Prospects and Challenges of Palestinian Logistics System*

ABDALLAH M.A. HASSOUNA* · Hyun-Duk Kim**

Abstract: The purpose of this paper is to shed the light on one of the most important influential factors for the development the Palestinian economy, which is logistics system. The discussion about the Palestinian state and its economy arise after the UN General Assembly voted to grant Palestine a nonmember state. Palestine is considered land-locked country, although it has seashore. Although Palestine has seashore, it is considered land-locked country due to the lack of sovereign logistics infrastructure. International Trade with Israel, Jordan, and Egypt is done through land border crossings. Palestinian international trade to European, Asian, and American countries is currently done through Israeli airports and seaports. Almost 99% of the Palestinian imports are through land. Israeli policies and procedures incur Palestinian exports additional transportation costs when delivering their products to Israeli ports and Airport and even when transit these cargos to neighboring countries through Israeli controlled areas. Therefore, without direct access to international markets, the Palestinian economy will not be able to compete in international markets, and will continue its dependence on the Israeli economy. Considering that the current situation will continue, alternative routes for international trade to avoid using the Israeli ports are Aqaba Port in Jordan and Port Said in Egypt. In the long term, having a seaport and Airport in Gaza, Airport in the West Bank, and constructing the Corridor connecting Gaza and the West Bank, is the only solution capable for independently integrating the Palestinian economy with the region and other countries in the world, and therefore creating competitive advantage for the Palestinian exports.

Key Words: Logistics System, International Trade, Palestinian Economy

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^{*} Visiting professor, Korea Maritime University, First Author.

^{**} Associate Professor, Sunchon National University, Corresponding Author.

I. Introduction

Logistics system and supply chain management play an important role in any economy and they are a critical to the competitiveness of any country's economy. Effectiveness and efficiency of domestic logistics systems and the accessibility to the global logistics system are the crucial points to the success of a country. A prerequisite to the economic development of any country is an efficient logistics and transportation system.

Logistics is the process of planning, implementing, and controlling procedures for the efficient and effective transportation and storage of goods including services, and related information from the point of origin to the point of consumption for the purpose of conforming to customer requirements. This definition includes inbound, outbound, internal, and external movements. Logistics management activities typically include inbound and outbound transportation management, fleet management, warehousing, materials handling, order fulfillment, logistics network design, inventory management, supply/demand planning, and management of third party logistics services providers.

Logistics infrastructure is the key to trade facilitation and the movement of the goods and services in both ways inbound and outbound. These infrastructures include sea ports, airports, railways, and roads.

The objective of this paper is to review the capabilities of the current logistics system and the possibilities of developing competitive and efficient logistics system especially due to the arising arguments about the Palestinian state after the vote in the U.N. General Assembly to grant Palestine a non-member state on November 29th 2012, which is a de facto recognition of a sovereign Palestinian state.

This paper is constructed as follows. In the next section political and economical background is discussed in order to present the current situation and the need to the efficient logistics system. Next, current commercial route for international trade is discussed. Finally conclusion and recommendations are presented for the decision makers in order to

II. Background

Palestine lies on the western edge of Asia and the eastern side of the Mediterranean Sea. It consists of two territories, the West Bank and Gaza Strip, of an area covering 6,170 square kilometers which is about 23 per cent of the area of the pre-1948 British Mandate Palestine and one third of the area of the State of Israel. The West Bank is 5,800 square kilometers in area, and is located between Israel to the West and Jordan to the East. Although the area of Palestinian territories is relatively small, but it is highly populated with population around 4.3 million (2.65 million in the West Bank, and 1.65 million in Gaza Strip) and population growth rate of 3.3%, which requires more attention on the economy especially trade and employment.

The West bank and Gaza Strip are separated with no physical connection until now as shown in Figure 1.



Source: USAID West Bank and Gaza Strip, http://www.usaid.gov/wbg/maps.htm.

The Palestinian economy has special features that distinguish it from other countries in the same region. Since 1948 the Palestinian economy faced new situations and policies through joining the west bank to the Jordanian system and Gaza Strip to the Egyptian system. This situation continued until 1967.

After 1967, which is the Israeli occupation of the West Bank and Gaza Strip, the Palestinian economy lost its ability for growth and development due to full control of the occupation over the Palestinian economic resources and sectors through military orders which prevented any development and made the Palestinian economy totally dependant on the Israeli economy in all aspects especially trade and employment.

During the occupation period, the Palestinian economy suffered from the profound structural imbalances and high external dependence. The Israeli occupation blocked export markets other than Israel and deterred investment in production capacity. A large proportion of the Palestine labor force had to find work in Israel.

Since 1994, the guiding principles for West Bank and Gaza Strip, trade policy have been defined in the Protocol on Economic Relations between Israel and the PLO (Palestinian Liberation Organization), signed in Paris on April 29 1994. In broad terms, the Paris Protocol formalized the de facto customs union, which existed while West Bank and Gaza Strip was totally under Israeli control. Thus, the main feature of the trade regime defined in the Paris Protocol is to give free access for Palestinian goods to the Israeli market (and vice versa) and to keep policies governing import from third parties under Israeli control. In particular, the Paris Protocol ensures that West Bank and Gaza Strip are not allowed to set tariffs and other levies lower than the Israeli ones. But it also implies that West Bank and Gaza can benefit from Israeli free trade agreements with other trade partners.

On November 29th 2012, Palestine became a non-member state at the United Nations, when the U.N. General Assembly voted for non-member Palestine of Palestine, which is a de facto recognition of a sovereign Palestinian state, which implies some aspects of the future sovereignty over the international boarders.

For the Palestinian economy, the greatest potential for economic growth lies in trade. This trade includes not only the primary exchange of goods and services with Israel, but also trade with its neighboring countries, Egypt and Jordan, and with other countries. Efficient and reliable trade logistics are a prerequisite, in order

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to enable the Palestinian producers to compete in regional and global markets.

There are many restrictions imposed on the movement of goods to/from/within the West Bank and Gaza acting as obstacles to the contribution of export sector to the economic development. West Bank Producers and traders are undermined by prohibitive transaction costs at crossing points arising from long waiting times, and by damaged goods— especially fresh products.

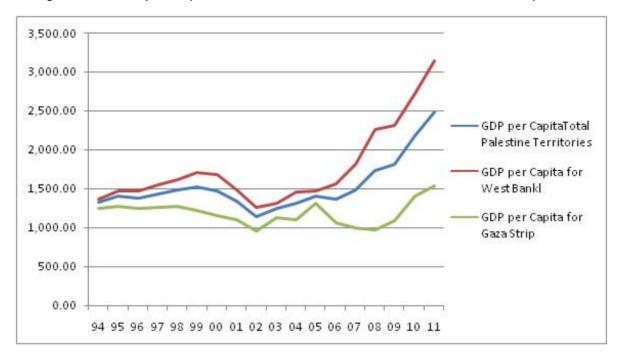
Although the statistical results for the Palestinian economic performance which were achieved in the last period were good, but were not enough to build a strong economy which ensures the continuity of the growth and the development. This was proved by the recession in the economy after 2000 when the Intifada started mainly due to full control of the Israeli over the borders and the procedures and policies against the Palestinian imports and exports. The decline in GDP and GDP per capita after 2000 is very visible and can be shown in <Table 1> below.

<Table 1> GDP from 1994 to 2011

Year	GDP (Million US\$)	GDP Per Capita
1994	2,828.4	1,320.4
1995	3,220.2	1,399.8
1996	3,365.5	1,380.4
1997	3,701.6	1,437.7
1998	3,944.3	1,481.9
1999	4,178.5	1,519.2
2000	4,194.7	1,477.0
2001	3,897.2	1,333.0
2002	3,432.6	1,140.8
2003	3,840.9	1,240.4
2004	4,198.4	1,317.0
2005	4,634.4	1,410.0
2006	4,619.1	1,363.0
2007	5,182.4	1,483.0
2008	6,247.3	1,737.0
2009	6,719.6	1,815.0
2010	8,330.6	2,185.9
2011	9,775.3	2,489.2

Source: Palestine Central Bureau of Statistics, Annual National Accounts, www.PCBS.gove.ps.

<Figure 2> below shows the gap between the two Palestinian Territories in terms of GDP per capita and the gap is increasing drastically. In 1994 GDP per capita for West Bank was USD 1,366.30 and in Gaza Strip it was USD 1,245.70, where as in 2011 GDP per capita for West Bank was USD 3,137.60 and in Gaza Strip it was USD 1,534.80. This indicator shows the importance of the connectedness of Palestine through a seaport in Gaza strip with other international countries.



<Figure 2> GDP per capita for the Palestinian Territories (USD current prices)

Another importance for logistics comes from international trade. Israel is the most important source of Palestinian imports and the largest market for its exports. As indicated in tables 2 below, Israel accounted for 70.5% of total Palestinian imports and 96.9% of total exports or 73.8% of the total value of Palestinian trade transactions in 1999.

<Table 3> Trade Partners of the Palestinian Territory by Value of Trade(1999) in millions of US\$

Region₽ .	Imports₽		Exports ₽		Total Trade≓	
	\$₽	%₽	\$ 42	%4⁻	\$47	%₽
Israel₽	1,853.6₽	70.5₽	360.4₽	96,9₽	2,214.1₽	73.8₽
Jordan₽	59.8₽	2.3₽	8.4₽	2.3₽	68.3₽	2.3₽
Total Arab Countries₽	73.9₽	2.84	9.6₽	2.6₽	83.5₽	2.8₽
European Countries≓	405.9₽	15.4₽	1.5₽	0.4₽	407. 4₽	13.6₽
Asian Countries₽	193.9₽	7.4₽	0.0₽	0.0₽	194.0₽	6.5₽
American Countries≓	56.5₽	2.1₽	0.4₽	0.1₽	56.9₽	1.9₽
Total Trade≓	2,629.0₽	100.0₽	372.1₽	100.0₽	3,001.1₽	100.0₽

Source: PCBS, "Statistical Abstract of Palestine No. 2" November 2000.

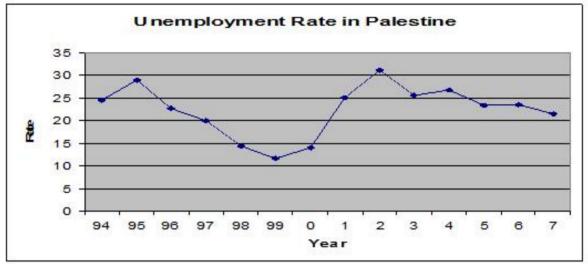
It is important to notice that the dependence on the Israeli economy increased if we compare the results of 2005 with 1999. Palestinian imports from Israel increased from 70.5% to 92% of total Palestinian imports, but export to Israel decreased from 96.9% in 1999 to 91% in 2006, but in total value of trade increased from 73.8% to 92 % as shown in Table 3 below, which confirms that there should be ways to reduce the dependence.

<Table 4> Trade Partners of the Palestinian Territory by Value of Trade(2005) in millions of US\$

Region₽	Imports₽		Exports₽		Total Trade₽	
	\$₽	%4⁻	\$42	%₽	\$4 ²	%₽
Israel₽	2,333₽	92₽	413₽	91₽	2,746₽	92₽
Jordan₽	40₽	24⁻	16₽	4₽	56₽	24□
Egypt₽	28₽	147	0.1₽	04⊃	28₽	14⁻
Remaining Arab Countries	1₽	0€	3₽	1€	44□	0.1€
Buropean Countries₽	69₽	3€2	15₽	342	84₽	34□
Asian except Arab Countries∂	45₽	247	5₽	1₽	50₽	2₽
American Countries₽	9₽	0.3₽	5€	14⁻	14₽	0.5₽
Total Trade main partnersਦ	2,524₽	100₽	457₽	100₽	2,980₽	100₽
GrandTotal₽	3,352₽	₽	665₽	ت	4,017₽	47

Source: Report on UNCTAD assistance to the Palestinian people October 2007.

In addition to the previous indicators, Palestine is facing severe problem with high unemployment rate. Prior to the ongoing crisis (Intifada or upraising), nearly a quarter of Palestinian employment were for Israeli employers, who pay wages significantly higher than Palestinian employers in the West Bank and Gaza Strip. Israel began to restrict Palestinian labor inflow in the early 1990s by introducing work permit requirements. Closures were sever in 1995 and 1996, leading to a drop in labor flows to Israel and high Palestinian unemployment as shown in figure 2 below. The unemployment rate severely increased after the crisis and the closures and restrictions done by Israel started in 2000.



<Figure 2> Unemployment from 1994 to 2007

Source: PalestineCentralBureauofStatistics, www.PCBS.gov.ps.

III. Current Commercial Routes for International Trade:

1) The Rafah border crossing between Gaza Strip and Egypt

The Rafah is the only Palestinian commercial crossing point with Egypt. It is mainly used for transporting Palestinian imports and exports between Gaza and Egypt.

2) Gaza Seaport

The port of Gaza is considered one of the most important strategic projects for the future economic security of Palestine Port negotiations have thus played a crucial role in all agreements signed between Palestine and Israel. Several agreements and memoranda stipulating the establishment of the Gaza Port have been signed by the Palestine and the Israeli Government.

The Gaza Port was mentioned in the Declaration of Principles on Interim Self-Government Arrangements, September 13, 1993. It states that the two sides

agree to establish an Israeli-Palestinian continuing Committee for Economic Cooperation, focusing, among other things, on cooperation in the field of transport and communications, including a Program, which will define guidelines for the establishment of a Gaza Sea Port Area, and will provide for the establishment of transport and communications lines to and from the West Bank and the Gaza Strip to Israel and to other countries. In addition, this Program will provide for carrying out the necessary construction of roads, railways, communication lines, etc.

The proposed Gaza Port was also included in the Israeli-Palestinian Interim Agreement on the West bank and Gaza Strip in 1995. More attention and detail were given to this topic in this agreement. The 1995 Agreement states that: Plans for the establishment of a port in the Gaza Strip in accordance with the Declaration of Principles, its location, and related matters of mutual interest and concern, as well as licenses for vessels and crews sailing on international voyages will be discussed and agreed upon between Israel and the Council.

In 1999, an Implementation Timeline of Outstanding Commitments of Agreements was signed and the Resumption of Permanent Status Negotiations was signed. It states that the two sides have agreed on the following principles to facilitate and enable the construction works of the Gaza Sea Port. The principles shall not prejudice or preempt the outcome of negotiation on the Permanent Status.

The Israeli Side agrees that the Palestinian Side shall commence construction works in and related to the Gaza Sea Port on October 1, 1999; the two Sides agree that the Gaza Port will not be operated in any way before reaching a joint Sea protocol on all aspects of operating the Port, including security.

The Palestinian National Authority started the process of constructing the seaport of its own five kilometers from the southern border of the Gaza Strip. The deep-water seaport, "Gaza Sea Port", will also serve the West Bank and, if economically feasible, Jordan along with other parts of the world, while future plans include the establishment of strategic links with the neighboring ports of Egypt, Ashdod, Beirut and Cyprus.

With financial support from European countries, the Palestinian National Authority decided to construct the Gaza Port in three stages:

 Phase one will include the construction of a dam, almost perpendicular to the shore line, with a berth of 600 meters in deep water and an additional petroleum products berth. By the end of the first phase, the port will be able to receive small container vessels with a maximum size of 15,000 DWT, however, equipment will be elementary including mobile cranes.

- Phase Two will entail the construction of a multi-purpose container terminal with the ability to handle much larger vessels.
- During the third phase, the breakwater will be expanded and a new multi-purpose terminal will be constructed in the center of the harbor basin to handle larger vessels (50,000 to 70,000 DWT) that would enable the port to function as a major transshipment facility.

Site preparation work was to have begun in November 1999 and was scheduled to be completed in 2001. However, construction works were suspended in September 2000 and Israeli authorities have not permitted construction to resume since.

3) Israeli International gateways

Palestinian International Trade with countries other than Israel, Egypt, and Jordan, especially Europe, Asian, and American countries is conducted through Israeli facilities such as Ben Gurion International Airport, Haifa Seaport, Ashdod Seaport, and Elat Port.

Even though table 3 in the first section shows that Israel accounted for 92% of the total value of Palestinian territories' trade with its main partners, 92% of total imports and 91% of exports, but Palestinian indirect imports purchased by Israeli firms and re-exported to the Palestinian territories and registered as part of Palestinian imports from Israel.

Palestinian enterprises are mainly dependent on Israeli port facilities for international trade. Since 2000 Israel has been imposing complex security measures, including a system of checkpoints/roadblocks, and cumbersome customs and overland transport procedures at all crossing points. As a result, market access benefits are lost by the prohibitive transaction costs facing Palestinian shippers (exporters and importers). This has been eroding the competitiveness of Palestinian exports, posing trade barriers of greater significance than tariffs. It is estimated that Palestinian trade-related transaction costs in 2003 were already at least 30%

higher than those accrued at the eve of the crisis (September 2000).

In addition to the Israeli's management of ports and airports related to Palestinian trade activities has been described as poor, unpredictable, and expensive.

For exporting and importing products via Ben-Gurion airport (in Israel), unlike Israelis, Palestinian businesses can only use cargo planes due to the Israeli regulations against Palestinian exporters using passenger planes. Passenger planes are cheaper and more frequent and go to all directions. This restriction causes delays and extra costs to the Palestinian trader especially when it comes to the transport of agricultural products. This is also in contradiction with Paris Protocol, which grants Palestinian and Israeli traders equal treatment at Israeli border points.

4) Commercial Crossing Points with Jordan

There are two commercial crossings with Jordan, including Karamah bridge, (also referred to as King Hussein Bridge or Allenby) and Damya Bridge (also referred to as Prince Mohammed or Adam Bridge). Importers use the former, while the latter is used for exports from the West Bank and Gaza, especially citrus and fresh products.

Gaza exports traveling to or through Jordan need to first cross the Israeli Eretz crossing (see figure 3) and continue through Israeli controlled routes (in Israel and through the West Bank) before reaching the main borders with Jordan.

To obtain access to these routes, a permit for the driver and another for truck are required from the Israeli authorities, and goods should be transported in uncovered trucks, known as "green trucks" originally used to transport agricultural exports and lacking most safety requirements. These trucks should also observe movement restrictions, which limit the number of routes that drivers can use.

After inspection and clearance by Palestinian customs and Israeli security officials, upon leaving Gaza, Palestinian trucks are escorted in convoys of 5–15 trucks by Israeli security patrols up to the commercial crossing with Jordan.

Trucks are then subject to "back-to-back" procedures, whereby goods are unloaded from the green trucks by Israeli and placed on the ground for inspection, and then reloaded onto Jordanian trucks before proceeding to their final destination in Jordan. The back-to-back procedures and the restrictions on Palestinian vehicles

are also applicable to exports originating in West Bank and destined for Jordan. The Palestinian Authority was expecting that back-to-back procedures were to be replaced by door-to-door system as of 2000. However, the outbreak of the crises and the closure policy rendered this practically impossible.

Gaza Strip Border Crossings

Polestinian communities

Ash Shati Camp

MEDITERRANEAN

Gazo

City

Skarni Crossing

Japanya

Japany

< Figure 3> Gaza Strip and its Main Crossing Points with Egypt and Israel

Source: The Washington Institute of the Near East Policy 2005.

IV. Conclusions and discussions

After reviewing the current logistics system and under the political situation between Palestine and Israel, there are two scenarios can happen and then will influence the efficiency of the Logistics system and its connectedness with International markets.

The first scenario is continuing under the current political situation, this will cause more problems for the Palestinian economy and will make it more dependent on the Israeli economy. The competitive advantage of the Palestinian exports and expensive imports will increase this problem. Therefore, Alternative routes for

imports and exports handled through Israeli ports are important to consider for reducing the dependency of the Palestinian economy on the Israeli one, and avoid high and extra transportation cost and delays in the Israeli controlled areas as a result of extra special procedures. Israeli claiming that these procedures which cause delays and extra land transport costs for the Palestinian cargos imports and exports using the Israeli ports and facilities are due to Security measures.

Alternative routes for international trade in order to avoid using the Israeli seaports are Aqaba Port in Jordan and Port Said in Egypt. Therefore, facilitating trade transit routes through Aqaba port and Port Said in Egypt will benefit the Palestinian economy.

Transit through Egyptian from Gaza, cargo will need to pass through the Rafah crossing point, and to the world through Egyptian Port Said.

There are two commercial crossings with Jordan as mentioned earlier, Karamah bridge, and Damya Bridge. Importers use the former, while the latter is used for exports from the West Bank and Gaza, especially citrus and fresh products. Palestinian goods destined for transit through Jordan to neighboring countries are usually re-exported through Al-Shouna in the Jordan Valley, and International trade with the rest of the world will be done through Agaba Port.

Currently, most trade volume is travestied through Israeli ports and Ben Gurion Airport (Israeli). However, the Jordan route is becoming more attractive as transit for West Bank trade with other international partners. Therefore, more attention should be paid on these Alternative routes in order to facilitate trade through them.

The second scenario and this one in the long term, Palestine will be recognized as an independent sovereign state, and then can have independent and sovereign infrastructure as follows:

- a) Having a seaport in Gaza is the only solution capable for independently integrating the Palestinian economy with the region and other countries in the world. Therefore, starting the immediate repair and reconstruction activities in the sea port and starting the operation, international trade with world countries will be facilitated and increased and the Palestinian economy will be improved.
- b) Expanding Gaza International Airport to include commercial services and resuming the operation after immediate rehabilitation of the damaged by Israel.

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- c) Developing the air transportation services in the west bank, through arrangements that insure the Palestinian could control, expand, and operate Qalandia Airport.
- d) Constructing the corridor between Gaza and the West bank in order to facilitate the movement of people and goods between the two territories of Palestine, and will enable West bank to use Gaza Seaport and access to the international market with less time and probably cost than using the Israeli or Jordan facilities.

References

- Article XI, Annex III, Declaration of Principles on Interim Self-Government Arrangements, September 13, 1993.
- Cottier Thomas, Pannatier Serge, Geneva Baker and Mackenzie, Overview of Palestinian economic policy and foreign trade, Economic Policy Program, London School of economics, 2000.
- Council of Supply Chain Management Professionals (CSCMP), http://www.cscmp.org/
- Hassouna Abdallah. and Nam Ki-Chan, Gaza Seaport as a way to Enhance the Palestinian Economic Development, International Journal of Navigation and Port Research Vol. 29, No. 9, December 2005.
- Ministry of Transport, Palestine, Needs for developing the transport sector in Palestine, Report, 2008.
- Palestine Central Bureau of Statistics,
- Palestine central Bureau of Statistics 2012, www.PCBS.gov.ps
- Palestinian Central Bureau of Statistics, "Statistical Abstract of Palestine No. 2" November 2000.
- Palestine National Authority, Ministry of Economy and Trade, Information Note on the Economy of the occupied Palestinian Territory (West bank and Gaza), Third United Nations Conference on the Least Developed Countries, Brussels, Belgium, 14–20 May 2001.
- Palestine Trade Center PALTRADE, Trade Impediments, Volume 1, Issue 5, August, 2005. The Israeli-Palestinian Interim Agreement on the WEST BANK AND THE GAZA STRIP Washington, D.C. September 28, 1995.
- The Sharm el-Sheikh Memorandum on Implementation Timeline of Outstanding Commitments of Agreements Signed and the Resumption of Permanent Status Negotiations, September 4,1999.
- United Nations Conference on Trade and Development (UNCTAD), Report on UNCTAD assistance to the Palestinian people: Developments in the economy of the occupied Palestinian territory, 2011
- UNCTAD, Report on UNCTAD assistance to the Palestinian people, 2007, p18.
- USAID and World Bank, Technical paper 1, Border and Trade Logistics, 2000