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The Current Status of Industrial Sector in Palestine



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"The Current Status of the Industrial Sectors in Palestine: An Outlook Based on Selected Indicators"

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Executive Summary

This research has been carried out by a team of the Palestinian Federation of Industries led by an external consultant. The research is financed by CARANA through the USAID project of Enterprise Development Integration Program EDIP. It was carried out during April of 2009.

The purpose of this research is to assess (to a certain extent) the challenges and obstacles and their affects on developing the industrial sector, through the process of reviewing the current status of the industrial sector and drawing a strategic upgrading plan, by focusing on different sectors within industry as a whole.

The team used a combination of methodologies and tools in performing the research. Reviewing the secondary data, field visits and interviewing key players and using a questionnaire as a major tool..

The industrial sector plays an important role in the process of economic development in Palestine. Industry exists as the base of the pyramid, through which many of the forward and backward linkages in services and other economic areas stem. The industrial sector is characterized as a long-term investment, however susceptible to external environmental factors and its openness to countries with low-cost production capacity.

The quality level of industrial production in Palestine has improved greatly in the last decade. The percentage contribution of this sector in total GDP has increased from 8% in the mid-eighties to 17% in the late-nineties, then dropped down during the first years of the intifada and approached nearly 16% in recent years. During 2007, the industrial sector has employed an average of 81586 sector workers, an average of 13% total work force.

The sector includes the following subsectors: stone and marble, textiles and garments, food processing, engineering and metallurgical industries, chemical industries, pharmaceuticals and veterinary, construction industries, handicrafts, paper and printing, furniture, leather and shoes, and plastics.

There are many potential opportunities and reasons to invest in the industrial sector in Palestine, the most prominent reasons are the abundant human resources and the absorptive capacity of the market. Nevertheless the sector suffers a number of obstacles and impediments against its growth. The major obstacle is the political instability and movement obstacles. Moreover, industry has institutionalized problems in terms of administrative and financial management, production, quality, competition, knowhow and difficulties in exporting.

The Palestinian National Authority has worked hard to create a comprehensive legal enabling and coherent framework in order to facilitate the establishment of businesses, investment and trade. The Law of Industrial Free Zones issued in 1998 and the Investment Promotion Act of 1998, give special incentives to new investments. Palestinian products can take advantage of the benefits of preferential trade agreements signed with many countries. Many donor agencies have assisted in the development of the industrial sector.

To develop and improve industries and help them achieve their national and individual roles and targets, a national integrated program for industrial development should be created and designed.

To ensure the success of such a program it should be flowing from the mature and deep understanding of the beneficiaries' needs. All other stakeholders should be heavily involved in the designing, implementation and evaluation efforts of the program. Stakeholders may include, but not limited to, industry representatives, private sector institutions, government agencies and ministries, donor agencies, international agencies, academic institution and consumer protection associations.

The recommendations to assist and develop industry should be based on three major pillars; the national pillar, the sector level pillar and the firm level pillar. To assure the achievements of such a program the three pillars should be integrated together in one comprehensive program.

2. Introduction

The industrial sector in Palestine includes some 15,000 registered companies in the West Bank and Gaza. The majority of these are small and medium family-owned businesses, and only about 100 of the manufacturing, mining and construction enterprises in Palestine have a workforce of more than 100 employees. The contribution of the industrial sector to GDP is approximately 16%, and the industrial sector absorbs around 13% of the total work force.

Industrial sectors represented by PFI include food and beverages, construction, stone and marble, pharmaceuticals, chemicals, metal and engineering, textiles, garments and leather, paper, printing and packaging, handicrafts, plastic and rubber, and furniture.

2.1 Objectives:

This study aims at drafting a report that will focus on current problems and obstacles impeding Palestinian industries from achieving more growth in the economy. It will also focus on possible ways to provide assistance to those industries to develop, improve productivity, decrease costs, generate more jobs and increase their market share and penetrate more international markets.

2.2 Purpose:

The report will be used as a viable tool for PFI and other donor agencies and policy makers to design action programs of assistance to the industrial sector. The report can be looked at as a corner stone for building an industrial national integrated plan for industries. It can also be considered as a road map for industrial modernization programs.

2.3 Scope of work:

The study is a PFI product commissioned by CARANA through EDIP funded USAID program to help boosting the Palestinian economic growth. The study will be presented in a special conference to be held by CARANA.

The study was carried out by a PFI team and supervised by an external consultant. And will be published for the benefit of all interested parties.

2.4 Methodology and tools:

The work team used a number of tools in conducting the research and reaching the required outcomes of this study. Some of the tools used were:

- Reviewing the available data and information available in the literature.
- Field visits to industry representative sectors.
- Collecting recent data (if available) from PCBS
- Personal interviews with 37 key players in the industrial sector, both the government, private sector associations, private sector and UNIDO representative (3 interviews were conducted by phone and one was by email).
- A questionnaire was designed and filled by representatives of all industrial sectors. Small samples of representative industries in the twelve sectors were chosen. One hundred questionnaires were distributed; 71 of these were filled and retrieved for analysis.
- Excel sheet was used to analyze data in the questionnaires.

2.5 Limitations and obstacles:

The time given for the completion of this report was short. The actual work was carried out over a period of one month. It was hardly sufficient to complete the job.

The quick response of the questioned and interviewed candidates was obtained with some difficulty, and the team depended on a continuous and persistence follow up to make it work.

A major problem faced the team was in two folds; the accuracy of the data and information provided to them and the deviation resulted from different sources.

Different approaches and methodologies in categorizing and classifying industries have an impact on the information, regulating and clustering the problems, needs and programs to be provided to industry. PFI, PCBS and the Ministry of National Economy have a major responsibility in harmonizing this classification.

2.6 The contents:

The final outcome of the research has focused on describing the current status of the sector, analyzing its linkages and relations, key players, strengths and pitfalls of the sector, potential sectors in need of special care and an actionable program to assist industry.

3. Palestinian Economy

3.1 Overview

Palestine has witnessed rapid economic growth in the period between 1994-1999, with an increase in the rate of growth in the Palestinian gross domestic product to more than 10% per year. However, growth in GDP has decreased significantly during the peak of the second intifada (2000 - 2002), but growth resumed in 2003, approaching its previous levels before beginning of the second intifada in September 2000.

This point indicates that a real growth opportunity exists in Palestine during the normal stable political and economic conditions. The figures of the macroeconomic framework, which emerged in December 2007, expected further growth in gross domestic product GDP by 15% by 2010 if the political situation is somewhat stable. Unfortunately, this did not happen due to continued political uncertainty and restraints imposed by Israel on the Palestinian economy.

The following table shows the change in the GDP from 2002 to 2007.

Table 1: change in GDP during the years 2002 to 2007						
Indicator	2002	2003	2004	2005	2006	2007
GDP (million \$)	3838.9	4165.3	4247.7	4247.7	4107.0	4135.5
GDP/ capita (\$)	1191.3	1272.3	1246.2	1281.6	1129.2	1112.8

* GDP Figures / per capita in 2007 is considered preliminary and subject to revision and amendment, and for the rest of the West Bank and Gaza Strip at constant prices (base year 1997)

3.2 Palestinian economic sectors

The most important economic sectors that make up the Palestinian economy are as follows:

3.2.1 Industry (manufacturing and mining)

The percentage contribution of this sector in total GDP has increased from 8% in the mid-eighties to 17% in the late-nineties, then dropped down during the first years of the intifada and approached nearly 16%. During 2007, the industrial sector has employed an average of 81586 sector workers, an average of 13% total work force.

The sector includes: stone and marble, textiles and garments, food processing, engineering and metallurgical industries, chemical industries,

pharmaceuticals and veterinary, construction industries, handicrafts, paper and printing, furniture, leather and shoes, and plastics.

3.2.2 Services Sector

The services sector plays a leading role in the Palestinian economy, in 2007, the sector contributed more than 65% of the GDP and 60% of the total workforce. The services sector include: domestic trade, tourism, transport and communications, engineering design, communications, financial services, software services and others.

3.2.3 The construction sector

The construction sector contributed around 2.5% of GDP and 11.6% of total workforce in the country in 2007. The sector is susceptible to the political situation and to the trends of international donations. This sector is featured by highly intermittent temporary employment rates.

3.2.4 Agriculture, forestry and fishing

Agriculture contributes to about 8% of GDP, or 10% of the total exports, 16% of the total workforce. These figures are for 2006, but they are good indicators on the contribution of the sector in the last five years.

Table 2 : Economic Sectors Contribution to GDP					
Sector	1985`s	1994	1999	2002	2007
Industry	8	12	17	12	16
Services	11.5	21	62.6	70.2	65
Agriculture	29	14	10	10	8
Construction	17	22	8.5	5.5	2.5
Others	34.5	31	2	2.3	8.5

3.3 Economy in figures

The Palestinian population in the West Bank and Gaza Strip has reached (3.8) million inhabitants at the end of 2007.

Table 3: Sector Employment Contribution		
Sector	2006	2007
Industry	12.4	13
Services	60.5	60
Agriculture	15.9	16
Construction	11.2	11

The level of education among the Palestinians is classified the highest in the region. About one million two hundred thousand Palestinian students are sitting on the seats of education in the current school year 2008 \ 2009 in various stages of education (elementary, secondary and tertiary).

Table 4: Unemployment Rates												
year	1996	97	98	99	2000	01	02	03	04	05	06	08
%	23.8	20.3	14.4	11.8	14.1	25.2	31.3	25.6	26.8	23.5	23.6	28

Although Palestine has very limited natural resources, it still has a highly renewable human capital resource. 57% of the population under the age of twenty and the rate of 65% under the age of twenty-fifth means an increase in the labor force, including a total of 500000 workers in the next five years. This is in addition to the potential inherent in the working women's race, which is considered a strategic reserve for the labor force. This tendency has its impact on the availability of young labor force and an incentive for more investments in the economy.

In terms of wages, the daily rate of pay at the end of 2007 was \$20 in the West Bank and much less than that in Gaza Strip. The average annual production of the worker in the industrial sector in the Palestinian territory is

estimated at \$20863.

The Palestinian National Authority has committed itself to pursue a free economy and open markets policy, and has seen the private sector as the main driver force towards the achievement of economic growth. The government's plan for reform and development for the period 2008 - 2010 shows a clear commitment towards building an enabling environment for the flourishing of the private sector. The convening of the partnership conference between private sector and government in Jericho in early October 2008 is seen to be the culmination of its policy towards a prosperous private sector. The government has adopted a common economic agenda with the private sector in this conference.

The Palestinian National Authority has worked intensively to create a comprehensive legal enabling framework and coherent in order to facilitate the establishment of businesses, investment and trade. The law of industrial free zones issued in 1998 and the Investment Promotion Act of 1998, give special incentives, including income tax, fixed assets, and exemptions for exports, preferential treatment for regional and global markets. Palestinian products can take advantage of the benefits of preferential trade agreements signed with: the European Union and EFTA countries, the United States, Canada, Russia, Turkey and the Arab free market agreement.

Table 5: industry GDP contribution% changes through the years 1985 to 2007

Year	1985	1999	2002	2007
Industry GDP contribution%	8	17	12	16

4.The Palestinian Industrial Sector

Industry Overview

The Palestinian industrial sector is categorized by its wide variety of products and inter-related sub sector branches. The sector lacks severely the adequate continuously available raw materials for the sustainability of the sector. But it has a great advantage of the dedicated hard working and resilient business community. The business community, as a driving force for the industry, was able to achieve several successes during difficult uncertain conditions.

One of the main features of industry was its connectivity to the Israeli economy. On one side this is a fatal threat to industry because its success is subject to the Israeli priorities, not the Palestinian priorities, and it is a known fact that most of these priorities are not business related and highly politicized. On the other hand, industry has benefited from Israeli business connections elsewhere in the world.

The sector is represented by the Palestinian Federation of Industries (PFI). The PFI advocates for better industrial policies and regulations and works on developing and upgrading industrial performance. The federation started its work in 1999 with a representation of six industrial associations. Today, thirteen different industrial associations are members of the federation.

Industry is playing an important role in the economic and social well being of the Palestinian society. It employs about 13% of the total workforce and it contributes 16% to the GDP. Exports were (and still are) a good economic ambassador for the entire Palestinian cause. The rapid growth of industry was notable during the nineties, the political uncertainty and turbulences have affected the industrial sector negatively.

A slight shift was noticed in the structuring of industry that is related to both political changes and international economic changes and globalization sequences. The leather and shoe making industry and the garment and textile industry are examples of badly affected industries. Contrary to that, Pharmaceutical industries and marble and stone industries were good examples of positive change.

4.1 Leather and Shoe Industry



4.1.1 General Information:

This sector used to be considered as one of the largest industrial sectors until the end of last decade. Currently the number of operating firms in the shoe industry is around 230 firms and 12 tanneries, were it is used to be around 1000 firms ten years ago. The sector employs about 2500 workers were it used to employ around 10,000 workers in the past. The total number of produced shoe pairs was about 13 million ten years ago, it is now about 4 million shoe pairs.

This industry is concentrated in Hebron city with some in Nablus. Tannery is a sole property profession of Al Zatari family based in Hebron.

Table 6: leather and shoe sector general information

Sector	# of firms	Total investment	GDP %	# of employees	Market share %	Employee productivity
Leather & shoe	230	120	1	2500	40	29000

4.1.2 Sector diversification:

The sector is composed mainly of tanneries and shoe makers. Tanneries are the major supplier of raw materials to the shoe making industry. Shoe makers produce casual shoes, tennis shoes, women and children, slippers and sandals. Little portions of the tanned leather are used for clothing industry and as covers for furniture.

4.1.3 Quality as an advantage:

Shoe making industry used to be one of the most Hebronites competent advantages. It was featured by its high quality product and by the large number of family members working in the industry. The industry started declining because of the free trade movements with countries like China and not because of quality. The industry used to depend on high quality natural leather and high skills of workers.

4.1.4 Technical position and capacity:

The industry used to have a huge production capacity at about 13 million shoe pairs. The Hebronite shoe making was famous and capitalized on accumulated experience. The hand making shoes was another feature of this industry. The sector lacks the capacity in designing new models and prototypes.

This industry needs upgrading of machinery and adapting to new technologies and computer based manufacturing techniques.

4.1.5 Marketing position:

Palestine and Israel were the most important markets for this industry. Subcontracting agreements was one of the main features of the industry in nineties. Even though, a small percentage was directly exported to Jordan, Saudi Arabia and Germany before the intifada, some of the products sold to Israel were re-exported under Israeli brand name.

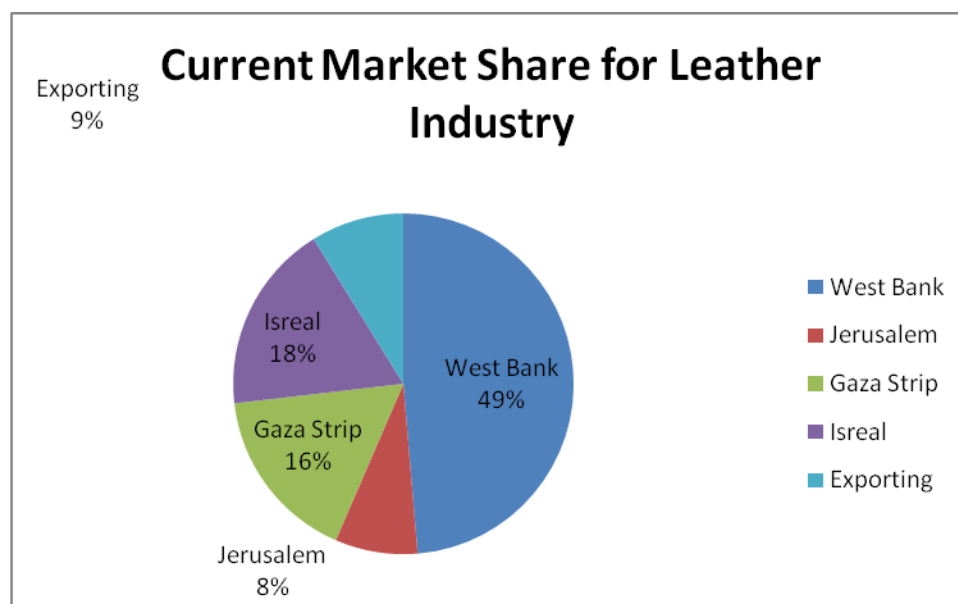


Figure 4.1: Current Market Share for Leather Industry

This sector needs a sales and promotional campaign to resume business relations with European markets. It has great production potential and lacks marketing and business linkages. The current market share of the industry is less than 40%.

4.1.6 Financial position:

The total investment of the sector has dropped from 220 million USD to seventy million USD. This drastic drop was due to the sharp decrease in demand due to political conditions and completion of imported goods, mainly shoes. The industry had shown a great interest in investing in new markets and less interest in investing in new machinery. The remaining interests were targeting finding new partners and developing new products.

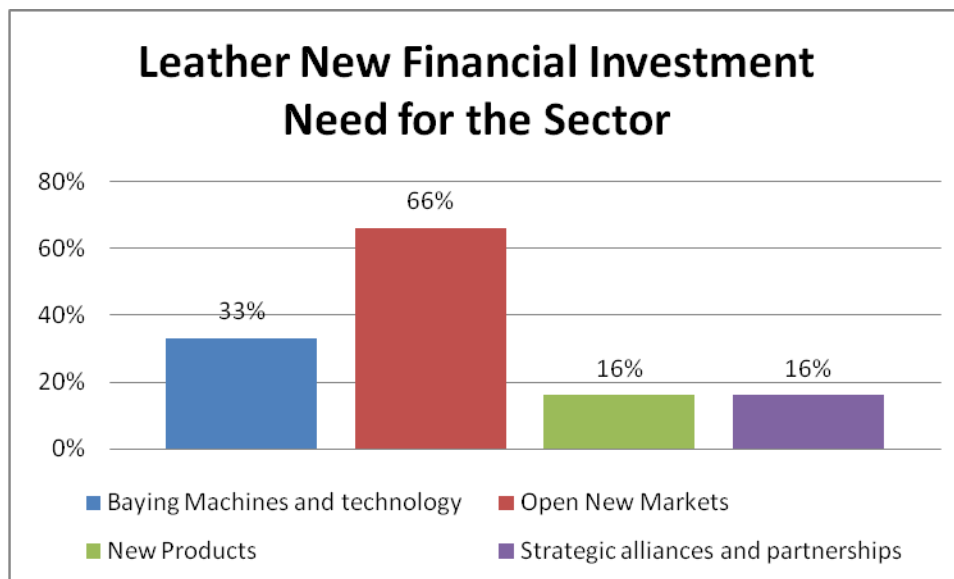


Figure 4.2: leather new Financial Investment Need for the Sector

4.1.7 Industry problems and needs:

The leather industry faces severe problems in supply of raw materials, availability of chemicals for tanning, shortages in modern production methods, environmental considerations, training and adapting new technologies, family business administrative problems. The industry of shoe making also faces problems of shortage of sales, maintenance and machinery problems, access to markets, local market unfair competition, lack of creative design specialists and the like.

4.2 Metal Industries



4.2.1 General Information:

The sector is served by an industry association which represents 40 major firms working in the industry. A rough figure of firms working in this industry is estimated at 120. The problem is how to define the working firms and how to recognize the working workshops. The average number of workers in the sector is estimated at 1000 workers.

Table 7: metals industry general information

Sector	# of firms	Total investment	GDP %	# of employees	Market share %
Metals	120	NK	NK	1000	35

4.2.2 Sector diversification:

The sector is comprised of several diversified fields. These are: metal doors, aluminum profiles, iron and steel rods and drawing, welding and abrasive materials, nails and steel rods, metal furniture, scales, stone machinery, packaging machinery, lathing, agricultural machinery, municipal containers, kitchen wear, electric circuit boards and other specialized workshops.

4.2.3 Quality as an advantage:

The quality is related to the application and use of the machines and tools produced. It is obvious that the majority of the products are either used for the industry or as complementary parts to other businesses. Hence, quality is an important matter.

The PSI standards and specifications are valid only to some of these products, ISO certificates and fire preventing certificates have been acquired by some firms.

There is a lack in fully equipped laboratories and testing, this can be overcome through close cooperation with academic institutions. Also, research and development can help choosing the proper composition of materials. Moreover, the culture of quality standards and specifications has to be widely spread in the sector.

4.2.4 Technical position and capacity:

The total production capacity is barely reaching 40% of the sample companies. Technically speaking there is a big variation in the level of technology used in the sector ranging from low to high levels. The industry needs to be equipped with testing facilities and knowledge to cope with the technology and quality needs. Academic networking with the industry is vital to the development of this industry.

4.2.5 Marketing position:

Traditionally, the sector has experienced the export practices decades ago and still does. Welding materials and abrasives were the main exports. The opportunity still exists for more exports in to countries. Metal doors, stone machinery and packaging machinery are some major examples.

Locally, there is high competition with the Israeli and imported materials, mainly Chinese. PSI is not active in the regard of checking the quality of the imported materials. Local market needs carefully set regulations in order to maintain fair competition in the market.

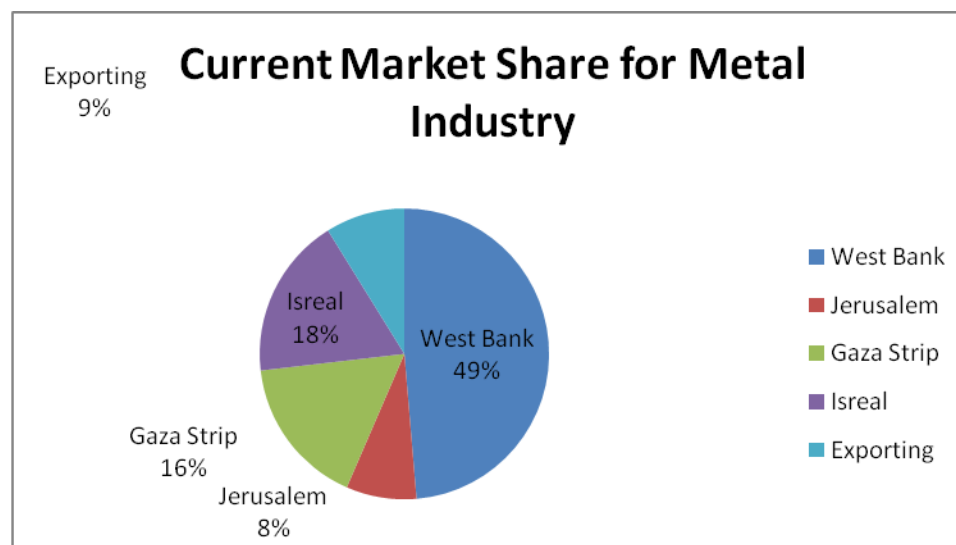


Figure 4.3: Current Market Share for Metal Industry

4.2.6 Financial position:

There are no precise figures indicating the total investment in the sector. But some references stated that the total amount of investments exceeds the figure of 100

million USD. According to the sample firms, 100% of them have the desire to invest in new machinery and 80% will invest in seeking new markets.

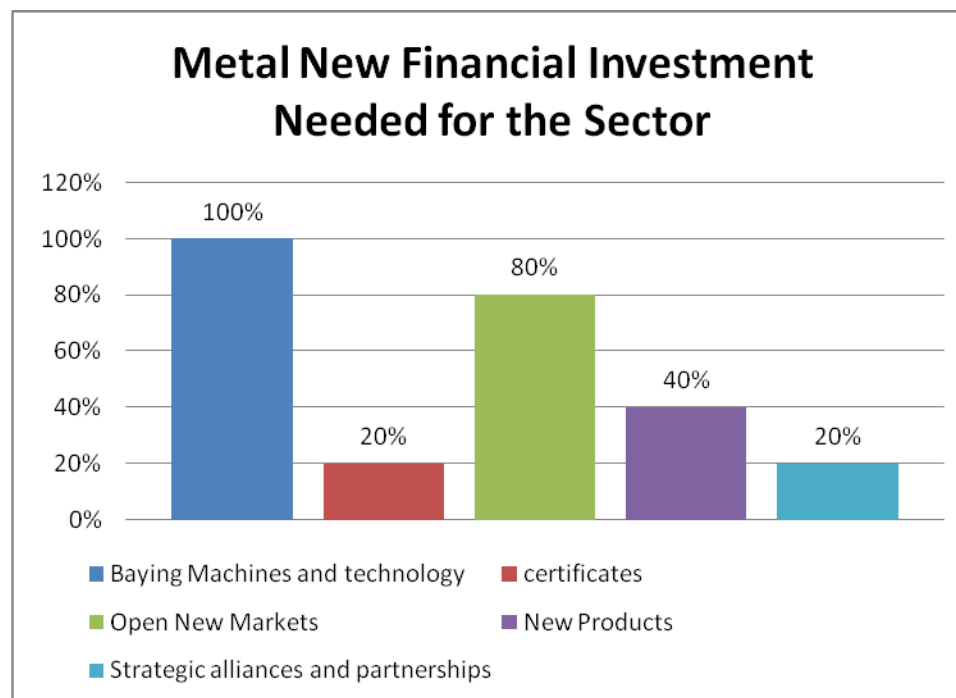


Figure 4.4: New Financial Investment Needed for the Sector

4.2.7 Industry problems and needs:

This industrial sector's needs are summarized in the following points:

- 4.2.7.1 Regulating the local market and achieving fair competition.
- 4.2.7.2 Design a package of promotional and technical assistance to open new markets for the industry and increase exports.
- 4.2.7.3 Equipping the industry with proper testing laboratory and linking it properly with the academic institutions.
- 4.2.7.4 Looking for alternatives of fuel consumption and decreasing power costs.
- 4.2.7.5 Industry's wastes need to be properly recycled to maximize the outputs and to reduce impact to the environment.
- 4.2.7.6 Training and other administrative needs and modern management tools need to be devised.

4.3 Chemical Industries



4.3.1 General Information:

The sector is represented by an industrial association that needs to be strengthened and institutionalized. The estimated number of regulated companies working in the industry is 60, five in producing cosmetics, five in the production of paints and inks and the remaining are working in the detergents production. The actual number of producers (un-regulated) is much more than that. Some factories produce both detergents and cosmetics.

The average number of workers is estimated at 15, and the total employment is estimated at 900 workers. The actual number is greater than this because of the non-regulated manufacturers. The industry is spread all over the West Bank.

Table 8 : chemicals sector general information

Sector	# of firms	Total investment	GDP %	# of employees	Market share %
Chemicals	60	NK	NK	900	35

4.3.2 Sector diversification:

This sector is comprised of three major categories; paints and ink, detergents and cosmetics. Traditional olive oil soap products are sometimes categorized as traditional industries. A growing tendency in developing these products is being noticed.

There is an overlapping in industries which produce both detergents and cosmetics and companies which produce medicines, veterinary products, detergents and cosmetics.

4.3.3 Quality as an advantage:

The chemical industry deserves more attention because of its direct relations to human health. So increasing awareness at both sides; the manufacturers and the

consumers is vitally important for the development of this industry. Paints are directly related to the construction sector and affected by its mechanisms.

Quality is a demand at the manufacturers' side according to 33% of the questioned factories. Quality will help increase the fair competitiveness of the locally regulated licensed industries. ISO certification could suit 2-3 manufacturers, but all need to follow certain documented procedures in manufacturing to maintain quality and consistency. Paints industry is in total need to PSI compatible specifications. To enhance the culture of quality, adequate laboratories should be established.

4.3.4 Technical position and capacity:

Few companies were able to build a brand name for themselves based on quality. Paints companies are searching relentlessly for new products to increase their competitiveness in the market. The majority are working below 50% of their production capacity. Upgrading machinery and adapting new technologies is needed almost by all industries. Re-designing the processes might help increase the productivity.

The sector lacks adequate technical knowledge and expertise in products such as washing powders and solid soaps. Developing the existing packing and packaging is an issue to be handled with special care, small size samples are needed for promotion and marketing.

4.3.5 Marketing position:

Cosmetics are the most exported products of the industry. There is a potential for exporting some products of the industry. Markets like Jordan, Algeria, Gulf States and Yemen need to be checked for export. But export has the prerequisites of standards, quality, certificates and promotion.

The local sales in the West Bank reach up to 74% of the total sales. Packaging and labeling is an issue of concern to the industry in building the image and the position in the market. Companies need to develop a container image and label of their own. There are no approximate figures of the share of cosmetics in the local market, whereas it is estimated at 40% for the detergents and 35% for the paints. Promotional materials need to be invested in the sector.

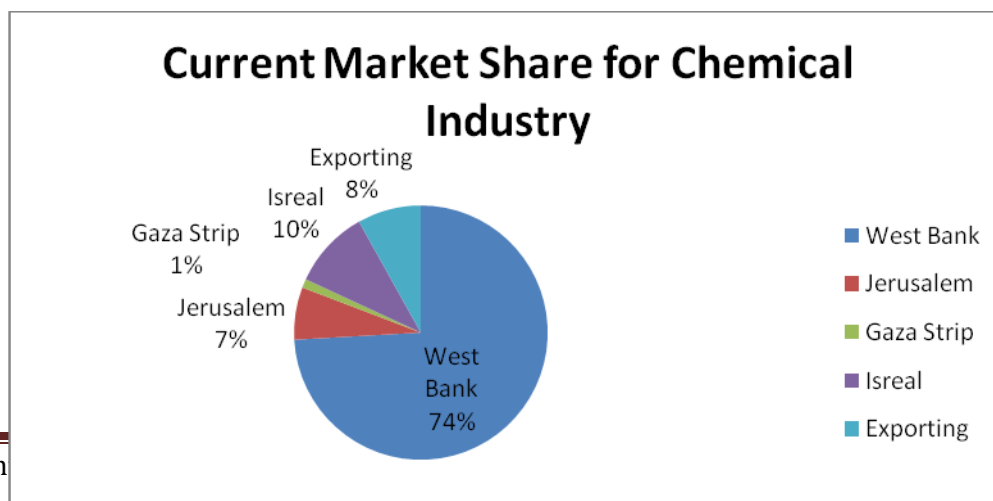


Figure 4-5: Current market share for chemical industry

4.3.6 Financial position:

When the sample was asked about their priorities in new investments, their answer focused on investment in opening new markets for the industry and investing in new technologies. This tendency raises the importance of linking the industry to financing institutions and schemes.

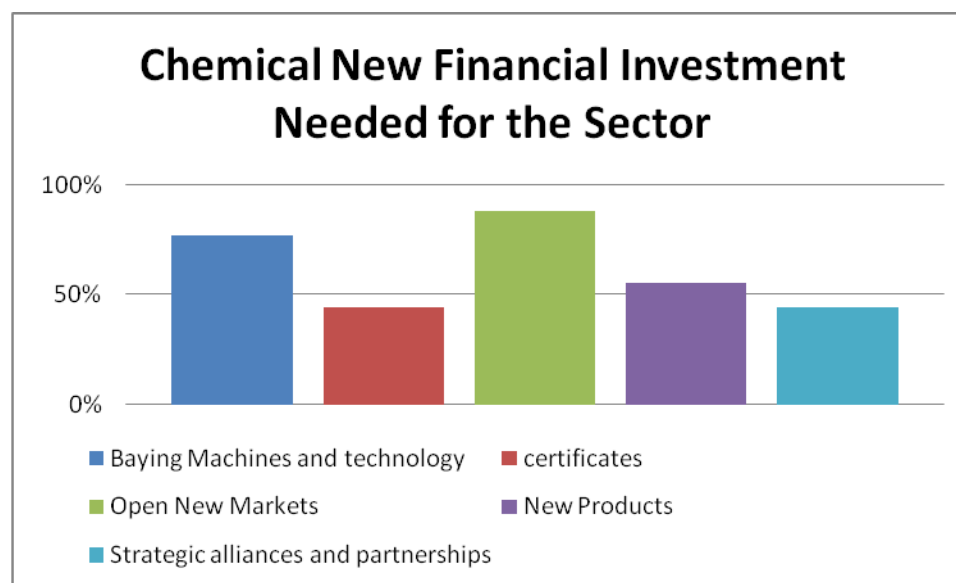


Figure 4.6: chemical new financial investment needed for the sector

4.3.7 Industry problems and needs:

It is clear that this sector suffers from unfair mechanisms of the local market. And hence regulating the local market is a priority. This will force the incompatible illegal products to leave the market. The availability of raw materials is a real threat to the industry combined with the acquisition of proper technologies.

Encouraging small companies to merge with others or form a strategic relation with them will enhance their competitiveness in the market. Besides, this will minimize the negative effects of family business administration and practices in the industry. Lack of training and technical assistance is seen to be an important matter to develop the industry.

4.4 Construction Industries



4.4.1 General Information:

It is roughly estimated that the total number of industrial firms working in this sector is 350 working facilities regardless the size of the enterprise and the field of specialty. Whereas the sector is distributed all over the West Bank, the average existing life of industry is 15 years.

The sector is represented by a weak association, and is affected severely by the practices of other associations like Engineers and Contractors Associations.

Table 9: construction sector general information

Sector	# of firms	Total investment	GDP %	# of employees	Market share %
Construction	350	NK	NK	NK	70

4.4.2 Sector diversification:

This industry is mostly composed of five major fields and hence product types. These are ready mix concrete, bricks, stone crushers, asphalt products, cement precast manholes, cement pipes, carpe stone and cement tiles.

4.4.3 Quality as an advantage:

Quality is so important in this sector. Quality in most cases is a request by the designer and it is one of the procurement criteria. Not all firms have acquired the Palestinian Standards (PS) for their products, and even those who acquired it are hardly able to maintain and keep it. The industry is weak in the processes of validation, inspection and frequent controls and checks. Moreover, PSI lacks sufficient resources and mechanisms to control the whole process.

Apart from ISO 9001:2000, which was requested by some industry operators, most of the international certificates are not requested. Environmental management systems are needed in this industry since some parts of it are considered as pollutant industries; ISO 14000 could be suitable for large firms only.

It is good to say that the country is moving towards reconstruction and rehabilitation processes in Gaza Strip which will need a huge amount of building

materials. Moreover, the plans to build new cities and boroughs will also double the potential demand for construction materials. The cluster is so important for growth since it carries significant forward and backward linkages.

4.4.4 Technical position and capacity:

The total utilized capacity of this sector is expected at 45%. Whereas, the average employed labor force is estimated at 22 workers per firm. The number of work force for the sample ranged between 16 and 28. This means that any increase in production capacity will increase substantially the number of workers in the sector.

It is quite noticeable that there are certain deviations in the technology and capacity of production in some fields, for example bricks production, whereas the deviation is negligible in the ready mix concrete.

Construction is a cluster with strong growth potential and readiness for collective action and with above-average performance on key factors related to West Bank and Gaza circumstances. Its strong growth potential ratings are based not only on global forecasts but also on the local context, which includes a diversified product and service base. Likewise, the past collaboration of its firms and support institutions translate into relationships that should propel fruitful and immediate coordinated activities. With history of labor absorption reaching more than one-fifth of workforce, construction is positioned to resume its vital role in job creation, although the cluster's fortunes do fluctuate with the political context.

4.4.5 Marketing position:

The industry's main market is the West Bank. It comprises 73% of the total market share. Whereas, Israeli construction products –constitute 23% of the market, and the remaining is sold in Gaza markets. It is obvious that the industry does not export any of its products; it is a heavy transport costing industry. Jordan could represent a potential country for export because of proximity, but the whole costs and requirements need to be checked.

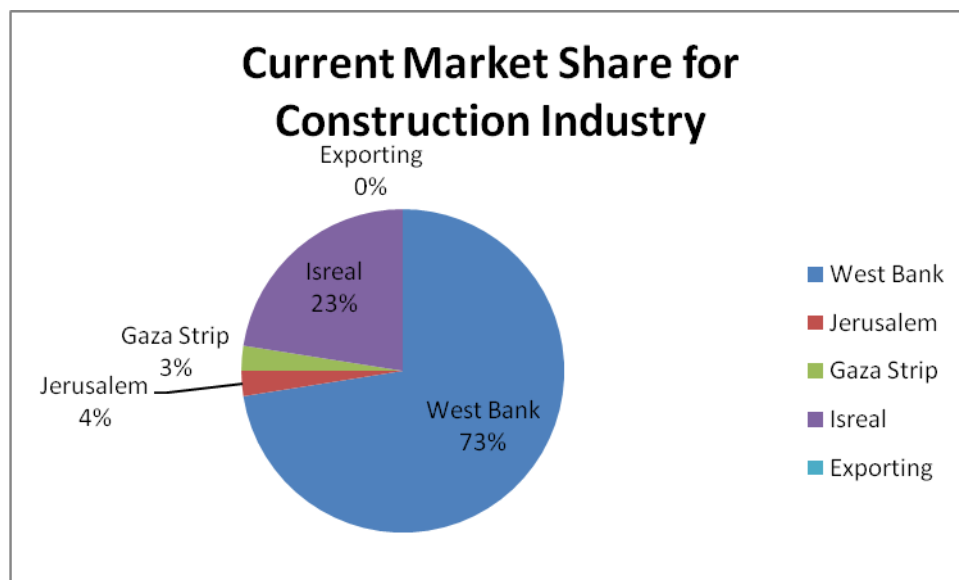


Figure 4.7: current market share for construction industry

4.4.6 Financial position:

All questioned firms requested financial resources for buying new machinery. Whereas, half of the industry need investment in developing their products, developing their market and get involved in some strategic partnerships with other related or inter-related industries.

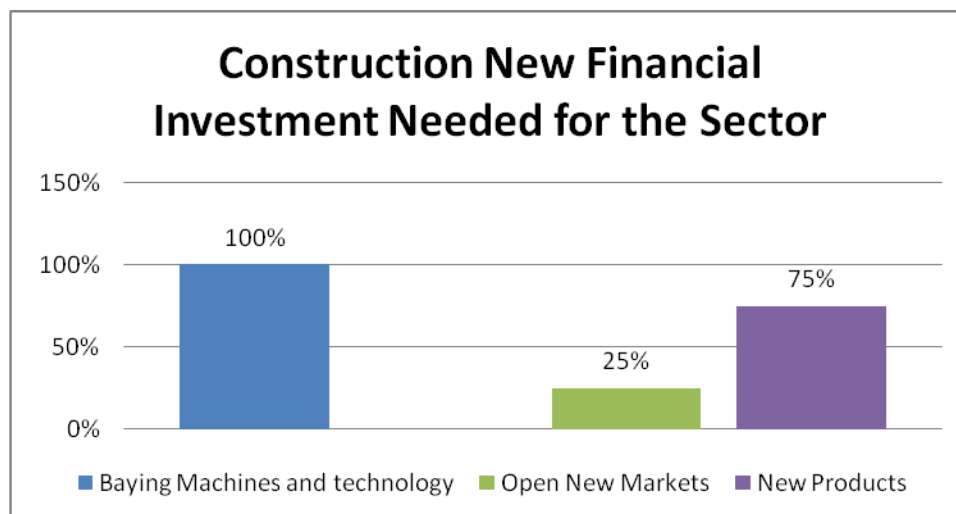


Figure 4.8: construction new financial investment needed for the sector

4.4.7 Industry problems and needs:

The most needed request from PNA institutions is to consider the local products in their bidding and tendering and give it a preferential status treatment. It is

requested to consider the standard specifications in the design phase of any project. This will enhance fair competitiveness in the industry.

The industry needs great efforts to increase awareness among its players and stakeholders. Educating the operators of industry is vital to consolidate the quality culture in the industry.

It also needs a proper national campaign to capitalize on its strengths. Promotional materials are to be published to convey the message of the industry properly. This could include; website designs, catalogues, brochures and others.

The industry can be motorized by some initiative programs that can include firm technical assistance, access to finance access to technology and knowhow, workforce development and policy and regulatory reform.

4.5 Handicraft and Traditional Industries



4.5.1 General Information:

The sector is served by a weak association which needs to be strengthened. The religious and tourism handicrafts are concentrated in Bethlehem area. The number of olive wood workshops has decreased from about 160 to 135, 12 of them have

reasonable size operations and the remaining are small. The mother of pearl workshops has sharply decreased from about 130 to 15 working operations.

Hebron was famous for family owned pottery, glass and ceramic workshops. Today, very few of these workshops still exist in each category. Other sectors of handicrafts are scattered all over the West Bank.

Table 10: handicrafts sector general information					
Sector	# of firms	Total investment	GDP %	# of employees	Market share %
Handicrafts	1020	NK	< 1	1200	30

4.5.2 Sector diversification:

The sector is composed of diversified components. These are classified as oriental handicrafts; olive wood carving, mother of pearl, ceramics, glass works, pottery, embroidery, carpet knitting, wax, false jewelry and other hand works.

4.5.3 Quality as an advantage:

The quality of these products is derived from being handmade which adds a great value to them. Quality is seen in the surface finish appearance and resulted from good chosen raw materials. A certificate of excellence is issued by some chambers but nothing to do with PSI.

Traditionally, this industry was related to the tourism sector. And hence, thousands of skilled people, especially in Bethlehem area, were specialized in this sector. So, this represents a great value to the local population there, and it is one of its features.

4.5.4 Technical position and capacity:

Generally speaking, the industry is working on low capacity in most of the fields. Since this industry is highly sensitive to tourism, the last decade has shown some shifts in production. Smaller workshops have disappeared and fewer workshops have grown their production capacity and sales. The mother of pearl workshops have declined sharply and also the ceramics and glass works.

The industry has a rich capacity of skilled labor and traditional culture in this regard and is moving towards more exports and hence the need for development is highly urgent. Most of the machinery and hand tools are old and need upgrading. One feature of this industry is low investment, and hence any development will create substantial effects on production. This industry needs to deploy modern technologies and developments in machinery and design.

4.5.5 Marketing position:

Traditionally, handicrafts products used to be sold locally to tourists and pilgrims. The activities carried out by promotional institutions and chambers, and the holding of regional and international cultural trade shows have opened the door for direct exports. Other major exports are sold in the American markets and some are sent there in the form of gifts. These exports have created the need to change in the industry.

Informal figures from the industry show that the volume of sales last year reached up to six million dollars, whereas the formal figures hardly reach the figure of one million dollars. The industry has a potential in the export market and can capitalize on the unemployed skilled labor.

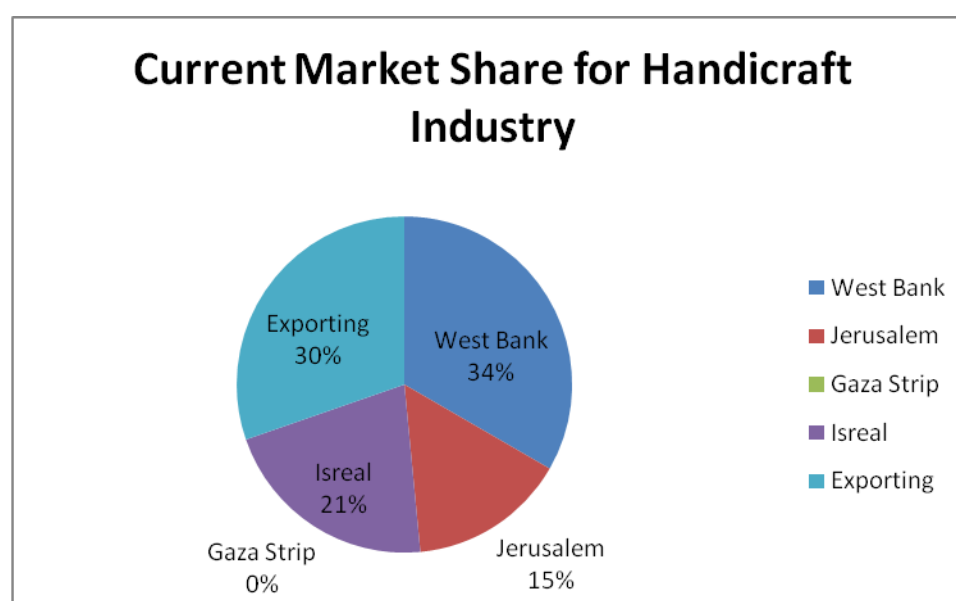


Figure 4.9 : current market share for handicraft industry

4.5.6 Financial position:

The sector is categorized by low investments in machinery. It is largely dependent on skilled labor. Cash is needed in obtaining the necessary raw materials and in financing the workers until the receivables are in the account which might take months.

The industry operators need the cash to finance their procurements. They are also looking for financing the opening up of potential markets.

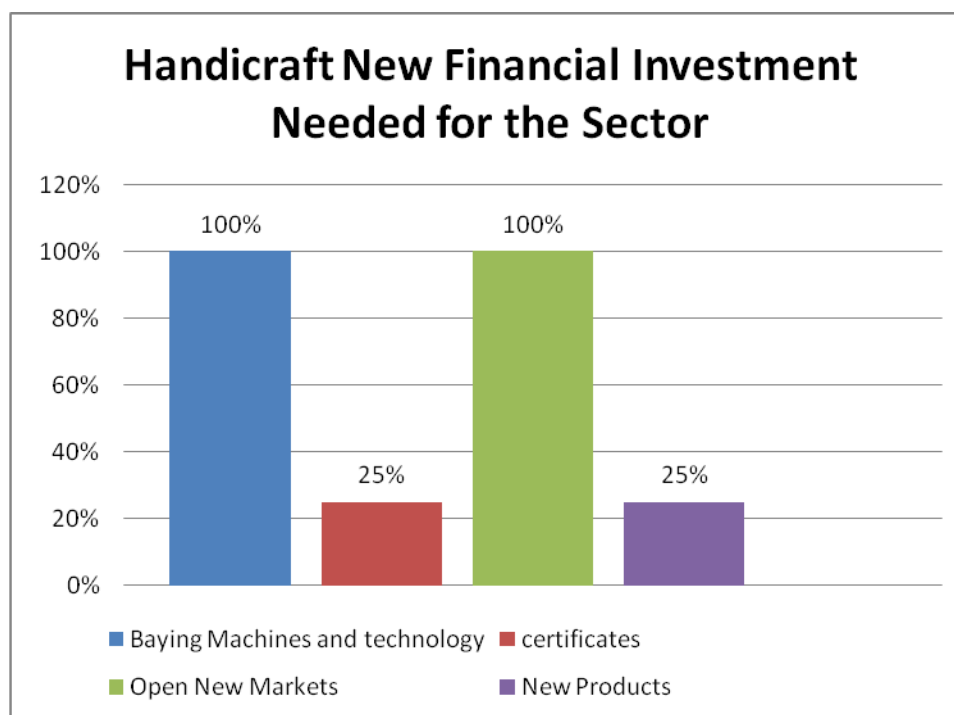


Figure 4.10: new financial investments needed for the sector

4.5.7 Industry problems and needs:

The sharp decline of pilgrims and tourists numbers coming to the country during the last decade was the major problem to the industry. This can be traded off by the increasing volume of exports, especially to the American markets.

Technical assistance to store properly the seasonal available raw material of olive wood, inducing graphics and 3-D designs, the upgrading of machinery and introducing the CNC machines are needed to develop production.

Management training, language skills, design, financial skills are essentials for developing the sector. The sector is categorized by its family administration, and hence insertion of family business administration tools is needed.

4.6 Textile Industries



4.6.1 General Information:

Prior to the second intifada, there were more than 1700 firms operating in this sector in the West Bank alone. The figure now is hard to guess, according to the industry association's estimates the number of working firms varies between 700 and 1000. Employment has dropped severely from 11000 permanent jobs to almost 5000 unsecured jobs. Women are the major work force in this sector. The sector is spread all over the West Bank and represented by an industrial association.

Table 11 :textile and garment sector general information

Sector	# of firms	Total investment	GDP %	# of employees	Market share %	Employee productivity
Textile & garment	1000	NK	< 2	10000	40	31400

4.6.2 Sector diversification:

The sector is composed mainly of textile, garment and clothing production, dying, wool wear, and other accessories. The main feature of this sector is of subcontracting nature.

4.6.3 Quality as an advantage:

The sector has witnessed some advancement in the past towards achieving high quality products. Some are up to the international standards. The accumulated experience of the sector, the abundant labor force, the ability to respond properly to the requests and needs of other producers and partners, and its keen understanding of manufacturing value chains in the industry contribute to the inherent advantages and opportunities of this sector.

4.6.4 Technical position and capacity:

The sector is now working at a capacity which is less than 35% of its normal production capacity. Many firms have been depended on the flextime, job sharing and reduced work days and work hours arrangements to maintain their labor force. The machinery is getting old and some are out of date. Intensive maintenance programs and machinery upgrading schemes are highly needed in this sector.

4.6.5 Marketing position:

It is obvious that an increased percentage of the sector operates on a subcontracting basis and hence has no great problem in marketing products. The problem is hidden in getting more subcontracts and shifting to more autonomous state of manufacturing. Other producers are selling 70% of their sales in West Bank markets; the remaining is being sold outside the country, mainly to Israel.

Some factories have exported to Jordan, others were successfully exporting to European markets and USA markets. Some entrepreneurs have capitalized on their personal relations and relatives in the export process. The export market was estimated at 15 million USD in 2000 and less than 10 million USD in 2001.

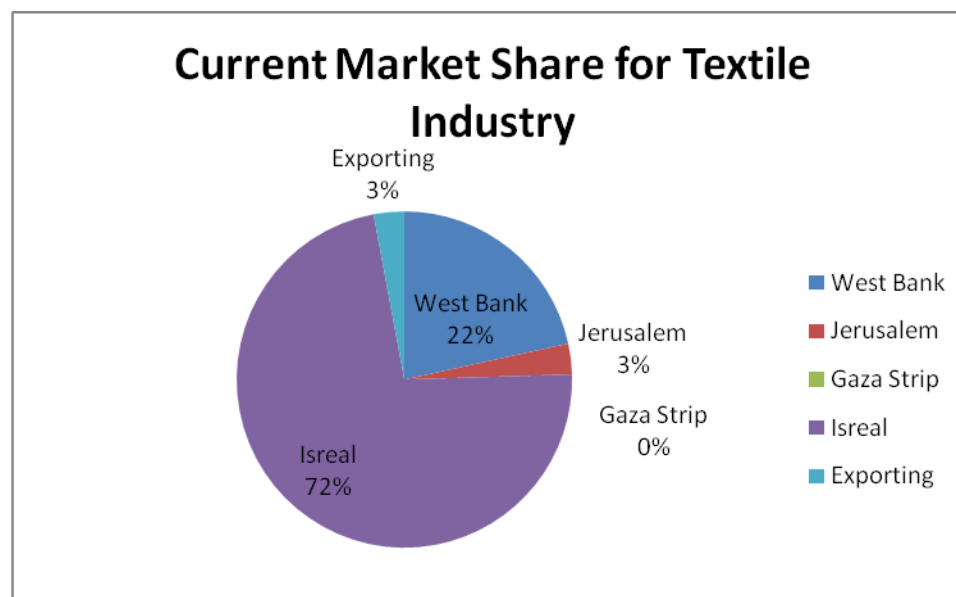


Figure 4.11: current market share for textile industry

4.6.6 Financial position:

The sector produced a total of 126 million USD in the year 2000, which represented 15% of the gross industrial product. The sector considers the access of new markets as a first priority for financing, next to it is the upgrading and development of machinery. The need for investing in new machinery is not considered a priority for the sector at this stage.

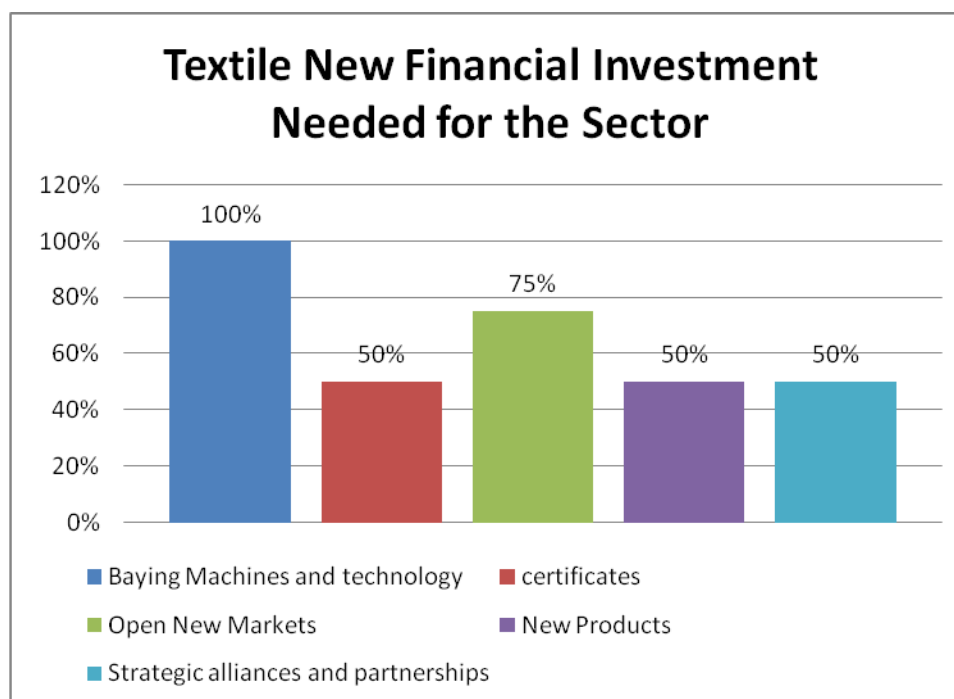


Figure 4.12: new financial investment needed for the sector

4.6.7 Industry problems and needs:

This industry is a real victim of free trade arrangements especially with low cost producing countries like China and the second intifada. The sector was heavily dependent on the Israeli market and on the subcontracting relations with Israeli marketers. The availability of raw materials and the increase in production costs decreased the competitiveness of the sector.

4.7 Stone and Marble Industries



4.7.1 General Information:

The stone and marble industry is considered as the biggest industry in terms of number of firms, sales volume, employment rate and total investment. In recent years the industry showed a linear decline in production, sales and returns.

The total number of manufacturing firms is around 700 firms, and the total number of workers is estimated at 8000 workers. The industry is spread over the West Bank regions but focused in the regions of Bethlehem and Hebron.

Table 12: stone and marble sector general information

Sector	# of firms	Total investment	GDP %	# of employees	Market share %	Employee productivity
Stone & marble	1124	600	4	8000	50	45259

4.7.2 Sector diversification:

Stone and marble industry means the stone manufacturers and the quarries. The stone manufacturers are categorized as small, medium and large scale size producers. Workshops are another category of buying slabs and cutting it into small size pieces.

The main composites of final products are external cladding, internal cladding and tiles, cut to size products, decorative products, special products (flamed, antiqued ...) and tomb products.

4.7.3 Quality as an advantage:

The sector's major competitive advantage is its dependency on local raw materials. Quality is an important issue in selecting the materials and in the surface finish of the final product resulting from proper manufacturing practices. The basic competitive features of the products are color and texture. Quality and price are interchangeable factors in the sector. More quality means more costs in the manufacturing and supply chain.

The sector has invested in testing samples of final locally produced products in internationally recognized laboratories in Italy and the results were published in a product catalogue book for the whole industry. Local tests for certain specifications are being performed in local laboratories.

Although 50% of the interviewed sample requested the implementation of ISO standards, but in reality only one out of six companies in the sector was able to keep and maintain the ISO certificate after five years of obtaining it.

4.7.4 Technical position and capacity:

Technologically speaking, the sector has an easy access to the most updated and advanced technologies in the international market. Few of the manufacturers develop and upgrade their machinery regularly. There are substantial differences in operating the machines and in the process orders and scheduling.

The sector has the capacity to manufacture up to 35 million square meters; actually it operates only at a capacity of about 30% of their total capacity, i.e. 12 million square meters.

The sector needs to be better informed about the advancements in abrasives, tools and other needed accessories for production. Maintenance is another problem affecting the continuity of operations.

4.7.5 Marketing position:

The marketing mix is shifting towards export in the last 7-8 years. The composition of the market is classified as: 65% Israel, 25% local market in West Bank and 10% for export.

The marketing of these products depend highly on the design specification done by engineering offices. So, networking with engineers and contractors is vital for the survival and growth of these companies.

Competition among local producers is severe, whereas competition with imported products in the local market is weak, and almost negligible with external cladding products. Competition in the international market is high especially with economies of low manufacturing costs such as Jordan and Turkey. Palestinian stone and marble has built its image in more 33 countries all over the world.

Proper promotional tools are not widely used in the sector. Continuously improved product catalogues and other promotional materials are needed.

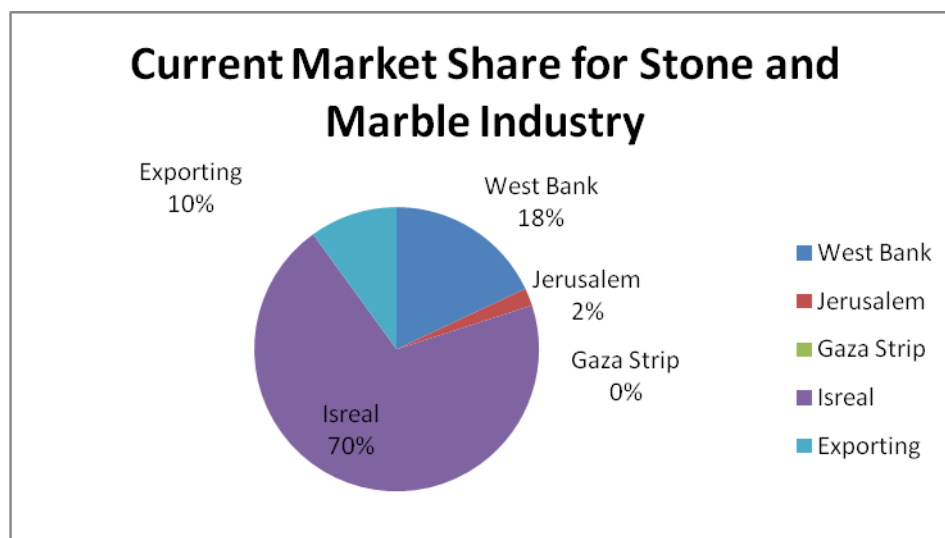


Figure 4.13: current market share for stone and marble industry

4.7.6 Financial position:

The initial investments in the sector exceeds the amount of 400 million dollars and are mostly generated by own savings and family resources.

Severe competition and reductions in total sales have influenced payment terms and affected the cash flow of the industry. Most firms depend on commercial banks for facilitation.

When factory owners were asked about their priorities in financing, the answer was to buy new machines and develop new markets.

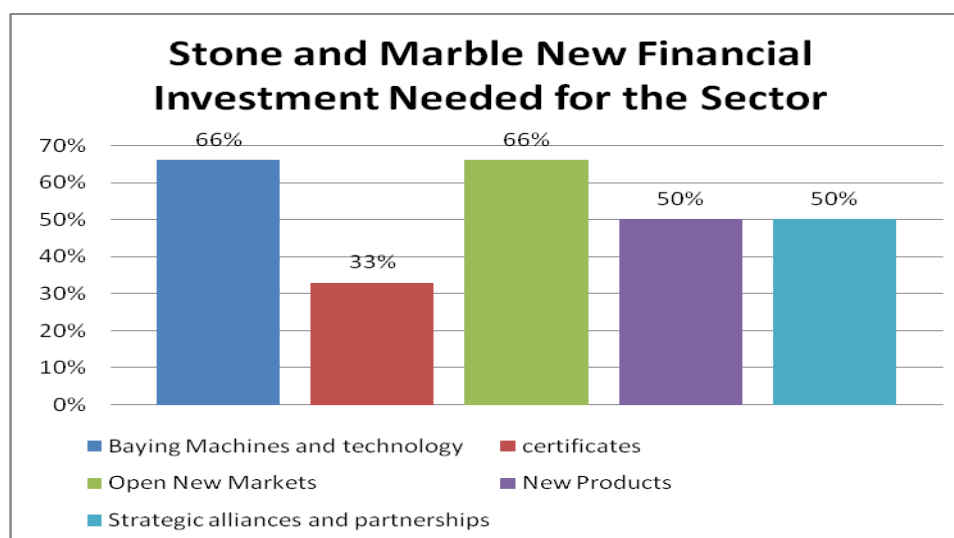


Figure 4.14: new financial investment needed for the sector

4.7.7 Industry problems and needs:

Although this sector is the biggest in the whole industry it faces many complex problems. The sector is characterized of its family business nature and heritage, so more emphasis on educating and training of both administrative staff and management is needed. Management information systems and computer applications are also needed.

Motion and transportation problems are encountered especially with those products sold in the Israeli market. Redesigning and restructuring work inside the firms will enhance their productivity and reduce operation costs.

Linking the industry to relevant stakeholders; academic institutions, professional associations and the like will enhance its strength.

This industry is represented by a well-organized federation that still needs further capacity building to serve better its membership.

4.8 Pharmaceuticals Industry



4.8.1 General Information:

The Pharmaceutical industry is comprised of six manufacturers in the West Bank; five of them are located in Ramallah. The industry produces 1118 medicines (mostly generics) according to the ministry's registry while the market registers about 4500 medicines available in the pharmacies and hospitals. The total number of workers is estimated at 1200 workers.

The industry contributes less than 1 percent of GDP, it is considered one of the highest in worker productivity (\$44,000 in 2005). This industry is represented by a strong industrial association.

Sector diversification:

The local manufacturers are focusing their production on three medicinal groups; these are anti-infective, muscoskeletal and alimentary medicines.

In addition to medicines, two of the companies are producing veterinary medicines, and also two of them are producing some kinds of detergents and cosmetics.

Table 13: pharmaceuticals sector general information						
Sector	# of firms	Total investment	GDP %	# of employees	Market share %	Employee productivity
Pharmaceuticals	6	90	< 1	1200	55	44000

4.8.2 Quality as an advantage:

The industry has invested heavily in building GMP quality facilities and systems. Over USD50 million dollars were spent in the last 7 years.

Palestinian drug prices are more competitive than its Israeli and foreign counterparts, bonuses on Palestinian medicines surpass other rivals. Nevertheless, the availability of medicines is another noticeable competitive factor.

4.8.3 Technical position and capacity:

The industry works at a reasonable capacity rate and its major problem is the waiting time during processing. The industry has the capacity to produce more varieties of medicines if proper patent, licensing and validation procedures are in place. The industry has invested a lot in infrastructure and machinery to be qualified for certain certifications; mainly GMP (Good Manufacturing Practice).

4.8.4 Marketing position:

The market share of this industry is about 55% of the total market in terms of quantities and 45% in terms of dollar value. Almost 90 percent of local industry sales are in WBG, the rest is exported to East Europe, Arab and African countries. One company has partnered strategically with a European company to obtain easy access to European markets.

The total market size of medicine is estimated at about 48 million dollars. It is distributed over private sector 71%, public sector 20%, and 9% for NGOs including UNRWA.

The sector uses a wide variety of promotional materials and sales methods. The industry is well prepared.

4.8.5 Financial position:

The total amount of assets in the sector is estimated at 90 million USD. The industry needs to invest a lot in quality matters and certification. Entering new markets, registering medicines and developing new products are of this industry's top priorities.

4.8.6 Industry problems and needs:

Local manufacturers cover only around one third of the Palestinian Essential Drug List. So efforts continue towards producing more drugs. Bridging the gap between the Pharmaceutical Industry and Universities is an essential requirement for development. Costing Systems, financial and management information systems are also needed.

Acquiring GMP certifications from local and international authorities is considered the visa to enter international markets. Market studies and registration of medicines are particularly needed.

4.9 Veterinary Industry



4.9.1 General Information:

There are six veterinary medicines producing companies in the West Bank-; 3 in Ramallah, 2 in Nablus and one in Hebron. In addition, two of the existing human pharmaceutical manufacturing companies in Ramallah have sections to produce veterinary medicines. That accumulates the whole number to eight factories in the West Bank.

The total employment in this sector is estimated at 120 laborers, and the estimated sales volume of the industry is 8 million USD.

The industry lacks internal coordination among members and external with different legislative institutions. Soon they might be part of Pharmaceutical Industries Association and that will most likely help.

4.9.2 Sector diversification:

The sector produces similar products and it covers about 45% of the market share. The variety of products vary from; vitamins, hormones, antibiotics and insects¹ killers.

4.9.3 Quality as an advantage:

This industry is trying to cope with the technical regulations of the Ministry of Health and the WHO. Companies are eager to adapt and implement standards operating procedures, GMP and other international certifications. The industry is determined to upgrade its qualities to increase their market share and to be able to register for export.

4.9.4 Technical position and capacity:

In order to reach the acceptable levels of quality, the industry needs a lot of assistance in terms of knowhow, technological enhancements, machinery and skilled labor. The industries are ranked between low to medium level standards in terms of manufacturing practices.

The industry is working at almost 25% of its total production capacity. That is partially due to the market mechanisms and organizational considerations.

4.9.5 Marketing position:

The industry produces about 25% varieties of the market demanded products. The market share for Palestinian products reaches up to 45% of the total consumption. The market of these products is mainly the West Bank 84%, Gaza Strip 7% and Jerusalem 9%. Before the last war on Gaza the sales to Gaza reached up to 30% of the total sales.

The industry is looking for export markets and some companies have tried registering their products outside the country. Registration and certification are two major perquisites for export. The high potential for export is expected to be to Jordan, Sudan, Saudi Arabia, Egypt, Yemen, Algeria and Ex-Soviet Union countries. Thorough investigation and diagnosis to these markets is needed.

The industry needs upgrading in terms of its promotional tools and materials. Product catalogues, website development and other promotional materials will assist communicating the products of the companies. Participating in regional trade fairs is a necessity.

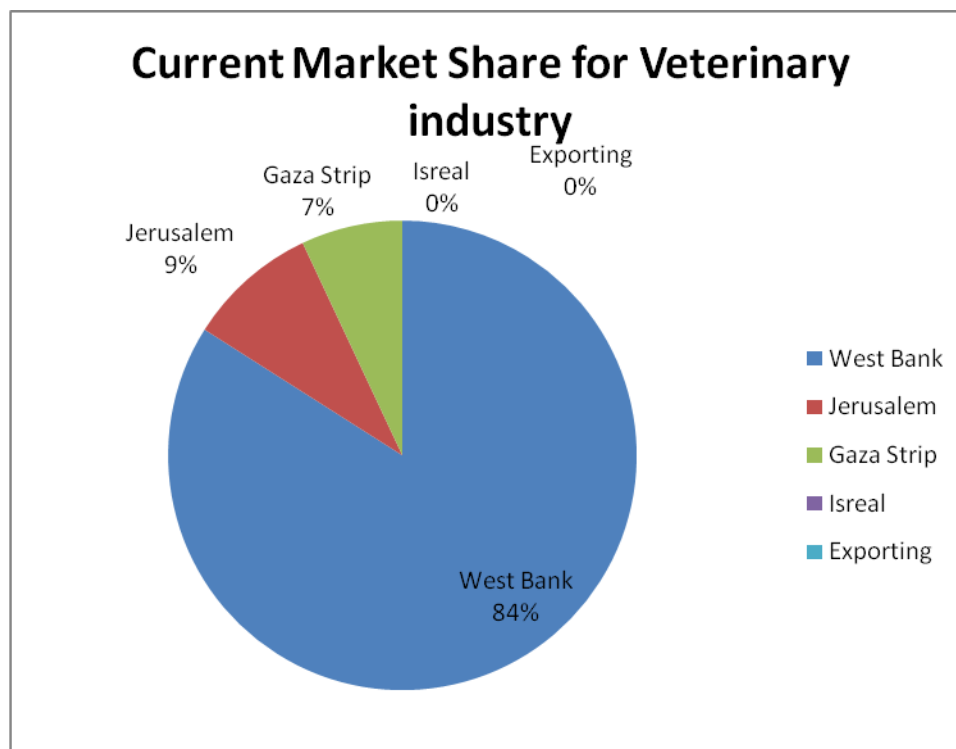


Figure 4.15: current market share for veterinary industry

4.9.6 Financial position:

The industry is growing towards high quality production level, and hence investments are needed in various fields. Fulfilling the technical requirements of GMP means allocating budgets for physical layouts and infrastructure and altering the manufacturing procedures. The industry suggested that new investments will target new machinery and knowhow and certification.

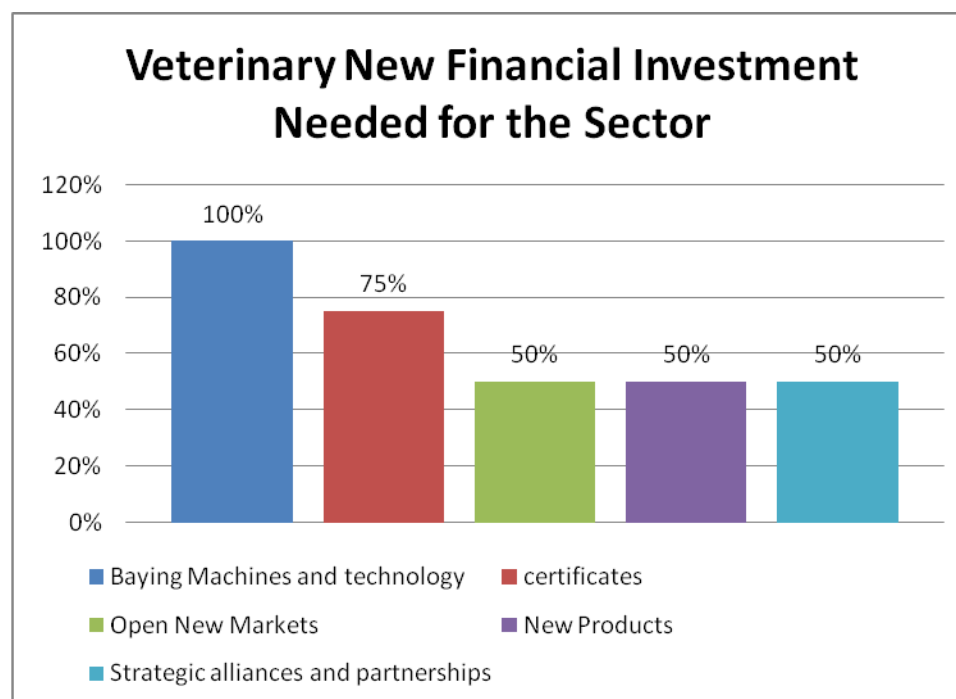


Figure 4.16: new financial investment needed for the sector

4.9.7 Industry problems and needs:

This industrial sector has a lot of problems to tackle. The manufacturing and certification related problems are on top of these concerns. Financing is not easily accessible and is crucially needed. In the local market, unfair competition with un-recognized licensed sources is dominant. Different institutions have to play their roles properly.

The industry claims that cooperation with the Ministry of Health is so weak and can be considered as an obstacle. The inconsistency in the cadre, the long testing procedural time are some examples.

Training is largely needed in the sector; a testing laboratory is needed for both the industry and the Ministry of Health. National registration of products is a prerequisite for export and registration abroad. Validating local products to treatment of local diseases is an important issue.

Companies should to be able to adapt changes and develop their internal administrative and financial systems needs.

4.10 Food Industry



4.10.1 General Information:

The food sector is growing rapidly both vertically and horizontally. The official figures of the sector indicate that there are more than 1600 working firms in this sector including bakeries. Excluding bakeries, the actual number of firms becomes 224 manufacturing firms including the large scale milk cow farms (>50 cows). 152 of them are active members of the food industry association, which is a strong association. The large number of female cooperatives working in food processing sector and traditional sweets and confectionary makers are not included.

The labor force is estimated at 8000 worker. The industry is spread all over the West Bank. The importance of the sector is its direct organic relation the food security of the nation.

Table 14: food and beverage sector general information						
Sector	# of firms	Total investment	GDP %	# of employees	Market share %	Employee productivity
Food and beverage	224	480	4.8	8000	50	28000

4.10.2 Sector diversification:

The sector is comprised of a wide variety of products. These are, Meats, Vegetables (fresh and frozen), Oils and fats, Dairy, Flour mills, Animal feed, Chocolates and confectionaries, Spaghetti, Water and soft drinks and beverages, Chips and snacks and others.

5.10.3 Quality as an advantage:

Food products are directly related to human health and safety; hence they deserve special attention in terms of quality assurance and quality control. Short expiry dates are another factor concerning quality. The accumulated experience of the industry helped in the consolidation of quality culture. The public awareness at the consumer's side and severe competition has created a challenge for continuous improvement of quality.

Many firms have acquired the necessary certifications of ISO versions and HACCP. 95% of foodstuffs are covered by the technical specifications of the Palestinian standards. Many firms have also acquired the necessary national certificates PS, and the international HACCP, ISO 22000 standards.

“Halal foodstuffs” is a growing business; the sector has the potential to produce according to Halal certification. Fair trade certification is another example of increasing the quality and hence sales.

4.10.4 Technical position and capacity:

The sector has a high production capacity, not all of it is fully utilized. Sub sectors within this industry are closely linked to each other and have many connections with other sectors; for instance chemicals and plastic, printing and packaging. The industry has an advantage of modifying its production lines to produce different related products and developing new kinds of products.

The severe competition in dairy sector (internal and external competition) for example requires a certain degree of coordination between factories to focus on certain segments or specialize in specific products.

4.10.5 Marketing position:

The purchasing food basket of any household is around 42% of all other living expenses. This indicates the importance of this sector. The majority of sales are targeting the Palestinian population in the West Bank and Gaza, very few products are sold in Jerusalem and nothing is being sold in Israel. The closure of Gaza and Jerusalem has resulted in depriving the sector from 55% of its normal constituencies.

The market share of food products varies between 90% for meat products to 30% for dairy products; the average is around 50%. The food industry has

experienced export mainly to Arab countries. Olive oil and other fair trade products have been exported to many countries around the world.

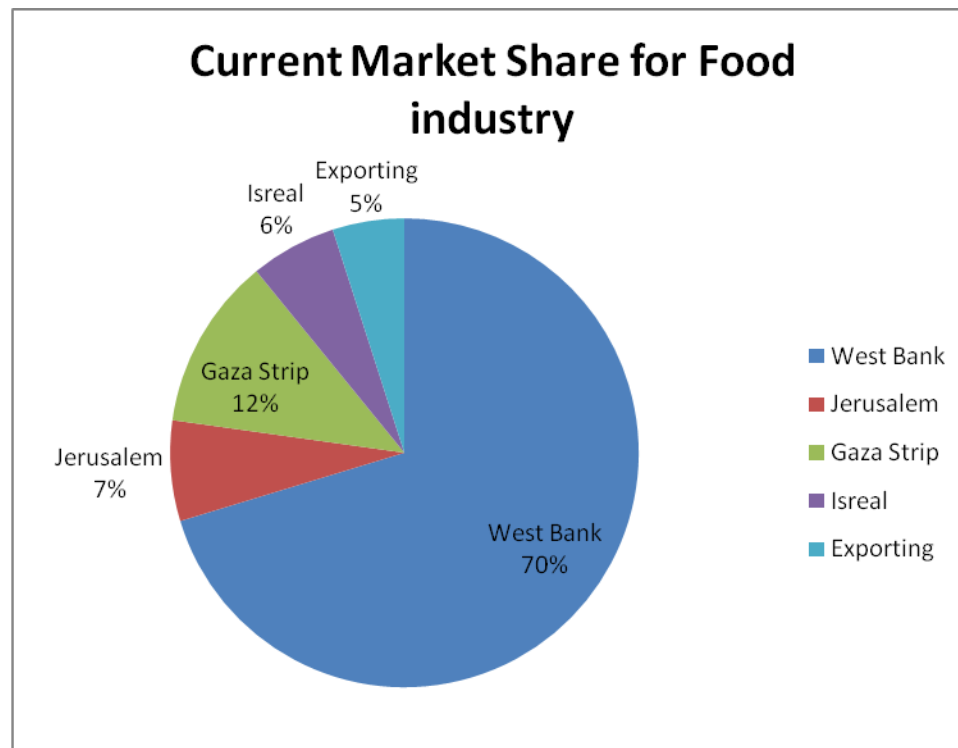


Figure 4.17: current market share for food industry

4.10.6 Financial position:

The total investments in the sector are estimated at USD 480 million. Many firms have set their own plans for development and growth. Research shows that 70% of interviewed factory owners need to invest in machinery and developing products. Investing in developing new markets is a second priority for the new investments.

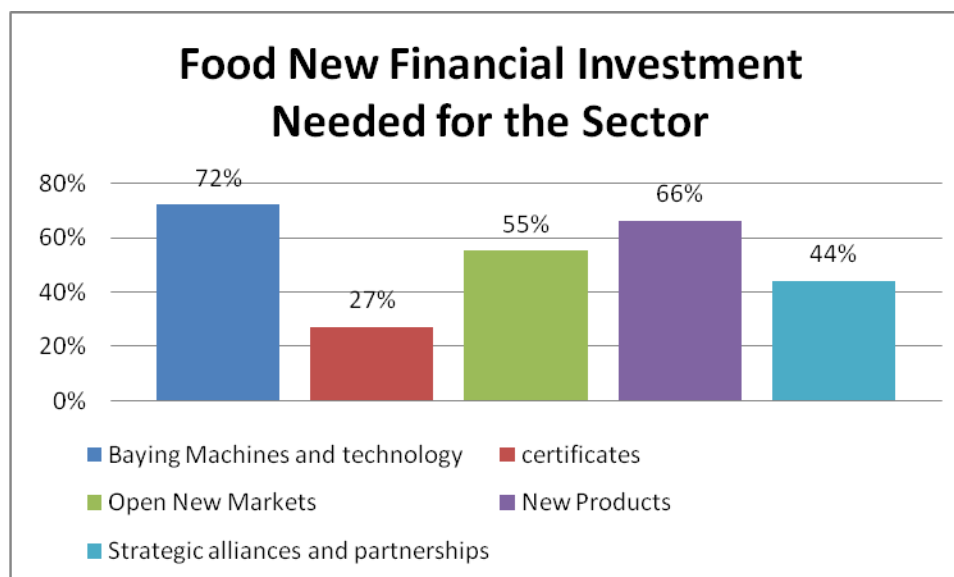


Figure 4.18: new investment needed for the sector

4.10. 7 Industry problems and needs:

The major obstacle facing food industry is the current local market mechanisms. The weak inspections over market products; their compatibility, validity, composition and source of origin created an unfair competition with the locally produced products. The latest policies and decisions of the Ministry of Education are threatening some snack producing firms. The inconsistency and overlapping of ministries procedures are causing confusion and ambiguity within the sector. Some of the sector branches depend totally on raw materials coming from Israel, others depend partially on Israeli suppliers. Some of the raw materials are prohibited from entering the country because of security measures; this is a real threat to the industry.

Laboratory testing and facilities are very important for the survival of the industry; it needs high attention and development. Quality management systems, manufacturing systems and products quality assurance are of great importance to the sector. Promotional campaigns and tools along side with management and technical training will be an important asset to the industry.

4.11 Plastic Industry



4.11.1 General Information:

This industry is distributed around the various parts of the West Bank with a focus on plastic pipes in Hebron and Ramallah. According to the sectors association records the total number of industrial facilities is 100 firms employing 1000 workers with a total average of 10 workers per firm. The working labor varies from 5 to 20 workers with an exception of 4 factories employing more than 50 workers.

The industry is represented by an association that needs to be strengthened.

Table 15 :plastics sector general information

Sector	# of firms	Total investment	GDP %	# of employees	Market share %
Plastics	100	NK	NK	1000	70

4.11.2 Sector diversification:

The sector is comprised of wide range of products. These include; plastic pipes and fittings, sanitation fittings, plastic bags and sacks, different size and multipurpose plastic containers, drinking water containers, polystyrene, rubber and kitchen wear.

4.11.3 Quality as an advantage:

Quality is a matter of high interest for construction related products (water and sanitary applications) and for food packaging materials. For other products quality is a matter of raising the competitive advantage of the firm.

Competition is high among the local producers and less effective with the exported products because of the price considerations. And because many exported items have on similar products produced locally.

There is an increasing tendency towards quality and certification in the sector. Apart from the construction and food related products, firms need not to acquire certificates, but they are more in need of formulating easy reliable operating procedures to ensure higher rates of quality.

4.11.4 Technical position and capacity:

The industry is working at 49% of its total capacity and has great potential in developing and diversifying its products. Training for skilled labor is needed, and ways of decreasing the electricity power consumption rate is worth considering as electricity is a major cost component and deserves critical scrutiny to minimize it.

Utilizing the industry's waste properly has a dual positive impact on the total productivity of the firms and on the environment.

4.11.5 Marketing position:

The industry sales are distributed over the West Bank 66%, Gaza Strip 15%, Jerusalem 2% and Israel 10%. It is clear that local market is the core of this industry.

Exports are rarely seen in this industry, but the industrialists feels that they can export to countries like Syria, Jordan and Iraq. The whole issue needs checking if it is viable or not. Assessment will cover issues like; regulations, certificates, competitiveness, quality and marketing channels.

Promotional kits for potential firms are looked at as an important element for enabling their marketing capabilities. Such kits may include website design, catalogues, and brochures. Participating in international trade fairs could be another tool for raising the knowledge of the industry's management.

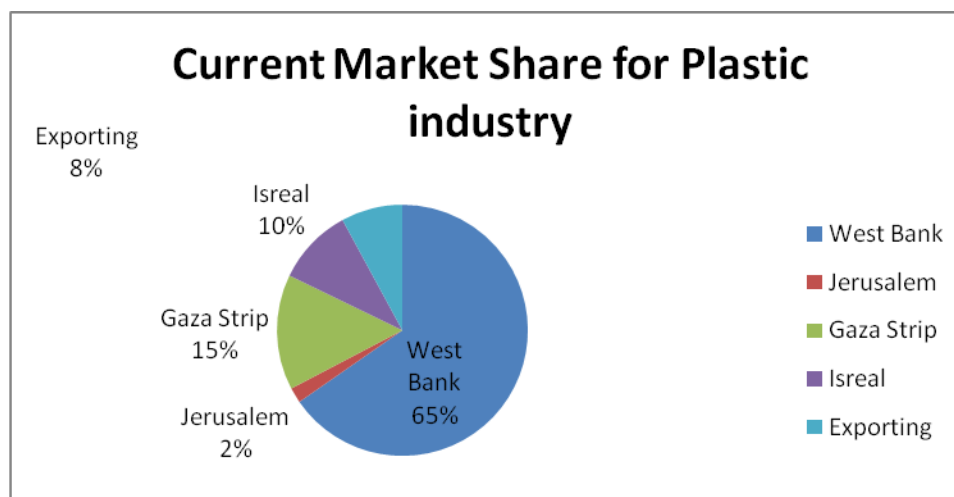


Figure 4.19: current market share for plastic industry

4.11.6 Financial position:

In answering questions related to finance, firms expressed their eagerness to have access to soft loans that are needed for developing and upgrading production lines and for developing new products. Although getting cash for them is a difficult job, but they did not rank it as their first priority.

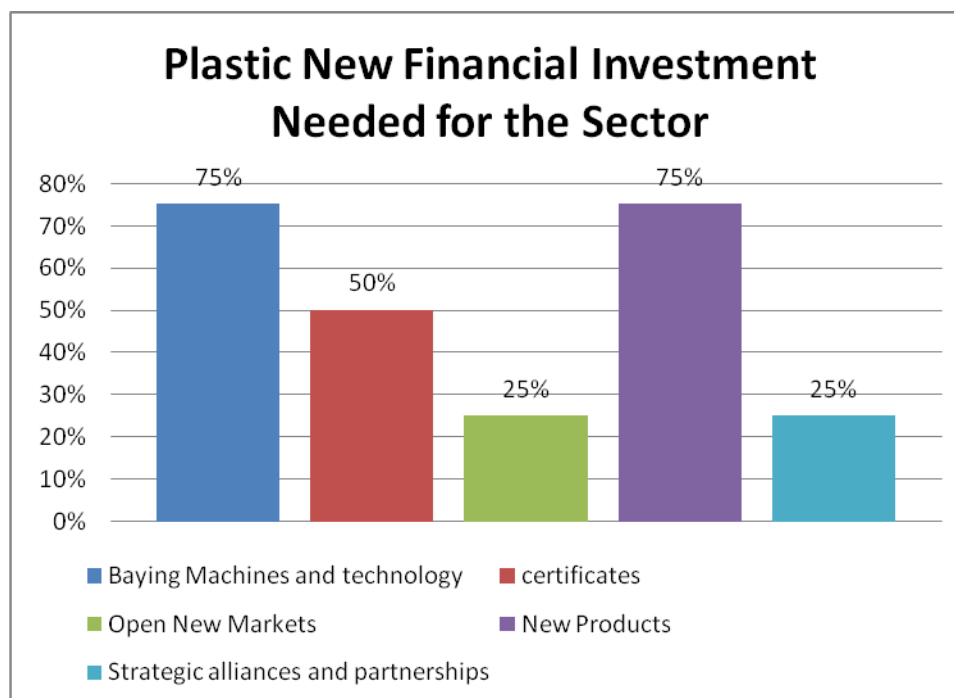


Figure 4.20: new financial investment needed for the sector

4.11.7 Industry problems and needs:

Firms consider organizing the local market will enhance local competitiveness among the producers and ensure fair treatment of legally licensed firms.

Cutting taxes and providing cheap infrastructure utilities will decrease manufacturing costs. Training is needed for the top management of the sector. Family inheritance can be developed by introducing good management practices.

Upgrading machinery and preventive maintenance are some major problems in this sector.

4.12 Paper Industries



4.12.1 General Information:

This industry goes back to early parts of the last century. It has shown a great development after mid nineties. The number of operating firms went up to 300 firms employing from 2 to 150 workers per firm. The industry is represented by an association which needs to be strengthened. The association has registered 170 members of different sizes. The active players in the industry are about 140 firms.

Table 16 : paper and printing sector general information

Sector	# of firms	Total investment	GDP %	# of employees	Market share %
Paper & printing	300	NK	1	NK	60

4.12.2 Sector diversification:

The sector composite includes: printing houses and presses, paper manufacturers (sanitation paper and diapers)—, newspapers, cardboard and carton box manufactures, bookbinders, pre and post print services and advertisement and promotion firms.

4.12.3 Quality as an advantage:

Quality improvement in the printing industry witnessed a big improvement in recent years. New technological advancements have eased processes but created a challenge towards increasing the level of quality. Severe competition among paper and printing firms created a tendency towards quality. Although this is a traditional inherited industry, printing processes need qualified and well trained professionals.

4.12.4 Technical position and capacity:

The industry is served by a technical school in Jerusalem which produces graduates to work in the industry. Besides, the vast majority of machinery is of German origin, and hence a common similarity in competencies is available in the industry. Competition is high, but also the volume of work has tripled during the last fifteen years. Although the capacity is low in some firms, generally speaking the production capacity is at the highest among all other industries.

New large investments in the sector were seen in the cities of Nablus, Hebron and Ramallah.

4.12.5 Marketing position:

Almost 90% of the market volume is Palestinian in the printing sector. However it is not the same case in the cardboard industry. One third of the Palestinian population are school and university students. Their needs in terms of paper and related products are so high and it is largely fulfilled by local manufacturers. The need for printed materials also increased at the other industry levels. The local demand for Newspapers, magazines and other media and promotional publications have increased. The printing of school text books have also raised the local demand for printing.

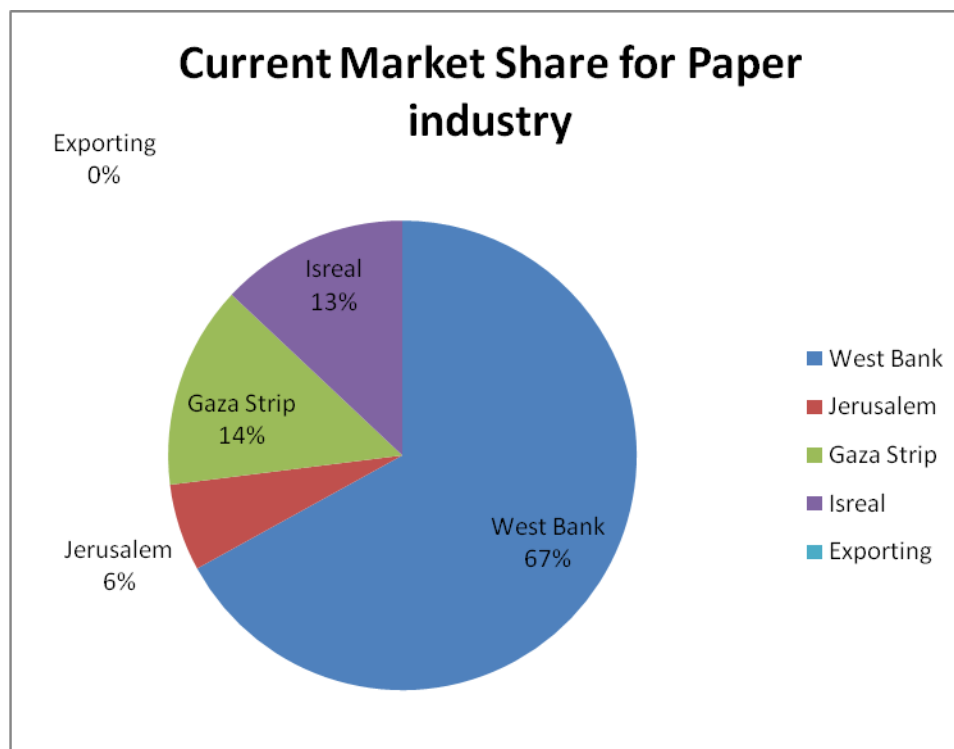


Figure 4.21: current market share for paper industry

4.12.6 Financial position:

The firm's urgent need to cash is for purchasing new machinery and technology. Some members are ready to invest in training, maintenance and design.

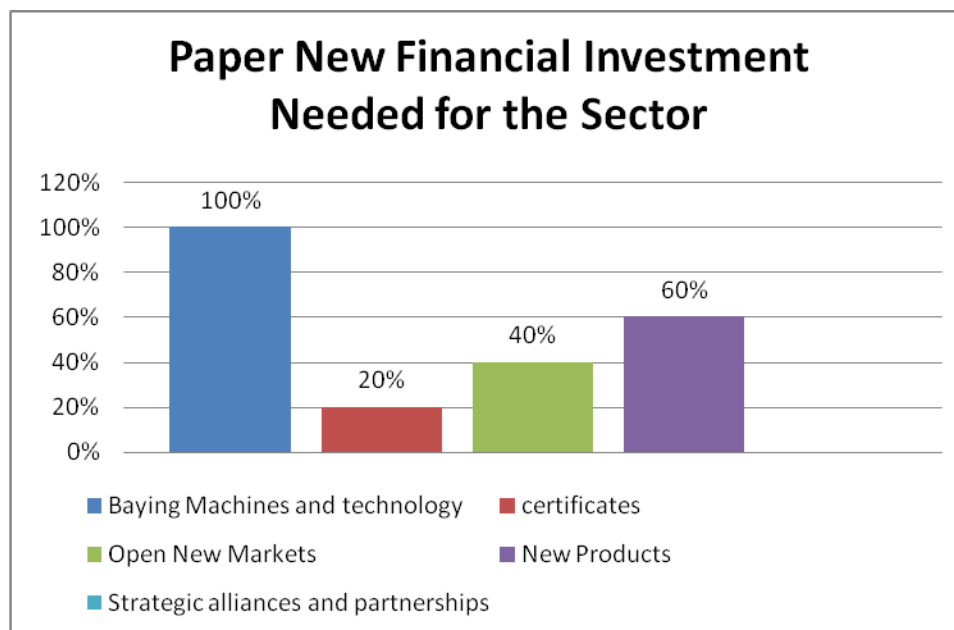


Figure 4.22: new financial investment needed for the sector

4.12.7 Industry problems and needs:

Many print houses are family-owned small firms, equipped with old, low quality and small volume production machinery. Intensive training programs at both the technical level and the managerial levels are needed. Technical training could take place in professionally specialized institutes like the Egyptian one. Training will involve production practices, maintenance, upgrading and quality matters. Management training may involve basic business essentials, communications, computer applications and other administrative and financial fields. The design stage and pre-printing stages are important to assure good quality production. Bookbinding side of production needs to be strengthened.

Firms need to be encouraged to form different types of strategic partnerships with each other to capitalize on their strengths.

4.13 Major Advantages and Pitfalls

The following listing is a brief summary of the major strengths and weaknesses of industry.

1. Strengths

- 1.1. A long and substantial experience of the industrial sector that has become embedded in the Palestinian culture and society values.
- 1.2. The existence of a qualified, well-educated and trained workforce.
- 1.3. Some industries have distinctive competitive advantage and are already well established.
- 1.4. Readiness and openness to adapt global technological and industrial modernization methods.
- 1.5. Women labor force availability is considered to be an additional reserve for labor.
- 1.6. The continued display of resilience, seriousness, dedication and commitment by the owners of businesses.
- 1.7. The existence of local representative institutions supporting industry in the form of industrial associations and the PFI.
- 1.8. Partnership with the government and generally positive responses from different governmental departments to industrial sector's needs and requests.
- 1.9. The ability of good number of companies to penetrate global markets and represent Palestinian industry internationally.
- 1.10. The existence of linkages and interrelationships between different industries which support both horizontal and vertical accumulations. Value chains integration is evident in many industries.

2. Opportunities

- 2.1. The existence of preferential trade agreements with stronger global markets opens the door for more export and market penetration.
- 2.2. The potential existence of new industrial zones with provisions of services and infrastructure at decreased prices.
- 2.3. The issuance of laws encouraging and attracting domestic and foreign investments.
- 2.4. The need of new investments in some missing specific fields and sectors.
- 2.5. Relying on the sympathies of the Arab and Islamic markets and capitalizing on the Palestinian diasporas as supporters of industry and Palestinian products.
- 2.6. Possible return of hundreds of thousands of Palestinians living abroad.
- 2.7. The creation of new residential neighborhoods and new cities, and the rehabilitation and construction process likely to take place in Gaza.
- 2.8. The possibility of diversification of access to infrastructure services from neighboring Arab countries (Jericho and Rafah electricity).
- 2.9. High population growth rate.
- 2.10. The need for large investments in infrastructure services and projects.

3. Weaknesses

- 3.1. Poor modern management techniques and systems.
- 3.2. Limited accessibility to affordable soft financing and loan guarantees.
- 3.3. Lack of management competencies and strategic thinking at the senior level of management.
- 3.4. The inability of growth and expansion at the existing manufacturing sites and locations.

4. Challenges

- 4.1. The continued measures imposed by occupation authorities and the damaging effects of these measures to industry and businesses in Palestine. Industrial investments are generally not secured and guaranteed against political risks.
- 4.2. The risk of market dumping as a result low cost influx of imported goods.
- 4.3. The absence of export encouragement related programs.

5. Industrial Environment

The Palestinian industry is operating under difficult political conditions. The Israeli occupation is not mandating full responsibility to Palestinian National Authority (PNA) to fully control its economy. Nevertheless, PNA is working hard to ease the working environment of industry and provide for an enabling environment. This can be achieved through empowering the business legal environment, trade agreements and empowering the associations` role and input.

5.1. The legal business environment:

In its efforts to attract industrial investments, PNA has issued a number of acts and laws to regulate and ease the movement of capital and investments. PNA had held two local investment encouragement conferences last year in Bethlehem and Nablus with an international participation to mobilize business investments. A third investment encouragement conference was also held in London.

Some of the investment encouragement laws are:

- Investment Encouragement Law
- Industrial Zones Law
- Income Tax Law
- Labor Law

5.2. The industrial zones:

A lot had been said about establishing new industrial zones. Only one of these has been established in Gaza late last century. Due to political reasons and Gaza blockade it is not functional anymore. Jenin industrial zone was the first initiative which took place early in 1997; however there is still not much progress on the ground. On the municipal level, there have been some developments to the existing local municipal parks. Through donations from Arab Funds, rehabilitation was carried out in the industrial parks of Beit Jala, Salfit, Abu Deis, Albeireh, Nablus and others still on the list.

With the assistance of donor community, four industrial zones have been rated as a priority for development. These are:

- Jenin industrial park with the help of German government (KFW)
- Tarqumia industrial park with the help of Turkish government

- Bethlehem industrial park with the help of French government
- Jericho agricultural park with the help of Japanese government.

5.3. Trade agreements

It is important to note that the PLO on behalf of the PNA has signed the following agreements since the latter's inception in 1994:

- Interim Association Agreement with the EU
- Interim Association Agreement with EFTA
- Free Trade Arrangements with the United States
- Free Trade Agreement with Canada
- Free Trade Agreement with Turkey
- Greater Arab Free Trade Area

5.4 Different key players

These players have been categorized as: governmental institutions, private sector institutions and donor agencies.

5.4.1 Governmental institutions:

5.4.1.1 Palestinian Ministry of National Economy (MNE)

This ministry has formulated its vision to create a highly supportive enabling environment for private sector development and expand global trade relations. The ministry relying on its limited resources and its hierarchy to provide a long list of important services to business people, investors and consumers; including trade licenses and facilitation, company registration, consumer protection, information and research.

5.4.1.2 The Palestinian Investment Promotion Agency (PIPA)

The Palestinian Investment Promotion Agency (PIPA) was established in 1998 as an autonomous agency of the Palestinian Authority (PNA), pursuant to the promulgation of the Investment Promotion Law. With a ruling Board of Directors composed of members from both the public and the private sectors, PIPA takes a proactive role in promoting Palestine's advantages to investors while keeping a close eye on legal developments and their impact on the private sector.

The services provided by PIPA include implementing the Investment Promotion Law to stimulate the flow of foreign and domestic investments in line with national priorities. PIPA assist all investors in licensing their projects, acquiring permits, obtaining incentives and acquiring income tax exemptions.

5.4.1.3 Palestine Standards Institute (PSI)

PSI has stated its vision as an institute recognized by the business community and consumers both locally and internationally to be the focal point for Palestinian participation in the global system of harmonized standards.

The PSI is a public institution founded in 1994 to facilitate trade and investment in the Palestinian Territory by meeting the needs of business and industry for metrology, standards, and quality assessment. The PSI seeks to advance citizens' health and safety and environmental protection.

PSI is an autonomous institution governed by a board of directors composed of both partners from the government and the private sector.

5.4.1.4 Palestinian Industrial Estates and Free Zones Authority (PIEFZA)

PIEFZA was established in 1998 as an autonomous agency of the PNA, following the Promulgation of the Industrial Estates and Free Zones Law. The objectives and responsibilities of PIEFZA are summarized in preparing, promoting and supervising the development of all Palestinian Industrial Estates and Free Zones with adequate good-quality infrastructure needed to support new investment activities.

5.4.2 Private sector institutions:

5.4.2.1 Palestinian Federation of Industries (PFI):-

The Palestinian Federation of Industries (PFI) is the national institution representing the Palestinian industrial sector through its federated associations. Industrial sectors represented by PFI include food and beverages, construction, stone and marble, pharmaceuticals, chemicals, metal and engineering, textiles, garments, leather, paper, printing and packaging, handicrafts,

plastic and rubber, and furniture, The PFI represents the over 14,000 industrial enterprises throughout the West Bank and Gaza Strip.

Founded in 1999 as a permanent private sector organization, PFI facilitates industrial development as the basis for economic performance. PFI's representational role is to educate, advocate, and communicate the value of a developed, socially-responsible, globally competitive industry. The aims of the PFI are realized through the enactment of the Industrial Modernization Center (IMC).

The IMC is the executive arm of the Industrial Modernization Program (IMP). The IMP is the main component of the Integrated Program for supporting Palestinian Industries, funded by the PFI, the Ministry of National Economy, Islamic Development Bank (IDB), and the United Nations Industrial Development Organization (UNIDO) and USAID. The aim of the integrated and upgrading program is to support the process of restructuring, competitiveness, integration and growth of industries and employment and to facilitate access to international markets in the context of economic and trade liberalization. Among the expected output of the program is improving the competitiveness of industries via productivity improvement, cost reduction, quality improvement, boosting exports, and increasing market share.

5.4.2.2 Palestine Trade Centre (PalTrade)

PalTrade's purpose is to lead the development of Palestinian trade as a driving force for sustainable national economic growth. As the National Trade Development Organization (NTDO) PalTrade advocates a competitive, enabling business environment and is dedicated to improving trade competitiveness through trade promotion and capacity building

PalTrade's operation and services are guided by sector-based strategies for trade development supported by assessment of cross-sectoral opportunities and impediments. These strategies are deployed through a range of services and activities aimed at vitalizing sectors to export to target markets.

5.4.2.3 Federation of Palestinian Chambers of Commerce, Industry and Agriculture (FPCCIA)

The Federation of Palestinian Chambers of Commerce, Industry and Agriculture is a national organization founded in Jerusalem in 1989 to represent the West Bank and Gaza Strip's chambers of commerce and

industry. The Federation's membership base includes 14 chambers and nearly half the operating businesses in the territories.

The Federation's main task is to strengthen and enhance the capacity of chambers to cope with the requirements of the global business environment. This challenge requires vision, planning, reorganization and restructuring. The Federation plays a leading role in this process at both local and national levels. Its vision and strategy is to ensure that the private sector is operating freely and is an integral to policy formulation at the national level. Equally, the Federation strives to create strong regional and international links to the world's larger, global markets.

5.4.2.4 Palestinian Businessmen's Association

The PBA is a non-governmental organization which was established in 1996 to serve as a think-tank for the Palestinian business community. It addresses issues of concern to its members, and to the business community in general, by analyzing policies and regulations, conducting field studies and surveys, providing technical assistance and training aiming to improve working conditions and managerial practices.

In addition, the PBA seeks to provide a forum for advocacy, lobbying and discussion of private sector priorities and concerns, seeking to promote good governance, economical and social reforms, free Trade and democratic values.

PBA acts in promoting trade and investment in Palestine and maintaining economic ties with the Palestinian business communities in Diaspora.

5.4.3 Current Major Donor Programs:

5.4.3.1 United States Agency International Development (USAID)

The United States is the leading provider of bilateral economic and development assistance to the Palestinians, having programmed an estimated \$2.2 billion through USAID since 1993. Funding has supported programs in the areas of water and sanitation, infrastructure, education, health, economic growth, and democracy. The United States also is committed to continuing assistance for basic human needs in both the West Bank and Gaza, including emergency food, health care, and access to safe water. In Gaza, much of this is accomplished through the United Nations Relief and

Works Agency and local and international non-governmental organizations (NGOs).

5.4.3.2 CARANA Corporation:

CARANA Corporation is a leading provider of global economic development services to governments, private business, individuals, and international donor agencies. CARANA designs and implements results-oriented strategies for competing in the global economy, primarily for the U.S. Agency for International Development. For 24 years, USAID has entrusted CARANA with assignments to assist them in generating economic prosperity. CARANA is among USAID's principal contractors in the economic growth sphere of development assistance, having been awarded numerous long-term international contracts. Currently CARANA is implementing the Enterprise Development Program EDP for the coming four years to assist Palestinian businesses and economic initiatives.

5.4.3.3 Department for International Development (DFID)

Department for International Development (DFID) is the part of the UK Government that manages Britain's aid to poor countries and works to get rid of extreme poverty.

DFID efforts in international development aim to bring people out of poverty and to reduce how much their country relies on overseas aid. Many different things can contribute to development which reduces poverty, such as settling conflicts, increasing trade, tackling climate change, securing more and better aid, and improving health and education.

DFID is currently running a three years program to help Palestinian businesses increase their market share through improvements in machinery and technology and development of creative promotional tools.

5.4.3.4 United Nations Industrial Development Organization (UNIDO)

The United Nations Industrial Development Organization (UNIDO) helps developing countries and economies in transition in their struggle against marginalization, which mobilizes knowledge, skills, information and technology to promote productive employment, in a competitive economy. It was established in 1966 and became a specialized agency of the United Nations in 1985, as a specialized agency, UNIDO has its own constitution, its own member states, its own policymaking organs, its own executive head and its own regular budget. Moreover, UNIDO disposes of voluntary contributions to finance developmental activities.

UNIDO presents many services in the world, this includes: Investment and Technology Promotion, Private Sector Development, Environmental Management, Industrial Competitiveness and Trade, Agro-Industries, Energy and Climate Change and Research and Statistics.

UNIDO, until mid nineties, was providing its services to Palestinians through other United Nations organizations; UNDP and ILO. Then UNIDO used a national focal person for its activities. Recently UNIDO is exerting a lot of efforts to mobilize a national industrial integrated development program in Palestine.

5.4.3.5 GTZ:

The GTZ is an international German technical cooperation enterprise for sustainable development with worldwide operations. It promotes complex reforms and change processes, often working under difficult conditions. Its corporate objective is to improve people's living conditions on a sustainable basis.

GTZ has been active in the Palestinian Territory on behalf of the German Federal Ministry for Economic Cooperation and Development, which made Germany became the first country to install a diplomatic representation, and it is one of the major donors in the Palestinian Territory.

The priority areas of GTZ's work in Palestine are: water, sanitation and waste disposal, sustainable economic development, institutional capacity building.

5.4.3.6 Italian Program:

An agreement have been signed between PFI (Palestinian Federation of Industries), Ministry of finance, and the Italian Government that under which an amount of £ 25 million will be devoted to economic development. Partly it will be lent to industrial companies as soft loans for purchasing equipments and other Italian materials that will help them in upgrading their industries. This will serve the purpose of developing the industrial sector in the country and supporting private sectors initiatives and institutions.

To implement the program properly, a definite criteria have to be adopted:

- Build an integrated unit to manage the project.
- Promote and advertise the project professionally.
- Preparing a list of requests from the industrial companies.

- Connect the Ministry of Finance with a Mediator Bank.
- Prepare Feasibility Study to put the suitable criteria for supporting different companies.

6. Potential Sectors for Development

After analyzing the status and conditions of all industrial sectors, and taking into consideration the efforts taken in previous years to assist industry, it is quite clear that some sectors have taken more interest than others. On the other hand, some sectors can play specific roles under the current political situation. No program of assistance can help all sectors equally and comprehensively, however some of the recommendations of this report will cover aspects of all industrial sectors.

Some of the obstacles facing industry are common in their nature and influence of different sectors. Moreover, since the sectors have many interrelated linkages, any assistance to any of them may affect positively other sectors.

Although the total production capacity of the manufacturing sector has fallen, and hence their market share, the last few years have shown a considerable increase in total exports. The following tables show clearly the growing tendency towards more exports in the major industrial sectors. Hence, some development efforts will focus on export oriented products for their role in job creation and enhancing the investment climate.

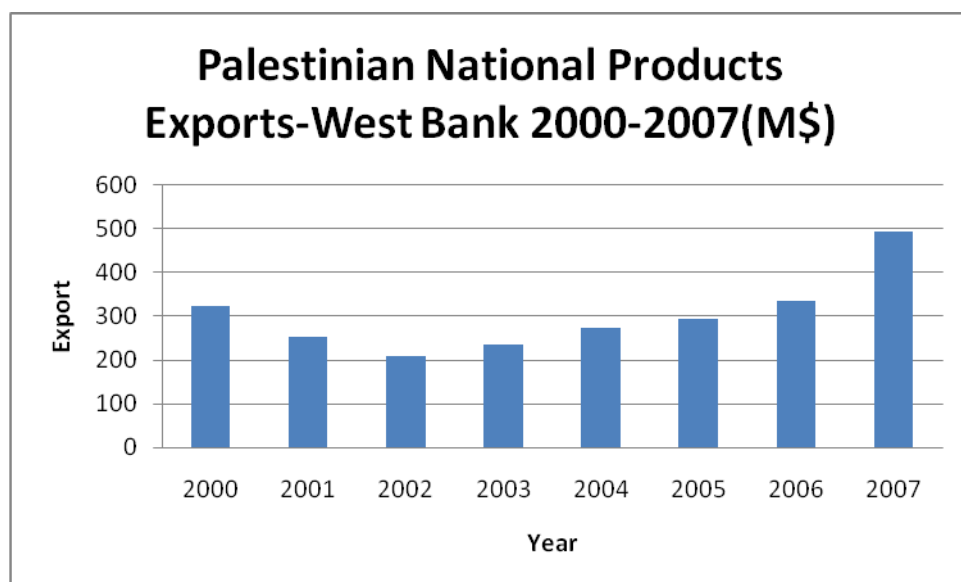


Figure 6.1: Palestinian National Products Exports – West Bank 2000-2007 (m\$)-PCBS

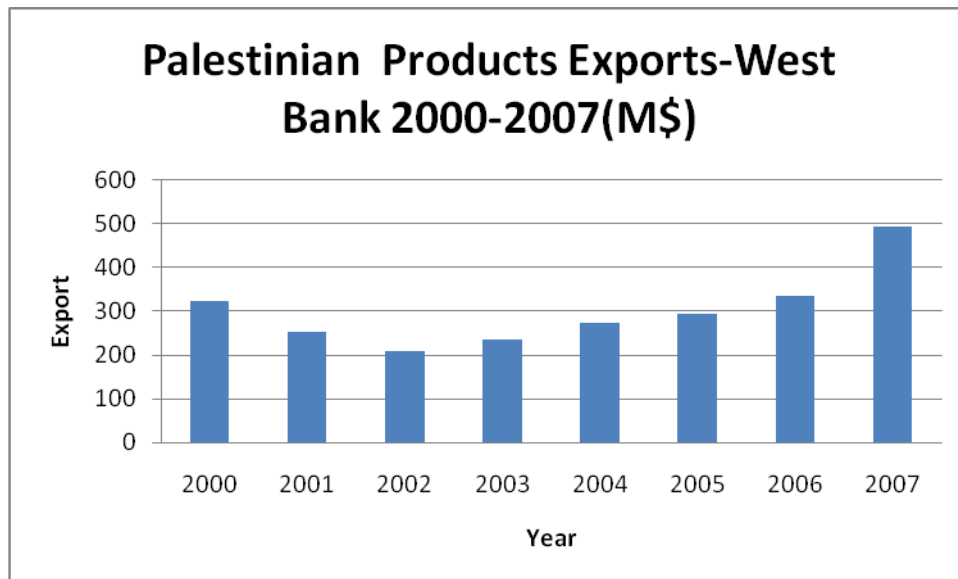


Figure 6.2: Palestinian Products Export-West Bank 2000-2007(M\$) - PCBS

The following table summarizes main exporting industries.

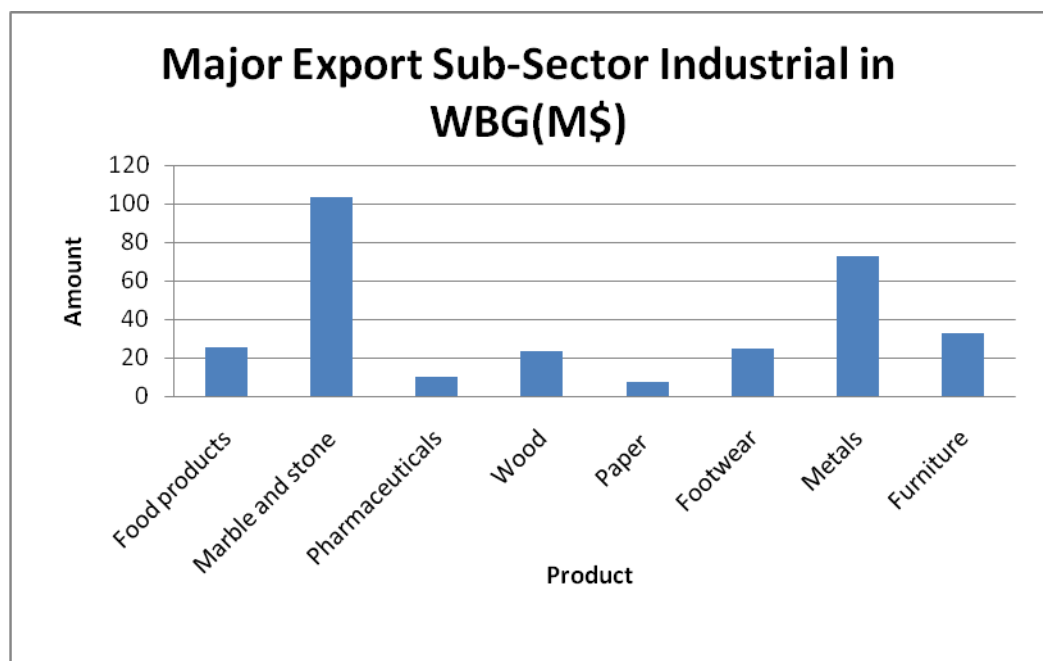


Figure 6.3: major export Sub-sectors industrial in WBG(M\$)-PCBS

The recent report of Palestinian Federation of Chambers has issued their export report of 2008. It reflects that the Palestinian exports to Arab countries have increased 35% compared to the year 2007. The main export products were as follows:

Table 16: main export products

#o	Products	Percentage
1	Marble and stone	30%
2	Food products	16%
3	Metal and plastic products	10%
4	Agricultural products	19%
	All other sectors	25%

For the sake of this study, the following industrial sectors need to have a special focus for their development. The criteria used for selecting these sectors is basically based on their readiness for export, their ability for employment generation and their total investment and relevance importance to the whole economy. The sectors are not necessarily categorized according to the priority needs.

6.1 Construction Industries

Construction industries are unique in their multi-disciplinary linkages and relations with other sectors in the economy. Some of these linkages are: building and contracting, engineering works and design, metal industries, furniture industries, marble and stone industries, chemical industries, plastic industries, financial services and transportation.

This industry is directly related to the housing trends in the economy. Currently, there are two major projects for establishing more housing units. The first is the rehabilitation and reconstruction processes that will take place in Gaza Strip after the latest war. It is estimated that 35000 apartments need urgent renovation or reconstruction. Moreover the need is greater in building public health, academic, civic institutions and destroyed industrial facilities. Besides, the need for rehabilitation of infrastructure networks and facilities is of high priority.

Second, there are some huge construction projects for new cities or compounds in the central area of the West Bank. That will depend mainly on local suppliers and will increase the domestic sales of local construction materials, and hence increase production that will be associated with more labor generation. Any assistance to the construction industries will have its major influence on employment generation and raising the living standards of workers. Also, it has its effects on encouraging the rate of establishing new start ups and small businesses in different fields.

The most direct related construction industries are; ready mix concrete, precast concrete for infrastructure, ceramic and floor tiles, street sidewalks pavements, curbs stones and asphalt construction. The anticipated housing projects are assumed to raise production to average levels of about 80%, which in turn will increase employment by at least 20%.

Moreover, the construction industry will have similar multiplier effect on the development of other industries. These are: paints industries, plastic industries, sanitary wear, aluminum and wood, furniture and similar industries.

Construction product exports are not highly exportable products because of their weight, nature, features and transportation and logistics problems. Hence, the major contribution of construction industries is creation of employment. It is expected that 20,000 jobs are going to be employed directly and double this number to be employed indirectly in different sectors.



6.2 Metal Industries

Metal and engineering industries have a wide variety of products that are strongly related to the anticipated construction process. Any further efforts to boost the construction sector will have its sequential effects on the metal industry. Specifically, the following products are directly related to construction process: abrasives and welding rods, nails, reinforcement steel rods, aluminum profiles for windows, doors, partitions, kitchen and path room facilities, metal decorative and entrance doors, metal furniture and other similar necessities.

Moreover, metal industries have a wide variety of products, ranging from construction related industries to production of mechanical and electrical machines. The data of PCBS shows that the sector has the second largest exported products after stone and marble industries. More specifically, it exported about 72 million dollars in the year 2007. The aggregated data are summarized in the following table:

#o	Items	000 \$
1	Iron or steel	40919
2	Aluminum	14430
3	Electrical machinery	10089
4	Auto and parts	6971
	Total	72409

The development of other metal products is closely tied to progress in other industries and to their linkages to the academic and professional associations. Stone and marble industries, filling and packaging industries, stainless steel applications, agricultural and agribusiness industries are all examples of linkages between metal industries and other industries.

These developments and inter-related linkages are seen as important motives to raise the production capacity and hence employment in this sector. The assumption is that starting building and contracting projects will increase the utilization capacity of the sector by at least 20%, this means at least 10% more direct employment in the sector. Other benefits can be seen in terms of intensive dependency of sectors on each other. This creates a solid ground for common interests and common development needs.

The effect can be summarized in the following sequence:



6.3 Marble and Stone Industries

The stone and marble industry is the largest exporting industry in terms of export volume and export markets. A number of firms are ready for export in terms of machinery and raw materials. They lack the expertise of marketing, good manufacturing practices and the organization culture for export as well as the quality culture. Currently the number of direct exporting firms ranges from eight to twelve,

whereas the indirect exporters could reach the figure of 40 firms. Qualifying another ten companies in the sector will have its positive impacts on the whole sector. The official export data of 2007 is about 103 million US dollars, whereas the actual figures greatly exceed the official figures. The Palestinian stone and marble products are sold in more than 35 countries, and the production capacity has reached about 40 million square meters per year.

Any assistance given to the industry will help resume the production capacity utilization and restore employment trend to its normal figures of 15000 workers. The following effect can be seen in the sector.



6.4 Pharmaceutical and Veterinary Industries

The pharmaceutical industries have heavily invested in developing their manufacturing techniques and standard operating procedures. The final aim is being certified as a GMP producer. This certificate, alongside with other environmental certificates are considered as a prerequisite for registering medicines and exporting them. The sector has experienced the export to some Arab and African countries as well as some middle Asian countries.

Pharmaceutical firms are now looking for EU-GMP certificates that will open European markets to them, and Arab FDA to open other Arab markets as well. Although the number of workers in the sector is relatively small compared to other sectors, the impact of the sector on export market is considerably high.

The veterinary industry has a lot of similarities with the pharmaceutical industry in terms of processing, certification and facilities. The veterinary industry has great potential for export and some firms have exported some products.

Both industries are seen to have the following impact on the economy:



6.5 Food Industry

Food industry is vitally important for its role in the food security programs and its direct effect on human health and safety. The sector is heavily related to the agricultural sector and has many inter-related connections.

The wide variety of diversified products of the industry and its relative weight of households purchasing basket (about 40%), make it a crucial element of interest for any development process.

Although there are considerable differences in the market share of different types of products, ranging from very high (meat) to very low (chocolates), an opportunity for balancing the equation is still possible.

Many food products have received assistance programs in the past, regarding the quality and certification, but still there is a lot to be done for improving this industry and securing peoples' lives. Consequent results of employment generation and increasing market share are inevitable.

Moreover, food industry is highly related to other industries. Chemical and plastic industries supply food industries with filling and packaging materials. Paper industries provide food industries with filling containers, labels, brochures, and other printing materials. Metal industries have their involvement in the development of food industries: packaging machinery and stainless steel packing containers.

The developments in the sector will be as follows:



7. Results and Conclusions

7.1. Results:

It is quite clear that productivity across all industrial sectors does not exceed 45% on average, and employment has decreased consequently to less than 60% of what used to be before the beginning of the second intifada in September 2000. Industry is an important part of the economy and is considered as a major driving force for employment and development. Only few industrial investments were evident in the West Bank in the last decade, most of these were in the form of development to existing enterprises.

Although productivity has fallen and hence the total sales, there has been an increase in the export ratio.

And even though a number of assistance programs were and still devoted to help the industrial sector, a clear absence of a national integrated program for upgrading the Palestinian industries remains to be a major issue and many of the activities of both public and private institutions were donor driven activities and not actual need driven.

Although both public and private sector institutions have agreed upon partnership, however both have to some extent no clear vision or strategy or detailed comprehensive program for supporting industry.

Lack of coordination efforts is evident between different donor agencies and international institutions resulted in minimizing the benefits of their programs and duplicating their efforts.

It is not easy to obtain accurate information and statistics of industrial sector. This is due to:

- No Palestinian control on trade borders and hence no proper or accurate official documentation.
- Different classification approaches of the sectors considered by industrial associations, PCBS and other organizations.
- Information accuracy and updating of information does not exist, any planner has to rely on informal information.

PNA was not able to control and regulate the internal market and eliminate unfair competition with local producers.

PNA was also not able to ensure the supply of infrastructure utilities with proper quality and competitive prices. Although a lot has been said about industrial zones, but no creation of any industrial zone had materialized.

Efforts to promote and encourage the usage and consumption of national products were intermittent, not on continuous basis, and hence their positive impact on industry is not really felt.

It is obvious that more than 90% of industries are classified as small family administered businesses. This implies that efforts have to be devoted to enrich the family business administration tools and mechanisms and tackle small scale related problems in financing, promotion, technical assistance, raw materials and other business essentials.

Inter-sector relations and inter-industry relations are weak. Networking with different academic institutions and other effective stakeholders in the sector will have its positive impacts on the development of the sector.

Creating business cultures among stockholders of all industries will assist in developing the essential human resource competent skills and knowledge, and will create a culture of strategic management and leadership skills among board members of firms and associations. This is an essential step for stimulating change.

Firm level development is a corner stone to develop the industrial sector. This includes reengineering processes, restructuring the organization, minimizing wastes and increasing efficiency.

ICT diffusion is not widely spread in the industrial sector; an insertion of ICT programs will develop the communication, manufacturing, decision making processes, inventory and other business activities.

Firms should be encouraged to form strategic partnerships and alliances with other competitors in the market to capitalize on the joint resources and minimize costs.

7.2. Conclusions:

To develop and improve industries and help them achieve their national and individual roles and targets, a national integrated program for industrial development should be designed and implemented.

To ensure the success of such a program it should be flowing from the mature and deep understanding of the beneficiaries needs. All other stakeholders should be heavily involved in the designing, implementation and evaluation efforts of the program. Stakeholders may include, but not limited to, industry representatives, private sector institutions, government agencies and ministries, donor agencies, international agencies, academic institutions and consumer protection associations.

The following recommendations summarize the possible elements and details of such a program. The recommendations are based on three major pillars: the national pillar, the sector level pillar and the firm level pillar. To assure the achievements of such a program the three pillars should be integrated together.

8. Recommendations

Based on field visits to representatives of different firms from different industrial sectors, and interviews with industrial associations and representatives of different public and governmental institutions (the list is provided in the annexes), and using the result analysis of the questionnaire (the tool of this research), the research team was able to draft some practical recommendations to be used for the development of the industrial sector and to form the basis for designing detailed programs to develop industry.

The findings and the results of this research will enable Palestinian Federation of Industries, private sector organizations, government organizations, international and donor agencies and other different organizations working in the economic development fields to extract assistance programs at three different major levels.

8.1. The National Level:

It is obvious that industries in all sectors are facing similar problems and obstacles at the national level. To tackle these problems and help industries overcome these problems, the following actions should be taken:

8.1.1. The National Initiative for the Support of Local Products

This initiative was recently launched under the auspices of the presidency and is considered to be the main umbrella activity for the support and promotion of local products. The initiative will be placed and hosted by Palestinian Federation of Industries and in partnership with other private sector organizations, civil society organizations and concerned government departments. The initiative should receive the support from donors, local firms, government and civil society.

The initiative will run for a period of three years, and will be implemented in intermittent cycles and intervals during this period.

The campaigning tracks of the initiative will target all community segments; from school students to professional in different business fields. And will use different tools of promotion. Such campaigns will increase substantially the volume of sales of local products and will have subsequent positive effects on productivity (quality and performance), employment, market share and higher utilization of production capacity.

The campaign will use different media vehicles and other tools to deliver its message and reach targeted audience. Advertisements, banners, publications, exhibitions, seminars, workshops, festivals and the like will all be components of this initiative.

8.1.2. Palestinian National Authority required role and interventions:

Taking into consideration “The Jericho Declaration” and results of the third national economic dialogue conference, and declared commitments of the government; the following recommendations are crucial for the development of the Palestinian industrial sector. Recommendations are divided into two groups, first: Immediate actions and interventions by the PNA, and Second: efforts and pressures that will be put on the Israeli side to remove obstacles and impediments that are adversely affecting the Palestinian industrial sector. In this regard, pressures of the international community are also crucial.

A clear cut mechanism should be developed to foster the follow up of the common agenda needed to implement the Private Public Partnership (PPP) and enhance coordination and cooperation between the two parties.

8.1.2.1. At the action level:

The following are recommended immediate PNA interventions:

Organizing the local market:

—Consorted efforts should be taken by PNA to organize the mechanisms of the local market and to enforce its legislative control on it. These actions should lead to fair competitiveness among suppliers and producers, and should protect the consumers. Such actions may include:-

- A mechanism for registering products, especially products that has a direct effect on health and safety of humans; food, medicine, detergents, etc.
- Elimination and removal of all of the undefined and smuggled products from the markets and careful checking of the source of origin of these products and their validity for consumption.
- Intensifying control and inspection mechanisms to ensure the compatibility of products with the technical regulations and standards set and approved by PSI.

A- Procurement

It is apparent that some public and governmental tenders still use Israeli brand named products and specifications and not recognized Palestinian technical specifications. Those actually favor Israeli products and deprive the Palestinian products from fair competition. A solid message should be delivered specifically to PEC DAR, /Ministry of Housing and Public Works, Ministry of Education, Ministry of Local Governments, Ministry of National Economy and Ministry of

Finance to specify items of tenders according to Palestinian technical specifications and standards, and to strengthen the principle of "favorable preference and primary treatment" to the nationally manufactured products.

This also can be extended to international aid organizations working in the country.

B- Infrastructure reliability and utility tariffs:

Although several enhancements have been made in the telecommunication sector, a lot still have to be done in other services in terms of connecting industry to reliable, proper and cheaper utility (power and water) services. Furthermore, the tariffs and costs of electricity and power represent a major obstacle to industrial development and reduce the competitiveness of Palestinian industries. The recommendation is to provide utility services to industries at lower and reduced costs.

C- Industrial Zones and Parks:

Although PNA is exerting efforts to develop internal municipal parks, the affordability of land in these parks remains limited because of the high prices of land. PNA is required to specify regional accessible pieces of land considered attractive, qualified and lower costing areas for industrial investment. PNA is also requested to accelerate efforts to put into operation the industrial zones of Jenin, Jericho and Bethlehem.

D- Tax Refunds:

It is a common practice that the Ministry of Finance delays refunding and tax rebates to industry for long periods. These refunds usually originated from buying new machines and exporting products. This is not an export encouraging practices and it impedes the capability for further exports.

F- PSI Development:

It is quite clear that PSI plays an important role in both regulating and organizing the local market and enhancing the development of various industries. Therefore, it is

important to continue with efforts to elevate the performance of this institution.

8.1.2.2. *At the policy level:*

Huge joint efforts and pressures need to be exerted by the international community and agencies working in Palestine in order to compel Israel to lift its blockade of the Palestinian Territory and remove barriers, which is taking its toll on industry and hindering free trade, access and movement of goods and persons.

The two regions of East Jerusalem and Gaza Strip are recognized by international law as occupied Palestinian territories, and hence it should be open freely to the Palestinian internal trade. The re-merging of these two areas into the local market will increase local sales by about 300 million U.S. dollars annually. This figure will have a very positive influence on the performance of Palestinian manufacturers.

A- Free movement of goods and people:

The collective punishment procedures imposed by occupation authorities need to be lifted immediately. The three main domains that need quick urgent considerations are:

- ✓ Internal movement between West Bank, Jerusalem and Gaza.
- ✓ Movement towards the Israeli market.
- ✓ Movement of imports and exports through Israeli controlled points.

This liberation of trade movement will highly increase the productivity of industrial enterprises.

B- Land use:

Land available for Palestinians to use freely is limited and categorized as A area, whereas the vast majority of land is categorized as C area where Palestinians have no control and are not allowed to develop. More land availability and accessibility will, in on doubt, stimulate investment in the industrial sector.

8.1.3. *Institutional role and interventions*

There is no doubt that institutions representing the industrial sector in Palestine play a pivotal role in the development of

this sector. Industrial federations and associations can perform well if they are enforced with resources and provided with programs to build their capacity and improve their performance.

It is however clear that different industrial federations encounter different problems but they all across the board share the common denominators in tasks and mandates.

Some federations evolved over the years and managed to represent its sectors and defend its interests better than others. However, it is recommended that a detailed scrutiny of industrial associations need to be carried out in order to determine horizontal and vertical needs of these associations.

Further, all industrial development programs should run through the PFI and relevant industrial federations, this ensures the continued support of the PFI and sectoral associations and empowers them to continue delivering their services and expertise to industry.

PFI is recognized as the flagship institution representing industry in Palestine. The Industrial Modernization Center (IMC) hosted in the PFI is also considered the only qualified and structured organization catering for on-the-ground needs for technical development of Palestinian industries. The IMC is the technical arm of the PFI and performs duties to develop, upgrade, capacity build, and technically elevate industrial performances inside industrial facilities. Therefore, it is vital to continually support the IMC and strategically maintain and evolve its role to support industry.

Programs aimed at developing and supporting industry in Palestine should always be directed and run with complete cooperation and coordination with the PFI and IMC. This will always empower the PFI to better represent industry and provide continued support for the PFI to advocate, negotiate, influence policies, and defend interests of industrialists with government, policy makers, donors, etc.

8.2. The Sector Level:

It is evident that the interchange of experience and knowledge across different industrial sectors is to the very minimum. It will be worthwhile that business

people learn from each other and share experiences and knowledge, and encourage others to invest in industry. The recommendation is to document voluntarily the experiences of ten success stories in the industrial sector in order to learn from their strengths and demonstrate that things can be done better.

The following are general recommendations for each sub sector. It is divided into two levels, the policy level and the technical level.

It is recommended that further detailed research has to be carried out to analyze the economics of certain sectors. For example, plastic and chemical industries, construction industries, metal industries, paper and printing industries.

8.2.1. Leather and Shoes Industry:

8.2.1.1. Shoes manufacturing industry:

The shoe manufacturing industry is highly dependent on leather tanning. But it has its own features at the same time. The following are needed:

On the policy level:

- A- Gaza market represents 30% of the industry's sales, so the market is urgently needed to reopen.
- B- Merging policies, partnerships and strategic alliances should be encouraged among small firms to rescue resources and consolidate strengths and capabilities.
- C- Strengthening the advocacy and the capacity building of the leather industries association will enhance the performance of the industry.
- D- Market access surveys and assessments are vitally needed to increase potential export markets, e.g. Germany, Saudi Arabia, Jordan, etc.

On the technical level:

- A- Training young entrepreneurs and professionals to provide industries with better capabilities and increase export readiness.

- B- Linking the Palestinian shoe industry with regional institutions to benefit from their experiences and build strategic business relations with them, Tunisia is a good example.
- C- Linking shoe industry to ICT technology to enhance competitiveness and increase e-business practices.
- D- Inducing training programs in the fields of quality, management, maintenance and good family business practices.
- E- Matching local businesses to international outlets on the B2B basis to resume the export to Spain, Italy and German markets.

8.2.1.2. Tanneries:

Tanneries represent a major source of raw materials to shoe industry, and is partially a source for some clothing and furniture industries.

To serve better this sector and enhance the services provided to shoe industry, the following should be done:

On the policy level:

- A- Obtaining urgent access to raw leather materials -into Gaza.
- B- Enhancing awareness practices with farmers and slaughter and stripping houses to increase the quality of raw leathers.
- C- Tannery industries in Palestine are totally family businesses, so basic management tools for family business administration are needed.

On the technical level:-

- A- Tanneries are considered to be highly pollutant industries, an Eco- industrial park for tanneries is highly needed. A quick action can be taken since the land is available and can be provided by industry itself. Proper technologies to solve the environmental problems, provisions of infrastructure utilities and utilizing the industrial waste collectively are some advantages of this park.
- B- Providing vaccinations and sterilization at large cattle farms will enhance the quality of raw leather.
- C- The provision of special stripping machines at three slaughter houses in Hebron, Gaza and Nablus. Steps 2 & 3 will increase the percentage of quality raw leather by at least 50%.
- D- Training: specific training is needed in the following domains:
 - Management, family business administration practices and technical aspects of tanning, (this can

- be done with the help of Leather University in Germany).
- Technical training of the proper mixing of newly used chemicals in the industry, this can be done in cooperation with at the chemical materials suppliers in Turkey, United Kingdom, Italy and Germany.
- E- At the current level, a common shared facility for both supplying water and collecting hazardous wastes is really needed. This can be organized by the industry association in providing two equipped trucks.
- F- ICT diffusion is needed to enhance the industry's capacity and link it to other stakeholders; the shoe industry, slaughter houses, supplies and others.

8.2.2. Metal Industries

Since the sector is widely diversified in terms of specialty and sub-sectors, the following common recommendations will help the whole industry.

On the policy level:

- A- Creating mechanisms to strengthen the relationships with different stakeholders; engineers and contractors associations, academic institutions and faculties.
- B- Linking industry with other interrelated diversified industries, such as construction, housing.
- C- Penetrating new regional markets for specific products; welding material, abrasives, steel doors, filling and packing machines, stone machineries, etc.
- D- Introducing best practices and tools for family business administration.

On the technical level:

- A- Provision of a well-equipped metal testing laboratory for testing the chemical, physical and mechanical properties of metals. This can be done jointly with academic institutions.
- B- Introducing and enhancing the importance of quality culture in the sector.
- C- Increasing the quality standards of the products and adaptation of a standardized calibration system.
- D- Qualifying the industry's labor force through intensive training at the professional training centers in Egypt.
- E- Creating programs to benefit from the industry's wastes.
- F- Looking for alternative technologies in operating ovens that are more economical and environmentally friendly.

-
- G- Upgrading the current machinery and production techniques through adapting PLC technologies, hydraulic and pneumatic systems.

8.2.3. Chemical Industries

The three major components of chemical industries share the following recommendations:

On the policy Level:

- A- Protecting registered (licensed) industries through intensive controlling and monitoring of the minimum acceptable standards of the products.
- B- Strengthening the capacity of the industry's association.
- C- Enforcing the preferential treatment for the national products in the national public tenders (e.g. paints)
- D- Strengthening industry's relationship with research and academic institutions.

On the Technical Level:

- A- Intensive training courses in detergents and cosmetics technologies (and solid detergents) and their impact on human health and safety.
- B- Management, costing and quality control training courses
- C- Collective purchase of raw materials to maintain quality and competitiveness.
- D- Improving filling, packing and packaging techniques, and building position, image and branding.
- E- Acquiring updates in paints technologies both for the water based paints and oil based paints.
- F- Provision of an equipped laboratory for proper and reliable testing of both raw materials and finished products.
- G- Inducing a maintenance and upgrading program for all machineries

8.2.4. Construction Industries

On the Policy Level:

- A- Linking the industries strongly with the engineers and contractors association and academic institutions.
- B- Building the capacity of the industry association to make it an effective player in the field.
- C- Networking and cooperating with different new housing projects to match construction products to design.

- D- Enhancing the roles of testing laboratories and assisting in the awareness of testing and controlling mechanisms.
- E- Introducing a mechanism of controlling the national bedding to ensure national reliable specifications.

On the Technical Level:

- A- Revision of the existing Palestinian standards and technical regulations (e.g. PS49)
- B- Intensive training courses for the middle management is needed in the following fields:
 - 1) Technical; calibration, specifications, standards, tests.
 - 2) Management; planning, staffing, leading.
 - 3) Marketing; promotion, pricing, e-marketing.
 - 4) Quality control and TQM.
 - 5) Costing.
 - 6) Procurement and bedding.
 - 7) Manufacturing; processes, procedures, storing.

8.2.5. Handicrafts Industries

On the policy Level:

- A- Building the capacity of the industry association and strengthen it to regulate the profession of handicrafts and enforce the best practices and fair competition.
- B- Establishing a common mechanism for buying collectively the raw materials of mother of pearl to serve better the small producers and increase their competitiveness.
- C- Protecting the member's rights from immediate typical imitation and copying of the models, patterns and prototypes.

On the technical Level:

- A- Establishing a suitable enabled storage place for fumigation and storing the wood of olive trees under ideal environmental atmosphere.
- B- Training programs in the following fields:
 - 1) Proper sharpening of the tools used in crafting.
 - 2) Operating properly and maintaining newly used CNC machines.
 - 3) 3D studio and graphic design.
 - 4) Hand drawing and painting (Turkey).
 - 5) Management training; family business administration, basic business essentials, costing, promotion and language skills.

- C- Production of product catalogues for medium and large sized firms and a general product catalogue for the industry in general in addition to websites.
- D- Encouraging the participation in the international trade fairs, especially in Europe and America.
- E- Studying potential new markets and matching B2B relations.

8.2.6. Textile Industries

On the Policy level:

- A- Strategic management and planning exercises are highly needed to assess the future strategies of this sector.
- B- Merging and other strategic partnerships schemes are needed to enhance and increase the competitiveness of the sector.
- C- Imported cloths have to be checked for their compatibility with the minimum acceptable technical regulations and for any possible negative impact of some of these imports on human health.
- D- Networking with the Ministry of Education to become the sole unique provider of school uniforms.

On the Technical Level:

- A- Provision of necessary laboratories and machines for testing the cloths and textiles.
- B- Periodic regular maintenance programs and upgrading programs for machinery are needed.
- C- Training is needed in the following fields: model and design, packaging, promotion, management and planning tools, crisis management, costing, quality control and training programs for skilled labor.
- D- Targeting some new markets through B2B contacts and publishing websites and product catalogues for 7-10 companies.

8.2.7. Stone and Marble

On the Policy Level:

- A- Zoning and licensing the quarries, the source of raw materials.
- B- Paying particular attention to the environmental issues on both sides, the factories and the quarries to create success stories.

On the Technical Level:

- A- Increasing awareness of the manufacturers towards the quality control issues.
- B- Training on basic management practices; planning, operations, communication, costing, ICT essentials, marketing and promotion.
- C- Health and safety issues are subject to further awareness and training.
- D- Promotional tools production; websites, catalogues.
- E- Market studies to penetrate export markets.
- F- Machinery upgrading and maintenance procedures.
- G- Improving family business administration practices.
- H- Enhancing productivity and performance of the existing production facilities.

8.2.8. Pharmaceutical Industry

On the Policy Level:

- A- Increase the level of cooperation and feedback information from physicians and pharmacists and other professional associations.
- B- Encourage and enable the industry to produce strategic families of new medicines.
- C- Strict registration procedures against non-Palestinian medicines to enhance local industry's positioning.

On the Technical level:

- A- Focusing on strengthening the culture of obtaining international certification and improve quality issues, e.g. EU-GMP, revision of existing GMP.
- B- Penetrating further export markets.
- C- Further enhancement of human capabilities through intensifying high-level training programs to create a wider base of capable human capital.
- D- Creating the Pharmaceutical Excellence Center.
- E- Creating mutual cooperative relations with the academic institutions.
- F- Regular and continuous improvement of the standard operating procedures to match up to GMP standards.

8.2.9. Veterinary Medicines

On the Policy level:

- A- Framing the internal relations between manufacturers to better assist the industry.
- B- Regulating the internal market through registration, intensified controlling and preventing falsification.
- C- Increasing awareness and the image of the existing factories and decreasing gap levels between them.
- D- Increasing market share of this industry.
- E- Coordinating better relations with the Ministry of Health.

On the Technical Level:

- A- Quality improvement and certification for both local and export markets.
- B- Training courses in: technical issues, production, management, costing, promotion.
- C- Exchanging expertise and know-how with international manufacturers (Turkey, Spain).
- D- Establishing a certified laboratory for testing.
- E- Introducing the concepts of bio-assay and bio-availability.
- F- Producing promotional tools to increase sales, improve and develop websites, catalogues.
- G- The induction of administrative and financial systems.
- H- Market studies for potential markets; Sudan, Yemen and assisting in registering the medicines in potential markets
- I- Matching local animal and plant diseases with suitable available medicines. Research is needed.

8.2.10. Food Industries

Although a lot of work has been done in this sector, still its importance is derived from its direct effect on human health and safety.

On the Policy Level:

- A- A mechanism should be created to ensure that all products in the market (locally and externally produced) are compatible with the Palestinian technical regulations.
- B- Common efforts to import shared raw materials on collective basis.
- C- Linking the industry to the academic institutions.
- D- Encouraging industries dependent on local surplus of agricultural products.
- E- Increasing awareness to differentiate between the products and their consequent implications to health (e.g. Palestinian and Israeli animal feed).

- F- Strengthening the industry association to become the focal point for the Food Safety Initiative. This initiative should be launched soon.
- G- Advocacy and lobbying to reverse measures taken by the Ministry of Education without proper legal and scientific procedures, this adversely affects local producers.
 Advocating for better procedures and scientifically based decisions by the Ministry of Health regarding the issue of validity (expiry date) of some locally produced products.

On the Technical Level:

- A- Innovating alternatives in Tetra Pack technologies.
- B- The development and modification of production lines to diversify production possibilities and capacities and introduce automation / PLC.
- C- Technical assistance to make innovations in product development.
- D- Training in business planning, HRM, costing, quality control, communication, packaging.
- E- Enhancing and improving the local testing capacity (consistency, reliability, validity, etc).
- F- Designing promotional campaigns for certain sub-sectors; websites, catalogues, etc.
- G- Certification is highly needed to approach external markets and enhance local loyalty; HACCP, ISO 22000, etc.
- H- Penetrating new export markets for qualified products; market research, certification, registration, packaging, coloring and other additives.
- I- Utilizing the increase of HALAL trade exchange; certification, registration.
- J- Utilizing the increase of Fair Trade exchanges; certification, registration.

8.2.11. Plastic Industries

On the Policy Level:

- A- Networking with stakeholders to enhance awareness of the locally manufactured plastic construction-related industries.
- B- Integration programs with other interrelated industries in the country.

On the Technical Level:

- A- Introducing the minimum acceptable level of technical regulations

- B- Training is heavily needed; management, essential business practices, costing, pricing and so on.
- C- Technical development is required on both human level and machinery level.
- D- Utilizing available machinery to develop new products.
- E- Utilizing properly the industry's waste and pay more attention to environmental issues.
- F- Introducing alternative ways to decrease the cost of electricity and power.
- G- Local marketing and promotion is needed.

8.2.12. Paper Industries

On the Policy Level:

- A- Networking with other interrelated industries in Palestine.
- B- Strengthening the industry association's capacity.
- C- Encouraging merging and strategic partnerships in the industry.
- D- Enhancing the image of corporations.

On the Technical Level:

- A- Intensive technical training for labor force; printing, production, maintenance (Heidelberg-Egypt) to ensure high quality products.
- B- Management training of the administration; business essentials, costing and pricing, family business administration practices, financial management, procurement and inventory.
- C- Graphic design training, i.e., pre-press training.
- D- Operational procedures and systems.
- E- The diffusion of ICT applications in the sector.
- F- Marketing and strengthening the overall image; websites, proper publications (leaflets, brochure, business cards etc.)

8.3. The Firm Level

It is evident that all the policy and technical levels of assistance are only supplementary to the actual performance of firms. Thus, more emphasis should be given to assist industries on individual basis. Enhancement and development can take place through necessary changes in the firm's systems. A thorough investigation, analysis and assessment of the current operations,

handling, layout and the like of each individual factory will help introducing the required positive changes to these individual firms. This will also contribute to time reduction, better waste management and eliminating unnecessary steps. It will also increase productivity, enhance performance and cut costs.

A diversified team should be chosen to visit factories and thoroughly study all production processes and methods, and provide reasonable solutions for redesigning the work. A number of selected firms will be chosen from different sectors to participate in this program.

The program will focus on the following aspects:

- A- Work study
- B- Layout efficiency
- C- Process and capacity design
- D- Inventory management
- E- Waste reduction management
- F- Energy consumption
- G- Work schedules
- H- Maintenance improvement

The anticipated results will inevitably lead to more sales, better quality, less defects, improved productivity and reduced costs, and hence elevate overall performance and boost competitiveness of industries in Palestine.

9.Action Programs

Abbreviations: SM=stone & marble F=food P=pharmaceuticals V=veterinary
 M=metals T=textiles

LS=leather & shoes CH=chemicals C=construction PL=plastic PP=paper
 H=handicrafts

#	Program	Activities	Sector
1	National Initiative for the Support of local Products	<ul style="list-style-type: none"> • Advertisements, banners, publications • Seminars, workshops, festivals, exhibitions • Field activities, demonstration • Media 	ALL
2	Public-private partnership – follow up mechanisms	<ul style="list-style-type: none"> • Local market regulations (registration, inspection ...) • Public procurement and tendering • Tanning industry's park • Tax refunds mechanisms 	ALL
3	Success stories	<ul style="list-style-type: none"> • Documenting industrial success stories 	ALL
4	Quality	<ul style="list-style-type: none"> • Training • Certification; PS, GMP, EU-GMP, HACCP, ISO • Awareness 	LS,M,CH, P,V,F,C,PL
5	Training	<ul style="list-style-type: none"> • Management and business essentials • Communication and languages • Financial, costing, pricing, procurement & inventory 	PL,LS,CH,C,H,P,V,PP,SM
6	Family business administration	<ul style="list-style-type: none"> • Integrating business and family strategies • Succession planning 	PP,SM,LS,M,H
7	Technical training	<ul style="list-style-type: none"> • Modern production practices 	PP,PL,F,LS,M,CH,C,T,V
8	Product development	<ul style="list-style-type: none"> • Products that are not produced • New ingredients and composition 	P,V,F,PL
9	New machinery	<ul style="list-style-type: none"> • Testing laboratories • Water and waste facilities • Stripping machines 	LS,M,CH,C,T,P,V,F
10	Maintenance and upgrading	<ul style="list-style-type: none"> • Maintenance and renewal • New technology; enhancement and adaptation; PLC 	LS,M,CH,T,SM,F
11	Models and design	<ul style="list-style-type: none"> • New designs • Protection and copying • Graphic design and 3D 	PP,T,LS,H
12	ICT diffusion	<ul style="list-style-type: none"> • Manufacturing 	PP,LS,SM,P,V,F

		<ul style="list-style-type: none"> MIS Management and communication 	
13	Market penetration	<ul style="list-style-type: none"> New potentials for export 	P,V,F,LS,M,H,T
14	Promotion	<ul style="list-style-type: none"> Training Websites, catalogues, trade fairs 	PP,LS,H,T,SM,V
15	Packaging	<ul style="list-style-type: none"> Package and image 	CH,T,F
16	Collective procurement	<ul style="list-style-type: none"> Bulk collective purchases 	CH,H,F
17	Operations	<ul style="list-style-type: none"> Standard operating procedures 	PP,C,P,V
18	Power and environment	<ul style="list-style-type: none"> Environment Power reduction and saving Health and safety 	LS,M,SM,PL,C,F,CH
19	Strategic management and partnerships	<ul style="list-style-type: none"> Strategic planning for the textile sector Merging and partnerships Strategic alliances with externals B2B 	LS,PP,SM,H,T,PP,V,F
20	Capacity building	<ul style="list-style-type: none"> Industry associations strengthening 	LS,M,CH,C,V,PP
21	Academic linkages	<ul style="list-style-type: none"> Strengthening relations with research and academic institutions 	M,CH,C,P,F
22	Networking	<ul style="list-style-type: none"> Linkages with related and ir-related industries Networking with supporting institutions 	LS,M,C,T,F,P,V,PL,PP
23	Productivity improvement	<ul style="list-style-type: none"> Work study Layout efficiency Process and capacity design Inventory management Waste reduction management Energy consumption Work schedules Maintenance management 	Firm level assistance

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11. Appendices

11.1. Interviews:-

List of interviews

(Alphabetical order)

No.	Name	Organization
1	Abdul Hafiz Noufal	Ministry of national economy
2	Ahmed Omari	Construction industries
3	Ali Badarneh*	UNIDO
4	Awad Abu Alia	Pharmaceutical industry association
5	Elias Arja	Textiles
6	Farahat Siaj	Shoe making industry
7	Farid Zatari	Leather tanneries
8	Fuad Al Aqraa	Food industry association
9	Ibrahim Najjar	Palestine trade center
10	Imad Asaad	Palestine trade center
11	Jawad Naji	Primer ministry
12	Jerjes Faqquseh	handicrafts
13	Mahmoud Farroujeh	Veterinary industry
14	Muhammad Amleh	Metal industries
15	Muhammad Issa	Veterinary industry
16	Muhammad Mahariq	Ministry of health
17	Muhammad Sayyed	Palestinian standards institute
18	Muhammad Sous	Diary industries
19	Nader Tamimi**	handicrafts
20	Nafiz Sinokrot	Plastic industry association
21	Nihad Hindiyyeh	Construction industries
22	Nour din Zatari	Leather tanneries
23	Radwan Radwan	Plastic industries / paper industries
24	Raed Barhoum	Chemical industries
25	Rimon Abu Farha	handicrafts
26	Rubin Joulani	Metal industries
27	Saqer Jerashi	Construction and chemicals industries
28	Shaban AL-Natsheh**	Leathear and Shoes Association
29	Subhi Thawabteh	Stone and marble industries
30	Sufian Ashour	Chemical industries
31	Taher Dwayyat	Food industries

32	Tareq Abu Fillat**	Shoe making industry
33	Tareq Sous	Textiles
34	Yasser Manasreh	Veterinary industry
35	Yousef Hassounah	Metal industries
36	Zein din Abed	Construction industries
37	Ziad Tumeh	Ministry of national economy

*Contacted by email

** Contacted by phone.

11.2 Questionnaire:

الاتحاد العام للصناعات الفلسطينية

برنامج تحديث الصناعة

يقوم الاتحاد العام للصناعات الفلسطينية بإجراء بحث حول الوضع الحالي للمنشآت والقطاعات الصناعية المختلفة بهدف القيام ببرنامج تنموية وتطويرية من أجل تعزيز القدرة التنافسية للمنتجات الصناعية الفلسطينية وزيادة الحصة السوقية لها. لذا يرجى منكم التكرم بتعبئة هذه الاستمارة واعادتها الى الاتحاد بواسطة الفاكس أو الايميل. علماً بان هذه المعلومات سيتم استخدامها لأغراض البحث وتطوير البرامج فقط.

يمكن إعادة الاستمارة eng-shq@hotmail.com إرسال الاستمارة إلى فاكس رقم 2955046-

معلومات عامة:	
اسم المنشأة :	عمر المنشأة:
الفرع الصناعي الذي تنتمي اليه منشأتكم:	المحافظة:
نسبة الطاقة التشغيلية (الانتاجية) الحالية الى الطاقة الكلية:%	
عدد العاملين (الحالي) :	عدد العاملين الممكن (في حالة التشغيل الكامل):
الشهادات التي حصلت عليها المنشأة: <input type="checkbox"/> PSI <input type="checkbox"/> ISO 22000 <input type="checkbox"/> ISO9001 <input type="checkbox"/> EURO-GAP <input type="checkbox"/> GMP <input type="checkbox"/> HACCP <input type="checkbox"/> أخرى	
الشهادات التي ترغب بالحصول عليها:	
هل تعتقد أن منشأتكم بحاجة الى مساعدات فنية: <input type="checkbox"/> خبراء <input type="checkbox"/> تكنولوجيا جديدة <input type="checkbox"/> ماكينات <input type="checkbox"/> نظم معلومات ادارية MIS <input type="checkbox"/> تطوير اداري <input type="checkbox"/> عمالة من نوع خاص <input type="checkbox"/> ربطها بالاعمال الالكترونية E BUSINESS <input type="checkbox"/> أخرى <input type="checkbox"/>	

معلومات تسويقية:	
نسبة البيع في الأسواق التالية %:	
الضفة الغربية.....القدس.....قطاع غزة.....إسرائيل.....تصدير	خارجي.....
أهم البلدان الخارجية (في حالة التصدير) :	
أهم الأسواق التي ترغب بالبيع / التصدير إليها :	
ما هي أهم العقبات التي تواجهك :	
ما هي احتياجاتك لدخول هذه الأسواق :	

الميزة التنافسية التي تتمتع بها
 منتجاتكم:.....

ما هي احتياجاتك الترويجية والتسويقية: ☐ صفحة انترنت ☐ كتالوج ☐ معارض خارجية ☐ وكلاء وموزعين ☐
 مواد ترويجية أخرى

معلومات مالية:

هل تتوفر أمكانية الوصول لمصادر التمويل:.....

هل ضمانات القروض والتسهيلات تشكل عائقاً أمام الحصول عليها:.....

هل استفدت سابقاً من برامج الدعم المالي أو الإقراض:.....

هل أنت بحاجة لذلك:.....

هل المنشأة بحاجة الى استثمارات مالية جديدة من أجل: ☐ شراء الماكينات والتكنولوجيا ☐ الحصول على الشهادات
☐ فتح الاسواق الجديدة ☐ إنتاج منتجات جديدة ☐ الدخول في تحالفات وشراكات استراتيجية ☐ غير ذلك

الوضع القانوني والحكومي:

برأيك ما هي الخدمات التي تقدمها مؤسسات السلطة الفلسطينية لمساعدة القطاع الخاص:

برأيك ما هي اهم الخدمات التي يجب ان تقدمها مؤسسات السلطة الفلسطينية لمساعدة القطاع الخاص:

- في مجال التشريع والقوانين
- في مجال الخدمات والمؤسسات
- في مجال الاتفاقيات التجارية
- في مجال جذب الاستثمارات الاجنبية
- في مجال الشراكة مع القطاع الخاص
- اية مجالات اخرى

القطاع الصناعي:

ما هي برأيك أهم المشاكل التي يواجهها القطاع الصناعي الذي تنتمي اليه:

.....

ما هي أهم الاقتراحات التي يمكن تقديمها لتنمية هذه الصناعة:.....

.....

هل برامج دعم الصناعة التي قدمت في السابق / او تقدم الان ملائمة:.....

..... ما هي ملاحظاتك عليها / تقييمك لها:

..... هل الاتحاد الصناعي الذي يمثلك يقوم بدوره لخدمة صناعته:

..... ماذا تقترح عليه ان يعمل:

11.3. Survey needs:

Some fact results derived out of the questionnaire			
The average production capacity across all sectors		50%	
Number	Certificate	Sum	Percentage
1	PSI	7	%9
3	9001:2000	14	%20
4	22000	5	%7
5	HACCP	3	%4
6	GMP	5	%7
7	14000	3	%4
	Total	37	
Number	Assistance	Sum	Percentage
1	Experts	20	%28
2	New technology	28	%39
3	Machinery	42	%59
4	MIS	10	%14
5	Administrative development	11	%15
6	Skilled labor	10	%14
7	E-Business	6	%8
Number	Market	Percentage	
1	West Bank	%61	
2	Jerusalem	%6	
3	Gaza Strip	%7	
4	Israel	%19	
5	Export	%8	
Number	Needs	Sum	Percentage
1	Web site	21	%30
2	Catalogue	29	%40
3	Trade shows	33	%46
4	Agents	42	%59
5	Others	22	%30
Number	Investment	Sum	Percentage
1	Machinery & technology	56	%78
2	Certification	22	%30
3	New markets	43	%60
4	New products	37	%52
5	Partnerships	22	%30