and related products industries.

---

*Local Industry Profile* As discussed in the previous sections, WBGs's edible olive oil industry is concentrated in the northern districts of the West Bank, including Tulkarem, Nablus and Jenin, which together account for 70percent of planted olive trees in WBGs. Like other industries in WBGs, the olive oil sector is highly fragmented. The olive oil sector is comprised almost 250 enterprises (1997 data from PCBS), which employ approximately 1,700 workers.

Edible Olive Oil

---

<sup>3</sup> KPMG, *The Competitive Alternatives*, 1999. For instance, an average food processing plant requires 370 kWh of electricity per month, compared to 225,000 kWh for electronics manufacturing.

---

Olive Oil Soap                      The olive oil soap sector is almost entirely located in Nablus. It is a traditional industry whose production is destined almost entirely to local markets. Only one company, the Abu Rous Soap and Chemical Company, utilizes a mechanized production process, rather than traditional manual production methods.

*International Trends*

Edible Olive Oil                      Olive oil production is a global industry, with the vast majority of output concentrated in Mediterranean countries. Consumption for olive oil has increased in recent years, particularly in the affluent, Japanese, United States, and European markets. FDI activity in the industry is primarily motivated by both the need to tap into new markets, as global demand for olive oil increases; and reduce labor costs, due to, among other factors, decreasing European Union farm subsidies.

*The Mediterranean is the leading olive oil production center.* Mediterranean countries are the main olive oil producers in the world. Of the 2.4 million metric tons of olive oil produced in the 1998-99 yearly season, EU countries in the Mediterranean accounted for nearly 75% of world supply. The top three olive oil producing countries in the world are Spain, Italy, and Greece. During the 1998-99 season, Spain produced approximately 975,000 metric tons, or approximately 41% of production, while Italy maintained an output of approximately 500,000 metric tons and Greece of 300,000 tons. The largest non-EU olive oil producer is Tunisia, which maintains an average production of 180,000 tons per annum. Turkey and Syria are other important olive oil producers. The olive oil produced in WBG amounted 14,998 tons in 1998, 0.6% of global output.

**Table 10.3: Characteristics of the Global Olive Oil Industry 1998-99**

Largest Producers in descending order	Spain (with 41% market share), Italy (with 21% market share), Greece (13% market share), Portugal, Tunisia, Turkey, Syria
Palestinian Production	14,998 tones, 0.6% of global output
Demand Trends	Rising overall global demand, with increasing consumption rates in the United States, Northern and Central Europe, and Japan.

*Rising olive oil consumption in world markets.* Olive oil consumption has increased in recent years and was at around 2.28 metric tons in the 1998-99 period. Demand outside the Mediterranean comes primarily from Northern and Central European countries, the United States, and Japan. The increasing demand stems primarily from the products healthy image among affluent Western markets. Olive oil has lower saturated fat and higher monounsaturated fat content than most vegetable oils. The rising consumption of olive oil in the United States is mainly satisfied via imports, which account for 98% of demand. The country maintains a marginal olive oil production of 0.1% share of global oil output, mainly from the state of California. The popularity of olive oil typically leads to more oil being sold than produced in a given moment, suggesting that some olive oil is mixed with other oils. Table 10.3 above summarizes some of the olive oil industry characteristics.

*Increasing cross-border investments.* In recent years the largest olive oil producers have been active foreign investors in regions with appropriate climatic conditions for olive production. Following are the main reasons for the increase in FDI activity:

- **Increasing Global Demand and New Market Exploration.** One of the main motivating forces to invest abroad is the rising global demand for olive oil, especially in developed countries. In addition, companies are trying to open and build a presence in new markets. For instance, Agrolive Pty Ltd, an olive oil joint venture set up in Australia, between local and Israeli investors, as well as the Italian firm Braha, will aim at the Australian markets, as well as explore new markets in Asia and the United States.
- **Seeking Lower Labor Costs.** Olive oil production is a labor-intensive industry, especially in the picking, cleaning and milling production stages. To remain competitive against low labor cost producers such as Morocco and Tunisia, and as global demand increases, many producers are seeking lower labor cost producing region. For instance, Mexico has been the host of several new olive oil ventures from United States, Italian and Spanish investors, where the average minimum wage for an olive picker averages US\$10 per day, as opposed to US\$9 per hour in California.

- Declining EU Olive Oil Production Subsidies.** EU olive oil production subsidies have been declining, due to both increasing production and EU trade policy. This increases production costs. Therefore, many European olive oil producers are seeking new production platforms featuring lower production costs. For instance, the EU aid scheme for olive oil producers is based on the Maximum Guaranteed Quantity, which directs subsidies to olive oil production quantities below a certain threshold (approximately 1,350,000 tons for the entire EU and 760,027 tons for Spain). As Spanish olive oil production has been increasing - 975,00 tons for the 1998-99 season - the maximum subsidy has declined by approximately 23% per kilo. As a result many companies are considering opening operations abroad to reduce production costs.

In addition to FDI, Israeli oil producers are expanding local productive capacity to tap increasing demand levels. Such is the case of Shemen Industries who is building a new olive oil processing plant to tap into the growing olive oil market. Table 10.4 below presents the most recent reported olive oil foreign investments.

**Table 10.4: Recent Reported Inward Foreign Investment in Olive Oil Globally by Host Country**

Country	Investor(s) (Home Country)	Subsector	Investment Type (Year of Formation)	Domestic partner(s)
Syria	▪ Lebsanese investor	Olive oil	Joint venture (1999)	▪ Syrian company
Australia	▪ Braha (Italy) ▪ Israeli investor	Olive oil	Joint venture (1998): Agrolive Pty Ltd.	▪ Australian investor
Mexico	▪ Taccone Farms (Italy)	Olive oil	Joint venture (1998)	▪ Mexican investors
	▪ Spanish investors	Olive oil	Joint venture (1998)	▪ Mexican investor

As international trends suggest, olive oil companies from Spain, Italy, and Israel have been motivated to initiate foreign ventures in recent years, mainly due to increasing global demand and high labor costs in their home countries. WBG could benefit from this trend as local labor costs are significantly lower than in these other main production centers.

Olive Oil Soap

*Green revolution in consumer tastes.* The olive oil soap industry falls under a larger grouping of nature-based beauty care products. While nature-based beauty care products are nothing

new, the beauty products industry has seen consumer interest in such products grow tremendously over the past decade. Consumer tastes have undergone a “green revolution” with consumers becoming increasingly aware of the therapeutic effects of natural ingredients, such as olive oil, as well as environmental and health concerns. This trend has been strongest in the United States and Europe – a trend that industry analysts predict is here to stay. The popularity of such companies as Aveda, The Body Shop, and Bath & Body Works – which manufacture and retail nature-based beauty products – points to the potential of this niche market. Beauty care product manufacturers are eager to exploit this trend.

*Recent investments pick up on consumer trends.* In recent years, the natural beauty care industry has witnessed a number of investments across market segments. The beauty care industry is traditionally subdivided into two segments: mass market and premium-brand market. In the past, the nature-based niche products were marketed primarily by premium brand manufacturers. With growing consumer interest in nature-based cosmetics, a number of mass market, multi-product producers have introduced new nature-based product lines, eager to tap this growing niche market.

Few of these product lines, however, contain very high contents of natural ingredients. Those with such high contents of natural ingredients are marketed by the premium brand producers such as The Body Shop, Aveda, Bath & Body Works, and a host of small niche market producers. Mass-market products are less likely to contain large quantities of natural products, due to their expense and, therefore, effect of final product prices. Premium brand beauty care products compete more on quality than price. It is these latter producers that are the most promising in terms of investment into the Palestinian market as the high content of oil in soap production (approximately 85 percent of the material inputs) would warrant investment close to an olive oil production center.

---

*Summary of Competitive Advantage*

Competitive trends in both the edible olive oil and olive oil soap sectors favor investment in the olive oil industry in WBG. They key factors favoring investment in edible olive oil are rising global consumption and the desire of the major olive oil producers to move production to lower-cost production centers. In the olive oil soap industry, growing consumption of nature-based beauty care products is the key factor driving investment. WBG, with its

relatively low labor costs (versus other olive production centers), has the potential to fit into the industries' global market strategies.

---

**10.4 Policy Considerations** The olive oil industry meets several of the key policy considerations, including:

- *Increased employment in the productive sector.* With unemployment rates over 20% in WBGS, investments in olive oil production would boost employment levels, since olive oil production is a labor-intensive activity, particularly in the picking, cleaning and pressing activities.
- *Diversify export destinations.* Despite the high olive oil yield in WBGS, export destinations of the product are limited. FDI in the industry would enable Palestinian oil to reach new markets by capitalizing on multinationals' established distribution networks in the U.S. and Europe.
- *Upgrade technology.* In WBGS, 66% of olive presses are manual. FDI will serve as a catalyst for capacity building and technology transfer as multinationals employ more sophisticated technologies.

---

**10.5 Summary of Promotion Potential**

While competitive trends, as well as policy considerations, favor investment into the olive oil industries, including both edible olive oil and olive oil soap, local production trends, which are characterized by an inconsistent supply of raw materials, severely restrict the potential for foreign investment into the industry in WBGS. However, should local production trends improve in the future (*i.e.* if the industry can reach "mass" production every year), then the potential for foreign investment in both sub-sectors would emerge.

# 11. Plastic Packaging and Construction Products

---

## 11.1 Industry Definition

The plastics products industry is comprised of diverse groups. The main plastics materials for different markets are high and low density polyethylene (HDPE, LDPE), polyvinylchloride (PVC), polypropylene (PP), polystyrene, polyurethanes, polyethylene terephthalate (PET) and Acrylonitrile Butadiene Styrene (ABS/SAN). The industry’s main business is to convert plastic resins and compounds into plastic products. The sector utilizes a range of different technologies, such as injection molding, compression and blow molding extrusion, hand lay-up of fiber reinforced plastics, and coating. Plastic converters’ outputs are used by other industries such as food packaging, building products, electronics, automotive, and consumer goods. Plastic producers may operate as custom processors producing components on a subcontractual basis for other manufacturers, or they may be inhouse operations vertically integrated into the manufacturing process.

The plastics sector is generally dependent upon other industrial groups for sales and therefore linked to their economic performance. While market expansion is possible against other materials, plastics prosperity must rely upon the economic fortunes of its client base. The major markets for plastics in Europe, for instance, are packaging (36%), building (20%), electrical and electronics (7%), automotive (7%), agriculture (4%), and furniture (3%).

---

## End-users of plastics

The end-user plastic market is comprised of virtually all manufacturing and commercial firms and the consumer market. Following is Table 11.1, which presents the primary plastic product groups for each market category.

This chapter focuses on the potential for the industrial estates to attract investment in two of these broad categories: packaging and building/construction (pipe, conduit and fittings, including drainage, irritations, plumbing fixtures and septic tanks) products.

**Table 11.1: Primary End Markets for Plastic Products**

<b>End Market</b>	<b>Products</b>
Transportation	Motor vehicles and parts, railroad equipment, travel trailers, military vehicles, ships, boats, etc.
<b>Packaging</b>	<b>Bottles, jars, vials, food containers, flexible packaging (refuse bags and films), tubes, tape, straps, drums, caps, baskets, trays, boxes, pallets, bubble containers, etc.</b>
<b>Building and Construction</b>	<b>Pipe, conduit and fittings, including drainage, irritations, plumbing fixtures and septic tanks; building materials for all structures; panels, doors, windows, skylights, bathroom units, etc.</b>
Electrical/Electronics	Home and industrial appliances such as equipment, wire and cable coverings, communications equipment, resistors, magnetic tape, records, batteries, etc.
Furniture and Furnishings	Rigid and flexible types, including household and office furniture, bedding, carpets, rugs, backing, curtains, blinds, awnings, lamps, picture frames and wall coverings.
Consumer and Institutional Products	Disposable food serviceware, dinner and kitchenware, toys and sporting goods, health care and medical products, hobby and graphic art supplies (including photographic equipment), etc.
Industrial Machinery	All types, including engine and turbine parts, farm and garden machinery, construction and related equipment, machine tools, ordnance and firearms, chemical process equipment.
Adhesives, Inks, Coatings	Adhesives and sealants; printing ink, magnet wire enamels, core binders, foundry facings, paper coating and glazing, paints, varnishes, and enamels.
Other	Resins

## 11.2 Comparative Advantage

The following section examines the match between the factor requirements of the plastics industry and the location attributes of the GIE and the six proposed industrial estates in the West Bank and the Gaza Strip. As demonstrated in Table 11.2, the industrial estates do not provide a very favorable environment for investment in the plastic packaging and construction product sectors.

### Access to Markets

The majority of plastics production is typically consumed in the same regional market in which it is produced, given the high costs associated with transporting a bulky, but low-value product.<sup>1</sup> Therefore, investment is largely driven by access to a large

<sup>1</sup> KPMG, *The Competitive Alternatives*, 1999.

**Table 11.2: Demand Profile for Plastic Packaging & Construction Products Industry**

Factor	Industry Requirements	Location Attributes		Comparative Advantage or Disadvantage
		West Bank	Gaza Strip	
<b>CRITICAL FACTORS</b>				
Access to Markets	Require access to large local market	Large combined Israeli-Palestinian market	Large combined Israeli-Palestinian market	Advantage
Labor Availability	Trained production workers	Supply of experienced workers	Supply of experienced workers	Advantage
Labor Costs	Need supply of relatively cheap, low-skilled workers	Relatively cost competitive vis-à-vis Israel, but higher than other locations in region	Relatively cost competitive vis-à-vis Israel, but higher than other locations in region	Disadvantage
<b>VERY IMPORTANT FACTORS</b>				
Power Infrastructure and Costs	Reliable, relatively low-cost power supply required	Possible to provide reliable power supply, but at higher cost than others in region	Possible to provide reliable power supply, but at higher cost than others in region	Disadvantage
<b>IMPORTANT FACTORS</b>				
Transportation	Low-cost transport (via land) of final product to markets is required	Local ground transportation is expensive	Local ground transportation is expensive	Disadvantage
Investment Incentives	Favorable package of incentives desirable	Industrial estate tenants receive favorable package of tax incentives	Industrial estate tenants receive favorable package of tax incentives	Advantage
Land/building Costs	Desirable to have access to serviced land or ready-built facilities at low cost	Industrial estates provide land and ready-built facilities, but at relatively high cost	Industrial estates provide land and ready-built facilities, but at relatively high cost	Disadvantage
<b>LESS IMPORTANT FACTORS</b>				
Access to Capital	Not very important	-----	-----	-----
Telecoms	Not very important	-----	-----	-----
Water	Not very important	-----	-----	-----
<b>OVERALL</b>				<b>Disadvantage</b>

market within a given geographic region, which would enable a producer to reach an adequate scale of production. While the WBG is too small to support the scale of production required to attract investment, its proximity and duty-free access to the Israeli market would enable an incoming investor to meet the required scale of production.

---

*Human Resources*

Labor Supply

The production of plastic packaging and construction products requires access to relatively low-cost, semi-skilled labor as machine operators, rather than higher-skilled technicians, drive the production process. WBG has an established plastics industry, specializing in the two identified sub-sectors – Key product sectors include construction supplies (sewage and irrigation pipes, water tanks), household products (bags, shoes) and packaging materials (primarily for agriculture products). In 1997 there were 144 enterprises and more than 1,000 employees engaged in the WBG plastics industry, with more than two-thirds operating in the West Bank. The plastics industry workforce has benefited strongly from training in Israeli plastics companies, where more than 40 percent of its workers have been trained.<sup>2</sup> Such an experienced workforce could provide incoming investors with an experienced workforce, familiar with the plastics industry, including injection molding and blowing. However, local industry experience is limited to low-value, low-technology products.

Labor Costs

While WGGs can provide an experienced workforce, the low-skilled nature of the required labor inputs and low value of outputs in the identified industry segments increase the importance of any wage differentials in alternative production sites. Both Egypt and Jordan, which are also in close proximity to the Israeli market, can provide a lower-cost production environment. Semi-skilled labor is, on average, only one-half the cost of WBG in Jordan, and one-fifth of the cost in Egypt. While productivity levels may be higher in WBG than these two locations, at the lower skills level, such productivity gains are not enough to mitigate against the much higher wage levels.

---

<sup>2</sup> MOPIC, *Building Competitive Advantage in the Palestinian Economy: Plastics Cluster*, August 1998.

---

*Electricity* The plastics industry requires a relatively high level of energy consumption vis-à-vis other light manufacturing sectors.<sup>3</sup> Therefore, a relatively cheap and reliable electricity supply is an important factor in the site selection process. While the WBG industrial estates are likely to have a reliable supply of electricity, the cost of electricity is twice as high as many other locations in the region, as demonstrated in chapter 3, reducing its attractiveness for the production of a low-value product, such as plastic packaging or construction materials.

*Summary of Comparative Advantage* Despite the presence of a workforce experienced in the selected plastic industry sub-sectors and access to a reasonably large market, the Palestinian industrial estates cannot provide a favorable location for investment, particularly in comparison to alternative locations in the region, such as Egypt and Jordan, where production costs are considerably lower – a critical factor for the production of a low-value product requiring relatively low-skilled labor.

---

**11.3 Competitive Advantage** The following sections evaluate the local and international competitive market trends in the plastics industries.

---

*Local Industry Profile* As discussed in the previous section, WBG has a well-established plastics industry, which specializes in the production of construction materials, household products, and packaging materials for the agriculture industry. In 1997, there were a total of 144 establishments in the WBG, which employed more than 1,000 workers. As mentioned, a significant proportion of these workers were trained in Israel. The limited consumption base within the WBG has not enabled the industry to diversify and upgrade its output. Local plastics production is focused on low-tech, low-quality products, with little potential for export. Approximately 90 percent of production is consumed locally, with only 10 percent exported to the Israeli market.

---

<sup>3</sup> KPMG, *The Competitive Alternatives*, 1999. For instance, the monthly consumption of electricity for an average size plastics factory is 400,000 kWh, twice as high as for electronics manufacturing.

---

*Regional and International Trends*

International

*A diversified and fragmented industry.* Throughout the world, large global firms dominate the plastics sector, such as GE Plastics (USA), DuPont (USA), UCB (Belgium), Van Leer (Netherlands), BASF (Germany), Goglio (Italy), though many small- and medium-sized niche players are present as well. In Europe, for instance, plastics converting features 27,000 firms of which only 12 employ more than a thousand workers. Mexico, in comparison, has some 3,000 firms with 90,000 workers of which 59% have less than 15 employees, 32% have up to 100 and the remaining 9% are medium and large firms. China has more than 17,000 plastic processing firms, mostly small, employing over 1.7 million people.

In the United States alone, some 8,000 companies comprise the plastics products segment that employs a work force of 1.3 million and grosses \$40 billion annually. While the sector is extremely fragmented, a few major players stand out, such as DuPont and GE Plastics. Miscellaneous plastic packaging, such as caps, food trays and bubble wrap, constituted about 12% of US plastics. Fabricated plastics for vehicles made up another 12%. Plastics for electrical devices accounted for 8% of sales.

*Competition is capital-driven and global,* with rapid advances in technology forcing investments in new processes. Historically, there has been little global trade or competition in plastics. However, increasing globalization has put pressure on plastic producers to remain competitive in various markets. For instance, multinational company GE Plastics (United States) maintains more than half of their business outside of their home market.

Nevertheless, plastics is a large and diverse market and many niche and industrial-specific needs can only be met efficiently by small and medium producers. For instance, DuPont, one of the largest plastics producers in the world, recently pulled back from a planned nylon fiber venture in China with the German company BASF. Company officials cite increased pressure on profit margins as well as competition from smaller Asian producers with lower cost structures as some of the factors inducing cutbacks in DuPont's nylon investments worldwide.

Foreign investment activity in the plastics industry is widespread and may take a variety of forms, depending on the business strategy. Companies may purchase local distributors, engage in greenfield investments of plastic producing plants, create joint ventures with local producers or build strategic alliances for research & development purposes. Below is Table 11.3, which presents a sample of recent investments in the plastics industry. In recent years investment activity in the Middle East has been high, with major business start-ups in Israel, Turkey and Saudi Arabia.

**Table 11.3: Sample of Recently Reported Inward Foreign Investment in Plastics Globally by Host Country**

Country	Investor(s) (Home Country)	Subsector	Investment Type (Year of Formation)	Domestic Partner(s)
Israel	▪ Schaumberg (USA)	Plastics modeling	Greenfield (1999)	
	▪ Kraft (USA)	Packaging	Expansion (1997)	▪ Carmel Container Systems
	▪ Planet Polymer Technologies	Degradable polymers	Joint venture (1997)	▪ Gov't owned firm
	▪ Great Lakes Chemicals (USA)	Flame retardants	Greenfield (1996)	
Turkey	▪ Owens Corning (USA)	Glass fiber reinforced plastic	Joint venture (1996)	▪ Yapi Merkezi Pipe
China	▪ LG Chemical (S. Korea)	D-Sorbitol	Joint venture (1997)	▪ Hongqi Chemical
	▪ GE Plastics	Compounding	Greenfield (1996)	
	▪ DuPont	Polyester	Expansion (1996)	
Korea	▪ Great Lakes Chemicals (USA)	Polymer stabilizers	Joint venture (1996)	▪ Miwon Commercial
Malaysia	▪ Southcorp (Australia)	Plastic bottles	Expansion (1997)	
UK	• Polypipe (Ireland)	Pipes and fitting	Greenfield (1996)	
Luxembourg	• DuPont (USA)	Polyester film	Expansion (1996)	

Israel

Israel has a dynamic and fast-growing plastics sector, which is expanding at an annual average rate of more than 15 per cent per annum. Plastics manufacturers have turned their comparative lack of size to advantage by focusing on specialist custom-made applications, with small batch production of high-quality goods.

The Kibbutzim, or rural collectives, in Israel account for 40 percent of the plastics industry and dominate the packaging sector in

Israel, as a high proportion of output is destined to supply the agriculture and food processing industries.

Other key product niches in Israel include advanced products, such as films and laminates, components for precision products, composite body parts for jet aircrafts and weapon systems, as well as lower-tech applications, such as household and construction materials.

WBGS can offer a well-trained, lower-wage workforce to plastic packaging and construction material manufacturers in Israel. However, the other advantages provided by the Kibbutzim, including low-cost land and attractive investment incentives, and competition from lower wage locations, such as Egypt and Jordan, put the WBGS as a distinctive disadvantage.

---

*Summary of Competitive Advantage*

Competitive trends in plastics indicate that, while there is significant potential for outward investment from leading producers of plastic product, including packaging and construction materials, the WBGS is not a likely destination, given the wage structure and limited industry experience. For lower-tech product categories, WBGS would find it difficult to compete with alternative investment locations in the region, such as Egypt and Jordan. Lack of experience in high-tech applications limits the WBGS's ability to attract investment in other niche sub-sectors of the plastics industry.

---

**11.4 Policy Considerations**

The plastics industry meets only one of the key policy considerations: increased employment in the productive sector. The local market-orientation of output would do little to increase exports from the WBGS and the low-levels of technology required and focus on lower-skilled labor would limit the opportunities for technology transfer or skills upgrading.

---

**11.5 Summary of Promotion Potential**

The plastic packaging and construction material sectors are not recommended for active promotion as WBGS does not offer any clear comparative or competitive advantages and the industry does not meet most of the indicated policy objectives.

## 12. Software Development

---

### 12.1 Industry Definition

The software development industry covers an extraordinary variety of sub-sectors and niche categories, which would be far too numerous to list in this present study. In the simplest terms, each niche category can be defined by three factors:

- *Point in the Production Process.* Like many industries, software development can be broken down into smaller, more discrete activities which make up the production process, including specification and prototyping, design, coding, testing, maintenance, and customization/conversion.<sup>1</sup> A specific software enterprise may carry out all or most of the above activities itself, or may outsource portions of the development process to companies that specialize in a specific activity, such as coding or product testing.
- *Type of Information System.* Software products are basically information systems, designed for use in a variety of fashions, such as:
  - operating systems (Windows, Linux) or data base management systems (Access);
  - communications software (voice and data networks);
  - computer-aided software engineering (CASE) tools;
  - animation, multimedia production;

---

<sup>1</sup> The specific activities are defined as follows:

- product specification and prototyping is the identification of user needs and product requirements;
- product design to specifications;
- program coding is the actual construction of the software product based on the design and specifications;
- product testing ensures that the product meets the desired specifications and identifies errors;
- product maintenance is the correction of errors following product delivery and changes in specifications, which can make up the highest proportion of software development costs
- product customization/conversion is the adaptation/re-coding of an existing software product to meet specific needs (language, market, platform, etc.)

- business and consumer applications (office suites, management systems, e-mail, entertainment, etc.);
  - weapons systems; and
  - integrated software components for electronics.
- *Method of Supply.* Software can be supplied in three different forms: as a packaged product, as a customized product designed for specific clients, or as part of turnkey<sup>2</sup> solutions for specific clients.

---

**12.2 Comparative Advantage**

The following section matches the factor requirements for the software development industry with the location attributes of the GIE and the six proposed industrial estates in the West Bank and the Gaza Strip. As demonstrated in Table 12.1, the industrial estates will provide a promising location, in terms of its attributes, for investment in this sector.

---

*Human Resources*

The most important factor for investment in the software development industry – in terms of what types of products can be produced in a given location - is the availability and cost of qualified labor. The type of labor required is primarily determined by the point(s) in the software production process that will be taking place within a given location. Table 12.1 displays the skills required at each step of the production process. Developing countries typically find it difficult to compete in those activities requiring higher levels of expertise – such as product specification and design – due to the lack of qualified and experienced engineers, circumstances shared in large part by WBGS.

Throughout the course of this study, TSG consulted numerous, individuals, organizations, and other studies were consulted regarding the quality of software development skills in WBGS – including local Palestinian software houses, foreign investors familiar with Palestinian computer science graduates, and the computer science departments of local universities. TSG findings indicate that there is overwhelming consensus that there are few “engineer”-level software professionals in the region (*i.e.* those with the ability to design new software versus programming new

---

<sup>2</sup> Turnkey solutions are the provision of integrated hardware and software systems designed for the needs of a specific client.

**Table 12.1: Demand Profile for Software Development**

Factor	Industry Requirements					Location Attributes		Comparative Advantage or Disadvantage
	Software Specification	Software Design	Coding	Testing	Maintenance & Conversion	West Bank	Gaza Strip	
<b>CRITICAL FACTORS</b>								
Labor Availability	Experienced systems analysts	Experienced software engineers	Programmers with training/ language certification	Experienced software engineers	Programmers with training/ language certification	Growing supply of computer science graduates, but need access to certification programs. Few with higher levels of expertise (engineers and systems analysts).	Small supply of computer science graduates.	Advantage (for coding/testing/ maintenance/ conversion) in West Bank
Labor Costs	Not as important as skills	Not as important as skills	Need to be cost competitive	Not as important as skills	Need to be cost competitive	Relatively cost competitive vis-à-vis other Middle East locations, but higher than other locations	Relatively cost competitive vis-à-vis other Middle East locations, but higher than other locations	Advantage

Factor	Industry Requirements					Location Attributes		Comparative Advantage or Disadvantage
	Software Specification	Software Design	Coding	Testing	Maintenance & Conversion	West Bank	Gaza Strip	
Telecoms Infrastructure and Costs	Need for low-cost, high-quality telecoms, including high-speed access	Need for low-cost, high-quality telecoms, including high-speed access	Need for low-cost, high-quality telecoms, including high-speed access	Need for low-cost, high-quality telecoms, including high-speed access	Need for low-cost, high-quality telecoms, including high-speed access	Possible to provide low-cost, high-quality service through on-site teleport	Possible to provide low-cost, high-quality service through on-site teleport	Advantage
<b>VERY IMPORTANT FACTORS</b>								
Financial Support	Often need for venture capital funding	Some VC funding available	Some VC funding available	Advantage				
<b>IMPORTANT FACTORS</b>								
Investment Incentives	Favorable package of incentives, particularly for R&D, is desirable	Favorable package of incentives, particularly for R&D, is desirable	Favorable package of incentives, particularly for R&D, is desirable	Favorable package of incentives, particularly for R&D, is desirable	Favorable package of incentives, particularly for R&D, is desirable	Industrial estate tenants receive favorable package of incentives, though no extra incentives for R&D	Industrial estate tenants receive favorable package of incentives, though no extra incentives for R&D	Advantage
Technical Support Services	Repair and maintenance for hardware	Repair and maintenance for hardware	Repair and maintenance for hardware; quality assurance/testing	Repair and maintenance for hardware	Repair and maintenance for hardware	Relative supply of trained technicians in region	Relative supply of trained technicians in region	Advantage
<b>LESS IMPORTANT FACTORS</b>								
Transportation	Not very important	-----	-----	-----				

Factor	Industry Requirements					Location Attributes		Comparative Advantage or Disadvantage
	Software Specification	Software Design	Coding	Testing	Maintenance & Conversion	West Bank	Gaza Strip	
Power Infrastructure and Costs	Reliable, relatively low-cost power supply required	Possible to provide reliable power supply, but at higher cost than other locations in region	Possible to provide reliable power supply, but at higher cost than other locations in region	Disadvantage				
Water Infrastructure and Costs	Not very important	-----	-----	-----				
Land/Building Costs	Desirable to have high quality office space at low cost	Desirable to have high quality office space at low cost	Desirable to have high quality office space at low cost	Desirable to have high quality office space at low cost	Desirable to have high quality office space at low cost	Industrial estates can provide ready-built office space, but at relatively high cost	Industrial estates can provide ready-built office space, but at relatively high cost	Disadvantage
<b>OVERALL</b>								Advantage

software), with the exception of returning expatriates who gained training and experience in more developed markets, particularly the United States.

In terms of local programmers, there is a growing number of computer science students graduating from Palestinian universities. While only 162 computer science students graduated in 1997, there are now more than 1600 students enrolled in computer science programs. These graduates possess a strong base at the theoretical level, but lack practical training and access to language certification programs. While many firms are willing to provide the necessary training, access to certification programs will be required to assure a supply of programmers that can meet international standards.

In terms of labor costs, as demonstrated in chapter 3, software programmers in WBG tend to be much cheaper than their Israeli counterparts (who are three to four times more expensive), and are relatively competitive with many locations in the Middle East, making it a favorable destination for investment. However, the cost of labor is considerably higher than India, one of the world's fastest growing locations for offshore software programming. Since labor costs typically account for approximately 80 percent of the operating costs for a software house,<sup>3</sup> the KTDC is more likely to attract investment in programming activities that require skills that are competitively priced or unique to the region, based on its proximity to the Israeli and Arab-speaking markets.

---

*Telecommunications*

The existing telecommunications infrastructure in WBG, while sufficient to meet the requirements of the typical manufacturing-oriented project, falls short of the requirements for offshore software development, which is dependent on high-quality, low-cost telecommunications for its success. While international leased lines are currently available through Bezeq, the Israeli telecommunications company, the high costs are a distinct disadvantage. As discussed in chapter 3, international leased lines from WBG are, on average, more than twice as high as leased lines from Jordan or Turkey. However, the Khadoury site in Tulkarem, which is being planned as a technology park, can ensure the availability of low-cost, high-quality telecommunica-

---

<sup>3</sup> KPMG, *The Competitive Alternatives*.

tions through a deregulated environment and the installation of an on-site teleport.

---

*Access to Capital*

In terms of access to venture capital – often the lifeblood of fledgling software houses<sup>4</sup> – some funding is available through the Peres Center's Peace Technology Fund for Israeli-Palestinian joint ventures. The Fund provides qualified projects with up to 15 percent of the investment. To date, the Fund has raised more than US\$65 million from the private sector and hopes to have US\$100 million available by the end of 1999. To date, US\$13 million has been distributed to fund new projects in WBGS. A number of other venture capital providers in Israel, including Leon Sfar of the Jerusalem Software Incubator, indicated a willingness to provide funding to promising ventures in WBGS. Another potential source of venture capital or traditional investment is the Palestinian Diaspora – similar to the role played by the Jewish Diaspora in Israel - as many of its members have achieved financial success in their new residencies and may be willing to aid start-ups "back home".

---

*Summary of Comparative Advantage*

In terms of overall industry requirements, the industrial estates – the Khadoury TDC, in particular – can provide a conducive operating environment for software development, including:

- A surplus supply of computer programmers at relatively competitive cost, vis-à-vis other locations in the region;
- The potential to provide low-cost, high-quality telecommunications through an on-site teleport and deregulated environment within the Khadoury TDC; and
- Sources of venture capital and other funding for start-ups, as well as joint ventures.
- Proximity to an existing IT cluster across the Green Line

---

<sup>4</sup> According to KPMG's *The Competitive Alternatives*, the average software company requires 67% of project costs to be funded through equity financing.

---

However, in the short-term, it can be expected that any investment would mostly likely be in software development activities requiring a lower degree of expertise, such as coding, customization and conversion, testing, and maintenance of software, with little investment in other activities within the software production process. Over time, as the skills and experience of local programmers progress, the potential for investment in design-related activities will increase.

---

### **12.3 Competitive Advantage**

The following sections evaluate the regional and international competitive market trends in the software development industry.

---

#### *Local Industry Profile*

*A small but growing sector.* The software development industry is currently in its nascent stages, though it has grown rapidly in the past few years. As of 1997, there were more than 60 computer-related companies, many of which, though not all, are engaged in software development and/or provision of IT services, including enterprise resource planning, network design and installations, web design and multimedia production. According to data obtained from the Central Bureau of Statistics, the majority of these companies employ less than 5 employees, which is relatively small by world standards. TSG interviewed more than 15 local computer-related companies; the majority of these companies were established by returning expatriates and employ graduates from local universities.

In addition, the majority of enterprises, which are based in Ramallah, are producing customized software, based on off-the-shelf data base management systems and business applications, for the newly established PA Ministries and other government agencies, as well as locally-based banks and financial institutions. A few companies have begun to export their services to similar institutions in the region, particularly in Saudi Arabia. Many of the companies interviewed pointed to their lack of experience, entrepreneurial skills and marketing skills as the key impediments to accessing export markets.

*Regional and International Trends*

Arab Middle East

*A growing regional market.* The regional, Arabic software market has demonstrated considerable growth over the past few years, reaching approximately US\$1.2 billion in software sales. In terms of software development, however, the Arabic market remains shallow. With the exception of a few large companies that export to the region, the industry is comprised of mostly small companies oriented toward their domestic markets, producing customized software applications for local businesses and government agencies. Imports of software, mostly from the United States and Europe, dominate local sales. Virtually all systems software and the majority of packaged applications are imported. For instance, Saudi Arabia's market for consumer and business applications totaled US\$419 million in 1998; local production only accounts for US\$21 million, with imports (mostly from the U.S. and Europe) accounting for the remainder.

*Regional niche categories.* As all systems software is imported from the leading multinationals (Microsoft, Novell, Unix), regional software production is oriented toward applications software and Arabization of other software. While Egypt produces the widest range of software (see discussion below) – from business applications to Internet software to Arabic language word processors - the leading categories for development in the remainder of the Middle East are packaged and customized business applications for banking and finance, health and medical, education, database management, and other Arabized consumer and business applications.

*Few investment opportunities, but many market opportunities.* Few regional producers have either the capacity or marketing skills to become more outward looking, either in terms of exports or outward investment. However, the few "big" names in the Middle East, such as the Kuwaiti-owned Sakhr, may be potential targets for investment in the KTDC. The Arab-speaking markets of the Middle East provide, instead, a growing consumer market for software, including both Arabized packaged software and customized business applications.

*The Egyptian market demonstrates scope for development.* Egypt has the largest software sector among the Arabic-speaking markets and provides an indication of the scope for development of a regionally-oriented software industry in the Middle East. Egypt boasts more than 200 indigenous software companies, which employ 25,000 people, including 6,000 software professionals. In 1997, local production was valued at US\$25 million. Locally developed application packages, which are destined for the domestic and regional markets, account for approximately 42 percent of production, while Arabized versions of existing applications account for more than 22 percent of local production; the remainder of local production is comprised of turnkey projects, primarily for the local market. While Sakhr Software, IBM, and few other large companies produce a wide spectrum of software applications (including Arabic word processing applications, spell checkers, Internet software), the remainder of the market is oriented toward the production of business applications, including banking and finance, health and medical, education, and database management – leading sectors for the regional market.

The Palestinian industrial estates would provide favorable locations for software developers - from Israel, WBG, the United States, or Europe – to access the growing Arabic-speaking markets of the Middle East. The Egyptian market, as described above, provides a good indication of the most promising industry sectors, including Arabized packaged software and business applications, particularly financial management, accounting and other data base systems.

Israel

*A large and booming sector.* The software development industry is one of Israel's largest and fastest growing sectors, valued at US\$1.2 billion in 1998, with exports totaling more than US\$700 million (compared to US\$5 million in exports in 1984). The domestic market, in terms of consumption, totaled US\$1.2 billion in 1998, for which imports, mostly from the U.S., accounted for US\$750 million. In addition, many electronics companies in Israel, as in the rest of the world, meet a large proportion of the software needs "in house", data which is not fully captured in market and trade statistics. Trade with the Middle East region accounts for only a minimal fraction of Israel's software exports and virtually none of its imports, with the largest share of trade taking place with Egypt, Jordan, and WBG.

*A diversified domestic market.* Today, there are approximately 500 software houses in Israel, including more than 200 start-up companies, most of which are located in Tel Aviv-Haifa corridor, in close proximity to the West Bank. The number of electronics and communications companies that conduct their own software development “in house”, though undocumented, would boost these numbers even further. While the United States largely dominates the development of systems software, the Israeli software sector is present in virtually every other sub-sector of the industry, from internet-based software to consumer and business applications to defense systems, from packages to custom and turnkey systems. The software sector has attracted inward investment from leading multinational software and electronics companies, particularly from the U.S., as well as Europe and East Asia, including greenfield investments, joint ventures, and acquisitions of Israeli companies. A shortlist of multinationals designing and developing software in Israel includes Microsoft, AOL, IBM, Motorola, Intel, Cisco, EDS, Siemens, and Hewlett Packard.

*Israel's growing shortage of software programmers and engineers prompts outward FDI.* Today, Israel has more than 10,000 employed in the software industry and demand for qualified software engineers and programmers continues to grow, far out-pacing the current supply. The end result is a more than 2,500-strong manpower gap, with software engineers and programmers accounting for the largest share (42 percent).<sup>5</sup> Given the local complexities involved in importing the required labor, Israeli companies are beginning to turn to offshore investment and outsourcing to meet its manpower needs, though many are concerned about compromising “company secrets”. In the past two years, Israeli companies and Israel-based multinationals have entered into several joint ventures in the region, including two in

---

<sup>5</sup> The S. Neaman Institute of the Israel Institute of Technology, Technion, *The Shortage of Electronics Engineers and Computer Sciences Graduates in Companies Incorporated in the Electronics Industries Association*, 1997. The total manpower gap for software development (in both electronics and software companies) is estimated at 2,500. The demand for software programmers and engineers accounts for 42 percent of the gap, while the demand for network specialists and systems analysts account for approximately 19 percent. Support and communications specialists account for another 19 percent.

Jordan and three in the West Bank, in order to meet the shortfall in demand:

- MLL has entered into a consortium of two Israeli companies, three international companies (including BAN of the Netherlands) and one Jordanian company, Horizon Software Technologies. The project will compete with other BAN subsidiaries for products destined to the global market.
- In Jordan, the Israeli company Malam Systems invested US\$2 million in a joint venture with Jordan's Century Investment Group. The joint venture will act as a sub-contractor to Malam in Israel, producing Y2K solutions.
- Siemens Data Communications in Israel, together with Siemens Germany, has entered into a joint venture with Hi-Tek in Ramallah. The joint venture will concentrate on local area networks, one of the principal activities of Siemens Data Communications.
- Hewlett Packard Israel is entering into a partnership with Safad Engineering in Ramallah. The company will conduct software testing and enterprise resource planning (ERP).
- Lernout & Hauspie, a Belgian company specializing in speech recognition software, will be investing US\$10 million over the next 3 to 5 years in WBGs.

In addition, TSG findings, which are based on company surveys with several Israel-based companies, indicates a strong interest in investing in WBGs. While some companies noted the concerns of many Israelis, in terms of security, about doing business across the Green Line, a strategic location, such as the Khadoury site in Tulkarem, can mitigate such concerns, providing a "safe haven" for Israelis operating in WBGs. In addition, its close proximity to Israel's hi-tech corridor ensures that Israeli managers have easy access to their "foreign" operations. Many have also noted the benefits of partnering with or hiring Palestinian programmers, particularly the strong social and family ties that lessen the probability that once a worker is trained, he or she will seek employment in other markets. WBGs can provide an opportunity for Israel's software industry to meet part of its manpower needs,

through joint ventures and/or sub-contracting arrangements with Palestinian firms.

*Accessing the regional market.* While the regional, Arab-speaking market has until now not been accessed, for the most part, by Israel-based companies, the total market is equivalent to Israel's domestic market, which absorbs almost half of the industry's output – a relatively sizable market for Israel's software producers. While ongoing trade embargoes limit Israel's ability to penetrate the Arab markets, Arabized Israeli software products with a "Made in WBG" label could provide such access.

*Promising Niche Sectors.* Based on the above analysis and the Palestinian experience to date (see discussion on Palestinian market below), the following niche sectors present the most promising opportunities for partnerships between Israeli and Palestinian software developers:

- Programming (coding, testing, conversion, and maintenance) for packaged software, including consumer and business applications (multimedia, Internet, etc.), and database management systems (particularly financial/banking and medical/health systems).
- Arabic language components (coding, testing, conversion, and maintenance) of bi- or multi-lingual software applications, including CASE programs, database management systems (particularly financial/banking and medical/health systems), and consumer and business applications (particularly Internet-related software, banking/financial applications, education, entertainment/multimedia) – some of the leading segments of the regional software market.

International

*U.S. dominates global market.* The United States dominates worldwide production of software, particularly the packaged software segment. In 1998, U.S. production of packaged software reached approximately US\$97.5 billion, or 75 percent of the global market for this segment. Europe trails behind, with 15 percent of global market share in packaged software, while Japan accounts for 5 percent. All other countries, together, account for the remaining 5 percent.

*Growing interest in serving Arabic-speaking markets.* While English remains the global *lingua franca* of the IT industry, demand for bi- and multi-lingual applications is growing, including both foreign-language interfaces and multi-lingual translation programs. The widespread use of the Internet has provided an additional boost to the latter. While Western-language interfaces are widely available, non-Western-language interfaces, such as Arabic, continue to be in relatively short supply, despite recent efforts to satisfy this growing market. Over the past few years, a number of software houses have introduced Arabic language-based applications to supply the 186 million strong market of native Arabic speakers.

- One company in particular, the Kuwaiti Sakhr Software, has been very successful in marketing its Arabic-based applications, including web browsers and English-Arabic e-mail readers.
- IBM established in 1984 an Arabic Competence Center in Cairo, which develops tailor-made applications that support Arabic.
- Other companies including such multinationals as Microsoft, Borland International, Oracle, Apple, and Digital Equipment Corporation have introduced Arabic versions of their latest software products.

WBGs, with its relatively low-cost supply of programmers in the region, would be an attractive base from which software developers could access this growing niche market, either through partnerships or sub-contracting arrangements.

*Labor shortages translate into outsourcing opportunities.* The leading markets for software development are currently facing extremely tight labor markets for trained programmers. In the U.S., it is estimated that there is a shortage of 350,000 programmers, systems analysts and computer scientists. While labor demand is growing, the growth of the labor supply cannot keep up and, in absolute terms, is actually in decline: the number of computer science graduates in the U.S. declined from about 42,000 in 1986 to below 24,500 in 1995. Canada presently has a shortage of 20,000 programmers. The UK, another leading supplier of software development, is facing similar shortages in

trained computer programmers. Even less developed, but growing, markets, such as Singapore and Thailand, are also experiencing labor shortages in their software development industries.

Not only have these labor shortages already led to skyrocketing salaries in these markets, but they may also lead to a potential loss of competitiveness in these markets as key positions go unfilled. Consequently, software developers are increasingly looking to overseas markets to meet their growing demand for lower cost, but highly qualified, labor. Nearly 200,000 jobs have already been “exported” to India by American software developers. Ireland and Bulgaria have also benefited from this trend. WBG, with its reputation for quality programmers and competitive labor costs within the region, can exploit the growing shortage, particularly for specific niche markets, where its cost disadvantage vis-à-vis locations such as India would be less important than skills specific to the region (e.g. Arabized software).

*Recent investments point to potential interest.* Recent investments by multinationals point to the potential interest in tapping into WBG’s supply of qualified programmers:

- Timex is currently training 10 to 12 recent computer science graduates at one of their production sites in the Philippines. Once training is completed, a software center will be established in El Ram in October 1999 and will operate as a wholly-owned subsidiary of Timex. Initially, production will focus on global positioning software, but will also develop new products in the future.
- IDS, a Silicon Valley-based software developer, has recently established a subsidiary in Ramallah, which specializes in web-based interactive database software. The subsidiary will develop and program products in English for export to world markets.

WBG, and the Khadoury TDC in particular, by providing a favorable environment for investment, can build on the slow but growing trend of multinationals to locate in the region, both to meet their manpower needs and their interest in the regional market.

*The lack of adequate intellectual property protections can deter investment.* One important factor that can negatively impact investment by software developers is the present lack of adequate intellectual property protections in WBG. It has been estimated that the United States, alone, has foregone US\$11 billion in sales due to worldwide piracy in software business applications. While the Middle East only represents a small share, in absolute terms (US\$250,000), the region has the highest rate of piracy in the world (69 percent in 1998).<sup>6</sup> While the PA is currently drafting new IPR legislation, it is important that the new laws meet international standards, conforming to both TRIPs and WIPO standards.

*Promising Niche Sectors.* The following niche sectors present the most promising opportunities for partnerships between multinational and Palestinian software developers, based on the above analysis and local industry experience:

- Programming (coding, testing, maintenance) for packaged software – mostly consumer/business applications (multimedia, Internet, etc.), database management systems (particularly financial/banking and medical/health systems), and other “non-sensitive” (*i.e.* Internet security, defense-related, etc.) niches.
- Based on regional demand, Arabic language components (coding, testing, maintenance) of bi- or multi-lingual software applications, including CASE programs, database management systems (particularly financial/banking and medical/health systems), and consumer and business applications (particularly Internet-related software, banking/financial applications, health/medical, education, entertainment/multimedia).

WBG and Diaspora      Based on the existing structure of the local software industry, as discussed above, the potential for investment by local and diaspora Palestinian entrepreneurs (those not in partnership with foreign companies) may be somewhat limited in the short-run, but will likely grow in the medium- to long-term. Initially, most of their

---

<sup>6</sup> Includes only piracy of business application. From the *1998 Global Software Report* (May 1999), conducted by International Planning and Research Corporation for the Business Software Alliance and the Software & Information Industry Association.

activities are likely to be a continuation of the industry's current activities – companies engaged in customized data base management systems (banking/financial, medical/health, government systems), business applications, and turnkey solutions for the PA and regional financial institutions. In the medium- to long-term, as local programmers and engineers gain experience, increased opportunities will emerge for local entrepreneurs to design and code Arabized software, outsourced from Israeli and international companies, as well as to design and develop new software for the regional market.

---

*Summary of Competitive Advantage*

Competitive market trends strongly favor investment by the software development industry – including both software houses and electronics companies with software development needs - in the Palestinian industrial estates, particularly the Khadoury TDC site in Tulkarem. Key trends favoring investment include:

- proximity to Israel's booming hi-tech corridor, which is experiencing labor shortages;
- growing trend toward offshore software development; and
- increasing interest by software developers in accessing the growing Arabic-speaking regional market.

---

**12.4 Policy Considerations**

The software development sector, while not a source of employment generation, meets the other selected policy objectives of the PA, including:

- the potential for technology transfer and skills upgrading;
- the potential for the expansion of exports, both to the region and to the United States and Europe.

In addition, the industry, which is service-oriented, is environmentally friendly, with no water use and a low production of waste.

---

**12.5 Summary of Promotion Potential**

The software development sector is a promising target for investment promotion into the Palestinian industrial estates, particularly the planned Khadoury TDC in Tulkarem, with both comparative and competitive trends, as well as policy objectives, in its favor.

---

**12.6 Target Activities and Markets**

Based on the above analysis, the following sources of investment and niche software development sectors should be targeted for investment in the Palestinian industrial estates (primarily the planned Khadoury TDC in Tulkarem):

- Israel-based companies (both software houses and electronics companies with “in house” software development needs) interested in “outsourcing” coding/programming activities to meet manpower shortages, including business and database management applications;
- Israel-based or multinational companies (both software houses and electronics companies with “in house” software development needs) interested in producing Arabized or other localized packaged software (primarily consumer and business applications and database management applications) for the regional market;
- local Palestinian entrepreneurs; and
- the larger regional players, with either significant exports to or outward investment within the region.

---

*Promotion Targets*

Investment targets, including employment, capital investment, and space requirements are differentiated between Israeli and multinational investments, on the one hand, and local and expatriate Palestinian investments on the other. Investment targets for Israeli and multinational companies is based on the average size of recent investments by such companies into the West Bank and TSG surveys with other potential investors. For locally-sourced and expatriate-funded investments, investment targets are based on existing and projected growth patterns of the local software development industry. Table 12.2 below displays

the promotion targets, for a three-year period, in the software development industry.

**Table 12.2: Promotion Targets for the Software Sector**

	Promotion Targets	
	Local	Israel/Multinational
Number of Projects	2	6
Cumulative Investment Value	US\$0.5 million	US\$3.25 million
Cumulative Employment	25-30	250-300

## 13. Stone and Marble Cutting and Shaping

**13.1 Industry Definition** This chapter focuses on the prospects for the Palestinian industrial estates to attract investment in the stone- and marble-cutting industries, which includes the cutting, shaping and polishing of both building stones and decorative stones (such as floor and wall tiles). This sub-sector of the stone and marble industry is typically referred to as the dimension stone industry.

**13.2 Comparative Advantage** The following section examines the match between the factor requirements of the dimension stone industry and the location attributes of the GIE and the six proposed industrial estates in the West Bank and the Gaza Strip. As demonstrated in Table 13.1, while WBGs can, in general, provide an attractive environment for investment in the dimension stone industry, the specific sites evaluated for this study are not appropriate locations for the establishment of the dimension stone industry.

**Table 13.1: Demand Profile for Dimension Stone Industry**

Factor	Industry Requirements	Location Attributes		Comparative Advantage or Disadvantage
		West Bank	Gaza Strip	
<b>CRITICAL FACTORS</b>				
Proximity to Raw Materials	Proximity to high-quality quarries	High concentration of high-quality stone quarries, but not in close proximity to proposed industrial estates	No stone quarries	Disadvantage
Access to Markets	Require access to export markets	Preferential access to key export markets	Preferential access to key export markets	Advantage
Labor Availability	Trained production workers	Supply of experienced workers	Supply of experienced workers	Advantage
<b>VERY IMPORTANT FACTORS</b>				
Transportation	Low-cost transport of final product to markets is required	Sea transport costs from Haifa and Ashdod are competitive	Sea transport costs from Haifa and Ashdod are competitive	Advantage

Factor	Industry Requirements	Location Attributes		Comparative Advantage or Disadvantage
		West Bank	Gaza Strip	
<b>IMPORTANT FACTORS</b>				
Labor Costs	Need supply of relatively cheap, low-skilled workers	Relatively cost competitive vis-à-vis Israel, but higher than other locations in region	Relatively cost competitive vis-à-vis Israel, but higher than other locations in region	Disadvantage
Power Infrastructure and Costs	Reliable, relatively low-cost power supply required	Possible to provide reliable power supply, but at higher cost than others in region	Possible to provide reliable power supply, but at higher cost than others in region	Disadvantage
Investment Incentives	Favorable package of incentives desirable	Industrial estate tenants receive favorable package of tax incentives	Industrial estate tenants receive favorable package of tax incentives	Advantage
Land/building Costs	Desirable to have access to serviced land or ready-built facilities at low cost	Industrial estates provide land and ready-built facilities, but at relatively high cost	Industrial estates provide land and ready-built facilities, but at relatively high cost	Disadvantage
<b>LESS IMPORTANT FACTORS</b>				
Access to Capital	Not very important	-----	-----	-----
Telecoms	Not very important	-----	-----	-----
Water	Not very important	-----	-----	-----
<b>OVERALL</b>				<b>Disadvantage</b>

*Proximity to Raw Materials* The heavy nature of the quarried stone, requires that cutting and finishing workshops be located in relatively close proximity to the raw material sources. WBGs has a large quarry and stone cutting industry, which accounts for approximately 20 percent of total industrial output, making it the largest single industry in the WBGs. The two main raw materials are limestone and marble, each accounting for 94 percent and 6 percent of production, respectively. While the stone quarries are widely distributed throughout the West Bank (there are none in the Gaza Strip), the quality varies from location to location (see Table. 13.2 below),

with the highest quality stones originating from the quarries around Hebron. The colors and hues available are among the most desirable in leading export markets. The Hebron region also has the highest concentration of quarries, with more than 125 quarry sites, approximately half of all quarry sites in the West Bank

**Table 13.2: Distribution of Stone Quarries in the West Bank**

Source	Stone Type	Quality	Specifications	Uses
Hebron-Bini Nu'am	Injasah	High	White color, veined, minimal absorption of water	"Chiseled" for building, polished stone, paving sidewalks, garden walls, decorating public places
Nablus	Jarra'ah	Medium	Grey, minimal absorption of water, veined, hard, uniform color	Building, paving, decorating public places
Nablus-Aseerah	Aseerah	Medium	White, minimal absorption of water, hard, uniform color	Building, paving, decoration
Hebron-Al Shyoukh	Al Shyoukh	High	White color, absorbs water, not uniform color	Building, paving, decorating public places, renovating ancient sites
Hebron-Tafouh	Tafouh	High	Beige color, soft stone, absorbs water more than others, not uniform color	Paving, polished stone, decoration
Hebron-Sanout	Sanout	High	Different colors, hard stone, minimal absorption of water	Building, paving, decoration
Jenin-Qabatya	Qabatya	Lower	Different colors, absorbs water, color changeable with time, hard stone	Building, paving
Hebron-Yatta	Yatta	High	White color, hard, almost uniform color, absorbs more water than others	Building, polished, paving, decoration

Source: Massar Associates/DAI, The Stone and Marble Industry: Market Study, 1999.

Given the distribution of quarries, the stone finishing workshops are also distributed around the West Bank (as well as a few in the Gaza Strip). Although Hebron has the highest concentration of quarries, Bethlehem houses the highest concentration of cutting and shaping workshops, but is followed closely by Hebron itself. Together, Hebron and Bethlehem account for close to two-thirds of all workshops in the WBGS.

While the West Bank boasts a high concentration and availability of high-quality stones, none of the evaluated industrial estate sites is appropriate for investment by the cutting and finishing industry due to their distance from the Hebron quarry sites. The identification of an appropriate, dedicated<sup>1</sup> site for this industry is essential if this sector is to attract significant flows of foreign investment.

---

*Access to Markets*

While Jordan was once WBGS's leading export market for dimension stones, investment is more likely to be driven by access to leading export markets outside the Middle East region, given the likely focus on higher-quality stones. Annual world consumption of dimension stones is valued at approximately US\$25 billion, with Japan, Germany, Italy, Taiwan, United States and France as the leading importers. Fifty percent of world output is produced by four countries – Italy (marble), China (granite and marble), Spain (marble), and India (limestone and marble). Production in the WBGS accounts for approximately 4 percent of world production – a substantial level given its geographic size vis-à-vis the leading producers. Given WBGS production levels and world consumption levels, access to world markets – particularly those destinations listed above – is an important factor in the site selection process. While WBGS does not have preferential access to leading markets in Asia, it can offer access to United States and Europe, which together account for a large proportion of world consumption of dimension stones. Such access can be a positive incentive to investment in WBGS.

---

<sup>1</sup> In addition to the site's proximity to the quarries, it is also important that the site be dedicated solely to the cutting and finishing industry given the environmental impact (primarily dust and noise).

*Availability of Labor*

Given the existence of a large dimension stone industry in the West Bank, an experienced and knowledgeable workforce is readily available to incoming investors. There are currently more than 10,000 workers employed in the industry. A significant proportion of these workers, particularly in the southern regions of the West Bank, including Hebron, have experience with the use of modern tools and capital equipment, including computerized cutting and polishing tools.

---

*Transportation*

Given the likely export-orientation of any investment in the WBGS dimension stone industry, the cost transportation is an important factor for investment. One obstacle to investment in this sector is the difficulty associated with exporting goods from WBGS. While the cost of transportation is relatively competitive, importers and exporters sometimes experience long delays due to the security requirements of the Israeli authorities. However, given the nature of the market, just-in-time delivery is not essential. Therefore, short export delays are not likely to impact investment.

---

*Summary of Comparative Advantage*

In terms of comparative advantage, WBGS can provide a very favorable environment for investment in the stone and marble industry, provided that a suitable site in proximity to the Hebron quarries can be identified and promoted. Key comparative advantages include:

- The availability of high-quality stone and marble that is competitive with other leading producers in terms of price and quality;
- An experienced workforce with knowledge of modern cutting and finishing techniques; and
- Preferential access to leading export markets in Europe and the United States.

---

**13.3 Competitive Advantage**

The following sections evaluate the local and international competitive market trends in the stone and marble industry.

---

*Local Industry Profile*

As discussed above, WBG has an active stone and marble industry driven by access to high-quality quarries in the West Bank, particularly around the Hebron area. The cutting and finishing industry is made up of approximately 900 workshops, which are supplied by approximately 250 quarries. Employment in the industry is more than 10,000.

Israel is the major export market for Palestinian stones. Actual exports to Israel, including the Israeli settlements, account for about 80 percent of Palestinian stone industry exports. Settlements, especially in the areas of Hebron, Betlehem, Nablus, Salfit and Jenin, are the major destinations for Palestinian exports in the industry.

Jordan and other Arab countries are also major export markets for Palestinian stones. As a result of the opening of the Gulf markets, exports of building stones to the regional markets (with the exception of Israel) grew from USD0.19 million in 1973 to USD10.92 million in 1987. However, exports declined sharply in the beginning of this decade due to a drop in demand as a result of the Gulf War. Exports to Arab markets have since fluctuated sharply depending on the political and economic situation in the region. Also, in recent years the Palestinian stone industry has started to face stiff competition from Jordanian stone industry, and is on the verge of losing the Jordanian market, a major market itself.

Despite the lack of significant exports to world markets in the past, the high quality of dimension stones in WBG provide a strong basis for investment by other leading producers, as discussed in the following section.

---

*International Trends*

*World market for dimension stones.* Stone production is a global industry, with approximately 50 percent of the output concentrated in 4 countries (Italy, China, Spain and India) from Europe and Asia. The world's annual consumption of stone is nearly 500 million square meters, a value of US\$25 billion at US\$50 per

**Table 13.3: World Processed Stone Production and Trade, 1996**

<b>Producer</b>	<b>(mil. tons)</b>	<b>Exporter</b>	<b>(mil. tons)</b>	<b>Importer</b>	<b>(mil. tons)</b>
Italy	8.25	Italy	3.44	Japan	2.5
China	7.5	China	3.09	Germany	2.17
Spain	4.25	Spain	1.49	Italy	1.9
India	3.25	India	1.35	Taiwan	1.1
Portugal	1.95	Portugal	0.9	USA	0.76
Brazil	1.9	Brazil	0.7	France	0.66
S. Korea	1.4	S. Africa	0.68	Spain	0.54
Others	18	Others	5.65	Others	7.67
Total	46.5		17.3		17.3

Source: Montani Stone, 1997.

square meter. In 1997, the demand for stone and marble showed a steady increase at 9 percent.

As seen in Table 13.3, Italy is the world's leading processed stone producer with 8.25 million tons per year followed closely by China, Spain and India. These countries are also the world's leading exporters of processed stones. Japan and Germany are the world's major importers of stones. The major importers of marble in the world include Japan, Germany, Italy and Taiwan while the major exporters are China, Spain and India.

Producing more than 4.25 million tons of processed stone, Spain ranks first worldwide in the production of granite and slate, and second in marble, following Italy. Granite production nearly doubled from 1986 to 1992, while marble production quadrupled. The country's importance in the world market is enhanced by the large variety of stones found in its subsoil.

In 1998, India ranked first in the world with 16 million tons of raw stone production. Moreover, India ranks high in terms of exports (in 1997-1998) - first in terms of raw siliceous stone exports, third in terms of total world stone exports and one of the top five leading countries in marble exports. India's green marble is rated as among the best of its kind.<sup>2</sup>

The United States has been one of the fastest growing markets for stone imports. Between 1993 and 1998, imports of raw stone to the U.S. increased 24 percent from US\$418.35 million to US\$519.78 million. However, marble imports to the U.S. actually

---

<sup>2</sup> Economic Times, Feb. 1999.

declined over the same five-year period, going from US\$199.35 million in 1993 to US\$168.17 million in 1998.

In the 1990s, demand for stone from Southeast Asia has been growing rapidly. As a result, the region has become a major destination for exports. Exports, particularly to Taiwan, Indonesia and Malaysia, have risen almost ten-fold in past five years.

*Foreign investment trends favor inward investment in WBGS.* In recent years, companies in the stone industry have been particularly active in foreign direct investment. Table 13.4 highlights the recent reported investment activity. The global trends in the industry can be summarized as follows:

- **Increasing Consolidation in the Stone Industry.** Recent investment activity points to a consolidation in the industry. Investments have large taken the form of acquisitions and joint ventures with existing companies, rather than new (greenfield) investments.

**Table 13.4: Recent Reported Inward Foreign Investment in the Stone Industry**

Country	Investor(s) (Home Country)	Sub-sector	Investment Type (Year)	Domestic Partner(s)	Amount (US\$ M)
Malaysia	Malaysian Resources Corp. (Malaysia)	Granite/dimension	Acquisition (1998)	N/A	1.14
Spain	3i Investment Group (UK)	Marble	Acquisition (1997)	N/A	19.4
Indonesia	Valiant Sdn (Malaysia)	Marble	Joint Venture (1997)	Tuah Sakato	-
Malaysia	Internazionale Graniti SpA (Italy)	Marble/travertine	Joint Venture (1997)	Nikkei Marble Sdn Bhd	8.0
India	Nicos SpA (Italy)	Marble/travertine	Joint Venture (1997)	Nicron Homeware Industries Ltd.	-
China	Acmar (Malaysia)	Marble	Joint Venture (1995)	Chinese Company	1.18
China	Tan Chiang Brothers (Singapore)	Marble/granite	Greenfield (1995)	N/A	9.0

- **Geographical Concentration.** Asia and Europe (already world leaders in the industry) were popular destinations for most of the foreign direct investment and also the origin of it.
- **Developing Countries in Asia are the Major Destination for Investment.** The developing countries in Asia (Malaysia, India, China) and Spain received most of the investment in recent years. These countries are both located close to large consumer markets, and have large domestic markets themselves.

---

*Summary of Competitive Advantage*

While WBGS has not been a target for investment, its superior quality stone with its own unique characteristics, has the potential to attract foreign investment. While competitiveness of Palestinian building stones in the region have been undermined by heavy price competition from Jordan, large export markets in Europe, which is in relative proximity to WBGS provides an opportunity for the export of high-quality dimension stones – a market niche that Jordan cannot match in terms of quality. Investors from other stone and marble producing countries – particularly Italy and Spain – are the most promising targets for investment.

---

**13.4 Policy Considerations** The stone and marble industry meets many of the main policy objectives, including:

- The potential for employment generation as the industry is a relatively labor-intensive;
- The opportunity to increase direct exports to world markets, including the United States and Europe;
- The potential for some degree of technology transfer as incoming investors are likely to introduce a higher degree of technology and more modern production techniques.

However, the environmental impact of these activities, including dust and noise, is a negative factor that needs to be addressed. The relocation of this industry into a dedicated site, far from existing residential centers, and careful planning of such a site can eliminate the negative environmental impact on both residents and other industry sectors.

---

**13.5 Summary of Promotion Potential**

Provided that an appropriate, dedicated site is located in the Hebron region, the potential for the promotion of the stone and marble industry is very high. With both comparative and competitive trends in its favor, as well as its ability to meet many of the policy objectives, the stone and marble industry should be targeted for investment. However, given the time required to locate a site, to conduct the required feasibility study, and, finally, to put in place the necessary infrastructure, this sector should be promoted in the latter part of the short-term marketing program.

---

**13.6 Target Activities and Markets**

Based on the above analysis, the primary markets and industry segments that should be targeted for investment are Italian and Spanish producers of decorative and high-quality building dimension stones.

---

*Promotion Targets*

Investment targets, including number of projects, employment, and capital investment are based on investments entering the region and similar investment locations worldwide. The average size of investment is approximately US\$1.0 million, with employment ranging from 40 to 60 employees. Table 13.5 below displays the promotion targets in the stone and marble industry. These figures are based on the assumption that an appropriate site can be located and that a “product”, in the form of a “stone city”, can be marketed by the end of year one.

**Table 13.5: Promotion Targets for the Stone & Marble Sector**

Promotion Targets	
Number of Projects	1-2
Cumulative Investment Value	US\$1.0 to US\$2.0 mil.
Cumulative Employment	50 to 100

# 14. The Investment Promotion Strategy

## 14.1 Introduction

This chapter focuses on the investment promotion strategy for the industries identified as targets for the industrial estates in the previous chapters. The final list of industries have been identified through competitive and comparative analysis and benchmarking the macroeconomic business environment of the industrial estates in the West Bank and Gaza. This chapter presents a brief general promotion strategy and industry specific strategies to facilitate and increase FDI inflows into the West Bank and Gaza industrial estates.

## 14.2 Review of Target Sectors and Markets

This section presents the list of core industry sectors and target markets for promotion into the Palestinian industrial estates. These targets represent the most promising opportunities for investment in the short-term, based on the attributes of the Palestinian industrial estates, competitive industry trends, and the key policy objectives identified by PIEFZA for the identification of industries for promotion.

**Table 14.1: Summary Matrix of Targets**

Industry Sector	Target Activities	Target Markets
Apparel	High-end apparel in the following categories: <ul style="list-style-type: none"> <li>▪ Men’s or boys’ trousers of woven textile fabrics;</li> <li>▪ Men’s or boy’s shirts of woven textile fabrics;</li> <li>▪ Women’s or girls’ trousers of woven textile fabrics;</li> <li>▪ Women’s or girls’ blouses of knitted or crocheted textile fabrics;</li> <li>▪ Women’s or girls’ lingerie, brassieres, panties, etc. of woven, knitted or crocheted textile fabrics; and</li> <li>▪ Sweaters, knitted or crocheted.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Israel, UAE</li> <li>▪ Italy, France, UK</li> <li>▪ Hong Kong, Korea, Taiwan</li> <li>▪ Palestinian Diaspora</li> </ul>
Consumer Electronics and Electrical Appliances	<ul style="list-style-type: none"> <li>▪ White goods (clothes washers and dryers, refrigerators, dishwashers),</li> <li>▪ Small kitchen appliances,</li> </ul>	<ul style="list-style-type: none"> <li>▪ Denmark, Italy</li> <li>▪ U.S.</li> <li>▪ Japan, Korea</li> </ul>

Industry Sector	Target Activities	Target Markets
	<ul style="list-style-type: none"> <li>▪ Televisions and radio receivers,</li> <li>▪ Personal care appliances (shavers, hairdryers),</li> <li>▪ Telephone sets</li> <li>▪ Small office appliances (adding machines).</li> </ul>	<ul style="list-style-type: none"> <li>▪ Israel</li> <li>▪ Palestinian Diaspora</li> </ul>
Call Centers	<ul style="list-style-type: none"> <li>▪ Inbound telemarketing (customer service)</li> <li>▪ Technical help desk services</li> </ul>	<ul style="list-style-type: none"> <li>▪ Israel (incl. Israel-based multinationals)</li> <li>▪ U.S.</li> <li>▪ Palestinian Diaspora</li> </ul>
Data Conversion	<ul style="list-style-type: none"> <li>▪ Data entry</li> <li>▪ Vector conversion</li> </ul>	<ul style="list-style-type: none"> <li>▪ Israel (incl. Israel-based multinationals)</li> <li>▪ Palestinian Diaspora</li> </ul>
Software Development	<ul style="list-style-type: none"> <li>▪ Offshore programming of packaged and customized software</li> <li>▪ Arabization/conversion of packaged software</li> </ul>	<ul style="list-style-type: none"> <li>▪ Israel (incl. Israel-based multinationals)</li> <li>▪ U.S.</li> <li>▪ UK, Germany</li> <li>▪ Palestinian Diaspora</li> </ul>
Stone & Marble	<ul style="list-style-type: none"> <li>▪ Cutting and finishing of high-quality dimension stones</li> </ul>	<ul style="list-style-type: none"> <li>▪ Italy, Spain</li> </ul>

**14.2 The General Promotion Strategy**

*Role of Promotion*

Investment promotion utilizes both "image building" and "investment generating" techniques. The former are intended to create a general awareness, or image, in the minds of investors about a particular location as a site for investment, while the latter are aimed directly at contacting and attracting investors. Compared to investment generating techniques, image building activities are less likely to target specific industry or geographic groups of investors. They are also generally less likely to yield immediate results, in terms of new investment, nor are their benefits easily measurable. However, image building is the most important step of a marketing plan for West Bank and Gaza to create a positive image in the eyes of international investors.

Investment promotion agencies, typically engage in both image building and investment generating promotion activities. The relative emphasis tends to vary, depending on the country's particular attributes and circumstances. Countries that have not previously sought to attract investment often utilize image building as a way of "getting on the map" in the minds of investors. In other

cases, image building may be required to dispel negative or inaccurate perceptions of a country's investment environment. Within this framework, image building should be an essential component of PIEFZA's investment promotion program. Indeed, all of the promotion tools prepared under the current USAID technical assistance project support image building activities.

In considering the mix of marketing techniques to be utilized in its promotion efforts, PIEFZA must have clear goals and expectations regarding the objectives and likely results of various types of marketing activities and approaches. Image building activities are designed to position West Bank and Gaza in the minds of investors such that they are most likely to respond positively to various types of investment generating activities whose immediate objective is to make direct contact with as many targeted investors as possible in order to generate new investor leads.

Once these initial direct contacts have been made, "personalized selling" becomes the focus of future direct contact with a particular investor. As with other types of industrial marketing characterized by well-informed buyers and infrequent buying decisions, personal selling is critical.

*General Guidelines  
for PIEFZA*

Marketing activities of investment promotion agencies are most likely to be successful if they are part of an integrated promotion strategy. Although effective promotion uses a variety of marketing techniques, these should not be implemented in isolation, but should be designed and scheduled to complement each other.

A crucial component of investment promotion is information on the determinants of foreign direct investment (FDI) and the company perspective of corporate location. PIEFZA personnel's understanding of the motives that shape investment flows will increase efficiency in direct contacts with companies through understanding the possible motives of the companies in examining West Bank and Gaza as an investment location. For this purpose, Annexes A and B provide a background on the determinants of FDI and the company perspective of corporate location respectively.

Furthermore, it will be important for PIEFZA to develop effective procedures for follow-up of marketing activities. It is important to develop procedures for effective response and follow-up of leads

and inquiries generated by general image building and other marketing activity. Because a given company's decision to make a new investment may take anywhere from six months to three years (or longer), periodic follow-up is critical to success. Whether by a phone, letter, or direct visit, it is essential to keep West Bank and Gaza on the radar screen. In addition, the follow-up should be as personalized as possible, particularly in the latter stages of the investor's decision-making process.

In developing specific programs and strategies for meeting its mission PIEFZA must recognize image building in its proper context within the overall process of promoting private investment. Through communication of investment conditions and opportunities, and through service/facilitation activities, promotion can help investors better understand and act on the assets a country has to offer and, accordingly, should be recognized as a valuable complement to on-going efforts to improve the investment product. Particularly during periods of political change or transition, promotion techniques such as image building can play an important role in enhancing investor awareness of positive developments, in dispelling negative misperceptions, or in addressing perceived defects in the "product".

---

### 14.3 Marketing Department and Marketing Program

#### *Promoting West Bank and Gaza Industrial Estates Abroad*

West Bank and Gaza's primary image problem is, at best, one of *No Image*, no information. It is beyond the level of general information, i.e. a point where a businessperson may have had experience in the region or considered doing business in West Bank and Gaza, that negative image becomes a factor.

The immediate task of projecting a favorable image of West Bank and Gaza abroad will be primarily one of public relations supported by advertising. PIEFZA should consider public relations activities coupled with advertising. Effective public relations will also help set the stage for successful advertising.

Subsequent investment promotion advertising, by nature business-to-business advertising, will be "editorially" driven. For these reasons, PIEFZA will consider engaging with a public

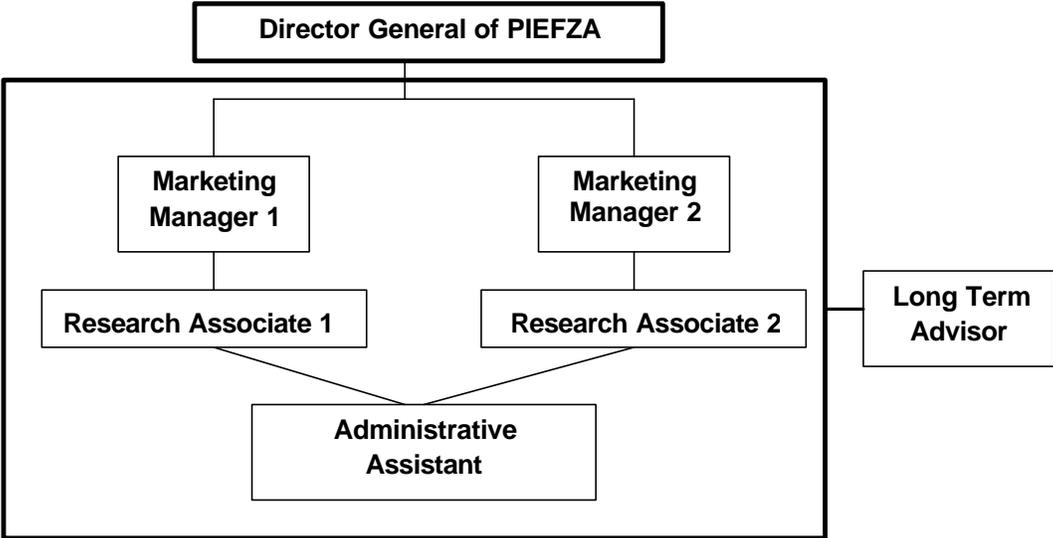
relations firm, which has a strong and recognized advertising component. Coordinating the public relations and advertising activities in one firm guarantees a coherent, integrated campaign and budget economies.

The public relations activities will be varied and complex. The advertising, on the other hand, will be an uncomplicated (by advertising industry standards) campaign. It might begin with a series of "editorial" ads in a selected number of general business and specific "trade" publications. TV will not considered as the ads must be frequently aired and the cost is too high for the benefits to be derived.

PIEFZA should realize that the task of national image building takes time and public relations and advertising activities will require continuity and consistency. The time horizon is not a year, but two to three years at the minimum.

*Marketing Department*

In order to create awareness of the existing and proposed industrial estates in the West Bank and Gaza and attract investment to these sites, a Marketing Department for PIEFZA is proposed and a two-year marketing program is devised for PIEFZA. The structure of the proposed Marketing Department is presented below:



The two Marketing Managers will assume the responsibilities of

leading promotion activities in the targeted sectors under the supervision of the Director General of PIEFZA. It is recommended that one manager be in charge of Electronics and Information technology sectors, and the other be in charge of Apparel, Stone and Marble and other light manufacturing activities. Both Marketing Managers will need to be supported by Research Assistants whose main responsibilities will include backstopping the Managers on promotional, and organizational activities. PIEFZA will need to recruit an administrative assistant to handle all administrative work that the activities of the Marketing Department will require.

A long term advisor is proposed to assist PIEFZA's newly established Marketing department with promotion tools and techniques. This person has to be a FDI Promotion expert with experience in industrial promotion, and should have good knowledge of FDI flows worldwide. In addition to the support of the long term advisor in enhancing the knowledge and skills base of the Marketing Department members, a set of training modules provided by an international consulting firm specialized in FDI is recommended. This will definitely be crucial in developing the skills base of the Marketing Department. Annex E presents sample training courses.

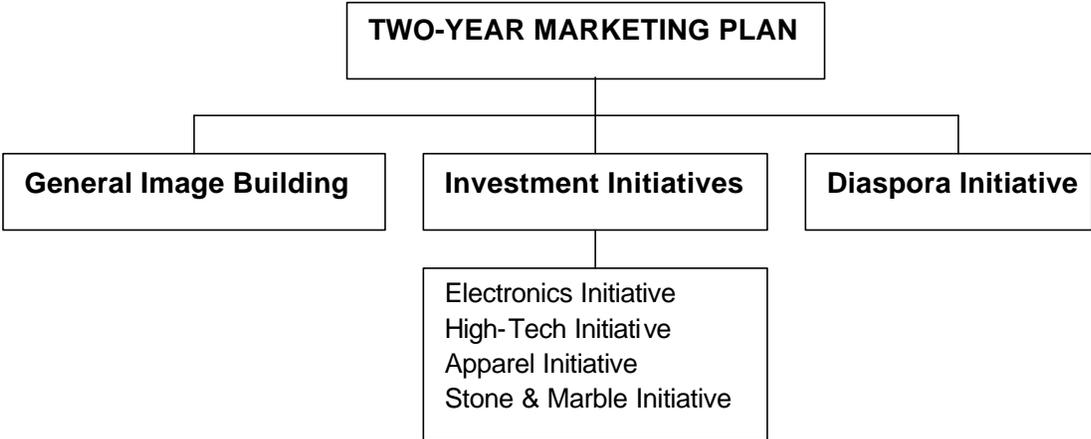
The marketing department should be supported by hiring of an investment agent based in Israel. This will extremely be helpful if the recruited person for this position has current contacts with the companies in the targeted sectors that Israel is targeted as a primary market. It is of much importance that the agent has proven knowledge of the target industries and on the foreign direct investment flows. PIEFZA should also consider developing joint efforts with Peres Center for Peace in order to reach out to the Israeli market in carrying out its promotional efforts. Annex C provides a format for a model contract for appointment of investment agents by PIEFZA in Israel.

A vigorous public relations program is an essential element in any promotion organization's marketing scheme. Because of its sensitivity and importance, the PR mission should be carried by a specialized Public Relations Agency who familiar with the WBG. The PR Agency will be in charge of an active and well conceived public relations effort that allow PIEFZA to profit from the cheapest and most credible type of advertising that exists: to have the

media print or say something positive about the organization rather than the agency pay to say it about itself.

*Marketing Program*

As mentioned earlier, a two-year marketing program is recommended to promote the industrial estates in WBG to markets targeted as a result of the industry assessments in the chapters presented before. The Marketing Program has three major components as presented in the chart below:



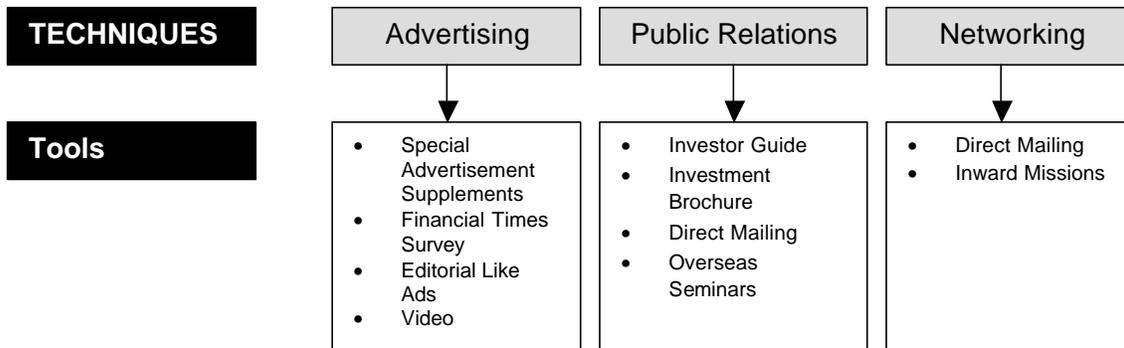
All three components play an essential role for the success of the marketing plan. While the General Image Building Component should concentrate on replacing the negative image of WBG in the investor’s minds with a positive one, it also should aim to capture the attention of the investors in the targeted sectors and the Diaspora. The Investment Initiatives Component focuses on marketing the targeted industry sectors to the targeted markets. The Diaspora Component aims to reach out to the Palestinians living abroad and identify potential investors among them for the targeted sectors and keep them informed about the investment environment, opportunities and advantages in the industrial estates in WBG. It is important to note that all Components should be pursued side by side to ensure success. The Components of the Marketing Plan are explained in detail below:

**COMPONENT ONE: General Image Building**

While the main focus of PIEFZA's image building efforts will be to create a positive image of West Bank and Gaza as a site for investment, PIEFZA will also aim to increase local and international awareness of the industrial estates. Tools such as printed materials (brochures, investor's guide, business cards, posters) video, a multimedia CD-ROM, development of a Web Site are already being produced and their costs are covered under the existing project. The general image building campaign will require the following additional tools and techniques.

*Techniques*

Techniques generally utilized in the image building programs of investment promotion agencies include advertising, public relations, and "networking", both at home and abroad. Guidelines for usage of each are discussed below.



**Advertising**

Advertising is utilized as an image-building technique rather than a means for directly generating investment. PIEFZA should consider using advertising programs to create a positive image in the minds of potential investors. This "image advertising" does not rely on direct responses to measure its effectiveness, but on whether the ad elicits a positive response based upon the content of the ad. The image of WBG is not well received in the English speaking countries and image building advertising will serve PIEFZA's interests in attracting investment to the Industrial estates.

Advertising programs are extremely expensive aspects of a marketing program, and should not be entered into without a long-term commitment, and with the advice of a professional

advertising agency.

Most investment promotion agencies rely exclusively on print for advertising. Radio advertising has been used, and television advertising more rarely. Unless radio or TV time can be accessed free of charge, the costs associated with these media are too high to justify the expected benefits.

The print vehicle most commonly utilized for projecting a country's image as an investment location are special advertising supplements in well-known business magazines such as *The Economist*, *Corporate Location*, *Wall Street Journal*, the *Financial Times*, and *Institutional Investor*. These magazines are worldwide influencers of investors. Many countries prefer four-color magazines to newspapers due to the possibility of utilizing reprints as a supplement to or in lieu of brochures.

#### Special Advertising Supplements

Special advertising supplements should be commissioned in one or more major U.S. business magazines to project a general image of the country and of the opportunities it offers. These supplements, often called "advertorials" because although paid advertising, they appear as editorial, can be informative, attractive, comprehensive reports on the country and they carry the prestige of the magazine publishing them. Reprints of the supplements may be used in lieu of or in addition to promotional brochures in press kits, for direct mail purposes and as "handouts."

The cost of publishing a supplement in the *Corporate Location* magazine ranges between US\$56,000 for 12 pages and US\$92,288 for 20 pages. The cost might be offset in part by PIEFZA seeking contributing advertisers from the national business community and from other government agencies. Business Week's costs are approximately 10 to 15 per cent higher on a cost-per-thousand-reader basis. Annex D provides a sample multimedia location study by the *Corporate Location* Magazine.

*Euromoney* and *Institutional Investor* (European and U.S. publications, respectively), two other relatively well-known magazines which frequently publish advertising supplements or sponsored supplements as they are sometimes referred to, have smaller circulations and specialized, financial readerships. PIEFZA should consider them for its long term planning.

#### Financial Times Survey

Financial Times surveys are more useful than special advertising supplements (not to be confused with regular "space" advertising) in other newspapers. The Financial Times is widely read and respected. The editorial, written by Financial Times regular staff~ is not subject to advertiser control, consequently the subject country should be prepared for a "hard," but presumably fair-minded "look."

The Financial Times sells advertising in the surveyed country to support its publication and PIEFZA would be expected (but not obligated) to buy an ad. It should have no other financial obligation.

#### Editorial-Like Ads

PIEFZA will consider a series of full-page editorial-like informational ads in The Economist, the influential U.K. weekly news magazine circulated internationally. One-page, black and white, editorial ad appearing six times a year would cost approximately \$92,000 (@ \$15,300 per insertion). One 1-page advertisement in The Economist every 6-months is budgeted for the general strategy.

### **Public Relations**

Public relations techniques and activities appropriate for consideration by PIEFZA include press relations, organization of seminars in key overseas markets, and organization of visits by key international business leaders.

#### *Overseas Seminars*

Overseas seminars can be an effective technique for communicating investment opportunities to overseas investors. However, such seminars require careful advance planning, usually a minimum of three months. One effective technique for overseas seminars is to seek sponsorship of a company already operating in West Bank and Gaza. If such companies are willing to host a seminar in their own country, and to invite associated firms, this sends a powerful signal about the attractiveness of the investment environment.

PIEFZA should consider seeking to engage multinationals operating successfully in West Bank and Gaza in similar fashion for "testimonial" advertisements and to serve as "business ambassadors" of West Bank and Gaza in their home countries.

*Printed Brochure,  
Investment Handbook  
Posters, Video*

For both image building and investment generation purposes, production of a set of promotion materials, including a basic printed brochure; an investor handbook and a brochure on PIEFZA services. Production of a short promotional video/CD for use both at home and abroad has already been considered under the existing promotional efforts by PIEFZA. Utilization of the Video is particularly important while promoting investment in higher-technology sectors such as software development and engineering.

All updates on the printed promotional materials should be written by PIEFZA staff but to ensure that PIEFZA presents an integrated, coherent promotional package they should be edited for standardization of language and they should be designed, and the production supervised, by PIEFZA's public relations firm. The creation of a core theme or themes and the design of an integrated promotional package will be a major responsibility of PIEFZA's Public Relations Agency.

During the second year of the promotion plan and depending on the inquiry trends from East Asian and European targets, PIEFZA should consider having some of its promotional material (including the video sound track) translated into those languages. A budget estimate for printed materials might be between \$75,000 to \$200,000, depending on the extent to which four-color, two-color and one-color printing is used throughout, the number of items, the quantity of each and to what extent domestic printing could be used. PIEFZA will work closely with a public relations firm to ensure careful budgetary management of the design and production of printed materials.

*Direct Mail*

Direct mail can be one of the most cost-effective ways to reach a targeted group of decision makers. The three key elements of an effective direct mail campaign are a good mailing list; a well-written letter (and enclosed brochure); and an effective response devise.

*The list:* A good list would allow PIEFZA to focus in on companies that most closely meet selected targeting criteria, and to develop a letter specially tailored to the interests of that particular group. In addition to selecting companies, it is important to identify the right decision makers to whom to address a mailing. Direct mailings

should be addressed to Presidents, CEOs, VPs for International Operations, and VPs for Manufacturing.

Customized lists should be developed in consultation with direct mail specialists who charge anywhere from \$10 - \$1,000 per thousand contacts for rental of their mailing lists. The lists are usually computerized, and coded by a large number of parameters. The owners of the lists usually will work with a client to develop a customized list that meets specific targeting requirements.

Because direct mail promotion is unsolicited, and relatively impersonal, response rates are low, from one to five percent, no matter how well targeted the list. On the other hand, the relatively low cost of direct mail promotion offsets the low rate of response. Time and budget permitting, the impersonal nature of direct mail can be countered by combining it with telemarketing. While it can sometimes be difficult, if not impossible, to get through to business executives on a cold-call basis, if a telephone contact can be made in advance, the recipient is much more likely to pay serious attention to a mailing.

The letter: While a basic marketing announcement will be suitable for most mailings, a separate, targeted letter should be developed for each mailing. Each letter should incorporate selling points identified in the benchmarking and industry analysis sections for the target group in question. These selling points should be combined to present a "unique selling message" that focuses in on West Bank and Gaza's comparative advantages.

Response device: The response device should provide an easy way for the reader to respond. The objective should be to get the reader to request additional information. The response device should summarize the message contained in the main letter; in many cases the response device will be the only part of the mailing that is read. It should offer some "benefit" such as a free brochure or video, in order to get the reader to respond.

About 75 percent of responses will come within the first three weeks after the mailing is received. Designated marketing staff should be prepared to follow-up responses in a timely fashion. A response means that the investor has more than casual interest in West Bank and Gaza; interest that may be enhanced by timely,

professional follow up.

### **Networking for Promotion**

A final promotion technique is "networking" with individuals and institutions that serve as intermediaries or sources of information for investors. These include the Diaspora Palestinians, embassy officials of target countries in Israel, corporate location consultants, lawyers and accountants, industry associations such as the Israel Association of Electronics Industries. PIEFZA should endeavor to provide these types of groups and individuals copies of promotional literature and should meet with them periodically to discuss investment activity in the country. A vital component of networking and image building to appear on international investors' map is international investor forums such as the World Direct Investment Forum to be held in Portugal in June 2000. This conference is one of the Corporate Location and Euromoney Seminars on business opportunities in overseas markets. Presentations to a large audience, coupled with circulation of investment guides and industry brochures, and meetings with decision-makers from MNCs will provide an important step stone for PIEFZA to gain access to a large number of private sector executives.

Eventually, PIEFZA should consider becoming more proactive, in targeting and contacting specific companies identified in the industries chosen for promotion in this report as likely investor candidates. Many promotion agencies reserve the single largest item in their marketing budget for direct meetings with prospective investors. Again, this reflects the relative importance of personal contact. Each of the other marketing techniques discussed above has a specific role to play. Advertising and press releases are designed to position West Bank and Gaza industrial estates in the minds of investors, pre-conditioning them to respond positively to direct contacts. Such contact is designed to put PIEFZA's representatives in touch with specific decision makers in target industries/companies. Direct contact through the investment agent and/or outward or inward missions are essential components of the sector specific investment promotion strategies discussed later in this chapter.

### **Public Relations**

*Public Relations Agency*

PIEFZA will retain a public relations agency with advertising

agency capability for its public relations and advertising functions. The agency account executive will be one and the same person in charge of both advertising and public relations. There main focus of the agency will be promotion of the industrial estates in Arabic-speaking, European, Asian and North American countries. Therefore, PIEFZA might consider a Pan-Arab Public Relations Agency with well established connections in these countries.

The agency will be responsible for creating advertisements and for recommending a media schedule, that is, selecting the publications to be used, the placement in the publications of the ads and the frequency with which the ads should appear.

Investor Servicing

With a limited capability to service potential investors, there is a great danger that any marketing or investment generation campaign could lead to a response which PIEFZA is unprepared to service. Such a situation - unsatisfied clients - would be disastrous for PIEFZA's image as an investment site and should be avoided at all costs. Thus PIEFZA should proceed very carefully and direct its attention towards a well-defined, known and satisfied targets identified in this report. As discussed earlier, effective investor servicing will require recruitment of new staff, who will be solely responsible for investment promotion into the IEs and investor servicing.

Indicative Budget (US Dollars)

TABLE 14.2 : General Image Building Initiative

ACTIVITY	DESCRIPTION	TOTAL/YEAR
Video CD	Allocated for under the existing Project	Cost exclusive
Multimedia CD-ROM	Allocated for under the existing Project	Cost exclusive
Investor's Guide	Allocated for under the existing Project	Cost exclusive
Investment Brochure	Allocated for under the existing Project	Cost exclusive
Web Site	Allocated for under the existing Project	Cost exclusive
Posters	Allocated for under the existing Project	Cost exclusive

Translation of Printed material into Asian languages	At the end of year one, printed material needs to be translated before departure.	\$15,000
Advertisement in Economics and Investment Media	Theme: Success Stories of Companies in WBGs	\$62,000
Two Marketing Managers	Salary	\$40,000
Two Research Assistants	Salary	\$30,000
One Administrative Assistant	Salary	\$11,000
<b>TOTAL:</b>		<b>\$158,000</b>

**COMPONENT TWO: Investment Initiatives**

*Role of Investment Initiatives*

Implementing a strategy program that is set up to cater exclusively to an industry cluster is referred to as the investment initiative. The objective of an investment initiative is to stimulate interest in projects within the international investor community using a combination of promotion approaches.

There are several advantages to using the initiative approach:

- Industry knowledge: PIEFZA can develop depth of information in a high-priority sector or industry. This depth allows the PIEFZA to take on promotion tasks confidently, as opposed to merely taking on reactive, “customer service” tasks. By developing a knowledge center in-house, the organization can develop in-depth relationships with counterpart industry organizations, thereby creating a center of excellence. The center’s expertise can contribute to significant success of the initiative.

- Performance measure. Management can structure a work-plan linked with predetermined agency objectives (such as investment or employment targets).
- Finite life. The finite life of an initiative approach provides a significant advantage over department units, which are characterized by static task definitions over an indefinite period. The adaptive nature of an initiative allows management to change its structure over the life of the initiative.
- Testing ground for best practices. An initiative approach allows for a testing ground to develop a dedicated sector-specific department within the investment promotion agency, based on the success of the program.

---

*Significance of Firm Size and Market Orientation*

While country of origin provides broad parameters in which to analyze the context of an investment, the type of firm targeted will determine the marketing approach. This applies particularly to the size of the firm, in terms of the value of investment. These firms fall into three types:

- Small (less than \$1 million in investment)
- Mid-sized (\$1 million to \$5 million)
- Large/multinational (more than \$5 million)

*Firm size* has clear implications for the promotion approach to be implemented. Marketing to a multinational, for instance, which can directly access high levels of government for information and clearances, will be radically different from marketing to a mid-sized enterprise, that may require assistance with basic market information as part of the country orientation.

Another important determinant in the approach directed to an investor group is the *market orientation* of the potential investment (local or export market). In the case of an investment whose output is directed at the local market, motivating factors for site location include size and growth of local market, purchasing power of consumers, level of competition (i.e., domestic rivalry among firms), nature of competition policy (i.e., cartels, monopoly, etc.). Alternatively, investors that seek an export platform tend to look

more at comparative operating costs, investment incentives, distance from target market, etc. While cross-cutting issues such as business operating conditions (e.g., bureaucracy) affect all enterprises, the market orientation nevertheless provides insight into the needs of the investor group, thereby allowing the promotion agency to tailor its marketing approach to target their requirements.

The issues of *size*, *nationality*, and *market orientation* of the firm formed the basis for developing the marketing strategy for PIEFZA. Table 14.2 proposes an approach based on the firm size. It categorizes the essential function of an investment promotion agency into two tasks: proactive promotion and facilitation. While the information provision and inward visit facilitation remains unchanged by nationality of investor group, the proactive promotion varies considerably. Direct presence is more appropriate in the case of mid-sized companies since larger companies, mostly multinationals, get marginal value from investment promotion and facilitation given PIEFZA's will establish extensive links in the target marketplace.

**Table 14.3: Promotion Strategy Mix by Investor Group**

Company Size	Promotion Strategy Mix
Multinational Companies	<ul style="list-style-type: none"> <li>• Aggressive presence</li> <li>• Aggressive image building</li> </ul>
Medium and Large Companies	<ul style="list-style-type: none"> <li>• Market information</li> <li>• Investment promotion missions</li> <li>• Inward delegations</li> </ul>
Small Companies	<ul style="list-style-type: none"> <li>• Market information</li> <li>• Inward delegations</li> </ul>
Palestinian Diaspora	<ul style="list-style-type: none"> <li>• Investment promotion missions</li> <li>• Market information</li> <li>• Inward delegations</li> <li>• Awareness generation (industry opportunities)</li> </ul>

The tools to be used to effectively carry on the industry initiatives are as follows:

*Industry Specific Advertising*

While advertising in general business publications is highly visible, many promotion agencies confined their advertising to specialized trade publications geared toward specific industry sectors in targeted markets. A quarter-page in this type of magazine may

cost as little as \$1000, but frequently yields an equal or greater number of serious inquiries than a costly advertisement in a general business publication.

*Specific Industry Brochures*

Small brochures that describe specific industrial sectors such as apparel assembly, consumer electronics assembly, etc., which are especially attractive to investors. PIEFZA has had in use some which are being revised. Brochures will be created for all industrial sectors identified for promotion.

*Direct Investment Missions*

Missions abroad are the most expensive marketing programs when measured on a cost per contact ratio. It is therefore imperative that these missions be well targeted and, if possible, directly related to the current project activity. These missions will enhance their possibilities of success by calling upon the knowledge, experience and planning of the travelling personnel.

**The High-Tech Investment Initiative**

The high-tech investment initiative comprises of emerging industries such as information technology and software development that are identified above in the industry analysis chapters. It should be noted that the high-tech initiative will focus primarily on the Tulkarem industrial estate that is destined for these type of industries.

---

*Information Technology Target Activities and Markets*

Target activities for software development should include data entry and vector conversion and remote processing services such as back office operations. Based on prior analysis of these activities, the following sources of investment should be targeted for investment in the Palestinian industrial estates (primarily the planned Khadoury TDC in Tulkarem):

- Israel-based data conversion companies, including both basic data entry and vector conversion, interested in entering into joint ventures or other partnership agreements with local Palestinian companies; and
- Small Palestinian companies operating at the lower end of remote processing services, including back office services.

In the medium- to long-term, as the industry becomes more established and the regional market for such services grows, the KTDC will have the potential to attract investments from the U.S. and/or Europe.

---

*Software Target Activities and Markets*

Target activities for software development should include activities such as coding, customization and conversion, testing, maintenance of software. Based on previous analysis of the sector, the following sources of investment and niche software development sectors should be targeted for investment in the Palestinian industrial estates (primarily the planned Khadoury TDC in Tulkarem):

- Israel-based companies (both software houses and electronics companies with “in house” software development needs) interested in “outsourcing” coding/programming

activities to meet manpower shortages, including business and database management applications;

- Israel-based multinational companies (both software houses and electronics companies from US and Europe with “in house” software development needs) interested in producing Arabized or other localized packaged software (primarily consumer and business applications and database management applications) for the regional market;
- Local Palestinian entrepreneurs; and
- The larger regional players, with either significant exports to or outward investment within the region.

*Principle Selling Themes*

Principle selling themes for the high-tech initiative are:

- Khadoury Technology Park offering high-quality telecommunications
- Access to Arabic-speaking regional market
- Proximity to Israel’s booming hi-tech corridor

**Table 14.4: Promotion Strategy for High-Tech Initiative**

Industry Niche	Firm Characteristics			Promotion Approach
	Size	Nationality	Orientation	
Software development, Arabization, and outsourcing	Medium	Israel, US, UK	Export to the regional market and local sales (including Israel)	<ul style="list-style-type: none"> <li>• Image building with emphasis on the business environment an investment opportunities</li> <li>• Market information</li> <li>• Inward delegations</li> <li>• Build linkages with respective industry associations</li> </ul>
Outsourcing and Arabization of software packages	Large	Israel		<ul style="list-style-type: none"> <li>• Direct relationship with the respective industry association and companies</li> <li>• Reactive market and price information</li> <li>• Reactive facilitation/inward delegations from Israel to the industrial estates</li> </ul>
Sub-contracting of outsourcing activities	Medium and Large	Local		<ul style="list-style-type: none"> <li>• Direct relationship with companies/entrepreneurs</li> <li>• Market information</li> <li>• Local image building</li> </ul>

*Promotion Approach*

The promotion efforts should concentrate on initiating contact with the Israeli investors and significant multinational players in software and information technology sectors that are currently present in Israel. Target companies are those that are looking for low-cost regions to shift their labor-intensive operations and/or looking for opportunities to tap into the growing regional market through West Bank and Gaza.

The principal approach is utilizing the services of the investment promotion agent who will undertake the following:

- Establish an interactive network with the Israeli companies as well as the multinational companies located in Israel to serve markets abroad.
- Develop a short list of prospective investors
- Organize a Presentation in Israel to Israeli companies.
- Meet and pre-screen companies constantly and show progress
- Maintain the objective of getting people to make site visits in Industrial Estates in WBG
- Arrange meetings with high-level executives for visiting delegations from PIEFZA

In addition, PIEFZA will place industry specific advertisements, in respective industry publications in Israel. The marketing Department should research and plan to attend to industry trade shows such as Softworld 200 (Vancouver, Canada) Executive ComForum (Miami, Florida) and Computer Fest (Toronto, Canada), as this provides the opportunity to meet with the highest number of investors at any given time.

Through advertisements in industry specific magazines such as Advanced Intelligent Networks News, Business Computing Brief, PIEFZA will promote the High-Tech initiative.

PIEFZA should not overlook the local market in its promotion efforts, and identify, provide information and follow up with the potential local investors involved in back office services.

For the first year, there are no outward missions planned as the cost of these trips are unlikely to be justified at such as early stage of the marketing plan. It will be much easier to reach out to the

multinational companies that are not present in Israeli market if samples of successful businesses located in the WBG Industrial Estates could be given.

#### Human Resources

The following human resources will be utilized to carry out the High-tech Initiative:

- The Israel-based agent will play a key role in carrying out the promotional activities. He will serve as a key point of contact in promoting the software and information technology activities.
- His activities will be supported by the Marketing manager in charge of the high-tech initiative.
- The Research Assistant will play a crucial role in identifying and initiating contacts with the multinational companies that are not yet present in Israel, or in the region.
- The Administrative assistant will be responsible for all administrative support required for the promotion activities.

#### Indicative Budget for Promotion (US dollars)

**TABLE 14.5 : High-Tech Investment Initiative**

ACTIVITY	DESCRIPTION	TOTAL/YEAR
<b>Promotion Support</b>		
Public Relations Agency*	Full Time Fees	\$20,000 *
	Travel	\$8,000 *
Investment Promotion Agent in Israel	Full Time Fees	\$8,400 *
	Travel in Israel	\$840 *
<b>Promotion Activities</b>		
Overseas Missions (Two 2 person-1 week missions/yr)	Travel to Asia (Japan, Korea)	\$12,000
	Accommodation	\$5,800
	Travel to Europe (Denmark, Italy)	\$6,000
	Accommodation	\$5,800
	Organization of Travel	\$1,000
Promotional Fairs (Booths)	Once a year	\$10,000
<b>Promotion Materials</b>		
Sectoral Brochures	Publish once a year	\$5,000

Advertisement in Electronics Industry Journals	Twice a year	\$40,000
<b>General and Administrative</b>		
Communications	Phone, Fax, E-mail	\$10,000
Miscellaneous/contingency	Other expenses	\$3,000
<b>TOTAL</b>		<b>\$197,840</b>

\*This cost is one fifth of the total cost estimated for this item

**Electronics Investment Initiative**

*Target Markets and Activities*

In the short-term, electronics manufacturing activities will be based on the existing skill base and local industry experience, i.e. manufacturing and assembly of consumer electronics, electrical appliances, and basic telecommunications equipment. The industrial estates, particularly those in the West Bank, have the potential to attract both Israeli and multinational electronics manufacturers and should target:

- Israeli manufacturers, particularly in consumer electronics and telecommunications equipment, seeking to move their manufacturing and assembly operations to lower-cost locations “offshore”, either through direct investment/joint ventures or through sub-contracting/licensing agreements with local producers;
- Multinational and Israeli manufacturers interested in accessing the growing regional market through “point-of-sale” manufacturing and assembly operations, either through direct investment/joint ventures or through sub-contracting/licensing agreements with local producers. Major investment targets are Israel, Denmark and Italy in Europe, Japan and Korea in East Asia, and the US.

In addition to investment in assembly activities, there is also potential for the industrial estates to attract investment in after-sales repair and maintenance services for the regional market. Growing sales into the region will drive the need for authorized service centers – through either direct investments by manufacturers or sub-contracting/ licensing agreements with third party vendors. Based on current trends in the region, targeting

the latter option appears to provide greater potential as most repair services in the region are conducted by authorized third party vendors rather than directly by the manufacturers.

*Principal Selling Themes*

The principal selling themes for the electronics industry are:

- Available skilled labor at competitive cost compared to Israel and other nations in the region
- Increasing infrastructure quality (Industrial estates)
- Growing domestic market
- Access to the regional markets
- Duty-free access to the EU and US markets

---

*Promotion Approach*

The major target to attract investment in the electronics sector is Israel in the short-and-medium-term. Target companies are large Israeli companies that are looking for low-cost regions to shift their labor-intensive operations and/or looking for opportunities to tap into the growing regional market through West Bank and Gaza.

Given the requirement to have experience and an in-depth knowledge of the industrial structure and companies in Israel, cultural sensitivities, and language differences, the principal approach is utilizing the services of the investment promotion agent that PIEFZA will retain. The Israel-based agent will undertake the following:

- Establish an interactive network with the Israel Association of Electronics Industries and the Manufacturers Association of Israel – the Electronics and Software Division.
- Develop a short list of prospective investors
- Meet and pre-screen companies constantly and show progress
- Maintain the objective of getting people to make site visits in Industrial Estates
- Arrange meetings with high-level executives for visiting delegations from PIEFZA
- Represent PIEFZA at trade fairs and conferences

Networking through the electronics industry associations mentioned above and direct meetings with large companies will support the agents' efforts. Many of these companies are under increasing cost-pressure and can benefit from West Bank and

Gaza IEs lower labor costs. In addition, PIEFZA will place one-page advertisements, one every six-months, in respective industry publications in Israel.

In Asia (Japan and Korea), Europe (Denmark and Italy), and the US, the principal approach is image building with an emphasis on the positive attributes of the investment environment and provision of business opportunities in the industrial estates. In Denmark, PIEFZA should get bin touch with “The Confederation of Danish Industries” or “Export Promotion Denmark” to explore the opportunities in the targeted area. The image-building efforts should be continued as discussed earlier in the General Image Building section.

Two-week investment promotion missions starting in the 2<sup>nd</sup> year will support the image building campaigns in Europe and the US. The investment promotion missions to East Asia will take place during the first half of the second year after creating a relatively more positive image in the region through the image building efforts such as quarterly advertisements in related industry association, economic, and industry publications in Korea and Japan.

**Table 14.6: Promotion Strategy for Electronics Initiative**

Industry Niche	Firm Characteristics			Promotion Approach
	Size	Nationality	Orientation	
Consumer electronics and basic telecom equipment	MNCs	Denmark, Italy, Japan, Korea, and the US	Export to the regional market and local sales (including Israel)	<ul style="list-style-type: none"> <li>Image building with emphasis on the business environment an investment opportunities</li> <li>Market information</li> <li>Investment missions starting at the 6<sup>th</sup> month coupled with industry expos</li> <li>Build immediate linkages with respective industry associations</li> </ul>
Consumer electronics and basic telecom equipment	Large	Israel		<ul style="list-style-type: none"> <li>Israeli investment agents in Tel-Aviv</li> <li>Networking through industry associations</li> <li>Reactive market and price information</li> <li>Facilitation of inward delegations from Israel to the industrial estates</li> <li>One-page ads in respective industry publications in Israel</li> </ul>

To maximize coverage and efforts, the visits of the PIEFZA marketing department should coincide with a principal industry

conference held in the region and should also include respective industry associations as an integral part of the missions. Examples of such associations are: Electronic Industries Alliance and The Consumer Electronics Manufacturers Association in the US; Electronic Industries Association of Japan and Association for Electric Home Appliances in Tokyo, Japan; Electronic Industries Association of Korea in Seoul, Korea; and similar association of Italy and Denmark. Involvement of high-level government officials in these missions will provide easier access to the executives of the large corporations in Japan and Korea as they prefer official representation in the meetings. Direct contact with the Korean and Japanese Embassies in Israel is the first step of preparations for the investment promotion visits to these countries. Official contact will help speed up the process and enable direct access to related government organizations and industry associations through these nations' representatives in the region.

In the US and Europe, involvement of high-level government officials is not essential. Direct missions will be supported through the general image creation strategy outlined above. This strategy would involve a location study complemented a six-page ad in the corporate location magazines and/or the Institutional Investor magazine.

---

*Human Resources*

For promotion purposes, the following people should be directly involved in the electronics initiative:

- PIEFZA does not have an international network of offices nor the Palestinian Authority with investment promotion capabilities. Within this framework, it is essential to utilize the services of an investment agent based in Israel with extensive knowledge of industries in this market;
- The Agent based in Israel should be in charge of identifying and initiating contact with the Israeli and multinational companies based in Israel. He should initiate visits to potential sites, provide information on the existing and proposed industrial estates in WBG.
- The Marketing Manager should work to co-ordinate the development of new initiatives in Europe, Asia and elsewhere as well as to co-ordinate all incoming investment groups in this sector. He will also be responsible for this activity should direct global activities, and co-ordinate public relations and oversee the Israel-based agent;

- The Research Assistant should back up the marketing efforts by carrying out research on potential investors, supporting organization of inward and outward missions.
- The Administrative Assistant should be responsible from all correspondence activities with the investors, as well as arranging logistics for the trips of the Marketing Manager and the Research Assistant.

*Indicative Budget for Promotion ( US Dollars)*

**TABLE 14.7 : Electronics Investment Initiative**

<b>ACTIVITY</b>	<b>DESCRIPTION</b>	<b>TOTAL/YEAR</b>
<b>General and Administrative</b>		
Communications	Phone, Fax, E-mail	\$10,000
Miscellaneous/contingency		\$3,000
<b>Promotion Support</b>		
Public Relations Agency	Full Time Fees	\$20,000 *
	Travel	\$8,000 *
Investment Promotion Agent in Israel	Full Time Fees	\$8,400 *
	Travel in Israel	\$840 *
<b>Promotion Activities</b>		
Overseas Missions (Two 2 person-1 week missions/year)	Travel to Asia (Japan, Korea)	\$12,000
	Accommodation	\$5,800
	Travel to Europe (Denmark, Italy)	\$6,000
	Accommodation	\$5,800
	Organization of Travel	\$1,000
Promotional Fairs (Booths)	Once a year	\$10,000
<b>Promotion Materials</b>		
Sectoral Brochures	Publish once a year	\$5,000
Translation of Investment brochures	To be done prior to Missions to Asian Countries	\$10,000

Advertisement in Electronics Industry Journals	Twice a year	\$40,000
<b>TOTAL</b>		<b>\$145,840</b>

\*This cost is one fifth of the total cost estimated for this item

**Apparel Investment Initiative**

*Target Activities and Markets*

The targeted activities include baby/childrens’ wear, womens’ lingerie & brassieres, mens’ suits, womens’ dresses, trousers and shirts of woven textile fabrics, sweaters, and jeans. The targeted markets for the apparel initiative are:

- Large Israeli apparel manufacturers and UAE – JVs with Palestinian companies
- Mid-size local Palestinians & Large Ex-Pat holding companies – same niche sectors – under license to U.S. and/or European manufacturers
- Italy France and UK in Europe
- Hong Kong, Korea and Taiwan in East Asia.

*Principal Selling Themes*

The principal selling themes that need to be stressed for the apparel industry are access to lower cost, highly productive workforce; direct experience with Israeli apparel manufacturers in order to attract Israeli producers, and quality infrastructure, duty-free/quota-free access to U.S. and European markets, and incentives to attract Palestinians. The duty-free/quota-free access to US and European is a theme that will appeal to the Asian companies who like to take advantage of countries with such access.

*Promotion Approach*

The major target to attract investment in the apparel sector is Israel in the short-and-medium-term. Target companies are large Israeli companies that are looking for low-cost regions to shift their labor-intensive operations and/or looking for opportunities to tap into the growing regional market through West Bank and Gaza.

Given the requirement to have experience and an in-depth knowledge of the industrial structure and companies in Israel,

cultural sensitivities, and language differences, the principal approach is utilizing the services of the investment promotion agent in Israel. The agent in Israel will undertake the following:

- Develop a short list of prospective investors
- Meet and pre-screen companies constantly and show progress
- Maintain the objective of getting people to make site visits in Industrial Estates
- Arrange meetings with high-level executives for visiting delegations from PIEFZA
- Represent PIEFZA at trade fairs and conferences

Direct meetings with large companies will support the agents' efforts. In addition, PIEFZA will place one-page advertisements, one per every six-months, in respective industry publications in Israel.

In Asia (Taiwan and Korea) and the US, the principal approach is image building with an emphasis on the positive attributes of the investment environment and provision of business opportunities in the industrial estates.

Two-week investment promotion missions starting in the 2<sup>nd</sup> half of the first year will support the image building campaigns in Asia and the US. The investment promotion missions to East Asia will take place during the year-2 after creating a relatively more positive image in the region through the image building efforts such as quarterly advertisements in related industry association, economic, and industry publications in Korea and Taiwan.

**Table 14.8: Promotion Strategy for Apparel Initiative**

Industry Niche	Firm Characteristics			Promotion Approach
	Size	Nationality	Orientation	
High-End Apparel Products Assembly	Large	Taiwan, Korea, and the US	Export to the regional	<ul style="list-style-type: none"> <li>• Image building with emphasis on the business environment an investment opportunities</li> <li>• Market information</li> <li>• Investment missions starting at the 6<sup>th</sup> month coupled with industry expos</li> <li>• Build immediate linkages with respective industry associations</li> </ul>

High-End Apparel Products Assembly	Large	Israel	market and local sales (including Israel)	<ul style="list-style-type: none"> <li>• Israeli investment agents in Tel-Aviv</li> <li>• Networking through industry associations</li> <li>• Facilitation of inward delegations from Israel to the industrial estates</li> <li>• Advertisements in respective industry publications in Israel</li> </ul>
------------------------------------	-------	--------	---	---

To maximize coverage and efforts, the visits of the PIEFZA marketing department should coincide with a principal industry conference held in the target region. Examples of such industry events are Los Angeles Fashion Week (California Mart Exhibit Center, LA, November 2000), Herren Mode Woche (Cologne, Germany, July 2000), CPD Collections Premiere Duesseldorf (Duesseldorf, Germany, Aug 2000). The overseas visits by PIEFZA Marketing Department should also include respective industry associations as an integral part of the missions. Involvement of high-level government officials in these missions will provide easier access to the executives of the large corporations in Taiwan and Korea as they prefer official representation in the meetings. Direct contact with the Taiwanese and Japanese Embassies in Israel is the first step of preparations for the investment promotion visits to these countries. Official contact will help speed up the process and enable direct access to related government organizations and industry associations through these nations' representatives in the region.

In the US, involvement of high-level government officials is not important. Direct missions will be supported through the general image building efforts explained before. This strategy would involve a location study complemented a six-page ad in the corporate location magazines and/or the Institutional Investor magazine.

*Human Resources*

For promotion purposes, the following people should be directly involved in the apparel initiative:

- As Israel is one of the main targets for promotion, the Israel-based agent should support the activities of the Marketing manager in initiating contact with the Israeli manufacturers of apparel. He should initiate visits to potential sites, provide information on the existing and proposed industrial estates in WBG.

- The Marketing Manager should work to co-ordinate the development of new initiatives in Asia and US as well as to co-ordinate all incoming investment groups in this sector. He will also be responsible for this activity should direct global activities, and co-ordinate public relations;
- The Research Assistant should back up the marketing efforts by carrying out research on investors who are manufacturing high-end apparel under subcontracts from the well-known fashion companies.
- The Administrative Assistant should be responsible for all correspondence activities with the investors, as well as arranging logistics for the trips of the Marketing Manager and the Research Assistant.

**TABLE 14.9 : Apparel Investment Initiative**

<b>ACTIVITY</b>	<b>DESCRIPTION</b>	<b>TOTAL/YEAR</b>
<b>Promotion Support</b>		
Public Relations Agency	Full Time Fees	\$20,000 *
	Travel	\$8,000 *
Investment Promotion Agent in Israel	Full Time Fees	\$8,400 *
	Travel in Israel	\$840 *
<b>Promotion Activities</b>		
Inward Missions (Organize an Information Session every year and invite investors)	Invite investors from EU and Asia	\$20,000
Overseas Missions (Two 2 person-1 week missions/year)	Travel to Asia (Taiwan, Korea)	\$12,000
	Accommodation	\$5,800
	Travel to Gulf	\$6,000
	Accommodation	\$5,800
	Organization of Travel	\$1,000
<b>General and Administrative</b>		
Communications	Phone, Fax, E-mail	\$14,000
Miscellaneous/contingency		\$3,000
<b>TOTAL</b>		<b>\$110,640</b>

\*This cost is one fifth of the total cost estimated for this item

**Stone and Marble Initiative**

*Target Activities and Markets*

Provided that a site is identified to serve as the main destination for the stone and marble industry, the primary markets and industry segments that should be targeted for investment would be Italian and Spanish producers of decorative and high-quality building dimension stones.

*Principle Selling Themes*

The promotion efforts should be orchestrated around the quality and the color of the stone, availability of cheap and experienced labor. Other factors such as availability of stone and low price of stone should be stressed as well.

*Promotion Approach*

Investment targets, including number of projects, employment, and capital investment are based on investments entering the region and similar investment locations worldwide. The average size of investment is approximately US\$1.0 million, with employment ranging from 40 to 60 employees. Table 13.5 below displays the promotion targets in the stone and marble industry. These figures are based on the assumption that an appropriate site can be located and that a “product”, in the form of a “stone city”, can be marketed by the end of year one.

**Table 14.10: Promotion Strategy for Stone & Marble Initiative**

Industry Niche	Size	Firm Characteristics		Promotion Approach
		Nationality	Orientation	

Cutting, Polishing of decorative and high-quality dimension stones	Large	Taiwan, Korea, and the US	Export to the regional market and local sales (including Israel)	<ul style="list-style-type: none"> <li>• Image building with emphasis on the business environment an investment opportunities</li> <li>• Market information</li> <li>• Investment missions starting at the 6<sup>th</sup> month coupled with industry expos</li> <li>• Build immediate linkages with respective industry associations</li> </ul>
--	-------	---------------------------	--	--

*Human Resources*

The human resources devoted to this initiative will not be as intensive as the other initiatives as the an industrial site dedicated for this type of investment is not ready. The following people will be enough to create awareness of the possibilities in WBG for the stone and marble sector:

- The Marketing Manager in charge of Apparel will also oversee the promotion activities in this sector. He will be in charge of attending stone and marble exhibitions in Europe to promote the Palestinian industry in these events.
- The Research Associate will focus on Italy and Spain to identify the potential investors, and initiate contact with them through direct mailing.
- The Administrative Assistant will be in charge of organizing travels of PIEFZA staff, and scheduling incoming visits of potential investors to WBG.

*Indicative Budget for Promotion (US dollars)*

**TABLE 4.11 : Stone & Marble Investment Initiative**

ACTIVITY	DESCRIPTION	TOTAL/YEAR
<b>Promotion Support</b>		
Public Relations Agency	Full Time Fees *	\$20,000
	Travel *	\$8,000
Investment Promotion Agent in Israel	Full Time Fees *	\$8,400
	Travel in Israel *	\$840
<b>Promotion Activities</b>		

Overseas Missions (Two 1 person-10days mission in the first two years)	Travel to Europe (Italy, Spain)	\$6,000
	Accommodation	\$4,000
	Organization of Travel	\$400
<b>General and Administrative</b>		
Communications	Phone, Fax, E-mail	\$2,000
Miscellaneous/contingency		\$500
<b>TOTAL</b>		<b>\$50,940</b>

\*This cost is one fifth of the total cost estimated for this item

**Diaspora Initiative**

The Palestinian Diaspora constitutes a major group of investors that are known to be interested in investing in their homeland. PIEFZA should carryout the “Diaspora Initiative” to capture the interest of these investors.

*Target Activities and Markets*

The target activities will be all of the targeted sectors (i.e. consumer goods and electronics, apparel, information technology, software, stone and marble) and other light manufacturing activities that will benefit from the high skilled and relatively low cost labor pool in WBG.

The target markets for this activity are countries where there is a large concentration of Palestinian investors. Among the known concentrations are United States (Los Angeles, San Fransisco, Detroit, and Chicago), Honduras, Chile, and Venezuela. The promotion efforts should not be limited to these countries the but are presented to serve as samples.

*Promotion Approach*

Targeting the Palestinian Diaspora is an important factor of the Marketing Program. The Marketing Department should concentrate its efforts in identifying the investors and their businesses. A network of contacts should be established through personal contacts with the diaspora. The addresses and names listed in “Business Directory of Palestinians in the Diaspora” by MOPIC and the attendees to the “First and Second Conferences for Palestinian Businessmen Abroad” should serve as a good starting point for the networking campaign.

After identification of the investors is completed, PIEFZA Marketing Department should utilize the tools developed under the General Image Building Component to inform the potential investors of the current investment environment and advantages WBG offers via direct mail. Parallel to this activity, industry specific brochures should be send to focus the investors on possibilities of profitable businesses in WBG.

## Indicative Budget for Diaspora Initiative

Table 4.12: Diaspora Initiative

ACTIVITY	DESCRIPTION	TOTAL/YEAR
<b>Promotion Support</b>		
Public Relations Agency	Full Time Fees *	\$20,000
	Travel *	\$8,000
Investment Promotion Agent in Israel	Full Time Fees *	\$8,400
	Travel in Israel *	\$840
<b>Promotion Activities</b>		
Overseas Missions (Two 1 person-10days mission in the first two years)	Travel to Europe (Italy, Spain)	\$6,000
	Accommodation	\$4,000
	Organization of Travel	\$400
Identify and Profile 200 top investors among the Palestinian Diaspora		\$4,000
Direct Mailing Campaign		\$1,000
Overseas Missions (Joining Trade Shows)	1 trip-1 person trips per location to coincide with trade shows in target industries	
Trips to US (NY, NJ, Chicago, Detroit, LA, San Francisco)		\$6,000
Trips to Chile		\$7,000
Trips to Honduras		\$5,000
Trips to Germany		
Inward Missions Conference in Jerusalem		\$10,000
<b>TOTAL</b>		<b>\$83,640</b>

14.4 Budget Summary

Following is the 24-month PIEFZA investment promotion budget providing a general estimate of investment promotion costs for the promotion components as represented earlier at the end of each initiative. The total projected budget over the twenty-four-month period is US\$1,493,800. It should be noted here that this budget is indicative and does not take into account the monthly salaries of the existing PIEFZA staff.

Table 14.13: Overall Budget Summary for Two Years

COMPONENT	TOTAL
General Image Building	\$316,000
High-Tech Initiative	\$395,680
Electronics Initiatives	\$291,680
Apparel Initiative	\$221,280
Stone & Marble Initiative	\$101.880
Diaspora Initiative	\$167,280
<b>TOTAL EXPENDITURE</b>	<b>\$1,493,800</b>

# **Annex A: Determinants of Foreign Direct Investment**

---

## **A.1 Introduction**

This Annex describes the international FDI environment. Specifically, it examines: (1) factors that motivate and influence foreign direct investments, (2) global trends that currently shape FDI flows, and (3) regional investment trends.

---

## **A.2 Factors Motivating and Influencing FDI**

The factors that influence the direction, level, and form of foreign investment are the subject of a large body of research,<sup>1</sup> which has generally pointed to two groups of factors: industry-firm-specific variables and host-country factors. The formers are largely concerned with the initial decision to undertake an investment; the latter influence the final destination of the investment. Both sets of factors explain why some countries or regions do better in attracting foreign investment than others. They also explain why direct investment may be preferred over alternative methods of adding production capacity to continue serving a firm’s customers and markets, such as contracting, licensing, or just exporting from an existing factory. As examined below, while sharing some commonalities, experience among various countries has shown that FDI determinants vary strongly by size of company (multinationals versus smaller firms), market orientation (export versus domestic market), industry subsector, and investor nationality.

Unfortunately, most economists and business analysts who evaluate companies’ investment decisions have tended to over simplify business motives as macroeconomic and industry-firm-specific “push” factors and host-country “pull” factors. Push factors account for the relocation of industries to lower-cost locations; pull factors explain the uneven distribution of FDI among recipient countries. However, business-investment decision making is far more complex in reality; it involves both push and pull factors in the initial decision to invest, in choosing the investment location, and in determining the investment form.

---

<sup>1</sup>See for example, Dunning (1993), and Mody & Srinivasan (1992).

*Factors Affecting the Initial Investment Decision*

Business motivation may either be proactive or reactive. While it is true that many OECD firms were “pushed” to relocate due to rising production costs, it is equally true that many investments are part of a deliberate, proactive strategy to take advantage of market opportunities, serve existing customers better, or capitalise on a unique ownership advantage in terms of technology or marketing know-how. At the same time, investment decisions are frequently made in reaction to internal and/or external events, such as appreciation of exchange rates for export industries, technological changes, increasing wage rates, etc. A firm may also decide to invest offshore in the context of declining (not expanding) markets for its products as a tactical decision, part of a holding strategy.<sup>2</sup>

In the final analysis, investment location decisions are inextricably tied to the competitive forces that characterise the industry subsector in which the individual company operates. These include changes in production technology, distribution and marketing networks, end-user market trends, behaviour of competitors, supplier networks, strategic alliances and business relationships, cultural and national preferences, etc., which characterise the individual firm’s business environment. Understanding what motivates FDI requires examining the competitive environment at the industry subsector and, ideally, product-segment level.

In general, analysis of FDI patterns world-wide have pointed to the following sets of macroeconomic and industry-firm-specific factors that influence the initial decision to investment in production capacity:

- **Securing market access.** Companies make investments to secure preferential access to their customers’ markets. Export-oriented apparel manufacturers, for example, will invest in countries that can assure an adequate Multi-Fibre Arrangement

---

<sup>2</sup> An example of this practice is found in the offshore information services industry. In the 1980s, many U.S. data entry firms established labour-intensive data entry keyboarding operations in the Caribbean to reduce labour costs, even though the market for their services was shrinking due to the rapid technical advances of electronic scanners. This was a tactical decision to survive while developing a more sustainable response to industry changes and technological decisions.

(MFA) quota, or offer quota-free access to end markets. Consumer goods or scale-intensive manufacturers will make their location decisions to secure easy access to large domestic or regional consumer markets. Another example of this focus is auto components manufacturers who frequently locate their factories to be close to their customers.

- **Following a global or regional production and supply strategy.** The increasing globalisation of production has an impact on investment location decision making. Companies frequently make investment decisions as part of their global sourcing strategy. In most cases, the motivation for the investment is to secure or maintain global market share. Local factories are integrated to supply global markets; local product lines are designed to serve a company's needs on a global or regional market basis. Depending on individual strategy, firms sometimes make duplicate investments in more than one country to ensure a redundant supply capability either as a precautionary tactic or to facilitate a just-in-time manufacturing strategy.
- **Staying ahead of the competition.** Investment decisions sometimes are made to keep competitors out of a specific country or market. An example is the aggressive investment strategy of Coca-Cola Corporation in targeting emerging markets to forestall the entry of rivals such as PepsiCo.
- **Lowering per unit production costs.** For low labour cost-intensive industries such as apparel and footwear, locating in countries with low-cost, abundant, and trainable labour is the primary method of maintaining competitiveness. Rising labour costs and declining productivity have forced these types of industries offshore in search of lower labour-cost locations.
- **Securing access to raw materials.** For extractive operations such as mining and oil exploration, gaining reliable access to a raw material supply is a business imperative. This explains why these industries are frequently the first foreign investors in risky locations. Certain agribusiness operations—seafood processing/packing, for example—locate to secure a raw

material supply. Thai seafood processors—who have strong ownership advantages in terms of technology—are currently establishing operations in Indonesia, Vietnam, Myanmar, and India, mainly to access a raw material source.

- **Gaining access to available technology and skills.** Other types of more sophisticated production, research and development (R&D) and professional service operations seek to locate within a cluster of similar and related industries. This so-called agglomeration effect is motivated by the desire to benefit from efficiencies in reduced transactions costs and access to more specialised inputs and services that the location in a strategic cluster of industries implies. The existence of a certain threshold level of FDI tends to attract more FDI. The clustering of investment especially characterises the investment behaviour of the biotechnology, computer software, and other research-intensive industries in OECD countries, Taiwan, and South Korea. U.S. firms are also locating R&D centres in Russia and other CIS countries to access unique scientific talent available there.

These and other factors push or pull the multinational company (MNC) to explore various potential regions for offshore production locations. In general, once the decision to invest or expand has been made and a market opportunity identified, the more specific search of where to locate begins. It is usually only at this point that various host-country variables come into play.

---

*Where Investment Goes:  
Impact of Host-Country  
Policies*

Public policymakers are naturally more interested in the importance of domestic policies and programs in the FDI decision making process. The general consensus is that host-country macroeconomic policies play a fundamental role, but that investment incentives do not. Here again, however, evidence at the firm level is that it depends on the size of the company, the products that it produces, and the markets it serves. Nevertheless, there are certain commonalities:

- **Political and socio-economic stability.** An obvious prerequisite for sustained inflows of FDI is the relative business

perception of political stability, including the absence of civil strife and ambient business-labour relations.<sup>3</sup> Overall quality of life is an important factor.

- **Favourable foreign investment policies.** Although economic fundamentals must be in place, positive foreign investment policies and attitudes are very important. Investment policies should provide transparency, stability, and predictability/fairness. The main features of a favourable FDI regime are investment protection and guarantees against expropriation, nationalisation, currency inconvertibility; the ability to repatriate invested capital freely; and exchange rate stability and capital account convertibility. Labour laws must allow flexibility in hiring and firing employees, and free negotiation of wages.
- **Adequate physical infrastructure and transportation services.** While good-quality infrastructure is not in itself a necessary condition for foreign investment, basic infrastructure must be in place for industrial activity. This includes power and water supply, telecommunications, ports and airports, a good road network, industrial estates or industrial land, and adequate sea and airfreight services.
- **Good supply of trainable labour and adequate skill base.** Easy access to an abundant, low-cost, and trainable pool of labour is an important consideration even for non-labour-intensive industries. This is an obvious precondition for simple assembly industries, but it is also critical to operations that are labour-dependent, but where labour costs are only a fraction of total production costs, such as hard disk drive assembly. The simple lack of production workers in Malaysia, for example, is deterring hard disk manufacturers from locating there, although labour is a very small input. An adequate skill base in terms of

---

<sup>3</sup> Perceptions of political stability are relative, and the most important are those that directly affect business risks and profitability. For example, until very recently, political unrest in the Philippines deterred FDI, yet frequent changes in government in Thailand did not deter investors from investing billions of dollars in the country. The reason for this dichotomy is that in Thailand's case, day-to-day business activity was never critically affected, and Thailand's basic economic policy thrust was clear and largely unchanged.

skilled and technical labour is a prerequisite for more sophisticated industries.

- **Good supplier network and support services.** For more complex manufacturing operations, the availability of components, parts, and spares is a major consideration. While importing these components is always a possibility if transport facilities and services are adequate, there are related cost disadvantages and time delays.
- **Lack of red tape and streamlined procedures.** The ability to quickly establish and conduct business activities is an extremely important determinant of FDI location, especially for smaller investors. Bureaucratic and time-consuming procedures to receive the investment license and secure post-license approvals, import and export products, and other transactions raise costs significantly, and are barriers to entry.

The final consideration for foreign investors—and one that is wrongly accorded the greatest importance—is the availability of a competitive set of investment incentives. Fiscal incentives, such as income tax holidays, are an important consideration for foreign investors, but they are seldom a necessary or sufficient condition. Much more important is the absence of disincentives and restrictions. Complex performance requirements (in terms of equity ownership, restricted industries, local employment, technology transfer, land ownership, minimum investment level, etc.) are a far more significant investment deterrent than the lack of incentives *per se*.

However, certain types of investment incentives are important and available almost universally. These include a low effective income tax rate, deductions or credits for investment and reinvestment, and accelerated depreciation allowances and net operating loss carry-forward provisions. While income tax holidays have been criticised for their lack of effectiveness, they are widely used and have become part of the regular package of incentives expected by foreign investors. Rightly or wrongly, countries that do not provide generous incentives are generally perceived as being less friendly towards foreign investment.

In summary, host country policies do make a difference and do influence investment location decision making, once the decision to go forward with an offshore location has been made.

---

*Investment Location  
in the Real World*

The decision to undertake a greenfield foreign investment and the choice of an investment site take into account all the factors reviewed above, and are reviewed against two primary considerations: business profitability and risk minimisation. But the specific impact of these and other factors depends critically on the individual characteristics of a company and its production process. Analysis of FDI patterns has shown that the determinants of FDI vary significantly by:

- Size of firm (MNCs versus smaller enterprises)
  - Nature of production process and products produced
  - Market orientation (export versus domestic)
- 

*MNCs and Smaller  
Companies*

The investment behaviour of MNCs is very different from that of smaller foreign enterprises in many ways, but four practices are particularly important.

MNCs tend to think strategically, from a global/regional, multi-product line, multi-market orientation basis. Offshore investments may occur either as a proactive strategy to gain a foothold in an emerging market, or through restructuring/consolidation of existing manufacturing capacity to serve existing markets more effectively. But generally there is an overall “corporate thinking” by which individual site-location decisions are viewed from a company-wide perspective.

Smaller companies tend to view investment opportunities more narrowly. A production plant may be established to lower production costs of a small number of product lines or perhaps to capitalise on a unique “ownership advantage” in terms of a manufacturing process and supply an identified market, or most

---

often simply to be close to the company's main customers. Smaller automotive parts and components suppliers, for example, will mirror the location moves or desires of their automobile manufacturer clients.

Most MNCs tend to phase their entry into a country or region—initially through a marketing or representative office, later through licensed assembly of CKDs, contract ODM manufacturing, and eventually through the establishment of a full-scale production subsidiary or affiliate. But the clear preference, until recently was for the establishment of a wholly owned subsidiary.

The behaviour of smaller companies, on the other hand, tends to be more informal, initially using external sales agents to organise sales into the market, and preferring “arms-length,” non-equity contract manufacturing arrangements or joint ventures with local partners over 100% equity ventures. The 100% equity venture form of manufacturing arrangement has been enormously successful in attracting small-scale FDI in China and, increasingly, in Vietnam.

MNCs tend to place enormous emphasis on long-term political and economic stability of the host country, and a “rule of law” under which basic investment laws and guarantees are well known and predictably applied. MNCs tend to be less motivated by investment incentives *per se*.

In contrast, many smaller companies tolerate political instability so long as business activity can proceed unimpeded; they are less concerned with a clear legal framework, preferring to maximise investment incentives, but otherwise operate outside the formal regulatory framework. Unlike MNCs, which have a long-term investment perspective and the resources to overcome day-to-day bureaucratic impediments, smaller companies are deterred by complex regulatory conditions and prefer a streamlined regulatory environment.

The final difference—depending on the industry type—between large and small enterprises is the availability of industrial infrastructure. Unlike MNCs, a key locational requirement of smaller firms is the availability of serviced industrial land and pre-

built shells within industrial estates.

*Industry Subsector and Product Type*

The fact that the determinants of FDI depend on the type of industry of the individual enterprise is obvious but frequently overlooked. Natural resource-based activities (such as mining, petroleum, and other extractive operations) are driven by access to natural resources and proximity to the raw material source. The ownership advantage of the foreign investor derives from the high barriers to entry in terms of capital intensity, unique extraction technology, and extensive distribution network. The main locational advantage of the host country is clearly the abundance of natural resources, but the foreign investor will frequently seek special investment incentives, including tax subsidies and import protection.

A local market-oriented consumer goods manufacturer, in contrast, is trying to enter new consumer markets and stay ahead of the (global) competition by capitalising on advantages of ownership of an international product brand name and marketing and production know-how, especially over local competitors. Host-country factors that influence the site-location decision include the size, spending power, and growth of the domestic consumer market, and easy access to a domestic distribution network. In the past, import substitution-oriented manufacturers sought import protection as a condition for investment in a country. With the growing liberalisation of trade policies occurring among developing countries today, even domestic market-oriented investments are being made on the basis of market considerations and not temporary advantages through tariff protection.

The investment determinants of an electronics products manufacturer summarised in Table A.1 are significantly different from the two examples in Table A.2. Generally speaking, electronics companies are affiliates of large MNCs that compete globally. The source of the competitive advantage of these firms is in their cutting-edge R&D effort, specialised production and technical know-how in manufacturing and quality control, and strong affiliated network of input suppliers. The main locational advantages sought from the host country—almost regardless of end-market orientation—is access to a trainable pool of production,

technical, and managerial labour; specialised requirements for industrial and transportation infrastructure and facilities; and attractive investment incentives, especially free trade policies. The manufacturer places a premium on the ability to import inputs quickly, at low cost, and with a minimum of red tape, for processing and eventual sale locally or for export. The complexity of the products, multiplicity of inputs, and frequent product specification changes typical of the industry require a flexible import/export regime.

**Table A.1: Investment Determinants of an Electronic Manufacturer**

Industry Type	Source of Competitive Advantage	Industry/Firm Specific Factors	Host Country Factors
Natural- resource based	<ul style="list-style-type: none"> <li>- Distribution network</li> <li>- Extraction technology</li> <li>- Production scale, capital</li> </ul>	<ul style="list-style-type: none"> <li>- Access to raw materials</li> <li>- Global production strategy</li> </ul>	Abundance of natural resource Investment guarantees protections
Local consumer goods	<ul style="list-style-type: none"> <li>- Brand ownership</li> <li>- Marketing know-how</li> <li>- Production technology</li> </ul>	<ul style="list-style-type: none"> <li>- Access and proximity to consumer market</li> <li>- Behaviour of competition</li> </ul>	Local market size, growth Import barriers Distribution network access
Audio visual products	<ul style="list-style-type: none"> <li>- R&amp;D technology</li> <li>- Production know-how</li> <li>- Management and technical skills</li> <li>- Strong supply network</li> </ul>	<ul style="list-style-type: none"> <li>- Integrated global production strategy</li> <li>- Supplier network</li> <li>- Lower per-unit costs</li> </ul>	Low wage labour, skilled and technical labour Industrial and transportation infrastructure Investment incentives, free trade policies, streamlined procedures
Agroprocessing	<ul style="list-style-type: none"> <li>- R&amp;D capability</li> <li>- Production know-how</li> </ul>	<ul style="list-style-type: none"> <li>- Access to raw materials</li> <li>- Proximity to markets</li> </ul>	Abundance of raw material Physical infrastructure Investment incentives

Although there are a wide variety of agroprocessing operations, the main consideration of these operations is to secure reliable access to a raw material source. By taking advantage of small relative advantages in R&D and processing technology, agroprocessing operations will invest in countries or regions with an abundant raw material source. Because many items are perishable, location decisions are also influenced by the quality of transportation facilities and services. The final requirement is a package of competitive investment incentives, especially schemes that are “portable” and not conditioned on a specified location, such as within an industrial estate or EPZ.

#### *Export Versus Local Market Orientation*

The main distinguishing characteristic of export-oriented FDI is that the production process is separable and main factors are “mobile” enough to be situated in virtually any location. As shown in Table A.2, wholly export-oriented investments in developing countries are usually various light manufactured products that are either labour cost-sensitive (in that labour costs are a significant

proportion of total production costs) or labour-dependent (labour costs are a fraction of total product cost, but the operations require large amounts of labour). These activities are usually highly dependent on the import of production inputs and other components. The competitiveness of these activities depends on realising low per unit production and transaction costs, and enjoying preferential access to end-user markets.

**Table A2: Two Types of Export-Oriented, Labour-Intensive Industry**

<b>Labour Cost-Sensitive</b>	<b>Labour-Dependent</b>
Apparel assembly	SMT PCB assembly
Footwear assembly	Wafer fabrication
Toys and Sporting Goods	CD, hard disk manufacture
Audio visual equipment	CRT production
Certain computer peripherals	Office and telecommunications equipment
Passive components	Optical and scientific instruments
Manual PCB assembly	Precision engineering
Electrical appliances	Micro-electronics
Automotive sub-assemblies	

Important locational considerations for export-oriented FDI are low labour costs and an abundant supply of trainable labour, availability of industrial estates and EPZ facilities, adequate transportation infrastructure with direct export freight services, generous investment and export incentives, and streamlined investment and trade regulations. For higher value-added, efficient government services, skilled manpower, facilities for basic research, testing and quality control are increasingly important determinants.<sup>4</sup>

Local market-oriented investments traditionally are more concerned with internal market size and growth characteristics. Preferential access to markets can be assured through restrictions on competing imports, and, indeed, the combination of tariff protection and performance guarantees have been used by many Asian countries to spur import-substitution investments. The foreign firm typically has strong ownership advantages over local firms in terms of brand ownership, marketing and production know-how, and financial and managerial resources.

<sup>4</sup> Chia Siow Yue, "Foreign Direct Investment in ASEAN Economies," *Asian Development Review*, (1993).

However, the dismantling of trade barriers and the reduction in tariff levels underway globally is fundamentally changing this picture. It is no longer economical to establish a production unit in each market one wants to serve, as was the case until recently. Instead, companies are going through a period of substantial consolidation of plants and production capacity. In many cases, existing local plants are not as competitive as global plants to sell into local or regional markets. This is causing a significant number of closures and relocations.

Trade policy changes are also forcing shifts in corporate strategies with respect to investment in pure “export platform” operations, selling 100% of production to export markets. Although FDI levels in EPZs and other wholly export-oriented mechanisms continue to rise globally, there is a growing body of evidence that an increasing number of “dual-market” factories are being established that serve both the export and local markets. In these cases, access to a strong local market is becoming an important investment location consideration even for mostly export-oriented manufacturers, not just as a convenience to sell surplus production, but as part of the fundamental corporate strategy of integrated global production.

## **Annex B: Corporate Location: The Company Perspective**

---

### **B.1 Introduction**

Modern transportation and technology pose twin forces giving companies unprecedented choices in how to organise and deploy resources worldwide. Both enable enterprises to sell in new markets and disperse activities to take advantage of the comparative and varying strengths among places and their peoples. Indeed, where a business locates operations looms large in importance among decisions management makes today. Capturing a strategic advantage through business location is not simply an academic exercise, but a competitive necessity leading international companies to take bold steps in determining where all or parts of their companies are positioned<sup>1</sup>.

Consider the auto industry. U.S. and European automakers are building productive capacity in China, where Volkswagen now makes 200,000 vehicles a year in Shanghai. Most Japanese autos sold to U.S. consumers are made in the United States. Asian manufacturers are expanding production in Brazil and throughout Latin America. Service companies are also deploying globally. American Express does travel services accounting in the United Kingdom, India and Arizona in the United States.

The pace of foreign direct investment (FDI) flows continues to expand, reaching over \$300 billion in 1996 with more than a third of this headed for the emerging markets. Of the FDI going into Europe, an estimated 20 percent is being directed into Eastern Europe; China, Singapore and Argentina account for 60 percent of the overall emerging market share. The United States, however, remains the overall leader, receiving some \$40 billion annually. Cross border merger, acquisition and joint venture account for much of the activity within the OECD countries. But, as new

---

<sup>1</sup> TSG is especially grateful to the Arthur Andersen Real Estate Services Group, whose principals provided much of the input in this chapter

business units are developed, the need for rationalising location strategy becomes increasingly important in the search for improved performance. Increasingly, business executives tell us that relocations or expansions to new locations are an integral part of their plans.

Arthur Andersen, a management consulting firm, partnered with Fortune, a leading US business magazine in developing the "Best Cities for Business" listing in 1995. The research illuminated what cities or regions tell the most compelling story to attract businesses to locate -- or relocate -- their enterprises. At the same time, this joint initiative has cast light on larger trends at work in the global marketplace which are reshaping how companies make location decisions that stand a strategic and economic test. Clearly, globalisation has irrevocably changed how companies must deploy resources. Technology has made it possible for companies to locate operations at far-flung sites linked electronically, rather than by physical proximity. Business practices, in turn, are changing virtually as fast as technology. In a time of rapid and unpredictable change, the challenge is to ensure that location decisions create competitive advantage today, while serving an organisation's strategic interests in the future -- regardless of how difficult that "future" might be to forecast. An examination of trends affecting business location decisions can be a highly useful tool to illuminate the complex array of issues management faces. At the core lies a central question -- how can business location support corporate strategy and ultimately improve performance and shareholder value?

---

**B.2 "Best Practices" Approach to Business Location**

Location strategies adopted by individual companies typically balance a complex array of factors. To fully secure the strategic benefits, however, location strategy must be linked to corporate strategy to ensure that facilities and where they are located contribute to meeting corporate goals. A "best practices" approach to these decisions involves identifying how location

relates to critical business drivers, as well as its effect on a company's key performance indicators such as revenues, costs and profitability. In the process, the business must be examined functionally so that the "success of the parts" and the "success of the whole" are reflected in where operations are located and how they are connected.

One major American technology company examined its location strategy, and as part of its decisions about where to do what work, it concentrated its highest order of development work in California's Silicon Valley and the Boston 128 region in Massachusetts. The company, however, moved lower order development work to high-tech centres more affordable for middle-tier engineers, as well as outsourced and moved production to still less costly places. Management also planned to position accounting and other support tasks where they believed they could get good value for money in terms of internal and external customer responsiveness, and place all-important customer support centres in the regions of the world where they were and will continue to sell their technology. The linkage among all of these activities was enabled and supported by advances in telecommunications and transportation technologies; the management challenge was in extending this linkage to assure the shared vision they had in one place can remain shared as they grow in many places. Table B.1 summarises the ten most important location factors influencing international site selection decisions.

---

**B.3 The Disaggregation of the Corporation**

With modern technology and transportation serving as enablers, then, companies increasingly separate business functions to capture location benefits specific to these activities. Indeed, the "Disaggregation" of the corporation is one of the most significant trends in business location globally, as well as one of the most important options available to companies today. Some notable consultants contend that companies should develop a strong "home base" before venturing cautiously to separate

functions. The benefits of positioning business functions in locations with the most beneficial attributes are often too alluring to pass up, however. Separating business functions -- while developing the critical links needed for the organisation to function coherently as a whole under a single mission -- may be a "best practice" for many, but not all, international companies.

The changing nature of work provides the basic framework for examining how business location needs vary for different corporate functions. The four primary business functions -- headquarters, operations/back office, research and development and manufacturing -- call for varying types of location support.

- **Headquarters.** Since the role of a headquarters and its staffing vary considerably, the location attributes needed to support this mission vary as well. Nevertheless, headquarters sites have been downsized drastically in recent years, and that trend will clearly continue. As the source of vision, strategy and leadership, the headquarters location of the future may be more a function than a place.

Cities and regions attempting to attract headquarters sites need to understand the key attributes required by companies. Among the most important factors are professional services support and an environment that allows companies to attract top-flight personnel, which are increasingly multi-cultural. Cultural and recreational amenities enhance a city's attractiveness for this function. Excellent global air transportation is generally also essential. From the corporate side, the marginal cost of a more expensive headquarters location may not make a material difference. Companies can calculate the amount of additional revenue needed and determine whether there is a long-term strategic impact that accrues from being in a place that enables recruiting and retaining the talent needed to generate that revenue. ABB's incremental cost of being headquartered in Zurich is a small price to pay if their other strategic needs are served.

- **Operations/Back Office.** Job content for back office and customer service activities varies considerably, but technology continues to transform these operations worldwide. Some companies find current work forces adapt well to these changes; others decide that a new start offers a markedly better business solution. Operations and customer service functions rely heavily on a quality labour force with functional skills that span accounting and finance to customer service. State-of-the-art telecommunications is clearly critical, as are affordable living costs and competitive labour rates. Significantly, the search for lower costs and well-qualified employees are not incompatible. Companies find advantages in places with relatively low housing costs, strong community college or post-baccalaureate training programs, and marked underemployment in retail and other services. The growth of service centre clusters in the U.S. mountain West, the Canadian Maritimes, the Netherlands and the United Kingdom all reflect the presence of modern, telecom investments, as well as what might be described as a community ethos that prizes customer service. LL Bean, for example, has been able to bring its core service orientation from the small town of Freeport, Maine, to Tokyo, Japan.
  
- **Research & Development (R&D).** The clustering of research-related activity in the well-known technology capitals appears to be well established and workable. Technology has given companies new ways to be closer to the customer, but face-to-face contact still counts. R&D activities appear to require that people work in proximity for the creativity, camaraderie and the cross-pollination of ideas -- at least to a certain extent. In the future, an emphasis on the "development" portion of the R&D equation will require that these activities be located in proximity to production functions. For a company with short product cycles, the challenge is to find places that provide both competitive production economics, and an attractive environment for recruiting and

retaining engineering talent. And for both the “research” and “development” sides of the equation, companies need to distinguish between how much high-end talent they need and where a middlebrow technology centre might suffice. The top of the research hierarchy may remain in proximity to the leading research universities of the world. But, for R&D engineers who do not command the highest levels of compensation, the more affordable technology centres -- such as Raleigh, Austin and Phoenix in the United States, and Aachen, Germany, and Heerlen, The Netherlands, in Europe -- will undoubtedly be sustained and replicated.

- **Manufacturing.** Where products are manufactured involves familiar assessments of sources of raw materials, markets, logistics, costs and labour quality, cost and availability. These assessments can and do change as a result of changes in a company's community, and its industry, as well as the internal strategic response. In the future, location decisions regarding manufacturing facilities will increasingly involve global assessments of whether locations can sustain the infrastructure and energy sources critical to manufacturing processes. As companies expand into Viet Nam, for example, their location options are constrained not just by specific government planning requirements, but by the practical limits of few places with appropriate infrastructure. In all of the emerging markets, such is still the case. Economic nationalism also becomes more crucial as countries adopt regulations to control participation of domestic "partners," with the general intent that these countries or local areas share in the economic gain. There will be continuous government pressure to produce markets where companies plan to sell products. And, while in some industries, there is a continuous search for low cost labour, the magnet of most international investment seems to be the size and growth of the regional market itself, rather than to export back home.

The attention companies pay to logistics often begins at the back door -- the "distribution" side of the house. The distribution decisions are dictated by the drive to deliver value. This is increasingly the case with just-in-time delivery demanded by retailers and industrial customers, and with local markets being served from "best places" for producing.

---

**B.4 Implications for the Public Sector**

The ability of a city, region or nation to compete successfully for new companies, corporate expansions and relocations represents a critical aspect of maintaining vital economies. As companies embrace new opportunities to deploy business activities worldwide, competitive opportunities for the public sector also change. Cities increasingly find they can be effective in promoting economic growth by creating an environment that supports specific corporate functions. This represents a metamorphosis from the time when local areas might compete exclusively for industries -- capitalising on a suitable labour force or proximity to raw materials. A city or region competing for operational or customer service centres, for example, has a significantly different profile than an area seeking to attract manufacturing plants or headquarters sites. Workforce suitability, cost of living and political climate are but three of many factors that compel companies to locate specific functions in different areas. In the United States, many cities and regions today compete aggressively for back office, customer service and "call" centres that have become the backbone of local economies, driving significant job creation. In Europe such operational centres have just begun to surface as a potential way to organise a business and deploy resources. The deregulation of telecommunications and improved equipment will lay the foundation for these types of enterprises, which can be located in far-flung locations from other business functions.

Clearly, the old rules of thumbs may no longer hold. Clustering of companies with similar business interests or activities has spawned new types of centres distinct from the traditional

business or commercial centres. Industries may overlap in varying configurations that defy traditional practices, much as they do in the new centres for multimedia. The multimedia "gulch" south of Market Street in San Francisco, for example, involves the convergence of high technology and the artistic community required developing programming content for these products. DreamWorks SKG -- the partnership launched by Steven Spielberg, Jeffrey Katzenbach and David Geffin -- has opted for a site in Southern California for its \$200 million studio -- opting against six alternative sites in other states. It is here on the Los Angeles Westside that media, entertainment, artists and high technology companies have converged to create a fertile ground for these growing industries.

Nevertheless, even in a time of dramatic change driven by technology, a fundamental principle holds true. In a virtual world, where a company locates all or parts of operations still plays a critical role in how well it performs

# **Annex C: Format for Model Contract to Appoint Investment Agents in Target Markets**

---

## **MODEL CONTRACT FOR APPOINTMENT OF INVESTMENT PROMOTION LIAISON (OUTREACH) OFFICE**

This Agreement is made this XX day of MONTH 200X between the COUNTRY X IPA (hereinafter referred to as “the IPA”) acting by its Chief Executive of one part and Messrs. INVESTMENT PROMOTION AGENT COMPANY (hereinafter referred to as the COMPANY) incorporated under the laws of COUNTRY whose address is ADDRESS, acting by its Chairman, NAME.

WITNESS THAT

WHEREAS

- I. The IPA is established as the agency of the Government of COUNTRY X for the encouragement and promotion of investments with functions, among others, to promote investments in and outside COUNTRY X through effective promotional means.
  
- II. To effectively promote investments from the target countries into COUNTRY X, the IPA has deemed it appropriate to appoint a representative liaison office to be based in CITY to perform specific services on behalf of the IPA.
  
- III. The Company represents itself as qualified and capable of handling the liaison and outreach services in the target countries on behalf of the IPA and is willing to undertake same upon the conditions set forth herein.

NOW THEREFORE the parties hereto agree as follows:

### **ARTICLE 1: APPOINTMENT OF LIAISON OFFICE**

The IPA hereby appoints the Company as the IPA’s sole Investment Promotion Liaison (Outreach) Office responsible for the performance of the services described under Articles 2 and 3 hereof in

the target countries, and the Company hereby accepts the appointment on the terms and conditions hereinafter set forth.

**ARTICLE 2: OBLIGATIONS AND TERMS OF REFERENCE OF THE COMPANY**

The services to be provided by the Company shall be those of a liaison/outreach office. The details of the services to be provided shall include, but not be limited to, the following:

- 1) Serve as an effective channel of communication between potential foreign investors in the target countries and the COUNTRY X business community and relevant public sector organizations
- 2) Assist in preparing and/or prepare promotional brochures and materials suitable for marketing COUNTRY X in the target locations
- 3) Distribute promotional materials about investment opportunities in COUNTRY X
- 4) Advise the relevant COUNTRY X public and private agencies to understand the common perceptions and concerns of the business community of the target countries about doing business in COUNTRY X and to assist in addressing the negative perceptions
- 5) Identify and encourage potential investors (individuals and firms) in the target countries to invest in COUNTRY X
- 6) Assist potential investors in the target countries to visit COUNTRY X, coordinate such visits and advise the relevant private and public agencies in COUNTRY X on how to make the visits most productive
- 7) Follow up through questionnaires, visits, and other contacts with potential investors to ensure and sustain their continued interest in COUNTRY X as an investment location
- 8) Subject to prior agreement between the IPA and the Company, perform such other promotional and representational activities as may be deemed reasonable and incidental to the performance of the Agreement at the request of IPA and other competent COUNTRY X Authorities

- 9) Submit monthly written reports to IPA on the achievements and problems encountered in pursuance of the mandate given and to inform IPA of new developments affecting investment flows between COUNTRY X and the target countries and to ensure that the IPA is at all times sufficiently and effectively briefed

**ARTICLE 3: QUANTITATIVE AND QUALITATIVE PERFORMANCE TARGETS**

- 1) The Company hereby undertakes to strive to achieve the following quantitative and qualitative targets during the period of this Agreement:
  - i. The Company shall make at least XX (exex) visits per month to companies in the target countries for the purpose of promoting investment from the target companies into COUNTRY X and shall file appropriate reports on visits so made.
  - ii. As a clear demonstration that the companies so visited are actually considering investing in COUNTRY X, there should be at least one organized visit per quarter by such companies in groups or as individuals to COUNTRY X starting from the effective date of this Agreement.
  - iii. As a result of the effective promotion of COUNTRY X as an investment location by the Company during the initial period of this agreement, there should be between X (number) to XX (number) successful investments into COUNTRY X with an investment value of not less than the equivalent of US\$ X00,000 (X hundred thousand) per Investment.
  - iv. Targeted Investment projects should be in the areas of high employment generation, net foreign exchange earnings, high and appropriate technology transfer.
  - v. Qualitatively, the successful investment in COUNTRY X by investors from the target countries shall as far as possible be in line with the strategic Action Plans designed in accordance with the IPA's Corporate Plan.
- 2) Notwithstanding the performance targets set thereunder, the Company shall be solely responsible for the method and manner by which it shall perform the specified services under this agreement.

**ARTICLE 4: CHANNEL OF COMMUNICATION**

The Company shall report directly to the Chief Executive of the IPA and shall accordingly take instructions from him or any other officer of the IPA acting on his behalf during his absence from the office or authorized to act on his behalf.

**ARTICLE 5: FEES**

The Company acting in its capacity as a liaison office will be self-financing based on reasonable fees to be paid by clients in the target countries for services rendered. This understanding notwithstanding, the IPA undertakes to contribute a total of US\$X,000 (X thousand) towards the start-up cost of this antennae contract.

**ARTICLE 6: EFFECTIVE COMMENCEMENT DATE AND DURATION OF CONTRACT**

- 1) The effective and commencement date of this Agreement shall be the date first above written and agreed to by both parties.
- 2) This contract will run for an initial period of One (1) year from the commencement date and is subject to renewal, based on performance, for a further negotiated period.

**ARTICLE 7: SCOPE OF AUTHORITY**

The Company shall not hold itself out as a representative of the IPA or act in the name of the IPA without prior written consent of the IPA. Accordingly no clause in this contract shall therefore be interpreted to support the establishment of an agency of similar relationship. However, the company shall be entitled to adopt or use the following name in English or the appropriate language in the target countries for the purpose of performing the mandate given under this Agreement:

**INVESTMENT PROMOTION AGENT COMPANY**

**ARTICLE 8: ASSIGNMENT**

The company may not assign any item or part of its responsibilities given under this Agreement except with the prior written permission of the IPA.

---

*Investor Targeting Strategy for Industrial Estates in WBG*

---

**ARTICLE 9: FORCE MAJEURE**

Neither the IPA nor the Company may be held responsible for the fulfilment of its respective obligations in the case of events that characterize chance occurrence of *force majeure*. Any suspensions of execution by reason of this Clause will be limited to the period during which such cause or its consequence exists.

In the case of *force majeure* the party affected shall immediately notify the other party with reference to the occurrence.

If upon the expiration of thirty (30) days the conditions of Force Majeure persist, either party may terminate this Agreement by fifteen (15) days written notice to the other party.

**ARTICLE 10: CANCELLATION AND RECISSION**

The Contract may be cancelled by either party after thirty (30) days written notice is served to the other party to the effect in the following cases:

Noncompliance by the parties with any clause of condition established by the present Contract

Total or partial transfer of the present Contract to third parties without express authorization as contained in this Contract

**ARTICLE 11: WARRANTY**

The company warrants to the IPA that the services will be performed in a careful and professional manner in accordance with accepted practices for performing such services.

**ARTICLE 12: LAW OF AGREEMENT**

This Agreement shall be governed by the laws of COUNTRY X.

**ARTICLE 13: NOTICES**

All notices under this Agreement shall be given in writing and shall be deemed to have been given if delivered by one of the following means to the Authorized Representative of either party.

- personal delivery
- by telex
- by registered mail

at the following address:

For: THE IPA OF COUNTRY X  
THE DIRECTOR GENERAL  
ADDRESS

For: THE COMPANY  
INVESTMENT PROMOTION AGENT COMPANY  
ADDRESS

#### **ARTICLE 14: DEFINITIONS**

In this Agreement, unless the content otherwise requires:

“force majeure” means an event that cannot be prevented or controlled by a party, including but not limited to earthquake, storm, flood, lightning, or other adverse weather conditions, war, embargo, blockage, riot, or civil disorder, but shall not include any event caused by or under the control of a party, its subcontractors, or any of its employees.

“parties” means the Parties to this Agreement

“services” means the scope of work specified in Articles 2 and 3 hereof.

“target countries” means COUNTRY Y, COUNTRY Z, etc.

#### **ARTICLE 15: EXEMPTION**

The Company shall not be liable for any loss or damage suffered by the IPA or Government or any third party, except where such loss or damage is caused by any acts or omissions, negligence or recklessness on the part of the Company or its servants or agents.

IN WITNESS WHEREOF the IPA and the Company have caused this Agreement in two original copies which have the same legal effect to be signed and sealed in their respective names in CITY effective from the date first above written.

SIGNATURE.....  
FOR: COUNTRY X  
OF INVESTMENT

SIGNATURE.....  
FOR: INVESTMENT PROMOTION AGENT BOARD  
COMPANY

OFFICIAL STAMP  
DATE.....

OFFICIAL STAMP  
DATE.....

WITNESS  
(TITLE)  
  
.....

WITNESS  
(TITLE)  
  
.....

NAME

NAME

ADDRESS.....

ADDRESS.....

.....

.....

---

## **ANNEX D: Sample Multimedia Location Study Format by the Corporate Location Magazine**

### **Multimedia location study**

**Proposed for ..... 2000 issue, Corporate Location**

**Published ..... 2000**

**\*Live on the web ..... 2000**

### **Bonus distribution at:**

.....

Since 1987, Corporate Location has published in-depth analysis of conditions for foreign direct investment in over 200 countries and regions worldwide.

### *Content*

In the last 12 months, Corporate Location published studies on 50 different countries. Each study is comprised of independent editorial written by journalists in the field. This editorial is written following a series of lengthy interviews conducted with foreign companies already in the country. It covers areas of particular interest to future direct investors such as labour, infrastructure, incentives, governmental support, supply industry, finding partners, sites, costs, environment, quality of life, work permits etc. This is backed with maps, photos, the latest cost and FDI data, perceptions survey of future investors, pros and cons, home truths and case studies of real-life recent FDI decisions. Corporate Location will assign a journalist to the.....location study to conduct these interviews and carry out the research.

### *Publication*

The ..... location study will be published twice - within the magazine and on the ..... internet site within corporatelocation.com. Location studies are usually published a third time as reprints are offered at cost price to all participants as part of the package. Location studies are taken and distributed at all the trade, investment and industry conferences, exhibitions and fairs attended by Corporate Location such as Comdex (Las Vegas), Call Centre Solutions (Amsterdam), Shared Services Centres (London), Barcelona Meeting Point (Barcelona), Mipim (Cannes), World Direct Investment Forum (Lisbon).

### *Funding*

Location studies are typically mainly financed by the national investment promotion agency of the country which is being analysed. This is usually in the form of sponsored statements and/or display advertising.

---

In order to increase the size of the study, these agencies normally help to secure additional advertising from within the country. If this is the case with ....., Corporate Location undertakes to send a sales person out to ..... who will make their best efforts to secure additional funding. The independent editorial is apportioned on a 50:50 basis. For example, six pages of advertising would mean a minimum of 12 pages in total.

### *Circulation*

The magazine study will be read by almost 17,000 company subscribers. Each of expects to expand overseas within three years. The readership within these companies is approximately 85,000. Each reader is qualified as the person who identifies, authorises or selects foreign direct investment options.

Corporatelocation.com attracts approximately 25,000 hits per week from location advisers and corporate investors. The ..... location study would appear on the site for a minimum of 12 months with email and web-links to your address.

### *Response*

Although advertising can never produce guaranteed responses, Corporate Location's response package for investment promotion agencies takes much of the uncertainty away. There are three response mechanisms:

- Location Library (magazine)
- FDI Hotmail (weekly requests for information on ..... are delivered by email)
- Location library (internet)

#### *Don't forget:*

Advertisers with more than four pages receive FDI hotmail for one year (that's 52 e-mail statements).

### *Editorial Content*

The ..... location study will include the following:

#### *Investment Climate*

- Analysis of FDI into ..... over the last three years: by country of origin, capital and industry sector
- Investment opportunities in .....: in which industries does ..... offer the potential to earn big profits? eg .....oil, fisheries, tourism, agro-processing, back offices, light industrial manufacturing, financial services
- Sites: in-depth coverage of properties, developments, industrial parks, science parks, export processing zones, free zones available in .....
- Cost analysis: How does ..... compare to rival locations for wages, telecoms, property, transport costs
- Incentives: tax breaks, subsidies, reduced rates of corporate taxation, duty-free imports
- Partners: possibilities for jvs, strategic alliances, finding distributors
- Quality of life for expatriates, work permits
- Research and development infrastructure – universities
- Labour: skills, turnover, costs, availability, industrial relations, flexibility

- 
- Methods of entry: What is the best way to invest in ..... (joint venture, acquisition, privatisation, wholly-owned subsidiary)
  - Transport and communications networks: digitalisation rates, connectivity, roads, ports, airports
  - Energy and utilities: costs and reliability of supply

## *Case studies*

Based on interviews with recent foreign investors in ..... Why was ..... chosen? Were other locations considered? Why were they rejected? How easy/difficult was it to establish a new facility, recruit workforce etc. How useful was the government investment agency?

## *User's Guide*

A collection of articles written by main advisors to companies (such as commercial banks, management consultants, accountancy and law firms, property agents).

- Real estate: rental levels, occupancy rates, market forecasts, lease terms etc
- How to incorporate a company
- How to raise finance locally and foreign exchange issues

## *Regular departments*

- Location Briefing  
Cost data, facts, figures, statistics – everything you need to know to shortlist a location
- Location map: shows where all the large, recent foreign investors have sited their facilities, major ports, cities and airports in relation to regional market.
- Home Truths\*
- Pros and Cons\*
- FDI charts (amounts, sources, industries)

\* Denotes elements of location study which will appear on Internet version

## *Perceptions survey*

We interview 15 potential investors across a range of location factors including:

- availability of incentives
- property prices and quality
- labour costs and quality
- transport costs and quality
- government attitude to FDI
- academic/r&d infrastructure
- and various other issues specific to .....

---

Background information/testimonials

*About Corporate Location Studies*

Many magazines publish supplements which take a look at a particular country or region. The unusual thing about Corporate Location is that we specialise in revealing the truth, warts and all, about locations across the world. Because of our objectivity, you can be sure that corporate investors keep and use our location studies when shortlisting for a new site decision. A recent reader survey showed that 97% of our readers found our Location Studies to be objective and 94% kept them for reference..

Last year, the magazine covered 50 different countries through its regular series of Location Studies. Each supplement tries to get inside what it is really like to make an inward investment in the featured location. This is done by talking to lots of companies that have already invested there and gleaning their experiences - good or bad. Each study also features key foreign investment data charts, pros and cons, map, the stories behind recent overseas investors, an at-a-glance guide to the workforce, infrastructure, economy and incentives.

*Publisher's Note:* The size and breadth of each location study is determined by the editor's discretion and advertising support gained.

### *Rates, Dates and contact details*

The final price to ..... depends on the size of the location study required and indirectly on the amount of support we may generate from other sponsors. The more support, the bigger the study. However, in order to incorporate all the main standard elements of a location study, there is a minimum size of 12 pages.

### *Advertising*

12 pages	\$55,973
16 pages	\$74,630
20 pages	\$93,288

Half the pages are required for the independent editorial. The other 50% is used for ..... 's promotional messages/advertisements. The content of this is entirely at the discretion of the advertiser. However, full journalistic and production assistance is available from Corporate Location at no extra charge\*

\*This does not include translation fees

To preserve editorial integrity, the content of the independent editorial pages will not be shown to any party, other than Corporate Location editorial staff, prior to publication.

### *Reprints*

We are pleased to offer you reprints of the ..... location study, on high-quality paper, at the low cost of just US\$ 5000 for 5000 copies plus freight. This offer applies to orders placed at the same time as the location study is ordered. Reprints ordered after publication are considerably more expensive, price depends on size and quantity.

## Annex E. Training Modules

---

### E.1 Recommended Training Modules for Investment Promotion

- Course One and Two: How to Handle the Investor - This session focuses upon the practicalities of dealing with a corporate investor at the inquiry stage, following up referrals and receiving visits from the investor to successfully attracting a project. The most effective and successful methods of managing a project through to completion are explained in detail.
- Course Three: The Selling Process - The effectiveness of different methods in different markets and how to make the contact with the potential investor and ensure cost effective exposure
  1. coordinating the selling process
  2. contents and effectiveness of promotional literature
  3. use of computer driven, personalized presentations
  4. encouraging visits to location
  5. developing the marketing mix
- Course Four: Global Corporate Investment - Current and Future Trends
  1. Sources of inward investment: intra and inter country
  2. What are the main geographical sources of inward investment for the country?
  3. What type of investment has the country been attracting
  4. Are there any new players emerging in the global investment market?
  5. The changing policy at a global and national level
  6. Types of inward investment: greenfield, subsidiaries, joint ventures
  7. What are the main sources of nationally based inward investment?
- Course Five: Targeting
  1. How to identify target markets

2. Why you should not try to attract all types of investment and the reasons for a focused campaign
  3. initial contact with the target companies
  4. effectiveness of geographical targeting
  5. how to identify industry sectors which are compatible with the country's 5 resources
- Course Six: How Different Organizations and Companies Fit into the Country's National Investment Promotion Effort?
    1. The role of local companies
    2. The role of chambers of commerce, trade councils etc
    3. The role of regional and sub-regional organizations
    4. How the network should work within the national structure
    5. An overview of the national effort to attract inward investment
    6. The role and activities of the national investment promotion organization
    7. How to manage the network
  - Course Seven: How to Prepare a Marketing Strategy?
    1. establishing market priorities
    2. shaping the policy structure and making adjustments
    3. basic considerations; politics, resources, location, objectives and time-scale
    4. identifying strengths, weaknesses, opportunities and threats
    5. developing market intelligence
    6. marketing methods
    7. raising capacity and competitiveness of the agency
    8. assessing the region's strengths and weaknesses
    9. the need to review current practice
    10. domestic structure and overseas networks – options
  - Course Eight: Devising the Strategy: Role Playing

Delegates are divided into groups and given preparation time to formulate a marketing strategy for the region/city or country. They will then have to present this strategy to the trainers.
  - Course Nine: Resourcing the Investment Promotion Effort
    1. What is the cost of attracting investment?
    2. What is required in terms of personnel?

- Course Ten: How to Deal with the Client?
  1. how to screen potential investors and assess their value and contribution to your economy and community
  2. the need to develop a flexible response catering to the client's needs
  3. adapting your service to clients from different cultural backgrounds
  4. how your approach should be tailored to: R&D, assembly, joint venture, small firms v large firms
  5. language problems
  
- Course Eleven: What Type of Investment Does the Country Currently Attract?
  1. Which areas are benefiting from inward investment and how are they benefiting?
  2. What kind?
  3. Type of investment: New facilities, Joint Ventures
  4. Scale of investment to date
  5. How can the country benefit from future investment of investment is the country going to attract in the future?
  6. Industry type
  
- Course Twelve: Sales Techniques Various techniques discussed and evaluated?
  1. Telemarketing
  2. Advertising
  3. exhibitions, seminars/Conferences
  4. using multipliers and partners
  5. direct mail
  
- Course Thirteen: Can the Country Compete?
  1. Which types of investment should the country target?
  2. Does the country have a competitive advantage?
  3. How attractive is the country to investors?
  4. Does the country have competitors?
  
- Course Fourteen: How to Develop the Product?
  1. key component suppliers
  2. financial incentives, duty free zones

3. training and education
  4. technology and support
  5. build in extra benefits
  6. better infrastructure, business premises,
- Course Fifteen: Effective Information Systems
    1. managing property databases
    2. examples of the most advanced and effective systems in leading agencies
    3. finding a system to facilitate the inquiry process
    4. latest technology and the costs of implementing a programme
    5. creating a system that meets your requirements
  - Course Sixteen: How to Negotiate with the Investors?
    1. the follow-up process
    2. creating an effective package of benefits
    3. How to contact the investor - standard letter, introduction etc
    4. responding to leads and inquiries
    5. How to meet the investor
    6. negotiating techniques, positions and skills
  - Course Seventeen: Skills for Management
    1. Structure of the agency
    2. Delegation of activities
    3. Training requirements
    4. How to motivate the team
    5. How to manage the agency
    6. How to reduce job turnover
  - Course Eighteen: Development Agency Models
    1. Examples of competitive national agencies
    2. What are the objectives of the national investment promotion agency in the country?
    3. What options are available to the national agency: autonomy or co-operative; proactive or reactive?
  - Course Nineteen: How to Finalize the Strategy?
    1. Cost effective
    2. Compatible with financial resources

3. Prioritize markets<sub>1</sub> depth not width
4. Accepted by the policy makers
5. Compatible with skills available

- Course Twenty: Comparative Marketing Strategies: The Country and its Competitors

An overview of:

1. competitor strategies and resources
2. which companies should choose the country as an investment location?
3. focusing on and benefiting from the country's competitive advantage
4. what competition will you be facing in the future
5. comparative strengths and weaknesses
6. devising a marketing strategy for the country
7. what differentiates one investment promotion organization from another?
8. what does it take to succeed?

- Course Twenty-one: Case Study ~ Location Decisions of Companies

Presentation and discussion of companies' site selection. Using actual investment location case studies the course will cover the process and routes that companies use to make location investment decisions. Topics covered will include:

1. what criteria are used to evaluate sites
2. what impresses them and what puts them off
3. who makes the final decisions
4. the relevant importance of these criteria in different industries
5. general corporate strategies in relation to site choice
6. how companies go about their search
7. what are the decisive influences

- Course Twenty-two: Role Playing - Sales Techniques

Participants will divide into groups. Each group will be given a brief. After sufficient preparation time, the groups will have to "sell" their location to the investor. The aim of this module will be to refresh sales techniques, and examine best and worst practice of sales techniques.

