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د. خالد زيدان

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Palestine Economic Policy Research Institute

**Investment Opportunities for Small and
Medium Enterprises (SMEs)
in the Palestinian Transportation Sector**

Dr. Khalid Zaidan

2010

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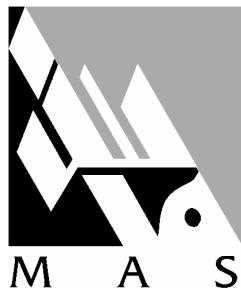
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P.O. Box 19111, Jerusalem and P.O. Box 2426, Ramallah

Tel: ++972-2-2987053/4, Fax: ++972-2-2987055, e-mail: info@pal-econ.org

Web Site : <http://www.mas.ps>



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Researcher: Dr. Khalid Zaidan, PhD in Transportation Engineering

Reviewers: Dr. Khaled Al-Sahili, Associate Professor at An Najah National University.
Engineer Fursan Samodi, Palestinian Ministry of Transportation.

Layout: Lina Abdallah

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Palestine Economic Policy Research Institute (MAS)
Jerusalem and Ramallah

Foreword

This study was prepared at the request of the Palestinian Ministry of Transport and Communication. As part of the ministry's effort to improve the quantity and quality of the sector services, the study aims to identify and highlight investment opportunities available to Small and Medium companies. The Transport and Communication sector is considered one of the most important and vital economic sectors in terms of its role in transporting individuals and goods within the Palestinian economy and between Palestine and its trading partners. As a result of the Israeli hostile policies expansion of the Palestinian transport sector has remained limited in road transportation, and this sector remained weak, unorganized, and denied diversification to other transportation branches (i.e. sea and air).

The high costs of transportation and communication in Palestine diminish the competitiveness of domestically produced goods in internal and foreign markets. For the past ten years Israeli sieges and transportation closure policies have severely debilitated transport and communication within the West Bank and Gaza Strip. Effectively, all Palestinian goods headed for export are rendered defunct on account of prohibitive cost barriers. As a result, Israeli and other foreign goods have displaced many domestically produced goods. These conditions necessitated a study that could find avenues to increase SMEs investment in the transport and communication sectors in order to modernize and develop structures to maximize efficiency and competitiveness which can help decrease costs of transportation and boost the competitiveness of the local products.

We extend our gratitude for the generous support we received from the Ministry of Transport and Communication, as well as all the ministry staff who provided us with all necessary data. I would also like to extend our thanks to the research team for completing this study in accordance with the Terms of Reference (TOR). Finally, we appreciate the support of the International Development Research Center-Canada (IDRC), who funded this study as part of “Poverty Reduction through Private-Sector Development: Policy Research of MSMEs” program.

**Dr. Samir Abdullah
Director General**

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Executive Summary

Background and methodology

Transportation is vital to the economic development of nations and to the improvement of the quality of lives of their citizens. As it connects resources with factories and factories with markets, it sets the foundation for economic activities, growth and development. Further, as transportation networks and modes provide access to jobs, healthcare, education, cultural and recreational facilities, they provide the foundation for better quality of lives.

The Palestinian National Authority (PNA), as it approaches the final stages of the process leading to the building of the institutions of an independent Palestinian state, understands the importance of the transportation sector. To this end, the PNA is undertaking several initiatives aimed at its development.

It is within this context that MAS, the Palestinian Policy and Research Institute, which is growing to become the PNA's think tank, and the International Development Research Center (IDRC), have joined hands to assist the PNA in formulating policies in different fields and sectors. This includes the transportation sector, and more specifically regarding the Small and Medium Enterprises (SMEs) in this sector.

The methodology used in carrying out his study included a desk top review of the current state of the SMEs in the transportation sector based on a synthesis of available literature. In addition, future development plans for the transportation sector were reviewed, and potential investment opportunities for SMEs were summarized.

Further, and for analytical purposes of this study, the transportation sector was divided into five sub-sectors, as follows:

- ◊ Roads and support services for the road sector
- ◊ Public transport
- ◊ Commercial transport
- ◊ International land border crossing
- ◊ Trains, seaports and airports

This classification was used to reflect the current condition of the Palestinian transportation sector. The sector is comprised of both roads and roadway vehicles and the support services they require. Further, Public transport and commercial transport were dealt with separately because of their specializations and their economic impact.

Land border crossings were also included as a separate sub-sector due to the level of specialization, and the fact that they are the only access points for entry and exit of Palestinian people and goods to and from the OPT. Finally, railroads, seaports and airports were merged into one sector because they are not presently available in Palestine. The future potentials for each of these sub-sectors were subjectively indicated based on a review of comparative experience.

Finally, each of the sub-sectors was separately reviewed. The future potential direction for SMEs in each sector was subjectively indicated based on available data, which proved to be the largest challenge facing this study.

Conclusion and recommendation

The following is a summary of the conclusions and recommendations for each of the sub-sectors discussed in this study:

Roadway and Support Services Sub-Sector

The conclusions of the roadway and support services sub-sector include the following:

- ◊ Israel continues to control the development of most main and regional roads, as it continues to control area “C”.
- ◊ Most infrastructure projects involve large scale financial investments and can only be carried out by larger size businesses and companies.
- ◊ The Palestinian experience in partnering with the SMEs to develop roadway infrastructure is limited to engineering planning and design and construction.
- ◊ There are 38 different professions that are licensed by the Ministry of Transport. These businesses work to support a functioning roadway transportation sector.
- ◊ Support services to roadway transportation are fully private, and are almost totally SMEs.

- ✧ There are no obstacles to entry into the market for SMEs in this sector. The only exception is for vehicle inspection facilities (Dinamometers). Further, more restrictions to entry apply due to safety related issues for some professions.
- ✧ Problems facing SMEs in this sub-sector are no different than the general problems facing other SMEs. Yet, continued development of know-how and developing local expertise are amongst the main challenges facing these SMEs.
- ✧ There is a lack of data on majority of these services, and there are no regular programs for data collection for most of these services.
- ✧ Potential for increased SMEs opportunities in this sector is directly proportional to the increase in the number of vehicles and the population.

As for the main recommendations in this sector, the following is a summary:

- ✧ It is important that detailed and regular data collection programs be developed for the different roadway transport support services.
- ✧ Capacity building programs and continued know-how development are essential programs, which need to be pursued to improve performance of this sector.
- ✧ Problems facing the SMEs in this sub-sector are similar to those facing other SMEs. Given the importance of the SMEs to the Palestinian economy, it is recommended that addressing the challenges facing the SMEs in OPT be given higher priority on the national agenda.

Public Transportation Sub-Sector

The conclusions of the public transportation sub-sector include the following:

- ✧ The public transport sub-sector in the OPT consists of taxis and buses.
- ✧ The system has good coverage, especially, in urban areas. In many rural areas the coverage is weak in terms of availability and frequency of trips.
- ✧ The sector is fully privately owned and operated under strict government regulations.
- ✧ Most taxis and buses are either individually owned or are owned through small and medium companies.
- ✧ Entry to the public transport market was heavily restricted under the Israeli occupation. When the PNA was established, it lessened the

entry restrictions. In 2008, it ceased all new permits, and recently it opened up entry to the market based on “needs”, and through a more restrictive entry process.

- ✧ As per 2009 data, there are about 10,800 public transport vehicles employing over 11,650 persons. The sector has a total output of over \$226 million.
- ✧ Vehicle age is not an issue for taxis since the regulations specify a maximum age of 18 years.
- ✧ About 30 percent of buses need urgent replacement. The small size of the bus companies and the strong competition from the shared taxis, place many companies in financial hardships, which limits their ability to renew their fleet.
- ✧ The World Bank in 2008 concluded that there were a large number of taxis operating in the market. It recommended the cessation of issuance of shared taxi permits for three years to allow buses to better opportunities at competing with them. In addition to restructuring the bus sector.
- ✧ The public transport system is not being utilized, by the PNA, to provide some social support to the marginalized group.

As for the recommendations for the public transport sector, the following is a summary:

- ✧ The extent of government restrictions to entry needs to be re-evaluated. This is especially the case for private taxis and private buses. Further, anytime government regulations restrict entry to the market, the potential for corruption and black markets increases. As such counter-strategies need to be in place to deal with such major shortcomings.
- ✧ Some form of social subsidy program for the poor and the marginalized need to be adopted, especially for shared taxis and public buses. Such a system may include provisions to restructure route franchising to include both profitable and non-profitable routes. In addition, direct subsidies to riders or operators may be considered.
- ✧ The PNA should assist the bus companies on merging into medium and larger size companies and it should establish a specialized fund to support fleet renewal.
- ✧ It is important that detailed study assessing the optimal balance between shared taxis and buses be carried out. Such study may include restructuring of the routing system.

Commercial Transport Sub-Sector

The main conclusions of the trucking sub-sector include the following:

- ✧ Trucking is the only mode for the transportation of goods in the OPT. This includes internal trade, and all imports and exports, which reached over \$ 4 billion in 2008.
- ✧ Data on internal trade is unavailable. Further, data defining ownership of trucks as a core business, or supplement to existing business is not available.
- ✧ This industry is fully privately owned and operated. Government regulations of the industry do not exceed the safety requirement.
- ✧ The industry is characterized by individual truck ownership and small-sized firms.
- ✧ There are over 30,000 trucks operating in the OPT, a majority of which have a carrying capacity not exceeding 4 tons.
- ✧ Over 50 percent of the truck fleet is older than 20 years, and is need of urgent renewal.
- ✧ The Israeli obstruction to access and movement are the biggest hindrance to the productivity of the sector and creates a major burden to the cost of operation.
- ✧ The individual ownership, or the small-sized firms, characterizing truck fleet ownership further contributes to weakened financial standings.

The principle recommendations to support this sub-sector include the following:

- ✧ The PNA needs to develop a program to provide incentives for the individual truck owners and small firms to join into larger size, more financially viable, companies.
- ✧ The PNA should establish a facility to support the renewal of the truck fleet.
- ✧ Programs for regular data collection on internal trade should be developed and implemented. In addition to the collection of data on whether trucks are owned as a core business or as support to other business.

The Land Border Crossing Sub-Sector

The following is a summary of the main conclusions of the land border crossing sub-sector:

- ✧ Land border crossings are the only ways for people and goods to enter to or to leave from the OPT.
- ✧ All land border crossings are controlled by the Israeli military.
- ✧ Rafah is the only land crossing with Egypt, and the King Hussein and Damia Bridges are the only land crossings with Jordan.
- ✧ Other land crossings are with Israel. The final locations and use of these crossings has not been agreed to between the PLO and Israel. As such, several proposed locations are inside the West Bank and not along the borders.
- ✧ The limited Palestinian experience with land border crossing is that at the land crossing between Israel and the Gaza Strip. In addition to the passenger collection point at the Jericho Rest Area on the way to Jordan through King Hussein Bridge crossing.
- ✧ At the Jericho Rest Area, SMEs were used to provide transport to and from the facility, operate cafes and shops, operate parking facilities, etc. In the Gaza crossings, most services were provided by the government.
- ✧ There is potential role for large companies to invest in developing the infrastructure of the land crossings or to manage them.
- ✧ Role for SMEs in land crossings including planning, design and engineering works. Additional potential opportunities include handling of goods and baggage, most concessionary services, and transportation of people and goods to and from the crossings.

With regards to the main recommendations of the sub-sector, the following is a summary:

- ✧ It is essential that the PNA begin the process of building the local capacities in developing and managing this sub-sector.
- ✧ It is essential that planning for land border crossings should endeavor to maximize the contribution and the participation of the private sector, especially SMEs, in developing and operating these crossings.

Rail, Maritime and Air Sub-Sectors

The following is a summary of the main conclusions regarding the transportation sub-sectors of rail, maritime and air:

- ✧ Under the Israeli occupation, the Palestinians have no rail system or maritime transportation.

- ✧ The Yassir Arafat international airport in the southwestern part of the Gaza Strip was the only airport to operate under the PNA. It operated for two years before Israel destroyed it.
- ✧ Future Palestinian plans call for the development of rail systems, a major seaport in Gaza, and to operate three airports; these include a rehabilitated Yassir Arafat international airport, the Qalandia airport, once the Israeli occupation hands it back over to the Palestinians, and a planned airport in the Jordan Valley.
- ✧ The role of the private sector is envisaged based on international experiences, as it is not available locally. This includes potential roles to build and manage the large infrastructure and service provisions, such as freight rails, by large size companies.
- ✧ Role of SMEs in these facilities includes handling of baggage, handling of smaller cargo, concessionary services, small chartered ships, etc.

The recommendations regarding these sub-sectors include the following:

- ✧ It is essential that the PNA begin the process of building the local capacities in developing and managing these sub-sectors.
- ✧ It is important that the PNA should strive to include the private sector from the planning phases for these projects. Further, it is essential that the PNA evaluate the ways for harvesting the potentials of the private sector, especially SMEs, in developing and operating these sub-sectors.

1. Background

Transportation is vital to the economic development of nations and to the improvement of the quality of lives of their citizens. As it connects resources with factories and factories with markets, it sets the foundation for economic activities, growth and development. Further, as transportation networks and modes provide access to jobs, healthcare, education, cultural and recreational facilities, they provide the foundation for better quality of lives.

The Palestinian National Authority (PNA), as it approaches the final stages of the process leading to the building of the institutions of an independent Palestinian state, understands the importance of the transportation sector. To this end, the PNA is undertaking several initiatives aimed at its development.

The Palestinian Ministry of Transportation (MOT) is leading the efforts for the PNA in this regard. It is working on issues including:

- ✧ The development of plans for the construction of the main Palestinian transportation infrastructure for the different modes of transportation from airports to roads and from rail to maritime.
- ✧ The development and automation of operating systems and databases to improve service delivery to the public by the MOT. This includes the licensing of vehicles, drivers, facilities, etc.
- ✧ The development of the regulatory framework governing the different components and modes of transportation, including the institutional and operational regulatory framework.
- ✧ The development of creative management and financing schemes for the different components and modes of transportation.

It is within this context that MAS, the Palestinian Policy and Research Institute, which is growing to become the PNA's think tank, and the International Development Research Center (IDRC), have joined hands to assist the PNA in formulating policies in different fields and sectors. This includes the transportation sector, and more specifically regarding the Small and Medium Enterprises (SMEs) in this sector.

1.2 Objective

The overall objective of this paper is to assess investment opportunities for SMEs in the Palestinian transport sector.

1.3 Importance of this study

The importance of this study is two folds. First it deals with the potential leveraging of the private sector, specifically SMEs, in developing the transport sector, which is vital for economic development. The second assesses potential opportunities for SMEs, which are the engine of Palestinian economic growth, in the transport sector.

1.4 Study Methodology

The methodology used in carrying out his study included a desktop review of the current state of the SMEs in the transportation sector. In addition, future development plans for the transportation sector were reviewed, and potential investment opportunities for SMEs were identified.

To achieve this, available literature was reviewed and synthesized, and the results were summarized in this study. Additionally, secondary data was obtained from the Ministry of Transportation (MOT) and the Palestinian Central Bureau of Statistics (PCBS) to support the study, as needed.

1.5 Study Limitations

This study was principally constrained by the data. There were two distinct problems associated with the data required for this study. The first had to do with the availability of the data itself to allow for any manipulation aimed at constructing any models. The second had to do with the accuracy of the data. In many cases, as the source of the data changed, so was its value. In some cases, data in different documents from the same source differed.

Data collection itself was not an option in this study. The level of detail required for any of the operating sub-sectors to allow for policy decisions, or analysis of future expectations, was beyond the means of this study.

It must be noted here though, that at the time of writing this study the Ministry of Transportation has established a statistical unit. This unit will work on unifying the lingo (meaning of the different terms used), in collecting all statistics related to the sector and ensuring its accuracy.

1.6 Study Components

In addition to this introduction, this paper includes three other sections. The first is a general description of the OPT. It describes the land, the population, the economy and trade, and a general summary of the Palestinian SMEs. In short, this section defines the variables that define the need for and the size and shape of the transportation system.

The second section focuses on existing SME investments opportunities in the different sub-sectors making up the Palestinian transportation sector. This section uses comparative international experience, as needed, to supplement the discussion on the role of the private sector, including the SMEs, in each sub-sector. It, further, summarizes future plans to develop each of the sub-sectors, and potential opportunities for SME investments.

Finally, the last section presents the main conclusions and recommendations of this study.

2. The Occupied Palestinian Territory

2.1 Land and Population

The Occupied Palestinian Territory (OPT) is composed of the West Bank, including East Jerusalem, and the Gaza Strip. The land-locked West Bank should be connected to the coastal Gaza Strip by an at-grade 42 km long territorial link over the Israeli territory (1, 2).

The total area (3) of the OPT is about 6,020 square kilometer, and it has a total population of just over 4 million inhabitants. The total population density in the West Bank and the Gaza Strip stands at 672 capita per square kilometers, as per population estimates (4) of mid 2010.

2.1.1 The West Bank

The West Bank, including East Jerusalem, is a land-locked land with a total area of about 5,655 square kilometers (3). The Hashemite Kingdom of Jordan borders the West Bank from the East, with a total border length of 134 kilometers. Israel borders the West Bank from the three other sides, with a total border length of 307 kilometers (5).

The Political Situation in the West Bank

The West Bank, including Jerusalem - the Palestinian capital, remains under the full Israeli occupation. Under the Taba agreement between the PLO and Israel, the area of the West Bank was divided into three categories for administrative and security purposes, as follows:

Area A: This is the area under the full control, administrative and security, of the Palestinian National Authority. This area is made up of the largest Palestinian population centers in the West Bank, with an exception in Hebron¹. The total area of “area A” is estimated at 17.8 percent of the area of the West Bank.

Area B: This is an area under Palestinian administrative control and under Israeli security control. It is located, mostly, in second level local

¹ Hebron is divided into areas H1 and H2 as per Wye River Memorandum agreed to between the PLO and Israel. H2 is the area, inside the heart of Hebron, in its old center, under the Israeli control.

population centers, near area A. “Area B” comprises approximately 18.2 percent of the area of the West Bank.

Area C: This area comprises 61 percent of the area of the West Bank. It is under full Israeli control, administratively and security.

One important note here is that for any Palestinian development in “area C”, Israeli military approval is required. This is true of all infrastructure and other facilities. As such, this means that all major roadways or rail, many access roadways, airports, etc, can not be constructed, or even rehabilitated without Israeli approval. This has been a major hindrance in developing the transport, and other major sectors in Palestine.

2.1.2 The Gaza Strip

The Gaza Strip is a coastal strip on the eastern side of the Mediterranean Sea with a total coastal length of 40 kilometers, making up its entire western boundaries. The total area of the Gaza Strip is 365 square kilometers (3). Its length is about 40 kilometers, while its width ranges from eight to twelve kilometers. Israel bounds the Gaza Strip from the north and east, and Egypt bounds it from the south.

The Gaza Strip is home to about 1.54 million (4). It has the world’s largest population density at about 4,206 inhabitants per square kilometer.

The Political Situation in the Gaza Strip

While Israel unilaterally withdrew from the Gaza Strip in 2005, it remains in control of the entire borders of the Gaza Strip. This includes the coastal area, and the southern borders with Egypt through the use of military means. Israel, in effect, continues to control the movement of people and goods into and out from the Gaza Strip. In short, the Strip continues to be under the full occupation of the Israeli military.

In 2007, the Hamas militias carried out a military coup against the PNA and took control of the Gaza Strip. This coup resulted in the division of the West Bank and the Gaza Strip. Israel has subsequently moved to full quarantine on the Gaza Strip, and has conducted a massive military campaign, destroying thousands of lives, homes, and much of the major infrastructure. This included the destruction of the Yasir Arafat international airport in the south eastern part of the Strip, and the initial work on the development of the seaport.

To date, the Israeli military continues its quarantine of the Gaza Strip. It does not allow the entry of most goods into the Strip, including all construction materials.

2.2 The Palestinian Economy and Trade

The Palestinian economy continues to be controlled by the Israeli occupation. On the one hand, the Palestinian economy is governed by the Paris Protocol signed between the PLO and Israel in 1995. This ill-conceived agreement was reached as a temporary arrangement, which was supposed to end with the end of the Oslo interim agreement in 1999. Yet, the lack of the Israeli will to reach a just and peaceful settlement to the conflict, resulting in two states living side-by-side, meant the continued application of this protocol.

On the other hand, the Israeli control of major lands in the West Bank, especially, “area C”, continues to severely obstruct the development of the needed infrastructure to support the Palestinian economic development. This control, and the Israel closure regime, which involves about 500 check-points, permanent and temporary, greatly restricts access and movement in the West Bank.

Yet, despite the Israeli occupation, the Palestinian Gross Domestic Product (GDP) stood at about \$ 4.82 billion in 2008, and the per capita GDP (6) was almost \$1,340. As for trade (7), by the end of 2008, the total Palestinian foreign trade volume reached over \$ 4.02 billion, of which, a total of about \$ 560 million in export and about \$ 3.27 billion in import.

Israel is the largest trading partner with the OPT. The total trade volume between Israel and the OPT in 2008 reached almost \$ 3.3 billion (7). Of this amount, about \$ 2.8 billion was in imports and about \$ 500 million in export.

Aside from Israel, the European Commission was the second largest trading partner with the OPT. Further, with regards to Arab countries, Jordan and Egypt were the largest trading partners with the OPT (7). Trade with Jordan constituted around 2 percent of the total Palestinian trading volume, while trade with Egypt was about 0.6 percent of the total trade volume in 2008.

2.2.1 Impact of Israeli Actions

The Israeli actions have severe impacts on the Palestinian economy. The World Bank (8) conducted a survey of major commercial transport routes in the West Bank in 2008. It found that route travel distances increased by forty percent. The study also found that the travel time increased by up to 366 percent, and that the labor cost due to delay increased by up to about 70 percent. Tables 1 through 3 summarize the results of the study.

Table 1: Travel distance increase due to Israeli restriction on movement, 2008

Route	Distance (km)		Percent Increase
	Normal	With obstructions	
Hebron-Jenin	143	200	40
Hebron-Allenby	70	77	10
Ramallah-Nablus	50	61	22
Ramallah-Jerusalem	19	25	32

Source: The World Bank, West Bank and Gaza. *Palestinian Trade: West Bank Routes*. (Report No. 46807-GZ). December, 2008.

Table 2: Travel tim increase due to Israeli restriction on movement, 2008

Route	Time (hours)		Percent Increase
	Normal	With obstructions	
Hebron-Jenin	2.05	4.05	98
Hebron-Allenby	0.80	2.50	210
Ramallah-Nablus	1.13	2.13	88
Ramallah-Jerusalem	0.36	1.68	366

Source: The World Bank, West Bank and Gaza. *Palestinian Trade: West Bank Routes*. (Report No. 46807-GZ). December, 2008.

Table 3: labor cost increase due to Israeli restriction on movement, 2008

Route	Labor cost (NIS/Km)		Percent Increase
	Normal	With obstructions	
Hebron-Jenin	0.23	0.35	34.3
Hebron-Allenby	0.31	0.65	52.3
Ramallah-Nablus	0.21	0.42	50.0
Ramallah-Jerusalem	0.45	1.49	69.8

Source: The World Bank, West Bank and Gaza. *Palestinian Trade: West Bank Routes*. (Report No. 46807-GZ). December, 2008.

In short, the check point system including the closure of Jerusalem, the continued closure of the safe passage between the West Bank and Gaza, the construction of the separation fence in the West Bank, and the quarantine of the Gaza Strip, combine to create the worlds most severe and inhumane closure regimes. The results include economic de-development and steadily decreasing standards of living for the Palestinian population.

2.3 Small and Enterprises (SMEs) in the Palestinian Economy

Small and medium enterprises make up 99 percent of all businesses in the OPT. In a study by Abdelkarim, where business size was based on the number of employees, it was found that over 90 percent of businesses in the OPT were defined as very small with four or less employees. Small business, with five to nine employees, made up 6.7 percent of the business. Medium business, defined to employ between 10 and 19 employees, constituted about 2 percent of the total number of businesses (9).

The study also found that 64 percent of the businesses in the transport and storage sector and mechanics were very small business.

Further, the study summarized the literature defining the problems facing the Palestinian small and medium enterprises. These problems, according to the study, ranged from Israeli restrictions and aggression, to the lack of proper infrastructure and legal framework. In addition problems facing SMEs included limited know how, weak marketing ability, inefficient productivity, and lacking competitive ability.

Finally, the study identified the lack of adequate financing as one of the major problems facing SMEs and their potential development and expansion. About eighty percent of SMEs rely solely on personal funding. Additionally, even the few who are able to receive some funding, it was usually for a short to medium term, with collateral requirement and costs that are beyond the means of most SMEs.

3. SMEs Potential Opportunities in the Transportation Sector

3.1 Make Up of the Transportation Sector

For purposes of this study, and to ease the analysis of the transportation sector, the sector was divided into five sub-sectors, as follows:

1. Roadways and Roadway Transport Support Services
2. Public Transportation
3. Trucking
4. Land Border Crossings
5. Rail, Seaports and Airports

3.2 Roadways and Roadway Transport Support Services

3.2.1 Existing Roadways and Roadway Transport Support Services

The transportation sector in the OPT is in its entirety an at-grade surface based roadway system. The total length of the paved roadway network in the West Bank and Gaza is estimated at 5,147 km. This includes a total of 4,516 km in the West Bank and 631 km in the Gaza Strip (10, 11).

The total number of vehicles in the OPT, excluding occupied Jerusalem, is estimated at about 188 thousand vehicles. Of those, about 123.6 thousand, or an estimated 66 percent of the vehicles are in the West Bank, as per 2009 data (11). In the Gaza Strip there are just under 55 thousand vehicles, or just over 34 percent of the total number of vehicles in the OPT, as per latest available data on the Gaza Strip in 2006 (10).

About seventy four percent of the vehicles in the West Bank and Gaza are private. Commercial vehicles constitute a little over 16 percent of the vehicles in the West Bank and Gaza, while public transport vehicles account for a little over 7 percent.

In an analysis of the age of vehicles, the Ministry of Transport found that about 68 percent of the vehicles in the West Bank are between 20 and 30 years old. It also found that about 21 percent of the vehicles are less than 10 years old. The rest of the vehicles, about 11 percent, were between ten and twenty years old (10).

Finally, to support the proper functioning of the roadway transportation sector, there are several support services, which are licensed by the MOT. These services include auto repair, auto parts shops, auto rental, gas stations, vehicles inspection facilities (Dinamometers), driving schools, etc.

3.2.2 SMEs in this Sub-Sector

The international experience in the involvement of the SMEs in developing the sub-sector of roadway and roadway transport support service can be divided into two categories. The first is the infrastructure and the second includes the support services.

The international experience on the role of the private sector in roadway infrastructure projects ranges from small planning or design contracts to complete design-build-operate-transfer corridor contracts (12). Generally, and due to the high infrastructure development costs, the role of the SMEs in the roadway infrastructure sub-sector is limited to the following:

- ◊ Planning and Design.
- ◊ Roadway Maintenance Projects.
- ◊ Roadway Rehabilitation projects.

With regards to support services, in most countries, these services are provided by the private sector, especially, SMEs. In countries where these services are provided by the private sector, the role of governments is limited to regulating the services through licenses and permits. The regulations are generally based on safety requirement.

The Palestinian experience is similar to the experience of most other countries in this sector. With regard to roadway infrastructure projects in the OPT, almost all of these projects have been small to medium in nature. As such, all engineering design and construction work in roadway maintenance, rehabilitation and construction, in the OPT, is carried out by SMEs firms.

As per 2009, there were a total of 150 consulting design firms (13), and a total of 430 construction firms (14) in the OPT. Data available from the MOT (10) indicates that the total investments by donors in the roadway infrastructure sector, in the OPT, reached almost \$ 550 million from 1994 to 2007. These projects were almost exclusively implemented by SMEs in the engineering field.

Support Service Facilities

With regards to support services in the OPT, all of these services are privately owned and operated. Further, these services are, for the most part, micro and small businesses, with only a few, which are medium in size.

Data on the number of establishments providing transport related support services is not inclusive. Such data, as important as it may be for economic and transportation development purposes, is available intermittently and only for few professions. A report published by PCBS (15) in 2008 summarized some of these establishments, by governorate, in the West Bank. Table 4 includes a summary.

Table 4: Number of selected support service establishments, by governorate, 2008

Governorate	No. of driving schools	No. of driving trainers	No. of training vehicles	No. of car rental companies	No. of cars available for rent
Jenin	22	100	74	7	45
Tubas	5	12	11	1	0
Tulkarem	16	66	44	5	37
Nablus	30	111	94	11	80
Qalqilia	8	22	23	7	139
Salfit	6	20	20	5	14
Ramallah	35	140	150	45	534
Jericho	10	22	31	9	44
Jerusalem*	6	18	20	7	27
Bethlehem	27	95	73	15	123
Hebron	35	147	123	7	46
West Bank	200	753	663	119	1,089

Source: PCBS. Annual Report for Transportation and Telecommunications

Statistics in the Palestinian Territory, 2008. July, 2009

* does not include the occupied city of Jerusalem.

As can be seen in the table, there were 200 driving schools in the West Bank with Ramallah and Hebron having the most schools at 35 each. Also, there was a total of 753 driving trainers and a total of 663 registered vehicles for training.

As for car rental companies, Table 4 shows a total of 119 companies with the governorate of Ramallah having the most car rental companies at 45. In addition, there were a total of 1,089 registered vehicles for rent, 534 of which were registered in Ramallah.

This same report (15) also provided data regarding the number of auto dealerships, mechanic shops, and auto part shops. Table 5 includes a summary of these establishments, by governorate, in the West Bank in 2008.

As can be seen in the table, there are a total of 374 auto dealerships in the West Bank, with most dealerships, 106, registered in Ramallah. In addition, there are a total of 1,685 mechanic shops and 471 auto parts shops registered in the West Bank. The governorate of Nablus has the most registered auto mechanics with 449 shops, and Ramallah has the largest number of registered auto parts with 105 shops.

Table 5: Summary of Auto Dealerships, Mechanic Shops, and Auto Part Shops in the West Bank, by Governorate, 2008.

Governorate	Auto Dealerships	Auto Mechanic Shops	Auto parts shops	Total
Jenin *	73	186	66	325
Tulkarem	17	279	63	359
Nablus **	74	449	81	604
Qalqilia	15	112	23	150
Ramallah	106	295	105	506
Jericho	3	17	1	21
Bethlehem	32	166	46	244
Hebron	54	181	86	321
West Bank ***	374	1,685	471	2,530

Source: PCBS. Annual Report for Transportation and Telecommunications Statistics in the Palestinian Territory, 2008. July, 2009

* includes Tubas, ** includes Salfit, ***does not include the occupied city of Jerusalem

Additionally, and based on the latest data provided by the Ministry of Transport for 2009, there are a total of 120 car importers registered in the West Bank. Further, the number of vehicle inspection facilities (Dinamometers) in the West Bank increased from 10 facilities in 2008 to 11 facilities in 2009.

3.2.3 Challenges Facing SMEs in the Roadway and Support Services Sub-Sector

The challenges facing the SMEs in the roadway and support service sub-sector are no different than the problems facing the rest of the SMEs in the OPT. These problems were highlighted earlier. Yet, few of these problems need to be stressed, as anecdotal evidence suggests that they are most relevant to the roadway and the roadway transport support services sub-sector. These include the following:

- ✧ The need to build the capacity of the local expertise and the need for continued know-how development. This is, especially, important for engineering design capacities for bridges, tunnels and main roadways. Additionally, ensuring continued know-how development for auto repair is important. As automobiles develop in their design and features, so should the skills of the local auto mechanics.
- ✧ Develop the marketing skills for some of these services. This includes auto rental, which should be expanded to reach international tourists visiting the OPT.
- ✧ Improve the management capacity of many of the smaller firms and automate some of the processes, especially, the ones related to improve services and inventory.
- ✧ Availability of funding for micro or small sized startups, including auto repair shops is limited. In addition to the limited available financing for business expansion or for improving operation and services.

Aside from these challenges, some types of the SMEs in the roadway and support services sub-sector face an added burden of additional governmental regulations. Some of these regulations may limit ability of SMEs to develop. An example includes restricting the entry into the vehicle inspection market (Dinamometer).

In addition to government regulations, registration of engineering design or contracting firms with the Palestinian engineering union or the Palestinian contractor union faces many restrictions.

To register, as a contractor (14), the regulations of the union, places stiff requirements for the availability of equipment or factories, capital and expertise in order to be registered at a given level. There are five types of contractors divided into five levels each. To move from level 5, least, to level 1, largest contractor, it takes a minimum of five years, in a market

characterized by high level of competition. The restrictions to entry were further compounded with a quota-based system on the amount of work allowed per engineer per year, which further restricts the development of the SMEs in this sector.

Finally, while regulations, in general represent an added burden on SMEs, overriding public good may be at stake, and will be adversely impacted due to lack of regulations. The lack of environmental regulations and monitoring regarding the proper handling and disposal of oils, filters, auto parts, etc is a challenge, which requires special attention. Not only due to its negative public health impacts, but also as it may represent opportunities for many “green SMEs” to be built around dealing with such waste.

3.2.4 Potential for Future SMEs Opportunities in this Sector

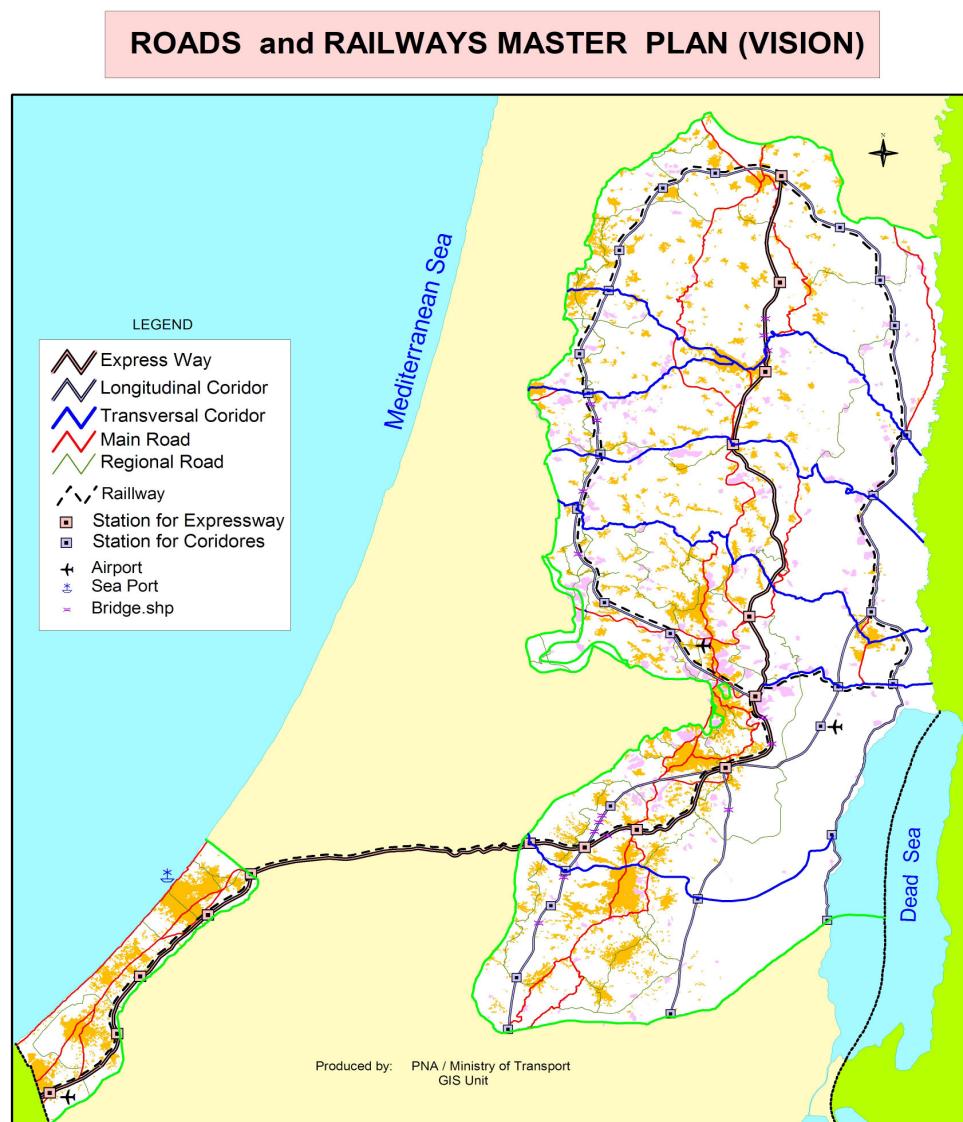
Engineering Services SMEs Opportunities

Figure 1 indicates a vision for the future of the roadway network in the OPT. The expected expansion of the roadway network, illustrated in the figure, includes the rehabilitation or the development of over 475 km of main roads.

In addition the MOT is planning roadway rehabilitation and development over the next three years for a total of 1,400 km (10). This is not including planned roadway rehabilitation and development within local centers.

For the most part, the design and construction aspects of most of these roads present opportunities for existing engineering SMEs. This is the case as classification requirement for these projects call for consulting engineering firms and level 1 or 2 roadway contractors. As such, within the next three years, new SMEs in either design or construction will be unable to compete for these projects. Yet, and as important, they present continued work potential for existing SMEs.

Figure 1: Roads and Railways Master Plan (Vision)



(Source: Ministry of Transportation.)

SMEs Opportunities in Support Services

With regards to support services for roadway transport, future opportunities depend largely on market demand. This is the case since entry to the market is open, excluding vehicle inspection facilities, which are governed by strict restriction to entry. While available data is insufficient to estimate future expected opportunities, it can be logically concluded that such opportunities will increase.

This is the case due to the direct proportional relationship between most of these facilities and the increase in the number of vehicles, persons, etc.

Further, and in addition to increasing the number of opportunities for new SMEs, there is a need to increase the focus on capacity building and continued development of skills and know-how to ensure better service and more productivity.

Finally, the investment required to startup most of these facilities is rather low. Therefore, for most of these establishments, the need for credit and financing is low. Yet, in some cases, including car imports, dealerships, gas stations, etc. that may require financing, the availability of such financing and the challenges to securing it is the same as for all other SMEs, discussed earlier.

3.3 Public Transport

3.3.1 Importance

Public transportation systems gain their importance from their socio-economic impacts. These impacts may include the following:

- ❖ Public transportation is the vehicle through which the poor reach the job markets, allowing them an opportunity to sustain themselves and the potential to move out of their conditions.
- ❖ It provides those unable to drive including the physically challenged, who are unable to drive, an opportunity to be more independent to move from one place to another.
- ❖ It provides a mean through which parts of public assistance to the poor and the less fortunate is provided.
- ❖ In heavily congested urban areas where air pollution is an issue, and in areas with limited parking spaces, the availability of public transportation help alleviate these problems.

- ❖ Public transportation creates direct employment and contributes positively to economic development.

Due to these factors, public transport has been an important political issue in many countries. The OPT was not an exception. Issues related to public transportation have been hot political issues over the years. These included issues of fare rates, fuel prices, route permits and franchising, private taxi permits, etc. On several occasions, over the past fifteen years, taxi drivers went on strikes due to dissatisfaction with government policies in these regards.

3.3.2 Ownership and Regulations

Historically, the public transport system was, and remains today, fully privately owned. The Palestinian Ministry of Transportation regulates the sector. The regulations include transport and vehicle safety, route definition and franchising, and controlling volumes and fares.

Prior to the establishment of the Palestinian National Authority the public transportation system was privately owned. Yet, under the Israeli occupation entry to the market was very restricted and difficult. Once established, the PNA eased restriction to entry to the market, while maintaining other controls including fares.

The PNA moved from permits based on ownership costing upwards of \$50,000 to a rented permit, at an annual rental cost of about \$3,000. This substantial decrease in upfront investment costs and the substantial increase in the number of licenses granted, substantially increased the number of taxis operating on the different routes and within geographic areas.

In 2008, the PNA government ceased the issuance of permits for taxis. This decision, which was, in good part, based on the recommendations of the World Bank, in addition to complaints of taxi owners and drivers watching their income dwindle as supply increased, lead to massive increases in the costs of taxi permits on the black market. Anecdotal evidence suggests that the cost of the taxi permit, on the black market, reached 100,000 NIS or more than \$ 26,000.

By the end of 2009 the Ministry of Transportation finalized the development of a new “needs-based for public transport” system for the granting of licenses for taxis and developing new routes. The system was based on license ownership, and the cost was set at about \$20,000 (JD

15,000). The new system effectively ended permit rentals, while allowing those already renting to continue renting, if they so wished.

With regard to needs, the ministry began a process in mid 2010 involving the assessment of needs for additional taxi services in the different areas of the West Bank. It concluded that there are needs for 51 taxi offices (companies), 153 shared taxi permits within governorates, and 309 shared taxi permits between governorates (17).

Accordingly, the ministry initiated the process of granting these licenses and permits through a lottery based process in each of the different governorates, in accordance with the new system.

Finally, while the new system has several advantages, it undoubtedly created more restrictive requirement to market entry than what was adopted soon after the PNA was established. The full impact of the new system, including both the extent of its positive and adverse effects requires evaluation in the near term.

3.3.3 Make-up, Economic Impact and Coverage

In the OPT, the public transport fleet is made up from taxis, shared and private, and buses, public and private. People movers like surface trains, metros, and high speed rail do not exist in the West Bank or Gaza. Regarding the size of the public transport fleet and its economic impact, Table 6 summarizes PCBS data (7) from 2002 to 2009.

**Table 6: Summary of Main Public Transport Indicators
in the OPT, 2002-2009**

Indicator	Year							
	2002	2003	2004	2005	2006	2007	2008	2009
Number of Vehicles	13,157	10,434	11,144	11,327	11,337	10,087	10,189	10,791
No. of employed persons	14,596	11,424	11,866	12,072	11,837	10,919	10,846	11,656
Compensation to employees (\$ million)	7.4	3.9	5.6	5.9	7.4	11.3	9.3	16.9
Output (\$ million)	178.2	132.3	129.6	162.6	168.3	170.8	177.5	226.2
Intermediate consumption (\$ million)	58.1	60.1	63.0	84.5	86.7	93.5	97.7	120.9
Value added (\$ million)	120.1	72.3	66.6	78.1	81.6	77.3	79.8	105.3

Source: <http://www.pcbs.gov.ps/DesktopDefault.aspx>

As can be seen from Table 6 the number of vehicles in public transport fell from 13,157 vehicles in 2002 to 10,434 vehicles in 2003, as a result of the Israeli application of the most severe closure regime in the OPT. The total number of operating vehicles increased by about 1,000 vehicles from 2003 to 2006. In 2007, the number of vehicles dropped to below 10,100 vehicles, which is the lowest since 2002. Subsequently, the number of vehicles began to increase reaching 10,791 vehicles in 2009, which is an 18 percent drop in the number of vehicles from 2002.

Similarly, the number of persons employed in the sector followed the same pattern. This is expected due to the individual ownership characterizing the public transport sector. The total number of persons working in the field fell from 14,596 persons in 2002 to 11,424 in 2003, then it followed a minor fluctuating pattern arriving at 11,656 persons in 2009. This is a drop of about 20 percent from 2002 in the number of employees in the sector.

The total compensation to employees, though, rose from \$7.4 million in 2002 to \$16.9 million in 2009, or an increase of 230 percent, in nominal dollars. Similarly, the output increased for the same period by 127 percent and the intermediate consumption more than doubled.

These results indicate somewhat market over-saturation with the number of operators leading some to leave the sector. This is inline with the World Bank conclusion that there is an over-saturation in the number of granted permits (16). In addition, the results, especially with regard to output and compensation, reflect better enforcement in the sector as police cracked down on illegal private vehicles transporting passengers, in many areas. Further, it reflects a more efficient system, as economic output increased at a time of reduced number of vehicles and employees.

With regards to the coverage of the system, it is rather wide. This is, especially, true in urban areas. In rural areas, the system is less accessible, in terms of availability and frequency. With regards to coverage and make up at the governorate level, data for public transportation in the Gaza Strip is not available. In the West Bank, though, the make up and coverage of the system, at the governorate level, is illustrated in Table 7 below (18).

The table indicates a total of 660 transport routes for shared taxis. Of these routes, 71 are intra-governorate routes and 589 are inter-governorates. These routes had a total of 5,138 shared taxis operating along them, of which 3,802 vehicles operating on the inter-governorate routes, and 1,336 operating on the intra-governorate routes. Further, it can

be seen from the table that the governorate of Hebron had the most routes, with 177 defined routes, of which a total of 133 inter-governorate routes.

With regards to the number of vehicles operating, the governorate of Nablus had the largest fleet of shared taxis at a total of 1,186 vehicles. Of these vehicles, a total of 681 operated along the intra-governorate routes.

Table 7 also shows a total of 302 private taxi companies, with a total of 3,946 taxis that are registered to these companies. The governorate of Ramallah had the largest number of registered companies with a total of 86, while the governorate of Hebron had the most number of registered private taxis with a total of 1,222 vehicle.

In addition to taxis, Table 7 shows that there are a total of 81 bus companies registered in the West Bank. These companies operate over 176 routes and have a combined total of 774 buses, both small and large. The governorate of Nablus has the largest number of bus routes with 44 routes, and Hebron has the largest number of buses with 156 buses.

Finally, Table 7 shows that there are a total of 723 private buses operating in the West Bank with 222 of these buses operating in the governorate of Hebron alone. Private buses are used for the transport of workers, students, etc.

Table 7: Summary of Public Transport System in the West Bank, 2009

Governorate ²	Route			Number of vehicles on route			No. of Private Taxi Company	No. of vehicles in these companies	No. of bus companies	No. of bus routes	No. of buses in bus companies	No. of private buses
	Internal	External	Total	Internal	External	Total						
Nablus	9	84	93	681	505	1,186	39	712	15	40	136	105
Ramallah	8	105	113	228	857	1,085	86	656	16	23	143	186
Hebron	44	133	177	213	776	989	40	1,222	14	25	156	212
Bethlehem	2	82	84	106	434	540	19	253	8	12	103	112
Tulkarem	4	59	63	64	407	471	29	289	3	25	68	0
Jenin	2	76	78	19	515	534	62	422	16	33	112	92
Qalqilia	0	27	27	0	144	144	13	211	1	5	8	12
Jericho	2	4	6	25	54	79	6	140	3	3	18	4
Salfeet	0	10	10	0	46	46	2	12	1	5	16	0
Tubas	0	9	9	0	64	64	6	29	4	5	24	0
Total	71	589	660	1,336	3,802	5,138	302	3,946	81	176	774	723

Source: Palestinian Ministry of Transport

² Data from occupied Jerusalem not available

Productivity of the Bus Passenger Transport

In a study by the World Bank (16) of the bus passenger transport, it concluded that the bus utilization rate at 3 to 4 trips per day, and their output of less than 100 km per day are “low by any standards”. Further, the study concluded that only 60 percent of registered fleet is in actual operation. Additionally, the study concluded that the number of passengers per vehicle per day of about 120 passengers per day, and a daily revenue per vehicle per day ranging between NIS 280 and NIS 400 is “low by any standard”.

The study also identified several problems leading to the failure of the bus system. Principle amongst these problems, the study concluded was the “oversupply in the shared-taxi sector.” The study went on to state that “the problem is compounded by the large number of authorized taxis for individual hire.”

To deal with this problem, the study recommended that the number of shared taxis be “reduced significantly to an appropriate level”. Further, the study issued several recommendations designed to further restricts shared-taxis, and chief amongst these was a recommendation to cease issuance of new permits for three years.

This is in addition to the study’s recommendation to restructure the public passenger bus transport companies in the West Bank into three unions; one in the north, another in the middle, and one in the south. Such rearrangement will create larger bus companies more financially viable.

Age of the Public Transport Vehicles

The Palestinian National Authority has established an age limit of 18 years for all taxis. Further, the new licensing regulations for taxi permits specify the requirements for new vehicles to all new permits. These and other requirements for taxis ensure that the fleet, for both private and shared taxis, remains relatively newer models, ensuring comfort and safety to the riders. As such vehicle age is not an issue with regards to taxis.

The age issue is of rising importance and concern in the busing sector. A World Bank study (16) found that around 80 percent of buses, small and large, was 12 years or older. The study also concluded that about 30 percent of the buses operating the West Bank require immediate replacement.

Finally, the study assessed the financial stability of the busing companies. It concluded (16) that 60 percent of the revenues of the bus companies are barely sufficient to cover the fuel and maintenance costs of the buses. As such, fleet renewal, under these circumstances is not attainable without restructuring the sector and providing adequate financing facility to support these companies.

3.3.4 Challenges facing the public transport system

The challenges facing the public transport sector are, in part, general, yet in others modal. In addition, there are concerns affecting riders of the system. The following is a summary of the main challenges facing the system.

Challenges facing taxis

- ✧ Competition between the taxis and private vehicles used illegally to transport passengers remains a problem, even with the strong enforcement efforts of the government.
- ✧ The limitations to market entry by government, through regulations, provide not only opportunities for corruption, but also opportunities for black markets to prosper. As stated earlier, in the OPT, anecdotal evidence suggests that the price for a rented taxi permit reached NIS 100 thousand, or over \$ 26 thousand.
- ✧ There continues to be a lack of proper taxi stations in many cities and towns.
- ✧ Increased operating costs and lower productivity due to delays at Israeli check points.
- ✧ Some drivers do not abide by set routes or permit requirements.

Challenges facing buses

- ✧ Smaller companies entail weakened financial performance and abilities.
- ✧ Age of bus fleet is growing old and 30 percent require immediate replacement.
- ✧ The lack of adequate funding facilities, or financing, is a major problem facing the renewal of the bus fleet.
- ✧ Competition between shared taxis and buses is weakening the financial sustainability of the bus companies.

Challenges facing riders

- ✧ The coverage of the system remains weak in rural areas. This is, especially, true in terms of frequency of trips to and from these areas.
- ✧ There is no needs-based program aimed at providing proper access to the poor to be able to utilize the system to improve their conditions.
- ✧ Some drivers charge over the fare prices set by the government.
- ✧ Long delays and wait times on many routes due to limited number of passengers.

3.3.5 Potential Opportunities for SMEs in Public Transport

The international experience in both developed and developing countries point to the absolute failure of the public sector in developing and managing the public transportation system, whether for taxis or buses. This failure came about due to several reasons, primary amongst them are poor planning and lack of funding.

Therefore, countries shifted to privatizing the public transportation sector. In the bus transportation services, private sector operates reached 75 percent of the buses, globally. Competition for the distribution of bus routes cut operating costs between 25 and 40 percent in several European countries, including the UK, Denmark, Sweden and Finland (19).

In addition, the cost difference of bus routes per passenger kilometer between publicly and privately managed bus routes reached 100 percent, and in some cases even more, in many main cities in developing countries including Ankara, Calcutta and Jakarta (20).

As for the public transport system in the OPT, it is made up entirely from small and medium sized bus and taxi companies. In addition to the companies, there are many individual taxi owners operating both private and shared taxis. The following is a summary of potential future plans for developing the sub-sector, and the associated potential opportunities for SMEs:

Taxis

Under the new system for the issuance of taxi permits, the PNA issued in mid 2010 several permits for new companies and routes. In addition the ministry issued several new permits for existing routes. This issuance, after two years of cessation, was based on “needs assessment”, and accounts to about five percent of the existing fleet.

Given the existing recommendations of the World Bank to reduce the number of shared taxi permits due to the negative impact on the bussing industry, and the added restrictions to entry to the market, increased opportunities for SMEs in the taxi market is expected to be very limited in the near to medium future.

One potential area for increase, especially for shared taxis, includes services to rural areas. This may be anticipated due to “needs” of these areas for public transportation. Yet, a major concern remains with regards to profitability of such routes, which could mean that the operators may not honor the permit requirement or may go bankrupt due to a losing route. As such, it is important to look into restructuring the entire routing system to join profitable and non-profitable routes, or provide operator subsidy.

Buses

The MOT adopted, in mid 2010, the World Bank recommendations (16) to restructure the busing sector into three Unions, north, middle and south. The existing busing companies are then expected to join these unions. In addition, plans are being developed to provide financing for fleet renewal. This will create three bus companies in the West Bank. These companies would be medium to large sized with stronger financial footing.

Other plans discussed in the OPT for the bussing sector include the development of Rapid Bus Transit (RBT) for inter-city routes. These plans are being advanced as phase I of the implementation of the Arc (21). Future phases of the ARC call for the development of high speed rail to replace the RBT.

The movement towards the establishment of a RBT, or the restructuring of the bus companies into larger more financially stable ones, will better position the busing market to compete with the shared taxi market. The result of such competition could mean a reduction in the revenues to the share taxis, and could even result in a reduction in the overall number of shared taxis, or even routes.

Aside from the adverse impacts on the shared taxi market, developing the bus passenger market enables the less advantaged to have better access and mobility, achieving an important objective of the public transport system.

It must be stressed here that current available information and data are insufficient to develop policies. This is due to the lack of needed data, either because it was not collected at all, or it is not available for a given

timeframe to allow for policy formulation. As such it is important that detailed studies assessing the full impact, whether socially in terms of access, or economically in terms of lost SMEs opportunities, need to be carried out to determine shared taxi – bus balance in the OPT.

Further, it is important that policies for the shared taxi market and the public bus market be evaluated differently than the private taxis and private buses. A functional distinction may, and should, be made between the two classes. Shared taxis and public buses are better equipped, and can be used as a vehicle for social protection and development. This is unlike private buses and taxis. As such it is important that restriction to market entry be reevaluated in order to:

- ◊ Create more competition.
- ◊ Allow market to determine needs
- ◊ Create provision of services to disadvantaged areas.
- ◊ Create provision of services to disadvantaged groups.

In other words, policies restricting entry of private taxis and buses to the market need to be reassessed to determine whether open market is better suited for this mode of public transport. Further, social subsidies, either to individual riders or public transport operators on special routes should be considered to provide better coverage. This may include the establishment of new, including potentially unprofitable routes, and packaging both profitable and non-profitable routes for franchising. Alternatively, it may include providing operators' subsidies.

Note on Private Bussing

Private bussing are bus transport for specialized groups. These include students, workers, tourists, etc. Currently the MOT is in the process of restructuring these companies and providers of services. Creating specialized companies could, on the one hand, limit the ability of the public passenger transport bus companies to compete for these services. Yet, restricting entry to these markets to public passenger bus companies limits competition, and could result in more expensive and inefficient services. In addition, such restrictions will undoubtedly result in a reduction in the number of SMEs, and especially, individual owners-operators operating in the field.

Therefore, without adequate data to formulate such policy, it is recommended that the market for such services be open to both public passenger transport buses and to specialized operators for these services.

Yet, at a minimum, all services should be regulated for safety and quality of service provided, to ensure proper services to students, tourists and workers.

Summary

To summarize, future plans to restructure the public transport market may ultimately result in a reduction in the available opportunities for SMEs, especially in the taxi market. This reduction need not be translated into the available number of employment opportunities. This is the case, as movement of the bus market towards larger companies could mean the need for more overall number of employees.

One important note, public transport is an essential instrument to achieve social public policy benefiting the poor and marginalized. Therefore, any changes should stress this aspect through:

- ❖ Establishment of better coverage to marginalized areas, even if public subsidies is called for. Or,
- ❖ Insuring better access to the poor and marginalized groups, whether through rider-based or operator-based subsidies. Or using combinations of routes, based on potential revenues, through a newly restructured route franchising scheme.

3.4 Trucking

3.4.1 Existing Situation

The trucking industry is a vital sector to the Palestinian economic development since it is the only mode of transportation used in the movement of goods in the OPT. Trucks carry all imported and exported goods, which exceeded \$ 4 billion in 2008. Further, trucks move all goods in the internal trade market inside the OPT. This is in addition to the movement of all humanitarian assistance of food and medicine.

This industry is in its entirety privately owned, under minimal regulation by the Ministry of Transport related to vehicle and driver safety issues. Entry into the market is open and initial investment cost need not exceed the cost of the truck itself. As such, the trucking industry is characterized by a large number of individual owners who operate on chartered basis, i.e. SMEs.

In addition, to individual owned and operated trucks, or small trucking companies, many Palestinian companies in the fields of manufacturing, distribution, etc. own their own trucks, which they use exclusively to move their goods.

The total number of trucks operating in the OPT was estimated at 30,000 trucks (22). Of these, about 22,000 operate in the West Bank and 8,000 operate in the Gaza Strip. The bulk of the Palestinian trucking fleet consists of small trucks with carrying capacity not exceeding 4 tons.

As for larger trucks, in 2008 the total number of trailers and semi-trailers reached 296 in the West Bank and Gaza. According to the Ministry of Transport, in 2009, a total of 104 new trailer and semi-trailer were registered in the West Bank. Data for the Gaza Strip in 2009 is not available.

Currently, and according to PCBS statistics (15), most large trucks are concentrated in the Ramallah governorate with 119 trailers and semi-trailers. It is followed by the governorate of Jenin with 64, then Nablus with 40 trailers and semi trailers.

Finally, it is important to note here, that statistics regarding internal trade is not available. Further, data regarding the type of truck ownership, whether it is the core business of the company or the individual owner-operator, or whether it is not the core business, is not available. Such data is essential for better analyzing the sector to optimize its potential.

3.4.2 Challenges Facing the Trucking Industry

The continued Israeli occupation and control of the Palestinian land remains as the biggest challenge to the development of the Palestinian trucking industry. This is for several reasons, as follows:

- ❖ Israeli control over border crossings ensures long delays in moving goods to and from the crossings. These delays translate into high-costs and lost productivity to the industry, and subsequently lost income.
- ❖ Similar point is made with regards to the delay experienced by Palestinian trucks at Israeli check points inside the West Bank.
- ❖ The inability of Palestinian trucks to transport goods beyond borders, or the limits set by Israel, the inability to move between the West Bank and Gaza, and to operate within Jerusalem, limits potential income and opportunities for expansion of the industry.

Aside from the challenges created by the Israeli occupation, and at times as a consequence of the Israeli actions, the following are additional challenges, which require special attention:

- ✧ Over 50 percent of the Palestinian trucking fleet is older than 20 years (22). As such, renewal of the fleet is a top priority.
- ✧ The individual ownership of the trucks or the small size of the truck companies limits their financial viability.

3.4.3 Future Potential Opportunities for SMEs in the Trucking Sub-Sector

In the OPT, the trucking industry is fully privately owned, either individual owner-operator, or small companies. Given the direct proportional relationship between the population increase and economic growth with the need for more truck trips, the potential number of SMEs in the trucking sub-sector is expected to increase in the OPT.

However, as long as the Palestinian trucking industry is restricted to operate only within the limited geography of parts of the occupied territory, the ability to create financially viable trucking companies will be limited. Further, many companies involved in manufacturing or distribution in the local market, chose to own and operate their own trucks, as apposed to using a trucking company. This does not support the development of more SMEs opportunities in the trucking industry, nor does it contribute to the financial viability of existing ones.

As such, the PNA has an important role to play in supporting this vital industry. This can be accomplished in two specific ways, as follows:

- ✧ Create incentive programs to encourage truck owners and smaller companies to merge into larger units, medium and large companies making them more financially viable.
- ✧ Provide facilities to support the financing of the renewal of the existing fleet to help cut operating and maintenance expenses of trucks.

Finally, proper policy formulation requires adequate data to be properly analyzed to develop policies. This is true of the trucking industry. Therefore, it is important that data collection programs for the trucking industry be developed. This is in addition to collecting regular data on internal trade and the movement of goods between the different governorates.

3.5 Land Border Crossings

3.5.1 Existing Situation

Land border crossings are the only access points of entry or exits for goods and people between the OPT and the rest of the World. All existing land crossings are under the control of the Israeli occupation.

The Palestinian international land crossings include the Rafah crossing with Egypt, at the southern most end of the Strip, which is used primarily for the movement of people. In addition, the West Bank has two crossing points with Jordan. The first is the King Hussein Bridge Crossing (Allenby Crossing) to the east of city of Jericho in the West Bank. This crossing, which was mainly used for people movement has been developed to handle the movement of goods.

The other crossing is in the middle of the West Bank to the east of the city of Nablus. This is the Damia crossing, which was mostly used for the movement of goods. Currently, it is shut down and in need of major upgrade.

All other land crossings are with Israel. To date there is no agreement between the Palestinians and the Israelis on the location of these crossings. Yet, several points are used as crossings between the West Bank and Gaza and Israel. These points were unilaterally defined by Israel.

The land crossings between the Gaza Strip and Israel (10) include Alumtar (Karni), Sofa, and Nahal Oz, which are used primarily for the movement of goods. In addition there is the Beit Hanon (Erez) crossing used for the movement of people. As for the West Bank crossings with Israel include Bardala and Jalama in the northern side, which are used primarily for the movement of goods. Additionally, there are the Tulkarem (Shear Ephrim) crossing for the movement of goods and people, and the Qalqilia crossing for the movement of people, mainly workers, both of which in the western side of the northern part of the West Bank.

Further, there are remaining issues with regard to the location of the Betunia crossing point 6 km inside the West Bank near Ramallah, and the Tarqumia crossing in the south-western part of the West Bank, which is located 1.5 km inside the West Bank. Both points are used for the movement of goods.

Finally, the issue of the occupied city of Jerusalem and the crossing points in its vicinity require to be agreed between the two sides. This includes crossings used for the movement of goods and people between both, the Israeli and the Palestinian sides of the city.

3.5.2 SMEs at Current Crossings

The PNA, only in small part, controlled the Palestinian side of the crossings in Gaza. In addition, the PNA controls the passenger collection point known as the Jericho Rest Area, which collects passengers on the way to Jordan through the Karamah - King Hussein Bridge crossing. All other crossings are under total control by Israel.

As such, the PNA did not have many opportunities to allow the entry of SMEs to help develop the crossings. On the Gaza side of the crossing with Israel, much of the operations were handled by daily workers hired by the Palestinian Border Crossing Authority, and very little private sector operation.

This is unlike the operation of the Jericho Rest Area, where transport to and from the rest area, the cafeterias, shops, parking facilities, etc. are operated by SMEs.

3.5.3 Potential Opportunities for SMEs at Land Border Crossings

Historically infrastructure facilities, include highways and buildings at border crossings, have been under complete public control (23, 24). This is at a time when, in many countries, support services, such as handling of goods and baggage or parking, and concessionary services including shops, cafes, etc. at land border crossings have been provided by the private sector, most of which are SMEs.

Over the past two decades many countries began moving towards privatization of the infrastructure at the border crossings. Such privatization occurred, either, through Build-Operate-Transfer (BOT) contracts, especially for toll roads, or through management contracts of existing facilities. This trend was fueled by the need to improve services at times of budget cuts and increased competitions over national budgets.

While full crossing management contracts or BOT contracts require large investments beyond the means of SMEs, most support and concessionary functions are suited for SMEs.

As such, after the Palestinians take control of, and develop, their land border crossings, there exists good opportunities for SMEs at most of these crossings. These opportunities include:

- ◊ Planning and design work.
- ◊ Rehabilitation and construction.
- ◊ Support services for the handling of goods including storage, lifting, etc.
- ◊ Concessionary services provided to persons including shops, cafes, parking facilities, etc.
- ◊ Transportation of people and goods to and from the crossings.

It is important to note here that, as the Palestinians plan to build their own state, the potential role that the private sector can play at the border crossings should be studied to maximize the potential benefits. Additionally, planning of such crossings should include provisions to maximize the role that SMEs can play in the development and operation of these crossings.

3.5.4 Challenges Facing the Land Border Crossing Sub-Sector

The principle challenge hindering the development of the land border crossing sector is the continued Israeli occupation and its heavy-handed control of Palestinian lands. Beyond the Israeli occupation, developing adequate and specialized institutions to develop and manage these crossings remain another challenge.

Finally, securing sufficient funding for the development of all the land crossings, and developing adequate Palestinian expertise to manage them remain important challenges to overcome.

3.6 Rail, Seaports and Airports

3.6.1 Existing Situation

Currently there are no rails, seaport or airports under the control of the Palestinian National Authority. As such, the three sub-sectors were combined in one.

Rail

While the construction of rails in Palestine began in 1889 under the Ottoman rule of Palestine (10), after the Israeli occupation in 1967 major parts of the rail lines and right-of-way were taken over for the construction of buildings and roads. Therefore, there are no rail tracks or trains operating in the OPT.

Seaports

With regards to seaport (10), an agreement was reached between the PLO and Israel in Sharm Sheikh in September 1999 to construct a Palestinian seaport in Gaza. The PNA worked with the donor community to secure funding for the design and the construction of the port. It contracted French and Dutch companies to design and build the first of three phases of the port in April 2000.

The Israeli attack on the Gaza Strip during the second intifada, and the subsequent Hamas takeover of the Strip and the Israeli blockade, the port did not materialize.

Airports and Air Transport

After the 1967 war, Israel took control of Qalandia Airport in the northern part of Jerusalem, and with it took control of all Palestinian air travel. The Palestinians remained without an airport of their own or an airline until after the establishment of the Palestinian National Authority.

After the signing of the Wye River memorandum between the PLO and Israel in 1996, The Palestinian National Authority began the construction of the Yassir Arafat International Airport in the southeastern part of the Gaza Strip, about 36 km from the city of Gaza.

The cost of constructing the airport (2) reached \$ 110 million, off which about \$ 40 million came as loans from Egypt and Spain. The rest were provided as grants from several donors, and about \$ 7.4 million from the PNA's own budget.

The airport opened for operation in November 1998, and remained in operation until October, 2000, when the Israeli military closed off the Palestinian airways, and subsequently destroyed the runway and large parts of the airport in December 2001. The cost for rehabilitation of the airport is estimated at \$ 21.6 million.

Palestinian Airlines

The PNA established the Palestinian Airlines Company (2), as a public company to provide air travel services. The company, which owned two Fokker 50 airplanes and one Boeing 727, seized operation about one year after the destruction of the Yassir Arafat airport in Gaza. Currently, the company faces serious financial challenges, and major efforts are needed to restructure and fund the company.

3.6.2 Future Plans

The future plans of the PNA regarding the infrastructure components for air, maritime, and rail transport can be seen in Figure 1. This figure, which illustrates a vision for the future infrastructure of the transportation system, shows rail networks moving along the M40 route, the regional Arab transportation corridor, and around the northern part of the West Bank.

Additionally, the Gaza seaport is planned to be located and constructed to the west of the city of Gaza, as can be seen in the figure. Finally, the figure shows the location of three airports. The first, in the southeastern part of the Gaza Strip, is the Yassir Arafat international airport, which the PNA plans to reconstruct, and to build its cargo terminals.

The second and third airports are in the West Bank. One is the Qalandia airport to the north of Jerusalem, which the PNA plans to use for regional air flights, as soon as it is returned to its control. The second is the “Palestine International Airport”, which is in the planning phases to be located in the Jordan Valley area.

Aside from the infrastructure issues, the PNA is looking into institutional issues and into potential roles of the private sector in developing and managing such facilities.

3.6.3 Challenges facing Air, Maritime, and Rail Sub-Sectors

There are many challenges facing the development of these facilities. The primary obstacle is the Israeli occupation and its control over the Palestinian lands, sea, and air. Other concerns include the development of the institutions and expertise required to regulate, oversee, manage, and operate such facilities.

In addition, the issue of financing such facilities remains a challenge. The infrastructure costs of such projects are large.

Finally, the role that the private sector can play in developing these facilities is an issue that requires further analysis and understanding to be included in the development plans of these sub-sectors.

3.6.4 Role of the Private Sector Including Opportunities for SMEs

While detailed assessments and studies are required to determine the extent of the role that the private sector can play in developing these sub-sectors, few lessons may be highlighted from comparative experiences. These include:

Rail

- ✧ Infrastructure investment requirement are too large and require large businesses to be involved, if policy is to privatize.
- ✧ In general rail lines and trains used for the transportation of goods have been privatized.
- ✧ In the case of transporting passengers, privatization is an option, which may be carried out by competition to provide services over certain routes, or in certain areas.
- ✧ Design and construction of rail lines require specialized expertise, which is only available through large engineering firms.
- ✧ SMEs potential for participation in the rail sub-sector is limited to some concessionary services, which may be available at termini or stations. These include shops, cafeterias, cleaning services, etc.

Seaports and Maritime Transport

- ✧ Infrastructure investment requirement are too large and require large businesses to be involved, if policy is to privatize.
- ✧ In general seaports and container terminals have been privatized around the world and are operated by large companies.
- ✧ In general national carries have been privatized.
- ✧ Design and construction of seaports require specialized expertise, which is only available through large engineering firms.
- ✧ Support services to the operations of ports and ships are many, and there is large potentials for the involvement of SMEs in providing these services, by concessions or similar arrangements.
- ✧ Charter ship markets are open markets for the transport of people and ships. There exist good potentials for the involvement of the SMEs in building, maintaining, importing and selling, and operating these ships.

Airports and Air Transport

- ◊ Infrastructure investment requirement are too large and require large businesses to be involved, if policy is to privatize.
- ◊ Some airports have been privatized around the world, but not to the extent of seaports.
- ◊ In general national carriers have been privatized.
- ◊ Design and construction of airports require specialized expertise, which is only available through large engineering firms.
- ◊ Support services to the operations of airports and airlines are many, and there are significant potentials for the involvement of SMEs in providing these services, by concessions or similar arrangements.

Finally, it is important to note that the potential role that the private sector can play in the development and operation of these facilities should be studied to maximize the potential benefits. Additionally, planning of such facilities should include provisions to maximize the role that SMEs can play in their development and operation.

4. Conclusions and Recommendations

4.1 General Conclusions and Recommendations

The general conclusions of this study may be summarized as follows:

- ✧ The current Palestinian experience in the transport sector has been limited to the roadway sector and its associate transport modes and support services.
- ✧ The Israeli occupation continues to represent the most hindering obstacle to developing the Palestinian transport sector, and continues to obstruct the development of additional transportation modes.
- ✧ The lack of adequate data, both in terms of type and quality, continues to represent a major challenge to proper policy formulation, planning, and overall sector development.
- ✧ Small and medium enterprises constitute the bulk of the Palestinian private sector. This is also true for the private sector involved in the transportation sector.

As for the general recommendations of this study, they may be summarized as follows:

- ✧ The Palestinian National Authority needs to build upon its nascent experience in multi-model planning.
- ✧ The Palestinian National Authority needs to build upon its experience in ensuring the participation of the private sector, especially SMEs, in planning for the transportation sector. In addition, to seeking opportunities to harness the potentials of the private sector in developing the Palestinian transportation sector.
- ✧ The Palestinian National Authority should focus on unifying data and information relevant to the transport sector and should ensure the quality of such data.
- ✧ The Palestinian National Authority should, as much as possible, foster the use of the transportation system as a vehicle for social protection and upward mobility.

4.2 Specific Conclusions and Recommendations

The following is a summary of the conclusions and recommendations for each of the sub-sectors discussed in this paper:

4.2.1 Roadway and Support Services Sub-Sector

The conclusions of the roadway and support services sub-sector include the following:

- ✧ Most infrastructure projects involve large scale financial investments and can only be carried out by larger size businesses and companies.
- ✧ The Palestinian experience in partnering with the SMEs to develop roadway infrastructure is limited to engineering planning and design and construction.
- ✧ There are 38 different professions that are licensed by the Ministry of Transport. These businesses work to support a functioning roadway transportation sector.
- ✧ Support services to roadway transportation are fully private, and are almost totally SMEs.
- ✧ There are no obstacles to entry into the market for SMEs in this sector. The only exception is for vehicle inspection facilities (Dinamometers). Further, more restrictions to entry apply due to safety related issues for some professions.
- ✧ Problems facing SMEs in this sub-sector are no different than the general problems facing other SMEs. Yet, continued development of know-how and developing local expertise are amongst the main challenges facing these SMEs.
- ✧ There is a lack of data on majority of these services, and there are no regular programs for data collection for most of these services.
- ✧ Potential for increased SMEs opportunities in this sector is directly proportional to the increase in the number of vehicles and the population.

As for the main recommendations in this sector, the following is a summary:

- ✧ It is important that detailed and regular data collection programs be developed for the different roadway transport support services.
- ✧ Capacity building programs and continued know-how development are essential programs, which need to be pursued to improve performance of this sector.
- ✧ Problems facing the SMEs in this sub-sector are similar to those facing other SMEs. Given the importance of the SMEs to the Palestinian economy, it is recommended that addressing the challenges facing the SMEs in OPT be given higher priority on the national agenda.

4.2.2 Public Transportation Sub-Sector

The conclusions of the public transportation sub-sector include the following:

- ✧ The public transport sub-sector in the OPT consists of taxis and buses.
- ✧ The system has good coverage, especially, in urban areas. In many rural areas the coverage is weak in terms of availability and frequency of trips.
- ✧ The sector is fully privately owned and operated under strict government regulations.
- ✧ Most taxis and buses are either individually owned or are owned through small and medium companies.
- ✧ Entry to the public transport market was heavily restricted under the Israeli occupation. When the PNA was established, it lessened the entry restrictions. In 2008, it ceased all new permits, and recently it opened up entry to the market based on “needs”, and through a more restrictive entry process.
- ✧ As per 2009 data, there are about 10,800 public transport vehicles employing over 11,650 persons. The sector has a total output of over \$226 million.
- ✧ Vehicle age is not an issue for taxis since the regulations specify a maximum age of 18 years.
- ✧ About 30 percent of buses need urgent replacement. The small size of the bus companies and the strong competition from the shared taxis, place many companies in financial hardships, which limits their ability to renew their fleet.
- ✧ The World Bank in 2008 concluded that there were a large number of taxis operating in the market. It recommended the cessation of issuance of shared taxi permits for three years to allow buses to better opportunities at competing with them. In addition to restructuring the bus sector.
- ✧ The public transport system is not being utilized, by the PNA, to provide some social support to the marginalized group.

As for the recommendations for the public transport sector, the following is a summary:

- ✧ The extent of government restrictions to entry needs to be re-evaluated. This is especially the case for private taxis and private buses. Further, anytime government regulations restrict entry to the market, the potential for corruption and black markets increases. As

such counter-strategies need to be in place to deal with such major shortcomings.

- ✧ Some form of social subsidy program for the poor and the marginalized need to be adopted, especially for shared taxis and public buses. Such a system may include provisions to restructure route franchising to include both profitable and non-profitable routes. In addition, direct subsidies to riders or operators may be considered.
- ✧ The PNA should assist the bus companies on merging into medium and larger size companies and it should establish a specialized fund to support fleet renewal.
- ✧ It is important that detailed study assessing the optimal balance between shared taxis and buses be carried out. Such study may include restructuring of the routing system.

4.2.3 Trucking Sub-Sector

The main conclusions of the trucking sub-sector include the following:

- ✧ Trucking is the only mode for the transportation of goods in the OPT. This includes internal trade, and all imports and exports, which reached over \$ 4 billion in 2008.
- ✧ Data on internal trade is unavailable. Further, data defining ownership of trucks as a core business, or supplement to existing business is not available.
- ✧ This industry is fully privately owned and operated. Government regulations of the industry do not exceed the safety requirement.
- ✧ The industry is characterized by individual truck ownership and small-sized firms.
- ✧ There are over 30,000 trucks operating in the OPT, a majority of which have a carrying capacity not exceeding 4 tons.
- ✧ Over 50 percent of the truck fleet is older than 20 years, and is in need of urgent renewal.
- ✧ The Israeli obstruction to access and movement are the biggest hindrance to the productivity of the sector and creates a major burden to the cost of operation.
- ✧ The individual ownership, or the small-sized firms, characterizing truck fleet ownership further contributes to weakened financial standings.

The principle recommendations to support this sub-sector include the following:

- ✧ The PNA needs to develop a program to provide incentives for the individual truck owners and small firms to join into larger size, more financially viable, companies.
- ✧ The PNA should establish a facility to support the renewal of the truck fleet.
- ✧ Programs for regular data collection on internal trade should be developed and implemented. In addition to the collection of data on whether trucks are owned as a core business or as support to other business.

4.2.4 The Land Border Crossing Sub-Sector

The following is a summary of the main conclusions of the land border crossing sub-sector:

- ✧ Land border crossings are the only ways for people and goods to enter to or to leave from the OPT.
- ✧ All land border crossings are controlled by the Israeli military.
- ✧ Rafah is the only land crossing with Egypt, and the King Hussein and Damia Bridges are the only land crossings with Jordan.
- ✧ Other land crossings are with Israel. The final locations and use of these crossings has not been agreed to between the PLO and Israel. As such, several proposed locations are inside the West Bank and not along the borders.
- ✧ The limited Palestinian experience with land border crossing is that at the land crossing between Israel and the Gaza Strip. In addition to the passenger collection point at the Jericho Rest Area on the way to Jordan through King Hussein Bridge crossing.
- ✧ At the Jericho Rest Area, SMEs were used to provide transport to and from the facility, operate cafes and shops, operate parking facilities, etc. In the Gaza crossings, most services were provided by the government.
- ✧ There is potential role for large companies to invest in developing the infrastructure of the land crossings or to manage them.
- ✧ Role for SMEs in land crossings including planning, design and engineering works. Additional potential opportunities include handling of goods and baggage, most concessionary services, and transportation of people and goods to and from the crossings.

With regards to the main recommendations of the sub-sector, the following is a summary:

- ✧ It is essential that the PNA begin the process of building the local capacities in developing and managing this sub-sector.
- ✧ It is essential that planning for land border crossings should endeavor to maximize the contribution and the participation of the private sector, especially SMEs, in developing and operating these crossings.

4.2.5 Rail, Maritime and Air Sub-Sectors

The following is a summary of the main conclusions regarding the transportation sub-sectors of rail, maritime and air:

- ✧ Under the Israeli occupation, the Palestinians have no rail system or maritime transportation.
- ✧ The Yassir Arafat international airport in the southwestern part of the Gaza Strip was the only airport to operate under the PNA. It operated for two years before Israel destroyed it.
- ✧ Future Palestinian plans call for the development of rail systems, a major seaport in Gaza, and to operate three airports; these include a rehabilitated Yassir Arafat international airport, the Qalandia airport, once the Israeli occupation hands it back over to the Palestinians, and a planned airport in the Jordan Valley.
- ✧ The role of the private sector is envisaged based on international experiences, as it is not available locally. This includes potential roles to build and manage the large infrastructure and service provisions, such as freight rails, by large size companies.
- ✧ Role of SMEs in these facilities includes handling of baggage, handling of smaller cargo, concessionary services, small chartered ships, etc.

The recommendations regarding these sub-sectors include the following:

- ✧ It is essential that the PNA begin the process of building the local capacities in developing and managing these sub-sectors.
- ✧ It is important that the PNA should strive to include the private sector from the planning phases for these projects. Further, it is essential that the PNA evaluate the ways for harvesting the potentials of the private sector, especially SMEs, in developing and operating these sub-sectors.

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