

Final Report

Reducing Transport Costs of Egypt's Exports

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ACRONYMS AND ABBREVIATIONS

ASYCUDA	Automated System for Customs Data
ATUT	Agricultural Technology Utilization and Transfer Project
CAA	Cairo Airport Authority
CFS	Container Freight Station
COMESA	Common Market for Eastern and Southern Africa
DEPRA	Development Economic Policy Reform Analysis
DWT	Deadweight Tons
EAS	Egyptian Aviation Services
EBA	Egyptian Businessman's Association
ECAA	Egypt Civil Aviation Authority
EDI	Electronic Data Interchange
EFFF	Egyptian Federation of Freight Forwarders
FAC	Free Alongside Carrier
FAS	Free Alongside Ship
GART	General Authority of River Transport
GARTA	General Authority of River Transport Affairs
GC	General Cargo
GOE	Government of Egypt
I&F	Insurance and Freight
IATA	International Air Transport Association
ICAO	International Civil Aviation Authority
m.t.	metric tons
MENA	Middle East North Africa Region
NTB	Non-tariff Barriers
SPR	Sector Policy Reform
TEU	Twenty Foot Equivalent Unit (one 20ft container)
ULD	Unit Load Devices
USAID	United States Agency for International Development
WTO	World Trade Organization

Preface

This report is based on a study conducted by the Development Economic Policy Reform Analysis (DEPRA) Project, under contract to the United States Agency for International Development, Cairo, Egypt (USAID/Egypt) (Contract No. 263-C-00-96-00001-00)

The DEPRA project is intended to encourage and support economic reform in Egypt through the provision of technical assistance and services to the Government of Egypt with particular focus on international trade and investment liberalization, deregulation and financial sector strengthening.

The study was compiled by Charles Vandervoort, Team Leader and Michelle Morgan, Data and Information Specialist, both of Nathan Associates Inc., Arlington, VA, USA. Egyptian specialists on the team included Captain Farouk El Saigh who, with his extensive experience of maritime and port operations and his many contacts with key persons, provided valuable insights and was helpful in arranging the many interviews. Mohamed Saadawi did the same for the freight forwarding business and air transport. Dr. Adla Ragab prepared much of the information in the legislative area, and Rawia Mokhtar skillfully and energetically carried out the organization and conduct of the interviews of exporters, and the tabulation of the data.

The team thanks the Study Coordinator, Maurice Thorne, and Dr. Rollo Ehrich of DEPRA for their assistance on the study. They are appreciated for sharing their information related to the transport sector, and for papers on the maritime and air freight transport sectors written by Mr Thorne. Thanks are due to Abdel Wahab Heikal of DEPRA for his contributions, including his personal role in arranging meetings with representatives from the public sector and the business community, and to the staff of DEPRA for their administrative and logistical support.

The opinions expressed in this report and the conclusions and recommendations are those of the authors and do not necessarily reflect the opinions or policies of either the Government of Egypt or the U.S. Agency for International Development.

EXECUTIVE SUMMARY

This report focuses on ways to increase the competitiveness of Egypt's exports by reducing the transport and other costs related to transport . Three major topics are addressed:

1. Are Egyptian exporters paying higher transport costs than their competitors in countries in the eastern Mediterranean, and do these higher cost reduce the competitiveness of Egyptian exports?
2. Whether or not transport costs reduce Egypt's competitiveness, to what extent can these costs be reduced, and what are the approximate benefits?
3. What actions are required to reduce transport costs?

Evidence Of Basic Transport Cost Differentials

International Freight Rates: There is little evidence that ocean freight rates and airline freight rates place the Egyptian exporter at a disadvantage compared with competing eastern Mediterranean countries. If anything, freight rates ex-Egypt fall well within the middle to low range of prevailing rates for air and sea cargo. The lack of differentials in air freight rates can be attributed to the fact that the air freight market in the Eastern Mediterranean is fairly homogenous and because airlines commonly set competitive cargo rates for each region on a season by season basis. For sea freight, the lack of differential is mostly due to the intensely competitive nature of ocean shipping, aggravated by the economic recession in Asia and other regions which caused a shift of shipping away from the depressed areas to the Mediterranean area. Competition among the several new hub ports concentrated within the Mediterranean region is also a factor.

Airport Charges: Landing and other airport charges are well within the range of eastern Mediterranean competitors, the principal landside charge adding to the freight bill being apron handling. These handling charges have had some impact on the total air freight bill but do not seriously handicap the Egyptian exporter.

Port Terminal Charges: After Israel, which charges about US\$ 39 for a twenty-foot export container, Egypt at US\$ 43 has the lowest port handling charge for export containers. Rates for export containers in both these countries are believed well below actual costs. Other countries in the Mediterranean charge substantially higher rates with Cyprus, for example charging US\$ 140 and Italy charging US\$ 143.

Truck Transport: Truck transport in Egypt is expensive, and from 30% to 80% higher than that for Egypt's competitors. In Egypt, for example, the cost per kilometer of operating a heavy articulated truck in Egypt is more than 50% higher than the comparable cost for Lebanon. The high cost is caused by high taxes on new trucks and inadequacies in certain parts of the road system. The road surface on several important roads is rough, there is considerable congestion on the main roads approaching Cairo and Alexandria and within these cities, and the night lighting of primary roads could be improved. High road transport costs are especially burdensome for the lower value commodities such as citrus. For example, with citrus valued at \$500 per ton, the cost of transport by truck can amount to 3 to 5 % of the

landed value including sea transport of the product. In competing countries with a modern road system and an efficient trucking industry, and also perhaps a shorter length of haul to the port, the land transport component is much lower.

There are a number of reasons for the high trucking costs. Duties and taxes on certain types of truck tractors and trailers are very high, though under the WTO agreement they are slowly being reduced. Still, today, these charges add 45% to the capital cost of the vehicle, and this increases the operating cost substantially. The vehicle operating costs for a large new truck of about US\$1.7 per vehicle kilometer is just about double the US\$0.85 typical in other countries. Congestion on the roads, low travel speeds brought about by the inadequacy of the road system, and lack of information on availability of return loads for trucks causes under utilization of the heavy trucks used for transport of imports and export products. The amount of “empty” running of trucks and the haulage of empty containers from Cairo to the ports is excessive. After trucks deliver their load, the operator does not appear to have good information on where they could pick up a return load. The empty running for both containers and trucks illustrates the need for an “inland port” within the industrial areas where, in addition to many other advantages, loads can be consolidated and placed on board returning trucks.

The lack of information available to truckers, freight forwarders and cargo consolidators on the availability of cargo for trucks creates the illogical situation where refrigerated trucks for serving sea ports are in surplus whereas such trucks are in short supply for serving air freight. Trucking cost is much less important for air transport. Products transported by air, such as grapes, have a very high value, and the cost of land transport is only a small fraction of the landed cost. More important is the fact that, according to some exporters, the service by the trucking companies could be improved by measures such as training drivers to be punctual, keeping their trucks in good working order, and not deviating from the shortest route. There also appears to be a shortage of reliable refrigerated trucks. Under these conditions the “cold-chain” is sometimes broken, resulting in large losses to the exporter.

River and Rail: These modes do not play an important role – though they should -- in moving non-petroleum export products to the ports. In 1998 more costly transport by truck handled 97% of the port traffic with the remaining 3% left for waterways and rail. Experience in other countries has shown that, mainly through policy reform and improved management, the role of rail and waterways can be expanded considerably, and at great savings in transport costs to the economy.

Air Transport

Passenger service is the core business of the aviation sector in Egypt. Tourism, a major source of Egypt’s foreign exchange earnings, is a determining factor in the number and size of aircraft serving both international and domestic destinations. Freighter service is also limited by the fact that the bulk of Egyptian imports arrive by sea and quantities of inbound air freight are proportionally small. Overall, freight rates appear to be less of a constraint than space availability, although some products with a marginal profitability when exported by air could benefit from reduced air freight rates. Air cargo facilities in Egypt are insufficient to handle the volume of air cargo exports, both in terms of space and serviceability. Lack of air cargo infrastructure causes losses due to delays and spoilage. Because cargo terminals, cold storage,

and cooled staging areas are lacking, up to 25% of the revenue from the sale of fresh and frozen produce may be lost.

The institutions and laws governing air transport have been significantly liberalized in recent years, but still prevent competition in some areas that would result in lower freight rates. Air cargo rates are well within the range of rates paid by Egypt's export competitors and are unlikely to fall much further unless Egypt adopts an open sky policy for cargo carriers. There remains ample scope for reducing the total air freight bill paid by exporters outside of the per kilogram air freight rates. The main factors which could be addressed by a combination of policy changes and improved market information are cargo handling costs, cargo space for outbound freight, inadequate or inefficient air cargo facilities, and lack of market information and logistics planning.

Egypt Air, the national carrier, and Cairo Airport Authority still enjoy monopoly rights in the provision of services and infrastructure which are contributing to high shipping costs for exporters. Cargo handling fees charged by Egypt Air and EAS are excessively high, and handling costs are further exacerbated regulations of the Cairo Airport Authority limiting the handling equipment each carrier is allowed to have. Qualified private sector companies should be permitted to offer both warehouse and apron cargo handling services to all carriers, and all unnecessary restrictions on the provision of such services should be removed.

Private sector companies, both domestic and foreign, should be encouraged to build cargo facilities at Cairo and other airports on liberal terms, either through BOT arrangements or by direct investment. A comprehensive master planning study for the civil aviation sector should be carried out and an action plan developed to gradually increase and upgrade existing airport infrastructure and services, emphasizing BOO/BOT arrangements and private sector participation. A ten year forecast needs to be made of demand for passenger and freight services in Egypt, and the regulatory and infrastructure requirements required to meet this demand should be identified and translated into an action plan to be shared with the private sector. The Government of Egypt should identify resources to perform feasibility studies for expected infrastructure requirements.

Finally, freight forwarding and exporter associations should work to improve access to market information for their members, and exporter associations should improve the logistics planning capacity of exporters through training and information dissemination.

Maritime Transport

Maritime Operations: The four large ports of Alexandria/Dekheila, Damietta, and Port Said on the Mediterranean and a total of nine ports on the Red Sea carry almost all of Egypt's foreign trade, which totaled almost 50 million tons in 1998. Of this amount about 40 million tons were imports compared with 10 million tons for the exports. The ports of Alexandria/Dekheila, Damietta and Port Said each have their own port authority. The Red Sea ports are under one regional port authority.

The ports on the Mediterranean, and the Red Sea ports of Safaga and Suez are linked by road and rail to the rest of Egypt. The Mediterranean ports are also connected to the waterway system. As indicated earlier, however, the road system is congested and rail and waterways carry only a very small amount of the import and export cargo.

For imports, the largest categories for 1998 by tonnage were General Cargo and Containerized Cargo (10.7 million tons, 28%); followed by Cement, Gypsum, raw aluminum and scrap (10.5 million tons or 28%); and grain and corn (10.2 million or 27%). The two leading export categories were Petroleum (3.25 million tons or 42%), and General and Containerized Cargo (3.23 million tons at 41%), and followed by Dry Bulk (1 million tons or 14%).

Imports of the category "general cargo and containers" of 10.7 million tons for 1998 greatly exceed the exports of 3.3 million tons. This imbalance creates a surplus of containers available to carry exports, and the lack of a mechanism to quickly find consignments for these empty containers results in large numbers of empty containers being reloaded on board ships.

Movement of imports through Egypt's ports is still slow, and container dwell times (the time a container spends inside the port area after unloading from the ship) can exceed ten days. The main reason for the long cargo delays are the inefficient customs and other clearance procedures. Delays of from 5 to 20 days for imported cargo are common, whereas efficient ports do not impose delays of more than 2 days.

For exports the processing times, as a result of government policy to reduce the cost of exports, have improved considerably. No more than 2 - 3 days is required for clearing a container in the port.

Since 1989 the growth in container traffic measured in twenty-foot equivalent (TEU) containers has grown at a 16% annual rate. The growth rate has decreased mainly as a result of the sharp drop in transshipment traffic starting in 1997. Up to the year 1995 Egypt experienced a rapid rise in transshipment trade, and large container ships called at Egyptian ports, notably Port Said, to deliver and pick up containers. These large container ships, of course, also picked up and delivered containers of Egyptian exporters and importers. Transshipment trade, however, leveled off in 1995 at about 800,000 TEU's per year, and declined 50% to only 400,000 TEUs in 1998. The reason was the inability of Egypt's ports to compete with the new hub ports arising in the Mediterranean.

The frequency of calls by large container ships to Egyptian ports has declined dramatically over the past few years. As a result Egyptian exporters must now ship their goods by feeder vessel to non-Egyptian hub ports. If Egypt were able to improve the efficiency of its operations and again be a leading provider of transshipment services in the Mediterranean, the extra cost of feeder service to a non-Egyptian hub port could be eliminated. This would significantly reduce the cost of shipping export containers.

The number of container/ro-ro lines that serve Egyptian ports directly or indirectly, i.e., via transshipment or "hub" ports, numbers 48. These lines provide transport to all the world's ports, with the large and traditional ports such as Baltimore served almost on a daily basis, and with the prospective ports such as Maputo in Mozambique on the east coast of southern Africa served perhaps once a week.

Maritime Freight rates: Analysis of the complete data base for the year 1998 collected by the U.S. Bureau of the Census which includes all imports by sea and air into the U.S. from all countries indicates that, after Tunisia and Morocco, Egypt pays the lowest ocean freight rates

for its exports to the U.S. The favorable ranking of Tunisia and Morocco is reasonable since these countries are nearer to the U.S by 3000 and 2000 kilometers respectively. There is no evidence from these data that shipping lines serving the U.S. discriminate against Egyptian exporters by charging higher freight rates for them than for exporters in competing countries.

To examine whether or not the same is true for shipping lines serving Northern Europe, the Far East, and other regions, where no comprehensive data base was readily available, sample data on freight rates were collected from exporters, freight forwarders and shipping lines.

There was considerable variation in the more than 50 freight rates collected from the interviews. For example, the five shipping rates given for a dry 20-foot container from Alexandria/Dekheila to the Far East vary between US\$ 300 to 600, with an average of US\$ 485. The freight rates to the Far East from four neighboring countries vary between US\$ 250 and US\$ 600, with an average of US\$ 487. From Alexandria/Dekheila to Northern Europe the shipping rates vary between US\$ 216 and US\$ 533, with an average of US\$ 344. From Lebanon and Cyprus the rates to Northern Europe vary between US\$ 243 and US\$ 500, with an average of US\$ 307. For shipping to other regions such as North America, Arab gulf, and southern Europe the rates from Alexandria/Dekheila are lower than for those from neighboring countries. For shipping to North America, the data supports the finding from the U.S. Bureau of the Census that shipping rates from Egypt are lower.

In general, the data indicate that ocean freight rates from Egypt are lower or comparable with those from most of the neighboring countries. However, although the table provides no *prima facie* evidence that shipping lines charge higher rates to Egyptian exporters than they do for those from neighboring countries, the data are not sufficient for a positive proof. Unlike the case discussed above where the data were provided by the U.S. Bureau of the Census, and where the positive conclusion could be drawn that shipping rates for Egypt are lower, the sample size is too small and the variability in the data is too high for drawing a definitive conclusion for shipments to non-U.S. countries. For example, for ocean transport to northern Europe, only seven quotes were available from Alexandria/Dekheila with rates varying between US\$ 216 and US\$ 533. For rates from neighboring countries to northern Europe there were only 4 quotes, with three being identical and coming from one shipping line. From a rigorous statistical point of view, the difference in the two averages (US\$ 344 and US\$ 307) is not significant.

Such variation in shipping rates is quite normal since, unlike for air cargo transport, there are no "agreed-upon" rates used as a bargaining base for discounts. The ocean shipping rates given in the table are "spot" rates that are influenced by a large number of factors, the most important of which are the level of competition, seasonality of traffic, the availability of space on the ship, and the eagerness of a shipping line to gain market-share at the time of providing the quote. Competition is intense at present because of the lack of business for shipping in the Far East and other regions hit by recession.

Similar data were collected for the tariffs for container port handling and terminal costs in Egyptian ports and competing ports in the eastern Mediterranean. For a twenty foot export container loaded in Alexandria/Dekheila, the rate published by the port authority is L.E. 115 (US\$ 35). This included the various terminal handling costs including such costs as moving to and from the container stacking area and, of course, loading the container on board the ship.

An additional 30% -- a rough average -- was added to account for the services of the shipping agent, and making the total for the export container US\$ 43.

The cost of US\$ 35 for the export container compares with a published rate of US\$ 75 for an import container. Since the costs involved with loading an export and import containers are very similar, the costs should be about the same for both export and import containers. The reason for the low rate for the export container is that it is a "promotional" rate with the objective of reducing the cost of exports.

The cost data collected show that the handling costs for export containers for Egypt is the second lowest -- only Israel is slightly lower at \$39 per twenty-foot export container. We were told by shipping lines familiar with Israeli port administration that the Israeli port rate is heavily subsidized. The other countries close to Egypt, including Cyprus, Italy, and Abu Dhabi, for which it was possible to collect port handling costs data, charge triple what Egypt charges. Thus, it does not appear that the port handling charges for Egyptian ports handicap Egyptian exporters.

River and Rail Transport

The potential for rapid improvement of the river and canal transport system through public and private investment is great, since about 85% of the barge fleet is operated by the private sector. As with the other modes, however, attracting foreign investment to improve the efficiency and expand the capacity of the barge fleet is one of the largest obstacles to improvement.

Even though the inland water system is quite extensive, it carries only 4% of the total tonnage of goods carried by surface transport within Egypt. Raising the efficiency and productivity of river transport would be especially helpful in shifting bulk traffic (such as grain) away from the road mode, and would reduce the need for costly investments to expand the capacity of the road system.

Egypt has a very long primary rail line system that spans the length of the Nile, connects (via ferries) with the Sudan and Libya, and connects through the Sinai peninsula with the rail systems of other eastern Mediterranean countries. Though extensive, the rail line is not integrated with the other transport modes, and connections with the ports are not well developed. It also does not have the specialized rolling stock (see table below) designed for the efficient carriage of bulk, containers, and truck-trailers (piggy-back). As such, it cannot fulfill its vital function of serving intermodal transport. For this, significant investments will need to be made in sidings to factories as well as rolling stock. The management of the railway should also start planning on connecting the rail system with possible future inland ports.

Intermodal Transport

Intermodal transport in Egypt is in its infancy. Intermodal transport is the smooth door-to-door transport of freight on two or more transportation modes. It is handled as one continuous through-shipment under the authority of a single bill of lading. Thus, for intermodal container freight, cargo remains in the same container throughout the entire trip. Intermodalism substantially increases the speed of transit of goods, and reduces spoilage and the cost of unproductive capital tied up in empty containers, idle trucks, empty rail cars, and

vessel/aircraft delays in airports and ocean ports. An essential point is that intermodal transport does not involve just the appropriate hardware. Rather, it is a “process” based on an integrated and systems approach to transport. The systems approach requires that all components in the chain of the intermodal freight transportation process have smooth interfaces and are totally reliable.

It is evident that intermodalism in Egypt is in its infancy. For example, for ocean transport there is a lack of empty containers at the factory site. Therefore, many export products are first transported to the port to be stuffed into a container. The main reason for the lack of empty containers at the inland sites is the difficulty in finding a return load for the container. Thus, the empty container may have to spend more than the allowed number of days (it varies, but is normally around seven days) away from the port during the search for a load, after which high rental fees, at an escalating rate, are charged. A corollary is that excessive stuffing in the port contributes to congestion of the port terminal.

For air transport the extent of intermodalism is better, though, as with the ports, there is still excessive delivery at the airport of cargo that needs to be stuffed into the airline containers. One solution to the problem of transporting empty containers that has worked well in other countries is to establish a Container Freight Station (CFS) or inland port near major origins of cargo. Such a facility would be operated by a freight forwarder, or a group of freight forwarders, and would specialize in unstuffing import containers and consolidating outgoing cargo for export containers. Such a facility would have a full time Customs officer so that the container could be packed and sealed for direct shipment on board the ship.

Institutional and Legislative Factors

The GOE recognizes that the regulatory regime and legal system must provide private business with the necessary enabling environment to encourage domestic and foreign investment and to stimulates the intense but fair competition so necessary for encouraging productivity and efficiency. In response to this, the GOE has taken positive steps, especially over the last three years, to reduce and eliminate biases favoring public sector companies and to facilitate investment.

A number of decrees were issued and a new law 1/1998 was enacted to liberalize the activities of port-services, such as stevedoring, by amending the provisions of the old law 12 which encouraged state monopolies. Ministerial decree 216/97 permits licensed air companies to provide apron handling for their own flights. Decree 3/1993 allowed Egyptian private companies to perform loading and unloading in Dekheila port of dry bulk, mostly grain. This has resulted in a 50% reduction in unloading costs and a 50% increase in productivity over the previous situation with only a public sector stevedoring company. Privatization and private reinvestment is now allowed for container terminals, but financial barriers to entry have resulted in little private entry into the ports. Decree 19/1996 allowed the same at Damietta, Port Said and the Suez ports. And Decree 30/1998 permitted privatization in other Egyptian ports.

However, involvement of the private sector would be even further encouraged if legislation were developed to make investment, both foreign and local, more transparent and less risky.

A number of measures have been taken by the Government to encourage participation by the private sector to invest in transport infrastructure and transport services, and a general act has been passed to encourage investment through the 1997 Investments Guarantees and Incentives Law, "Law No. 8 of 1997." Law No. 8 aims at boosting production and increasing foreign investment through removal of bureaucracy and streamlining procedures. It encourages the private sector mainly by improving profitability through tax incentives and permitting more liberal repatriation of profits. Such measures are of course important, but there appears to be considerably more room for improvement.

Specifically, the procurement process could be made more transparent and user friendly by clearly defining and writing into law clear procedures for pre-qualification of suppliers, the tendering process (one-stage or two stage), compulsory pre-bid conferences, submission, receipt, and opening of tenders, the evaluation criteria to be used, time span between receipt of offer, negotiation and award, procedures to be used for unsolicited proposals, negotiation procedures, and the settlement of disputes.

Privatization could also be accelerated if the MOTS, in consultation with other Ministries and the private sector, carried out a transport investment and release strategy. This strategy would inventory the public assets that could be privatized and would assign priorities to the release of these assets to the private sector. It would require considerable strategic planning led by the MOTS in close coordination with the Ministries responsible for public works, transport, finance, state-owned enterprises, and representatives from the private sector business associations.

Privatization of stevedoring has resulted in remarkable improvements both in the speed of discharge of grain products and in reducing the cost of discharging. Such improvements in efficiency could also be achieved in container handling which, even though the legislation for privatization is in place, is proceeding slowly. The main bottleneck appears to be accommodating surplus labor that may result from achieving higher efficiency of operation. The problem of surplus labor has, however, been solved in many other countries. It is recommended that the GOE, using the experience from other countries that have solved the problem, encourage privatization of the container terminals by developing a plan for port labor rationalization and voluntary labor retirement.

Customs and Other Inspection Agencies

On the export side, the cooperation among Customs and other inspection agencies has greatly improved over the past three years. Provided the documentation – which is still excessive – is in order, containers and goods are not unduly delayed at the ports. Sea freight is still delivered early because vessels prefer to have the containers of goods in the port stacking area a day or two before departure, so that the appropriate weight and balance calculations can be carried out. However, containers that arrive on the morning of departure of the ship can still be accommodated, provided space was booked on the ship. Air cargo clearance is timely if paperwork is in order.

On the import side, however, not much has improved. Time to clear import cargo can still exceed 10 days. The causes for these delays are complex and interrelated. Customs inspectors are ill equipped and not trained to handle the modern technology required for pre-clearance of cargo, electronic data processing required for ASYCUDA, and for reducing physical

inspection by RISK analysis. Urgent actions include high payoff measures such as simplified and harmonized documentation, training and certification of freight agents, pre-clearance and electronic data processing of customs clearance documents, and risk analysis towards a clearly defined goal of maximizing the collection of customs duties and taxes without undue interference with the movement of trade. Especially important is promoting a change of attitude within the Customs administration that Customs must play an important role in promoting trade through facilitation, and must become part of the solution rather than part of the problem. Such training and education would include, in addition to the conventional courses in Tariff Classification, Valuation, etc., courses on Customer Care and Public Relations, Business Ethics and Cooperation, Trade Economics, Commercial Business Procedures, and Management and Supervisory training.

Recommendations and Action Plan

This study finds that there is ample scope for reducing the cost of exports, thereby improving the competitive position of Egypt's exporters, and a number of recommendations are summarized below. However, the measures required to implement these recommendations are complex and interrelated. Simplistic implementation of a recommendation, say, to construct a dry port, will, as experience in many developing countries has shown, result in abject failure. A dry port must fit into a complex system where the necessary supporting infrastructure (roads, railways) is in place, maintenance is assured, and the legislative, regulatory, and institutional systems are properly designed to optimize the involvement of both the public and the private sector.

The same is true with recommendations such as those regarding the "concessioning" of the railway, construction of a BOT toll road, or the corporatization, commercialization, or privatization of a port terminal. Even measures which appear to be relatively simple to implement must be analyzed. For example, improving road maintenance may be such a recommendation. Or the training and equipping of traffic police to enforce traffic regulations and thereby reduce road congestion may be another.

Even with such apparently simple measures care is needed, however. Experience in other countries has clearly shown that the major problem with road maintenance and police enforcement is not one of a lack of will by the Government. Rather, it is the result of the lack of sufficient and reliable funding for such functions, and the weakness of the institutional framework to properly administer such functions. As has been demonstrated by the success of programs initiated by the World Bank and other donor organizations, a paradigm shift in thinking regarding road maintenance and management is necessary. This new thinking involves difficult issues such as financing maintenance through road user charges, and the planning and maintenance of roads managed by the private sector if necessary. Finding solutions requires a participatory approach involving the road users, the producers, and the public sector entities with responsibility for roads.

To ensure that the recommendations will be implemented on a sound basis, this study makes its recommendations as elements that should be addressed in a comprehensive transport sector study covering all transport modes. A suggested scope of work for such a study, which is conventional except for its emphasis on intermodal aspects and on ways to involve the private sector, is outlined in Appendix D. The study would require about 5 months to complete and a total level of effort (LOE) of 27 person-months. It would produce an action plan on how to

best implement the recommendations made in this study, along with other recommendations related to the transport of domestic cargo and passengers.

Air Freight Recommendations:

- Improve the adequacy and efficiency of air cargo facilities to reduce costs and eliminate delays and spoilage
- Expand uplift capacity during peak seasons to reduce the high costs and missed export opportunities that occur during that time.
- Provide market information and training on logistics planning on the part of some exporters.
- Strengthen legislation to avoid conflict of interest and discrimination against private operators with regard to the government operator.

Port and Maritime Sector Recommendations:

- Improve of efficiency of port operations through modernization.
- Increase port capacity by facilitating the establishment of a "dry" port, and through carefully selected investments in port expansion and modernization.
- Continue rationalizing port management and operations by redefining the respective roles of the public and private sectors, providing a new legal and institutional framework, and concessioning all commercial operations to private operators, with the port authorities being transformed into landlord authorities.
- Reduce delays in processing of import cargo through Customs reform and the adoption of new technology such as Electronic Data Interchange (EDI)
- Improve management of empty containers and reestablish the efficiency of transshipment operations.
- Enhance rail operations serving the ports by improving the port/railway interface.

Land Transport Recommendations:

- Reduce the high cost of new trucks by lowering taxes and duties.
- Improve truck productivity by reducing road congestion through better management of traffic, maintenance, overloading, safety, and driver discipline;
- Facilitate the establishment of an information system linking road transporters with cargo availability;
- Expand the road network, making maximum use of private sector participation through BOT type projects.
- Accelerate the schedule for the modernization and construction of canals, and link these waterways with the ports and inland cargo centers.
- Reestablish the railway to its proper economic role of low-cost carrier of bulk cargo, and develop its new role of carrying containers, by reforming its management and operations. The objective would be for the railway to function as a commercially viable enterprise by properly defining the roles of the public and private sectors.

Reducing Transport Costs of Egypt's Exports

1.0 INTRODUCTION

Many producers and traders, and economic analysts, say that freight rates for shipments by sea and air from Egypt are extraordinarily high. The Government of Egypt (GOE) is concerned about the impacts on exports of high transport costs, which are commonly said to be higher than those for competing countries in the Mediterranean and the Middle East. High transport costs, depending on a number of factors such as the value of the commodity, could eat into profit margins thereby placing Egyptian exporters at a competitive disadvantage. This would hamper the achievement of the government's targeted 10% rate of growth of exports. In reality, non-petroleum exports grew at less than 5% since 1995. This compares to a 14-34 % rate of export growth for the fastest growing economies around the world.

Prior to the study presented in this report, most evidence showed that transport costs were high. Many changes have been taking place, however, in Egypt's transport sector. The research for this study found that certain costs have declined, and are now approximately the same or lower than charges for like services elsewhere in the region. Freight transport rates, in general, no longer impose serious constraints on the competitive capacity of Egyptian exporters, although their competitive edge may be lowered by other costs incurred for transporting exports overland and by air or sea.

Authors of past studies and discussions noted high transactions costs for handling freight in Egypt's maritime ports. The handling costs include service fees, costs incurred in the submission of required forms, and many obstacles and inefficiencies in the management of maritime ports and the providers of required port services. The reports of the studies mention the following characteristics in comparison to maritime transport and services in nearby countries:

- ocean freight rates to and from Egyptian ports are from one-third higher to double,
- container handling costs are higher by about a third to double,
- export and import goods are in port for much longer times,
- the turn around time for containers is very much greater, and
- incidental costs and delays are excessive.

The air freight market has drawn less attention in the past, and has been less studied. Egypt's business community and sector analysts, nevertheless, believe that air freight costs, with only a few exceptions, may be comparatively high. Air freight services for exports from Egypt are criticized by many exporters and producers, frequently saying that the major problems are:

- high fees or rates of freight charges,
- insufficient air cargo space, and
- uncertainty of the schedule or uncertainty of cargo being loaded on the scheduled aircraft after the cargo is brought to the airport, although space has been booked in advance, or
- cost may be a minor matter, but the lack of facilities is a major problem.

Criticism from business operators has been focused on transactions costs of freight movements through the international maritime ports and airports. Costs of all other means of transport, specifically by river, road, or rail, are virtually never mentioned. Perhaps the apparent

disregard of these kinds of transport in discussions and studies is an indication that either (a) they are infrequently used, (b) the relative fees are viewed to be reasonable, (c) the costs are small and insignificant in the total freight costs, or (d) these means are owned or directly controlled by the exporters and importers, themselves. A consideration of all modes is important in view of modern practices of inter-modal transport, requirements of cold-chain continuity for horticultural commodities, and door-to-door shipments.

Transport costs, of course, figure in the total price of exports. Higher export prices usually translate into lower sales and a drop in foreign exchange earnings, if the foreign demand for the country's exports is elastic. The merchandise balance of trade is chronically in deficit, manifesting an evident reason behind the government's decision to set an explicit objective of attaining a 10% or 20% rate of growth of exports. Reaching this aim could be possible, if the right mechanisms for inducing export growth can be created and put into play. The information provided in this background sketch implies that the nation's export performance is possibly being hampered by high costs of freight transport and the resulting squeeze on exporters' profits. The claims and criticisms make an urgent case for an analytical study of the issues.

During the past several years, the GOE reviewed the maritime port services sector, which resulted in several prominent studies, recommendations, and supporting follow-up actions. One significant outcome was promulgation of Law 1 of 1998, its implementing decrees, and the response of the private sector to the new environment. The Law opened the sector to private sector engagement in all maritime service activities and removed the absolute ban imposed on all governmental entities from contracting with non-government owned agencies for maritime services for the transport of goods or passengers. The regulations for implementing this new law were promulgated by Ministerial (Transport) Decree 30 of 1998. The impacts of this new legislation and other regulatory changes are discussed elsewhere in this report.

1.1 Egypt's Export Trade Pattern

In order to determine the impact of freight transportation costs and services on Egypt's export competitiveness, the study first identifies export markets in which Egyptian goods compete with similar exports from neighboring countries. Then it compares transport costs for similar products exported to the same destinations, by mode, in order to assess the degree to which export volumes and revenues might be affected by differentials in freight costs. This report focuses on commodities which rely on general commercial transport, excluding petroleum products and a certain specific bulk items which have highly specialized transport requirements and are usually part of a vertically integrated operation. We have examined instead the commercial transportation services which are or could be easily accessed by Egyptian exporters and which would not require an exporter to make a large capital investment in specialized commodity transport infrastructure. These are commercial freight services by sea, air, rail, truck, and river transport.

Egypt's export trade pattern has evolved considerably over the last decade, due to a number of factors including changes in trade opportunities, regional instability, and competitive pressure. Before the collapse of the former Soviet Union and other Eastern Bloc countries, Egyptian products entered these markets in large volumes through supply, barter, and other contracts. The rapid collapse of the command economies, to which Egypt had previously shipped large quantities of agricultural products, foodstuffs, and textiles and from which it had imported heavy equipment and machinery, forced Egypt to find new markets. At the same time, the

increase in number of private sector exporters and the development of non-traditional exports contributed to a shift in overall export patterns. Sea and air freight services from Egyptian ports to foreign destinations, in particular, underwent major changes in order to cope with this shift. In recent years, the export pattern has stabilized, although within some geographical export regions we find steep annual fluctuations in the demand for Egyptian goods.

The following tables present the top 10 categories of Egyptian exports and 11 categories of imports by value in the years from 1995 to 1997, excluding petroleum products and ores.

Table 1.1 Top Egyptian Exports (millions LE)

	1995	1996	1997
Cotton Spinning	1038.0	657.13	953.96
Ready Made Garments & Textiles	857.3	811.65	879.71
Fruits, Vegetables and Flowers	685.9	714	623.09
Unmixed Aluminum	508.8	556.84	424.98
Other Agriculture	292.9	553.12	376.17
Raw Cotton	517.3	311.88	374.72
Cotton Textiles	371.1	301.49	356.35
Other Non Traditional Exports	344.3	304.86	308.96
Pharmaceuticals	141.8	173.95	226.84
Ferrous & Steel Products	122.3	51.64	197.66

Source: Ministry of Trade and Supply Arab Republic of Egypt

Table 1.2 Top Egyptian Imports (millions LE)

	1995	1996	1997
Grain	4297.0	5368.0	4104.1
Wood	2157.3	2030.5	2175.1
Iron and Steel (Shaped)	1412.0	2530.0	1841.7
Tallow	1717.8	1639.3	1659.6
Chemicals	1524.6	1491.0	1632.9
Motors, & Electrical Equipment	671.0	752.4	943.0
Vehicles & Spare parts	1097.5	939.8	844.2
Fibers	407.2	753.38	761.51
Stable & Moving Machines for Digging	345	414.63	708.23
Pumps & Air Compressor	548.5	660.72	678.80
Printing and Press Paper	711	566.64	608.62

Source: Ministry of Trade and Supply, Arab Republic of Egypt

Egypt's export pattern continues to change annually due to circumstances affecting the countries' primary export commodities. Raw cotton, yarn, textiles, and ready-made garments, which make up a large percentage of Egyptian exports, are subject to high tariffs and yearly quotas in most of their export markets which can change dramatically from year to year. Fresh fruits and vegetables also face steeply fluctuating demand depending on weather conditions in other producer countries. For example, bad weather in southern Europe or other North

African countries can result in high increases in demand for Egyptian strawberries in Northern Europe during one growing season, and in the next season the same importers may source all their strawberries from Spain. Export volumes of certain commodities such as sugar cane and cotton have also been affected by domestic price policies which may make it difficult for exporters to compete in foreign markets. Finally, Egyptian exports are facing greater competition as sea and air freight rates fall worldwide, enabling products from more distant sources to compete in the same markets with Egyptian products. Such is the case for sweet potatoes, which Egypt used to export. Demand for Egyptian sweet potatoes virtually evaporated when southern Africa was able to access European markets, selling higher quality sweet potatoes at competitive prices.

The regional geographic distribution of exports and imports has remained fairly stable in recent years. Percentage shares of trade varied little from 1995 through 1997. The trade shares of the top five trading regions in terms of exports is presented below. All other regions account for less than 5 per cent of Egyptian exports.

Table 1.3 Distribution of Egyptian Export and Import Trade (%)

	EXPORTS			IMPORTS		
	1995	1996	1997	1995	1996	1997
Western Europe	41.6	38.7	40.9	42.4	43.0	37.4
North America	19.6	20.9	14.0	15.4	13.1	11.6
Asia	14.3	13.6	14.6	15.0	16.4	20.3
Eastern Europe	9.9	10.3	10.8	10.3	11.2	10.6
Arab Countries	3.8	3.9	5.2	13.9	14.1	12.6

Source: Ministry of Trade and Supply, Arab Republic of Egypt

The variations in Egypt's export patterns are perhaps the most pronounced in Europe and in Arab countries, where Egypt exports the bulk of its agricultural produce. The fact that many southern European countries grow similar produce and the proximity of other Mediterranean producers gives importers a wide choice of sources, and price, quality, and preferential trade arrangements are deciding factors at sale time. The table below illustrates the shift in export markets in Europe between 1995 and 1997. Transactions between Egypt and Arab countries show a similar fluctuation among countries of the region.

Given the recent pattern Egyptian exports, a number of competing exporting countries were chosen for their overlap with Egypt in both commodity mix and destination markets using trade data published in the international trade statistics yearbook, by the US Census Bureau, and by the European Community. Commodities were cross matched for the major export destinations to identify Egypt's primary export competitors. The primary export competitors identified are used in this study as the comparison countries for freight rates for the different modes of transport. These are Cyprus, Greece, Israel, Jordan, Lebanon, Syria, Tunisia, and Turkey. For North American markets, France, Italy, and Spain can also be considered export competitors.

Table 1.4 Egyptian Exports to Western Europe (millions LE)

	1995	1996	1997	1996-97 % change
UK	484.0	562.83	306.62	(45.5)
Italy	1559.0	1488.87	1488.96	0
Germany	703.7	553.33	903.04	63.2
Switzerland	56.8	22.76	14.48	(36.4)
France	490.2	489.39	508.38	3.9
Netherlands	566.4	1238.85	898.92	(27.4)
Finland	5.1	21.42	3.50	(83.7)
Others	1101.4	779.6	842.4	8.1

Source: Ministry of Trade and Supply, Arab Republic of Egypt

1.2 Other Factors Contributing to High Costs of Exports

Not only costs of transport, but other necessary costs normally raise the price of exports, and therefore total cost becomes a kind of barrier to exporting due to reduced price competitiveness. A very important barrier, which is not easy to identify, is the distortion of domestic market prices caused by high tariff rates on imports. Due to higher prices of imports, caused by tariffs, investors bid up the prices of workers, materials, and plant and equipment for investment in the more profitable import substitution products. Consequently, these costs are higher for export producers, who suffer a loss of price competitiveness in world markets, and are induced to produce for the local market. This market price distortion amounts to an implicit tax on exports. The average tariff on imports is estimated to be about 30 percent (World Bank, 1998), which creates an implicit tax on exports of 19.4%. Unfortunately, this tax falls most heavily on non-traditional, manufactured exports which must compete in the world market. Traditional exports, such as petroleum, minerals, the Suez Canal, tourism, and agriculture, rely on industry-specific inputs, and sell into highly controlled markets. Thus, the impact of tariffs on these traditional exporters is less than the impact on non-traditional exports.

High import tariffs generate an implicit tax on exports in three principal ways. First, tariffs and other taxes on inputs raise the costs of producing the exportable product. Second, costs of factors of production in protected industries increase under tariff protection, as factors are bid away from non-protected industries. Third, domestic product prices tend to be bid up to the level of the world price plus the amount of the tariff. Domestic market prices therefore exceed international prices, so domestic markets are more profitable than export markets. Thus, production costs rise and exports become residual outlets for production.

Clearly, a 20 percent implicit tax on exports, which tax falls on their gross value, is a very large disincentive to growth in Egyptian exports.

Non-tariff barriers (NTBs) to imports have also been found to be significantly high. A lack of harmonized product standards, multiple inspections by several different GOE agencies, unrealistically stringent and mandatory quality standards in some cases, and unnecessary product testing at the ports have been estimated to add 10 percent to the CIF cost of imports. This would be roughly equivalent to a 7 percent additional implicit tax on exports. An

estimated additional 10 percent of the CIF of imports is added to the cost of imports by inefficiencies in maritime port services (Nathan, 1996). This too would amount to a 7 percent implicit tax on exports. In total then, not counting transport costs, which are the subject of the present study, the implicit tax on exports apparently totals 34 percent, including tariffs, non-tariff barriers, and excessive costs of port services. It should be noted, however, as discussed later in this report, that maritime port service costs appear to have declined significantly since the 1996 study was published.

This study builds upon the earlier work but expands the scope by including the maritime, air, road, river, and rail transport sectors in addition to the port sector. The basic question addressed in this report is how to increase the competitiveness of Egypt's exports by reducing transport costs. Three major topics are addressed:

1. Are Egyptian exporters paying higher transport costs than their competitors in countries in the eastern Mediterranean, and do these higher costs reduce the competitiveness of Egyptian exports?
2. Whether or not transport costs reduce Egypt's competitiveness, to what extent can these costs be reduced, and what are the approximate benefits?
3. What actions are required to reduce transport costs?

1.3 Methodology of the Study

A systems approach was applied by studying all the transport costs involved in the total logistics chain from inland warehouse to delivery at the port/airport of final destination, and to compare these with corresponding costs from other countries. It focused on all modes of land transport (road, rail, barge) and both air and ocean transport and, to a lesser extent, transport by road across international land borders. The methodology relied extensively on interviews of business operators including exporters; manufacturers; growers of agricultural export products; facilitators in the logistics chain such as freight forwarders, customs brokers, shipping agents; customs officials; operators of private public transport facilities and equipment, and transport policy makers.

Data on transport cost differentials between Egypt and its competitors were collected by analyzing the data banks on trade statistics maintained by other countries on imports from Egypt and its eastern Mediterranean competitors. These data were supplemented by interviews with the exporters and freight forwarders.

Tabulated and reliable data on costs and productivities of transport equipment used in Egypt were limited, and therefore considerable dependence had to be placed on interviews and site inspections. Information was developed to determine by how much costs could be reduced by calculating normative costs, i.e., what the costs ought to be in a normal environment. For example, normative costs were calculated for articulated trucks assuming the surface of the roads was brought up to standard, the excessive congestion was reduced, and the extremely high import duties were reduced. Where the calculation of normative costs was not possible because of the short time-span of this study, costs based on experience in other countries were used.

The report contains a number of specific recommendations addressing the urgent needs and shortcomings of the existing transport system. Most important, however, is the broad recom-

mendation pertaining to the need to start comprehensive planning in the transport sector. Such a study would review the overall development of the transport system in a longer term perspective to ensure that the demand for transport is met in the most cost-effective manner and with each mode playing its most appropriate role. That study would place special emphasis on the intermodal integration of the transport system, ways to promote greater involvement by the private sector in investment and operations, and the legislative and regulatory, institutional, financial, and the infrastructure aspects, and would provide a much needed opportunity to review, in a longer term perspective, the strategic development of transportation in Egypt with special reference to Egypt's import, export, and transshipment cargo.

2.0 AIR FREIGHT

2.1 Freight Rates

Air cargo rates are competitive for outbound freight, with Egypt Air offering government rates at a substantial discount. Companies chartering freighters can offer very competitive rates. Other carriers, in order to compete for cargo, typically charge 20 to 30 % below the agreed IATA rates, published in The Air Cargo Tariff (TACT). While the TACT rate is not usually the actual paid rate, given airline volume, seasonal, and bloc sale discounts, it is a fairly good indicator of the rate structure for the air freight market. The following tables present the 1998 TACT rates for cities within Egypt's main export regions.

Table 2.1. Typical TACT Air Freight Rates to Northern Europe (US\$/kg)

Type, Origin, Carrier	Destination				
	Amsterdam	Brussels	London	Munich	Paris
General cargo					
Cairo - EgyptAir	1.95	1.95	2.25	1.98	2.01
Cairo-other carriers	1.95	1.95	2.25	1.95	2.01
Regional average	2.18	1.52	2.16	1.41	1.86
Fruits & Vegetables					
Cairo - EgyptAir	0.98	1.03	1.12	1.03	1.06
Cairo-other carriers	1.03	1.95	1.33	1.27	1.27
Regional average	1.16	1.06	1.22	0.92	1.21
Textiles					
Cairo - EgyptAir	1.63	1.33	1.63	1.63	1.63
Cairo - other carriers	1.63	1.63	1.63	1.63	1.63
Regional average	1.68	1.17	1.65	0.98	1.58

Cairo - EgyptAir = government rate

Cairo - other carriers = TACT rate for all international air freight carriers

Regional average = average of TACT rates from Amman, Athens, Beirut, Casablanca, Damascus, Istanbul, Larnaca, Tel Aviv, and **Tunis (See Appendix A, Table 1, for individual country rates.)**

Although the TACT rates are only a general indicator of freight rates, clearly the published rates show agreed Egyptian air freight rates to be well in line with those of its export competitors. Actual paid rates for Egypt and several neighboring Middle Eastern countries, obtained from freight forwarders, carriers, and exporters in Egypt for high density cargo (such as fruit and vegetables) to 5 general destinations are as shown in Table 2.4. Actual paid rates from four Middle Eastern countries to the same locations for 1) fresh fruits and vegetables and

2) general cargo, obtained from freight forwarders in each of those countries, are listed in Tables 2.5 and 2.6, respectively.

Table 2.2. Typical TACT Air Freight Rates to Southern Europe (US\$/kg)

Type, Origin, Carrier:	Destination				
	Athens	Istanbul	Madrid	Milan	Bucharest
General cargo					
Cairo - EgyptAir	1.06	0.83	2.31	1.92	1.68
Cairo - other carriers	1.06	0.83	2.31	1.92	1.68
Regional average	1.30	1.66	1.35	1.68	2.45
Fruits & Vegetables					
Cairo - EgyptAir	0.56	0.53	1.09	0.86	1.68
Cairo - other carriers	0.56	0.83	1.33	1.12	1.68
Regional average	0.93	1.13	0.71	0.80	2.28
Textiles					
Cairo - EgyptAir	1.06	0.83	1.54	1.63	1.68
Cairo - other carriers	1.06	0.83	2.31	1.63	1.68
Regional average	1.01	1.28	0.93	1.25	2.18

Cairo - EgyptAir = government rate

Cairo - other carriers = TACT rate for all international air freight carriers

Regional average = average of TACT rates from Amman, Athens, Beirut, Casablanca, Damascus, Istanbul, Larnaca, Tel Aviv, and **Tunis (See Appendix A, Table 2, for individual country rates.)**

2.2 Other Air Transport Costs

Passenger service is the core business of the aviation sector in Egypt. Tourism, a major source of Egypt's foreign exchange earnings, is thus a determining factor in the number and size of aircraft serving both international and domestic destinations. Air cargo services are offered by all carriers on passenger/cargo flights, but only four carriers, Egypt Air, Air France, Lufthansa, and Saudi operate scheduled freighters. In recent years, events such as the Gulf war and the massacre of tourists in Luxor have dramatically affected the number of visitors to Egypt and have caused carriers to reduce scheduled passenger service, decreasing the cargo space available to Egyptian exporters. While the tourism trade has recovered most of its volume in the last year, carriers have been slow to re-instate service by larger aircraft. Freighter service is also limited by the fact that the bulk of Egyptian imports arrive by sea and quantities of inbound air freight are small.

Table 2.3. Typical TACT Air Freight Rates to Other Destinations (US\$/kg)

Type, Origin, Carrier:	Destination				
	Dubai	Jeddah	Johannes- burg	New York	Singapore
General cargo					
Cairo - EgyptAir	1.01	0.74	2.36		4.46
Cairo - other carriers	1.01	0.74	2.36	2.90	4.46
Regional average	2.46	1.67	3.03	3.49	6.67
Fruits & Vegetables					
Cairo - EgyptAir	0.74	0.38	2.36		4.46
Cairo - other carriers	0.74	0.38	2.36		4.46
Regional average	1.72	1.03	2.66	2.48	5.38
Textiles					
Cairo - EgyptAir	0.92	0.44	2.36		4.46
Cairo - other carriers	0.92	0.44	2.36		4.46
Regional average	2.19	1.12	2.74	2.38	4.79

Cairo - EgyptAir = government rate

Cairo - other carriers = TACT rate for all international air freight carriers

Regional average = average of TACT rates from Amman, Athens, Beirut, Casablanca, Damascus, Istanbul, Larnaca, Tel Aviv, and Tunis (See Appendix A, Table 3, for individual country rates.)

Table 2.4 Indicative Rates for High Density Cargo (\$/kg)

To: From:	Northern Europe	Southern Europe	Gulf	Far East	North America
Egypt	\$0.87	\$0.75	\$0.38	\$1.78	\$1.50
Cyprus	\$0.63	\$0.59	\$1.01	\$2.50	\$2.50
Jordan	\$0.89	\$1.00	\$0.53	\$2.29	\$1.74
Lebanon	\$2.17	\$2.13	\$1.31	\$4.49	
Syria	\$0.88	\$0.78	\$0.88		
Israel	\$0.90	\$0.85		\$2.00	\$1.85
Competitor Average	\$1.09	\$1.07	\$0.93	\$2.82	\$2.03

Source: Egyptian Commercial Representation Offices, quotations obtained by phone.

Table 2.5 Air Freight Rates (US\$ per kg) for Fresh Fruits and Vegetables

	To Northern Europe	To Southern Europe	To Arabian Gulf	To Far East	To North America
Turkey	1.00	1.00	1.80	3.50	1.90
Morocco	.89	.96	1.81	4.94	2.33
Cyprus	.30	.30	.53	.71	.49
Syria	1.90	1.60	.90	4.50	5.00

Source: Quotations obtained from freight forwarders in each of the countries in July of 1999.

Table 2.6 Air Freight Rates (US\$ per kg) for General Cargo

	To Northern Europe	To Southern Europe	To Arabian Gulf	To Far East	To North America
Turkey	1.10	.95	1.10	2.10	1.85
Morocco	.89	.96	1.81	4.94	2.33
Cyprus	.67	.55	.48	1.48	1.20
Syria	1.30	1.20	.55	4.00	3.50

Source: Quotations obtained from freight forwarders in each of the countries in July of 1999.

It does not appear that air freight rates are excessively high for Egyptian exporters, nor that prevailing freight rates in the region give other exporters a significant advantage. This conclusion is buttressed by data from the U.S. Bureau of the Census on freight plus insurance costs of air freight from several Middle East locations to the U.S. reported in Table 2.7. The one exception to this rule would be the rates offered by Israel's cargo only airline, which is specialized exclusively in the transport of fresh fruits, vegetables and flowers. This is the only cargo-only operator in the Eastern Mediterranean. It is to be expected that cargo rates from Cyprus to European destinations are lower for all categories of freight. Cyprus is much closer to the European mainland and is serviced frequently during peak export periods.

Table 2.7 Average Freight Plus Insurance Costs for Air Freight to the US (\$/kg)

Airline	I&F/kg
Cyprus	0.97
Jordan	2.36
Italy	2.52
Egypt	2.57
Israel	2.71
Morocco	2.94
Tunisia	2.97
Greece	3.15
Turkey	3.61
Average	2.83

Source: US Census Bureau Imports Database, March 1999

2.3 From the Exporter's Viewpoint

The exporters interviewed for this study expressed a range of opinions on the cost and availability of cargo space. On the positive side, most of them agreed that customs and quality inspections had been greatly streamlined and that they did not suffer undue delays in clearing their consignments. All the exporters were aware of the differential between Egypt Air's rates and those of other carriers, and many of them were aware of the price paid by Israeli exporters of fresh horticultural products. Of the major complaints, insufficient cargo space, unpredictability of cargo operations, and insufficient or inappropriate equipment, facilities, and service at the airport were the most uniformly expressed.

Insufficient cargo space was cited as the primary problem faced by exporters. Most exporters feel it is very difficult to find space and they often cannot get their produce to the desired destination on the day they wish to send it. Unpredictability of cargo operations was also a very big problem, with Egypt Air identified as the most unreliable carrier. Many exporters complained that Egypt air flights are often cancelled or that booked cargo was offloaded at the last minute in order to accommodate more passengers or passenger baggage, and left to await a later flight during which much or all of the cargo was often spoiled. More than one exporter claimed that Egypt Air cargo flights for which they had delivered cargo to the airport were cancelled at least 10 times per season. Other complaints included lengthy delays for cargo flights taking off, which contributed to produce arriving in poor condition at its final destination.

Virtually all exporters complained about the high price of freight rates. Although some exporters had no major complaint about the price of air freight, these exporters were generally either very aware of alternative freight arrangements and cargo chartering agents, and rarely paid above 80 to 90 cents/kg for horticultural exports to Europe, or they exported high value textiles for which handling is a lesser consideration on the lower cost Egypt Air flights. Other exporters complained that there was insufficient space on Egypt Air flights, forcing them to use other carriers which were more expensive. By implication, the Egypt Air special rate was acceptable to them, but they were unable to benefit from it due to lack of capacity. On the other hand, some exporters said they preferred to pay more to transport their freight on the other carriers because Egypt Air was unreliable or because they suffered more spoilage using the Egypt Air terminal. One exporter interviewed complained that the rates were too high even on Egypt Air, and even if Egypt Air lowered its rates by 20% they would still be too high. Nevertheless, he preferred to work with other airlines because they operate on schedule and Egypt Air changes its schedule day to day.

The belief that air freight rates were too high and put Egyptian exporters at a disadvantage was generally based on two factors. The first factor was the exporter's belief that exporters in other countries paid lower air freight rates to the same destinations. Most exporters have heard that Israeli exporters benefit from subsidized air freight prices and are paying only 55 cents/kg to northern European destinations. Other exporters also complained that air freight from Lebanon and Amman was cheaper. The second factor was the fact that while other Eastern Mediterranean exporters use sea and land freight which are cheaper, Egyptians are forced to use air because trucking is insufficient in availability and because of inadequate cooling systems in sea containers. The conclusion among exporters is that other exporters who have road or sea transport as an option were more price competitive even if the Egyptian product was a better one. In sum, exporters feel that air freight rates are too high for them to

compete given the transport options enjoyed by other exporters, and they feel that air carriers are charging excessive rates when they hear that Israeli exporters can get air freight space for as little as 50 cents/kg.

Many exporters complained about the lack of shaded areas for loading and unloading at the airport, about the fact that the warehouses and cold storage facilities at cargo terminals were overloaded during peak seasons, and about the bad handling services available. They claim that as much as 50 per cent of their produce suffers deterioration or spoilage due to exposure to heat or damaged cartons. Some specific complaints included the lack of cooled staging areas suitable for unloading, palletizing, and holding pre-cooled fruits and vegetables, and also about forklifts which were too small being used on cargo and unskilled cargo handlers, causing damage to the cartons of produce.

Most of the exporters' complaints regarding service focused on Egypt Air cargo operations and the Egypt Air terminal, although at least one exporter said that Egypt Air's services had improved and were now on par with British Airways. Exporters had fewer complaints about service from other carriers, but felt that because freight rates on these other carriers were significantly higher than the special rates offered by Egypt Air, they were forced to pay higher prices than they should.

2.4 The Air Freight Industry

Despite rapid technological innovation, seemingly insatiable demand, and considerable protection from competition, the airline industry had been characterized by only marginal profits over the last 35 years. The cartel-like structure of inter-airline revenue pooling and royalty agreements, IATA negotiated tariffs, and the freedoms of the air as negotiated in bilateral air services agreements, have largely failed to achieve the prime objective of any cartel, namely, high profits for its members.

Most international airlines, with a few exceptions such as Flying Tigers in the USA and Cargolux in Europe, carry both freight and passengers. On average, freight makes up about one fourth of total airline revenues, but generates only one eighth of total operating revenue. The revenue of freight per ton-kilometer being much lower than that for passenger ton-kilometers has been a determining factor in how individual airlines split their capacity between freight and passengers. An additional difficulty in allocating the freight/passenger split is that while passengers generally fly round-trips or at least return to their origin, freight does not. On major cargo routes, it is common for freight volumes in one direction to be double those traveling in the opposite direction on the same route. For a few airlines such as Air France, Lufthansa, and El Al, freight may represent 50 to 55 per cent of the total ton-kilometers generated. At the other end of the scale, there are some airlines where freight and mail together may only account for 5 to 10 per cent of total ton-kilometers. The carriage of freight may make a significant contribution to an airline's overall profitability, but the focus of most marketing and the assignment of aircraft on routes will be primarily on passenger demand and supply.

The air cargo industry is dominated by three routes which generate higher revenues for a number of reasons, and these are the North Atlantic routes, the Europe to Far East/Australia route, and the North and Mid-Pacific routes. These three routes generate over two-thirds of the total freight ton-kilometers and the majority of freighters still in operation are scheduled on

these routes. Everywhere else, the use of scheduled freighters has declined and many airlines such as British Airways and TWA have ceased to operate freighters altogether. Other major freight carriers have reduced the numbers of freighters in their fleets, focusing on long haul routes because operating costs are lower. Most of the cargo-only charter airlines went out of business in the 1980's, and these services are increasingly provided by airlines such as Air France, El Al, or Saudia operating freighters that are otherwise used on scheduled cargo flights.

At least twenty international airlines provide freight services to and from Egypt, and there are large numbers of freight forwarders and shipping agents that handle air cargo. There are approximately 10 to 12 large freight forwarders and agents which handle all modes of freight transport, numerous small to medium sized freight forwarders, and a total of 173 registered shipping agents. Many of the latter are very small operations with perhaps only two or three employees. There is no licensing requirement for freight forwarders. There is an Egyptian Federation of Freight Forwarders (EFFF), but many freight forwarders are not members of EFFF. There are only two cargo handling companies which provide cargo handling between terminal buildings and aircraft and which load and offload cargo. Egypt Air, the state owned and operated national airline, dominates air transport and cargo handling services, and also has a large freight forwarding agency, enjoying a partial monopoly in domestic air routes and in cargo handling, loading and unloading. Egypt Air carries between 40 and 60% of the air freight leaving Egypt in any given month. As presented in Chapter 2, actual air freight rates in Egypt are well below the published TACT rates, are generally competitive with those of other export competitors with one notable exception, and a special rate is offered by the national carrier, Egypt Air, which is substantially lower than that of the other airlines.

2.5 Air Cargo Operations

Air freight leaves Egypt on scheduled passenger flights, scheduled freighters, and chartered freighters. The two largest categories of goods being exported by air are textiles and fresh fruits and vegetables. The remainder is referred to in this report as general cargo. Textiles are generally sent by sea, except when a production run is late and the exporter faces a due date on an L/C or contract. Produce is highly perishable and many exporters ship by air rather than sea because of long shipping times and because efficient cooling and environment control technology required for sea shipment is not widespread in Egypt. Produce is also sent by air to catch European market windows towards the end of the season for each variety.

Most air cargo is shipped out of Cairo. Egypt Air operates two freighters on a daily basis, and Lufthansa, Air France and Saudi operate another 10 to 14 scheduled freighters a week, lifting between 40 and 100 tons of freight each. Of Egypt Air's two Airbus 300 freighters, with cargo capacities of 40 tons, one is chartered to Venus Air Cargo and the other is operated as an Egypt Air flight. British Air does not send freighters to Egypt, but has a daily 747 flight to London which can lift between 18 and 20 tons of freight. All other cargo is carried by chartered freighters and on passenger/cargo flights. Large body passenger aircraft can take about 12 tons of cargo in addition to passengers and baggage. Smaller passenger aircraft serving tourist destinations such as Luxor and Hurgada can generally carry between 5 and 7 tons of freight, with aircraft serving Alexandria able to take between 2.5 and 3 tons. Chartered freighters typically have between 36 and 85 tons of freight capacity. Egypt Air estimates that of approximately 300 tons of cargo leaving Egypt each day, one half is carried by Egypt Air.

This varies, however, and if charter flights were fully accounted for the figure would probably be around one third.

Carriers fill available cargo space on passenger flights to reduce the operating costs of passenger service, but baggage always takes precedence over cargo, and actual space available will vary for each flight. There is always some risk that cargo delivered to the airport for carriage on a passenger/cargo flight will not be loaded and must wait for a later flight. Typically, carriers will attempt to get all perishables onboard and hold non-perishables for the next available flight.

For virtually all destinations except Ostend (Belgium) and London, Paris, Germany, and Saudi Arabia, cargo must be sent on passenger/cargo flights. While Egypt Air has direct routes and landing rights to virtually every importing country, the company only has two cargo planes, and thus cannot offer expanded freight services. The volumes shipped to these destinations are also not sufficient to fill scheduled freighters year round, so other carriers have not added additional freighters to their routes. Shippers chartering freighters prefer Ostend as a destination because of the low cost of handling and the cargo services and facilities available, and from Ostend it is cost effective to truck cargo to its destination anywhere in continental northern Europe.

Most air cargo is palletized or stuffed into aircraft containers after delivery to the airport. Once cargo has cleared customs, it enters the customs areas and awaits arrival of the aircraft. Terminal handling to this point is either provided by Egypt Air or by the carrier or freight forwarder's own handling personnel. Cargo handling on the apron, including towage from terminals across the tarmac and loading and unloading of aircraft is provided by two companies, Egypt Air and Egyptian Aviation Services (EAS). EAS operates only in Cairo, so Egypt Air provides apron handling at other airports. Carriers are permitted to do the loading and unloading for their own aircraft but may not provide apron services for aircraft other than their own. At airports other than Cairo and Alexandria, cargo is offloaded or containerized, passed through customs, and employed directly on the runway. Cargo can also be delivered to Cairo airport and cleared through customs there. Once a container or striped pallet is inspected and receives a customs seal, it can be taken out of the customs area and transported to any other port of exit and boarded directly onto aircraft.

In order to fill cargo space on passenger flights, some freight forwarders and sales agents truck cargo from Cairo and Alexandria to Luxor and to Hurghada for no additional cost to the exporter.

2.6 Air Cargo Facilities

At present, Egypt has six international (customs) airports: Cairo, Alexandria, Luxor, Hurghada, Sharm El Sheik, and Aswan. An inventory of facilities is presented in Table 2.8. Of all the customs airports, only Cairo and Alexandria have cargo terminals and storage facilities. Cairo airport has four cargo terminals: Egypt Air, Swiss Air/Air France, Saudi, and the Air Cargo Egypt (ACE) terminal, all of which have limited indoor storage and warehousing space. Some covered outdoor open air storage is available, but often during peak seasons cargo must be left in parking lots and on curbsides due to insufficient space. There are cold storage facilities in every terminal at the airport, but space is limited. Cargo handling equipment (forklifts, dollies, pallet handling equipment) is somewhat aged and scarce,

Table 2.8 Inventory of Cargo Facilities

Loading/Unloading Equipment	
Cairo	Max capacity: 12,000 kg – Heavy shipments, all ULD-types: equipment available on request 12 hours before arrival.
Alexandria	Max capacity: 5,000 kg
Luxor	Forklift max : 2,000 kg ULD equipment max: 7,000 kg
Hurghada	Forklift max : 2,000 kg ULD equipment max: 7,000 kg
Sharm El Sheik	--
Aswan	Max capacity: 2,000 kg
Storage	
Cairo	Dry storage (enclosed or covered), cold storage between –20C to 12C (space limited), safe for valuables and storage rooms for radioactive, dangerous goods, and human remains
Alexandria	Dry storage (enclosed or covered), cold storage between –20C to 10C (space limited), safe for valuables and storage room for dangerous goods
Clearance	
Cairo, Alexandria, Luxor, Aswan	At the airport by consignee or his agent or his broker agent
Customs Hours	
Cairo, Alexandria, Luxor, Hurghada, Aswan	Sunday through Thursday 08:30 – 14:00 hrs. Clearance outside of customs hours and on bank holidays possible for all export shipments. Import clearance outside of customs hours and on bank holidays available for live animals, perishables, press material, human remains, spare parts for ships in transit, aircraft parts for AOG, diplomatic mail, and petroleum field equipment against payment of overtime fees.
Delivery	
All Airports	Cleared goods will be delivered at the airport 24 hrs a day with previous customs approval after working hours.

Source: IATA TACT Rules, Airport Information

Note: Alexandria airport here refers to El Nozhaa International Airport.

although pieces of newer equipment exist. A new electronic cargo scale is in operation but there is only one of these, and while mechanical scales are located in all the terminals, some of them are unreliable due to their poor condition.

Terminals are not efficiently laid out to facilitate transfer of cargo from trucks to the staging area, and there are no loading bays permitting trucks of different sizes to back up directly to the warehouse. High unloading decks are available for large trucks at curbside, but the general clutter both on the decks and on the curb in front of them makes access for trucks very difficult. All goods must be transported from curbside across the deck to the staging area, and among the different terminals there is very little covered (shaded) loading and unloading space. Often, the curb space in front of the terminal buildings is used as a staging area for stuffing containers, building pallets, and inspecting goods. There is no cooled staging area for offloading, palletizing and container stuffing, or for holding of cooled or frozen shipments awaiting loading onto the aircraft. Customs areas are unorganized and not clearly marked.

Security is good once the cargo enters the customs area but is virtually non-existent in the other terminal areas. The ACE terminal is not fenced and curbside unloading areas are just off the main street. Open containers and goods being offloaded are unguarded. Other terminals are fenced and have a guarded gate, but security services inside the terminal parking lots and unloading areas were not apparent. Runway capacity at Cairo is sufficient to land large commercial aircraft.

Alexandria's El Nozhaa airport has one cargo terminal which is separated into import and export areas. These are clearly marked, and there is enclosed warehousing, covered outstorage, and a covered outdoor loading and unloading space. A small cold storage facility is available which is only occasionally filled. Forklifts, dollies and scales are all somewhat aged but appear to be functional and there is fairly good availability of equipment when it is needed. A high unloading deck runs across the front of the terminal and can be used for loading and unloading large trucks with high decks. Because of the low volume of freight activity at Alexandria airport, the limited cargo facilities are sufficient most of the time. Only occasionally are the existing facilities overloaded when several consignments arrive simultaneously. Customs areas are fairly well organized into one long row of windows. Security is not very tight. The cargo terminal is fenced, but the gate is not monitored and there was no security apparent in the rear of the terminal where goods await emplanement in a covered open area. Entrance doors to the warehouses are left open, and while there is minimal surveillance due to the presence of cargo terminal personnel at desks within line of sight, security was not constant. Because of the low level of activity at this terminal, it may be easier to spot pilferage and to keep cargo under surveillance. The runway capacity at El Nozhaa is sufficient for small aircraft only, the largest aircraft able to land there being the Airbus 320. In freighter configurations, aircraft of this size would have a maximum cargo capacity of about 40 tons.

At all other airports, there are no cargo terminals and cargo is offloaded from trucks on the apron, palletized or containerized, and loaded directly into the aircraft.

Borg El Arab airport, about 30 kilometers southwest from Alexandria, was formerly a military airport but is now in the process of conversion to civil aviation use. Borg El Arab's runway capacity is sufficient to land large commercial aircraft, but as yet there are no terminal facilities and only charter passenger flights are using the airport. Cargo operations are not permitted yet, reportedly because security equipment and personnel is not yet in place. Other airports are also being considered for development in Menoufia and elsewhere in the delta, but it is uncertain if these will serve cargo or passengers only.

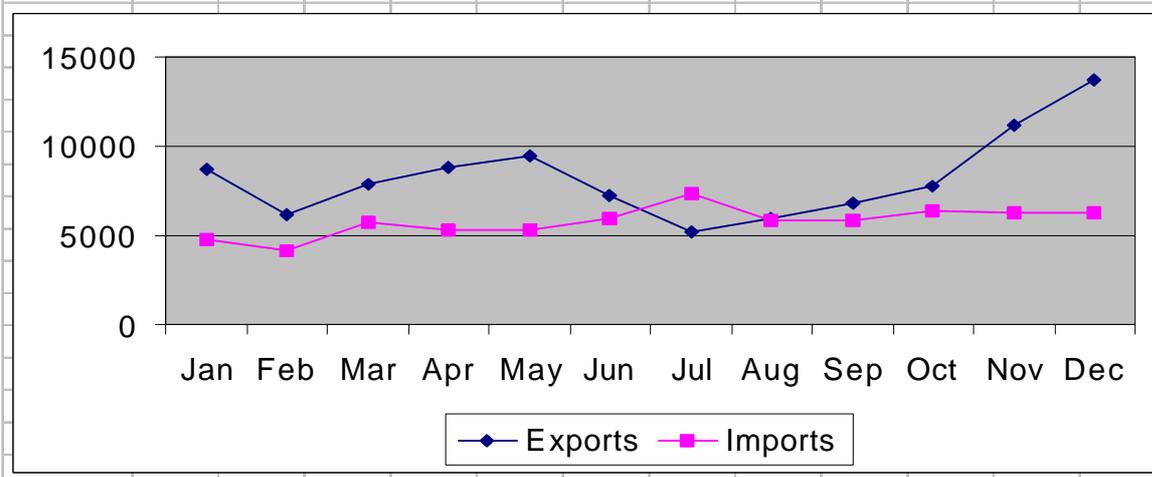
2.7 The Air Freight Market

The air cargo carried from Egypt consists mostly of fruits and vegetables and textiles. Fruits and vegetables are highly seasonal, and account for much of the volume mismatch between inbound and outbound freight volumes, illustrated in Figure 2.9.

This seasonal variation between imports and exports may indicate a shortage of capacity and thus higher costs. The high season for vegetables, particularly green beans, runs from November to mid-January, and a second high season follows in April and May. The total import volume by air for 1997 was about 69 thousand tons, compared to almost 100 thousand tons for exports. Only during one eight week period in mid-summer does import cargo

Table & Figure 2.9 Cairo International Airport, Air Freight Volumes in 1997

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Exports	8671	6180	7841	8828	9440	7209	5170	5987	6775	7813	11205	13696
Imports	4806	4118	5749	5287	5344	5996	7297	5854	5891	6352	6245	6293



Source: Cargo Village, Cairo Airport.

volume meet and exceed export cargo volume. At this point, the horticultural exports are finished and imports have risen slightly to meet demand during the peak tourist season for Gulf visitors. Carriers indicate that cargo space is available during most of the year except during peak horticultural exports. In order to schedule more turnaround freighter flights to major export destinations during peak demand, they would have to charge almost double for export cargo to cover the operating costs of the empty inbound leg. Whether this occurs or not is an empirical question and will require further research. However, part of the gap between incoming and outgoing freight may have been taken up by seasonal increases in tourist traffic. Most horticultural exports are highly price sensitive, and the additional freight costs would make the product unattractive at its final market sales price. Let us take for example strawberries, which are a very high value product. The following Table 2.10 illustrates profitability of strawberries in export markets and the share of transport costs in the total export cost.

Table 2.10 Strawberries – Break Even Prices, Profit, and Share of Transport Costs, 12/02/99 (All prices expressed in US\$/carton)

Market	Export Price	FAC Price	Air Freight	CIF Price	Comm ission	Break Even Price	Profit at Freight = \$2.00/ carton	Share of Air Freight Bill	Profit at Freight = \$4.00/ carton	Share of Air Freight Bill
Austria	9.49	3.30	2.00	5.30	0.53	5.83	3.66	21%	1.13	42%
Denmark	10.82	3.30	2.00	5.30	0.53	5.83	4.99	18%	2.46	37%
France	8.96	3.30	2.00	5.30	0.53	5.83	3.13	22%	0.60	45%
Holland	7.88	3.30	2.00	5.30	0.53	5.83	2.05	25%	(0.48)	51%
Sweden	8.76	3.30	2.00	5.30	0.53	5.83	2.93	23%	0.04	46%
UK	9.03	3.30	2.00	5.30	0.53	5.83	3.20	22%	0.67	44%

At an air freight price of \$2.00/kg (\$4.00 per 2kg carton), profit margins are almost entirely eroded by air freight, the share of which now takes up over 40% of the average export price.

Even at \$1.00/kg, air freight costs equal about a quarter of the final sales price. For lower value commodities such as green beans and melons, any increase in air freight rates above the prevailing rates of between .85 cents and \$1.05/kg would make export to most destinations unprofitable. Airlines scheduling turnaround freighters would not be able to charge a rate that exporters would be willing to pay. Consequently, carriers with landing rights in Egypt operating regularly scheduled flights are not keen to add additional cargo-only flights. They are able to charge higher rates carrying cargo from other regions to Europe and make higher profits by allocating the freighters they operate to the east-west routes or to routes where they can pick up more high value cargo.

Lufthansa, one airline which still operates a number of freighters, explained that the large carriers operating newer aircraft are hard pressed to seek out the highest value cargo and cannot afford to pick up additional freight in Egypt for reasons of profitability. For instance, Lufthansa operates a 100 ton freighter which lands in Cairo with a full load of cargo, offloads about 80 tons of import freight, and then heads directly to Sharjah in the Emirates without lifting any export cargo. In Sharjah, the final 20 tons is offloaded and the freighter heads for Madras or Delhi, depending on the day of the week, with an empty hold to pick up a full 100 tons which it carries to Frankfurt or Munich. This circular route allows Lufthansa to operate the freighter nearly full time, given the longer distances, and offers a higher revenue per ton-kilometer. Other airlines also indicated that they did not ask for permission from Civil Aviation to schedule additional freighter flights during peak season because it was more profitable to pick up grapes from Cyprus or fresh fish from other parts if they had any freighters free.

All the carriers interviewed confirmed that during high season for fruit and vegetable exports, there is a dramatic shortage in air cargo capacity. To supplement cargo space, some companies charter freighters for export freight to Europe. To bring an empty freighter from Europe, given the difficulty of picking up inbound cargo, freight forwarders would have to charge between 90 cents and 1 dollar per kilogram for outbound cargo just to cover operating costs. A better solution is to charter an African or Middle Eastern freighter overflying Cairo on its way to pick up freight in Europe. For example, an Ethiopian Airlines freighter leaving empty for London can be chartered for one leg only, landing in Cairo to pick up cargo which is offloaded in London. Because the freighter has a return load and Ethiopian Airlines wants to fill the empty leg, the freight forwarder can get space for as little as 75 cents a kilogram. At other times of the year, there is sufficient cargo space and many planes take off with some empty space in their cargo holds.

Our conclusion is that landing rights are not a barrier preventing increased scheduled freighter service out of Egypt, but the structure of the air freight market itself, the volume of passenger and import freight traveling to Egypt, and the nature of the export commodity requiring the additional freight service. Carriers seek the highest return on the limited numbers of freighters they operate, and because of seasonality of Egyptian exports, they have not added additional scheduled freighter service from Egypt.

2.8 Landing and Take-Off Charges for Freighters

One factor contributing to freight charges is often the landing and take-off fees, which may vary considerably from airport to airport. These charges are calculated differently depending on the weight of the aircraft, whether or not landing and apron lights are required, and a number of other factors. Table 4 of Appendix A illustrates the calculation of landing and take-

off charges for airports in the Eastern Mediterranean. In order to have a good comparison of landing and takeoff charges we have to compare at least three different weight classes of freighters, representing the most common aircraft types in use on cargo routes serving the Middle East and North Africa. This is because some countries charge a flat fee for any aircraft over a certain weight, and the breakweights for incremental charges vary greatly. Table 2.11 below shows the most common aircraft and their maximum takeoff weights.

Table 2.11 Aircraft Types and Maximum Take-Off Weights

Class	Aircraft	Maximum Take Off Weights (tons)
I	B737 series	46 to 64
	B727 series	76 to 92
	MD 80 and 90 series	64 to 72
II	A300 series, A310-300	130 to 150
	B767 series	136 to 175
	DC8 series	147 to 161
III	A340	257
	B777 series	229 to 299
	B747 series	268 to 394
	MD-11	273

Source: ICAO Secretariat

In Table 2.12 we have used the official landing and takeoff charges as published by each airport authority to calculate the charges that would apply to three different aircraft, each representing their weight category in a notional fashion. Charges were calculated, excluding all charges related to passenger carriage, for a daytime landing during off peak hours (when applicable). For each country, the highest traffic airport was used unless otherwise indicated.

As we can see, Egypt's landing charges are well within the range of those of competing countries, particularly for small and medium sized freighters. Lebanon and Jordan charge a bit less for the largest freighters, and Athens considerably less, but overall the landing charges in Egypt are on the low end of the scale for Eastern Mediterranean airports and far below that of most international airports. The conclusion is that landing charges do not contribute to any freight rate differential that could negatively affect exporters. In this respect, Egypt has a distinct advantage over Israel, Tunisia, and Turkey, whose landing charges are much higher.

2.9 Cargo Handling

Cargo handling for exports includes loading and unloading cargo from trucks, palletizing or stuffing containers, warehousing, apron transport, and aircraft loading or unloading. Any type of company, public or private, carrier or non-carrier may load and unload cargo from trucks, palletize or stuff containers, transport cargo within the terminals and through the customs areas, and provide warehousing and cold storage. These activities are currently carried out by the airlines, freight forwarders, or by employees of the exporter or his agent. Only EgyptAir

Table 2.12 Landing and Takeoff Charges by Aircraft Class, by Country/Airport

	Class I (for an MD80 at 63 tons)	Class II (calculated for an A310 at 150 tons)	Class III (calculated for a B747 at 394 tons)
Egypt	115	333	1,088
Cyprus	229	615	1,619
Greece	96	253	664
Israel	596	1,408	3,705
Jordan	117	314	900
Lebanon	167	385	1,039
Syria	206	523	1,500
Tunisia	441	1,499	4,739
Turkey	473	1,035	2,625
France	658	1,719	4,674
Germany	1,878	4,179	10,514
Italy	341	830	2,197
Netherlands	820	1,811	4,103
Spain	436	1,084	3,006
Switzerland	594	1,371	3,386
UK (off peak Heathrow)	527	569	777
UK (off peak Gatwick)	179	312	774
Singapore	317	835	2,366
South Africa	626	1,273	2,959
UAE (Dubai)	220	519	1,365
USA - Chicago	292	690	1,814
USA - New York	541	1,142	2,841
USA - San Francisco	182	430	1,131

and EAS are permitted to provide apron handling and aircraft loading and unloading, with the exception of carriers servicing their own scheduled or unscheduled flights.

EAS was established in 1990 for cargo handling services at the airport. Its shares are held by a number of air cargo companies, including EgyptAir which holds about 11% of the shares. The current chairman is from Lufthansa, and other shares are held by a few of the large international carriers. EAS is said to provide better cargo handling than Egypt Air, but both companies charge the same rates, and it is clear that there is cooperation in price setting between the two companies. Companies who are shareholders in EAS have contractual arrangements with the company to provide apron handling and aircraft loading. Under contract, a fixed charge may be paid per contract period for a certain amount of service after

which additional services are billed to the carrier at the set rate. One carrier has an agreement under which EAS provides loading and unloading under the contract for one hour before departure and for one hour after landing, and any additional handling is charged at the set rate. Other carriers may have similar arrangements. Charter carriers and carriers without agreements pay the set rate.

Cargo handling costs constitute a large portion of the final freight bill paid by exporters, and are reflected in the per kilogram freight rates charged by carriers. The following Table 2.13 illustrates some of the costs associated with cargo handling at Cairo Airport:

Table 2.13 Costs Associated With Cargo Handling

Apron Handling and Aircraft Loading	
Charged by Egypt Air and EAS for loading one 40 ton freighter = \$US 6,800 to 8,000	Applicable charge = \$172 per ton
Charged by Memphis Air for loading one 34 to 40 ton freighter = \$US 2,000 to 3,000	Charged rate = \$58 to \$75 per ton
Estimated Normative Cost for loading one 40 ton freighter = \$1500 to \$1800	Normative Rate = \$37 to \$45 per ton
Cargo Handling	
Warehouse handling	L.E. 15 per ton (\$4.42 per ton)
Dolly rental	\$250/hr per dolly
Heavy Forklift rental	LE 600/hr per forklift (\$177/hr)
Labor	
Bearers, porters, and security guards	\$35 per hour per person

Ministerial decree 216/97 permits air companies to provide apron handling for their own flights, but for this the company is required to invest in all new equipment or rent equipment storage facilities within the cargo terminal from Egypt Air, and provide maintenance services for equipment. The capital costs associated with this are so high that most carriers use Egypt Air or EAS, which charge exorbitantly high prices. The normative cost of apron handling and aircraft loading for a 40 ton freighter is approximately \$1,500 dollars, at most one fourth of what the two official apron handling companies charge.

Rental charges on handling equipment are also very high. In the case of container dollies, the charge per hour is almost equivalent to the purchase price of a new dolly. Carriers are sometimes forced to pay these charges because the Cairo Airport Authority has the right to restrict the number of pieces of equipment which each carrier is allowed to have at the airport. Some carriers complained that the limits were insufficient for the numbers of flights or sizes of aircraft they had to service, forcing them to rent equipment at very high prices from Egypt Air. One carrier explained that it had 20 dollies allocated to it, and that if they were loaded with containers and one flight was delayed, there was not enough stacking space within the waiting area to unload the dollies. It would therefore have to rent enough dollies to service another full flight, and if the delay were long enough, the cost of dolly rental could easily exceed the full amount of revenue generated by the cargo itself. One aircraft container, containing 800 kg of cargo at a rate of 1 dollar per kilo generates \$800 dollars of gross revenue before costs are applied. If a dolly is rented for four hours to sit this container on, all revenue is lost, and the operating costs of sending the container must still be absorbed by the carrier. The Cairo

Airport Authority is said by carriers to refuse requests by airlines to acquire additional pieces of equipment, or to grant storage space so that such equipment can be stored according to the regulations outlined by CAA.

2.10 Inadequacy of Air Cargo Facilities

Lack of air cargo infrastructure is a major factor limiting air cargo services and causing losses due to delays and spoilage. The size limit on aircraft landing at Alexandria and the absence of cargo terminals at other airports causes a number of problems. Much of the exports shipped out by air are produced in the delta, and would be conveniently shipped out of Alexandria were larger aircraft able to land. While Egypt Air operates small cargo flights out of El Nozhaa, these all go to Cairo, where cargo is transferred to another flight. The maximum freight space on passenger/cargo flights being limited to 2.5 to 3 tons, direct service from Alexandria to international destinations is restricted. Freight forwarders and cargo agents have the option of trucking the freight received in Alexandria to Cairo and to other airports. Some companies will transport freight from Alexandria to Luxor or Hurghada charging only the price for overland transport that they charge to carry freight to Cairo. The actual per kilogram air freight charge is offered at the same rate for cargo leaving Cairo. Sales agents for the carriers are able to offer the same rates because carriers want to fill empty cargo space on planes leaving Luxor and Hurghada, and the carrier gives the agent a discount rate. It is well known that the transaction costs associated with loading and unloading cargo constitute the major portion of the freight costs associated with every mode of transport, and even though exporters in the delta pay only the charges they would normally pay for carriage from Alexandria to Cairo, these charges add to the final freight bill to the amount of about L.E. 300 for trucking and L.E. 600 for loading and unloading for a typical 2,000 to 3,000 kg consignment.

Because cargo terminals are lacking in other airports, cold storage is lacking, and cooled staging areas are non-existent at Cairo airport, one freight forwarder estimated that up to 50% of perishables are lost to spoilage or arrive at their final destinations in poor condition. This translates into a lower sale price obtained for produce, by some accounts about 25% below the price which could have been obtained for produce arriving in perfect condition.

Fresh fruits and vegetables suffer a decrease in quality due to lack of cooled staging areas and cold storage. This decrease in quality results in a reduction of 25 per cent of the final sales price. In other terms, the exporter could get 33% more gross revenue for the product if it were properly handled. Approximately LE 208 million per year in export revenue may be lost on fruit and vegetable exports during passage through the airport alone.

3.0 MARITIME FREIGHT

3.1 Ocean Freight Rates

As shown in Table 3.1 below, there is no great difference in ocean freight rates to the United States for those paid by Egyptian exporters and compared to exporters in competing countries. In fact, Egypt is third from the lowest behind Tunisia and Morocco. The favorable ranking of Tunisia and Morocco is reasonable since these countries are nearer to the U.S. by 3000 and 2000 kilometers respectively. The highest cost of exporting by sea to the U.S. is in Israel, whose costs are 38% higher on the average than the costs from Egypt. And it should be noted that the ocean freight rates, to a certain extent, factor in other ocean freight related costs the exporter must pay, such as port handling costs¹.

**Table 3.1 Index of Actual Ocean Freight Rates Paid for Transport to the U.S. (including insurance)
Index (Egypt = 100)**

<i>From</i>	<i>To the United States</i>
Tunisia	95
Morocco	100
Egypt	100
Jordan	110
Greece	119
Italy	124
Cyprus	129
Turkey	133
Israel	138

Source: U.S. Department of the Census, 1998

As was broadly demonstrated above for the case of export to the U.S. for Egypt and neighboring countries, there appears to be no evidence that shipping lines serving the U.S. discriminate against Egyptian exporters by charging higher freight rates than for exporters in competing countries. In fact, Egyptian exporters are paying low freight rates to the U.S. These data are based on a large data base including all imports into the U.S. from the above countries for the year 1998. As such, the table indicates conclusively that ocean shipping rates from Egypt to the US are very low.

To examine whether or not the same is true for shipping lines serving Northern Europe, the Far East, and other regions, data were collected from exporters, freight forwarders and shipping lines on the cost of shipping containers to these regions. The results are shown in

¹ These ocean freight rates reflect to a large extent any inefficiencies in the port of export that increase the turnaround time of the ship. For example the in-port cost for a 43,500 DWT bulk carrier is very high. The ship owner must factor in the cost of anticipated delays in his freight rate or charter cost.

Tables 3.2 for freight from Alexandria/Dekheila and 3.3 for freight from other countries to various ports in the world.

Table 3.2 presents data for ocean freight rates from Alexandria/Dekheila to ports in various parts of the world. It is evident that the freight rates vary considerably. For example, the five shipping rates given for a dry 20-foot container from Alexandria/Dekheila to the Far East vary between US\$ 300 to 600, with an average of US\$ 485. The freight rates to the Far East from four neighboring countries vary between 250 and 600, with an average of US\$ 487. From Alexandria/Dekheila to Northern Europe the shipping rates vary between US\$ 216 and US\$ 533, with an average of US\$ 344. From Lebanon and Cyprus the rates to Northern Europe vary between US\$ 243 and US\$ 500, with an average of US\$ 307. For shipping to other regions such as North America, Arab gulf, and southern Europe the rates from Alexandria/Dekheila are lower than for those from neighboring countries.

Table 3.2 shows ocean freight rates from Alexandria/Dekheila to other ports in the world for four classes of container: 20 foot dry, 40 foot dry, 20 foot reefer, and 40 foot reefer. Table 3.3 summarizes the freight rates (for 20 foot dry containers only) from Egypt as compared with rates from ports in Lebanon, Southern France (Marseilles), Turkey, Morocco, Syria, and Cyprus. These tables indicate that freight rates from Egypt are almost always lower than the rates from ports in competing countries. However, although the tables provide a very good indication that Egyptian exporters do not generally pay higher freight rates than exporters located in competing countries, the data base is not sufficiently large to provide a definitive proof. Unlike the case discussed earlier of shipments from Egypt to North America which was based on the very large data base provided by the U.S. Department of the Census, and where the positive conclusions could be drawn that shipping rates from Egypt are lower, the sample size used for Tables 3.2 and 3.3 is small. For example, for ocean transport to Northern Europe, only seven quotes were available from Alexandria/Dekheila with rates varying between US\$ 216 and US\$ 533. For rates from neighboring countries to northern Europe there were only 4 quotes, with three being identical and coming from one shipping line. From a rigorous statistical point of view, the difference in the two averages (US\$ 344 and US\$ 307) is indicative, though not statistically significant.

Such variation in shipping rates is quite normal since, unlike for air cargo transport, there are no "agreed-upon" rates used as a bargaining base for discounts. The ocean shipping rates given in the table are "spot" rates that are influenced by a large number of factors, the most important of which are the level of competition, seasonality of traffic, the availability of space on the ship, and the eagerness of a shipping line to gain market-share at the time of providing the quote. Competition is intense at present because of the lack of business for shipping in the Far East and other regions hit by recession.

Table 3.4 below shows the tariffs for container port handling and terminal costs in Egyptian ports and competing ports in the eastern Mediterranean. For a twenty foot export container loaded in Alexandria, the rate published by the port authority is L.E. 115 (US\$ 35). This includes the various terminal handling costs, comprising such costs as moving to and from the container stacking area and loading the container on board the ship. An additional 30% was added to account for the services of the shipping agent, making the total for the export container US\$ 43.

The cost of US\$ 35 for the export container compares with a published rate of US\$ 75 for an import container. Since the operations for the export and import containers are very similar,

Table 3.2 Representative Maritime Freight Rates for Containers from Alexandria to Various Parts of the World

To	A. Freight Rates for Reefer Containers*		
	20-Foot Reefer, US\$	40-Foot Reefer, US\$	Transit time (days and km)
Thamesport (UK)		2400	8-11 (3647)
Rotterdam	2000	2500/2700	6-15 (3454)
Hamburg	2000	2500/2700	10-17 (3454)
Felixstowe	1800	2400	
Genoa	1300	2100/2400	4-6 (3633)
Naples	1300	2100	2379
La Spezia	1300	1700	1979
Giaio Tauro	1200	1700	1979
Marseilles	1600	2400	2679
UK Ports	2500		2679
Rotterdam/Antwerp/Hamburg	2000/2500	2700	2979
Odessa			4179
Abu Dhabi & Dubai	2100	2300	2579
Kuwait	2300	3000	3279

*Source: RONCO-ATUT Project

To	B. Freight Rates for Dry Containers*		
	20-Foot Dry, US\$	40-foot Dry, US\$	Transit time (days and km)
Baltimore	850	1150	
Rotterdam	250	500	
Buenos Aires	1200	2200	
Singapore	550	750	
Hamburg	216	432	
U.K.	533	984	
Southampton	492	820	
Naples	175	350	
Antwerp	351	595	
Rotterdam	216	432	
Norfolk	700	1050	
Singapore	300	550	
Shanghai	575	900	
Yokohama	400	550	
Jeddah	1400	2600	
Kuwait	600		18
Abu Dhabi	550		14
Jeddah	500		7
Hong Kong	600		19
Genoa	250		3
Antwerp/Rotterdam/Hamburg	350		15
Abidjan	1500		28

*Source: Mesco, H/L, and CMA

Table 3.3 Summary Comparison Of Average 20-Foot Dry Container Ocean Freight Rates From Egypt And Other Countries To Various Destinations

FROM	TO:				
	N. Europe	S. Europe	Arabian Gulf	N. America	Far East
Egypt	344	212.5	762	775	485
Morocco	695	533	1550	1650	1375
Lebanon	243	350	750	#N/A	600
Marseilles	#N/A	250	600	400	250
Cyprus	450	250	683	1166	500
Turkey	412	418	645	#N/A	702

Source: Quotations obtained from freight forwarders in each of the countries in July of 1999. For other rates see Appendix A, Table 5.

Table 3.4 Comparative Port Handling Charges for 20 and 40 foot Export Containers*

Country	Loading, Stacking, and Administrative charges.	
	20 ft, US\$	40 ft, US\$
Egypt	\$ 43	\$ 80
Israel	\$ 39	\$ 118
Kenya	\$ 70	\$ 80
Canton	\$ 105	\$ 210
UK	\$ 112	\$ 112
Morocco	\$ 123	#N/A
Abu Dhabi	\$ 132	\$ 196
Cyprus	\$ 140	\$ 180
Marseilles	\$ 169	\$ 169
Syria – Lattakia	\$ 350	#N/A
Turkey - Hadarpaja	\$ 400	#N/A

*Source: Mesco, Zim Lines, Lykes, Danzig and the Egyptian commercial attaches. For other countries see Appendix A, Table 6.

the costs should be about the same for both export and import containers. The low rate for the export container is a "promotional" rate with the objective of reducing the cost of exports. It is not known to what extent the higher costs of handling import containers subsidize the export containers, or whether both are subsidized from another account. To determine this would require a port operations costing and pricing study.

The costs presented in Table 3.4 show that the handling costs for export containers for Egypt is the second lowest -- only Israel is slightly lower at \$39 per twenty-foot export container. We were told by shipping lines familiar with Israeli port administration that the Israeli port rate is heavily subsidized. The other countries close to Egypt, and including, Cyprus, Italy, and Abu Dhabi, and for which it was possible to collect port handling costs data, charge triple

what Egypt charges. Thus, it does not appear that the port handling charges for Egyptian ports handicap Egyptian exporters.

3.2 Other Maritime Freight Costs

The four large ports of Alexandria/Dekheila, Damietta, and Port Said on the Mediterranean and a total of nine ports on the Red Sea carry almost all of Egypt's foreign trade which totaled almost 50 million tons in 1998. Of this amount about 40 million tons were imports compared with 10 million tons for the exports. Over the period 1989 to 1998 container traffic grew at an annual rate of 16%. The port of Alexandria/Dekheila handles about 28 million tons of cargo and accounts for more than one half of Egypt's total port traffic. Damietta follows with about 11 million tons (22%), Port Said handles 4.5 million tons (9%) and the remaining ports of Suez and Safaga on the Red Sea accounting for about 6 million tons (12%).

Table 3.5 Total Cargo: Egyptian Ports, 1998 (1000 tons)

	Alex/Dekheila	Port Said	Damietta	Suez	Safaga	Total
Imports	23,273.9	3,195.3	8,824.2	2,687.0	1,803.3	39,783.7
Exports	4,608.8	1,357.6	1,880.1	1,353.1	424.7	9,624.3
Total	27,882.7	4,552.9	10,704.3	4,040.1	2,228.0	49,408.0

The ports on the Mediterranean, and the Red Sea ports of Safaga and Suez are linked by road and rail to the rest of Egypt. The ports of Alexandria/Dekheila, Damietta and Port Said each have their own port authority. The Red Sea ports are under one regional port authority.

The total cargo exported and imported by major commodity category for the years 1989 - 1998 is shown in Appendix A, Table 7. For imports, the largest categories for 1998 by tonnage were General Cargo and Containerized Cargo (10.7 million tons, 28%); followed by Cement, Gypsum, raw aluminum and scrap (10.5 million tons or 28%); and grain and corn (10.2 million ton or 27%). The two leading export categories were Petroleum (3.25 million tons or 42%), and General and Containerized Cargo (3.23 million tons at 41%), and followed by Dry Bulk (1 million tons or 14%).

These tables show that imports of the category "general cargo and containers" of 10.7 million tons for 1998 greatly exceed the exports of 3.3 million tons. This imbalance creates a surplus of containers available to carry exports, and the lack of a mechanism to quickly find consignments for these empty containers results in large numbers of empty containers being reloaded on board ships. As discussed below, if the number of empty containers carried by the ship could be reduced, the freight rate may well be lowered.

Movement of imports through Egypt's ports is still slow, and container dwell times (the time a container spends inside the port area after unloading from the ship) can exceed ten days. The problem is only partly due to low container handling productivity in the ports. At best, rates of from 18 to 20 container movements per hour are achieved, whereas the average for an efficient port is about 30 movements per hour. In modern, highly efficient ports such as Norfolk, Virginia, in the U.S. rates of 40 movements per hour are achieved. The main reason for the long cargo delays, however, are the inefficient customs and other clearance procedures. Delays of from 5 to 20 days for imported cargo are common whereas efficient ports do not

impose delays of more than 2 days. In addition to added inventory carrying costs imposed on the importer, the long delays result in high storage costs and also contribute to pilferage and spoilage losses.

For exports the processing times, as a result of government policy to reduce the cost of exports, have improved considerably. No more than 2 - 3 days is required for clearing a container in the port. And a container that is cleared and sealed by customs at the factory or other external site can still be loaded on board ship if it arrives at the port gate between 8 - 10 hours prior to the ships departure time. This assumes that the ship has been informed of the container's arrival so that space and other accommodations can be arranged.

Since 1989 container traffic measured in twenty-foot equivalent (TEU) containers has grown at a 16% annual rate. The growth rate decreased mainly as a result of the sharp drop in transshipment traffic starting in 1997, and as a result of increased competition from efficient hub ports in the Mediterranean. Transshipment traffic increased from 770,809 TEU in 1997 to 861,477 TEU in 1997, a 12% increase. It then dropped by more than 50% to 412,202 in 1998. Total imports and exports of TEU increased slightly from 436,600 in 1995 to 719,600 in 1998, an 18% annualized growth rate.

Should the drop in transshipment container traffic continue, there will not be a capacity constraint on Egypt's ports for the next several years. However, should the ports become more efficient, and should transshipment traffic be again attracted to Egypt's ports, capacity constraints may appear within the next five years.

The GOE is adding port capacity with the construction and expansion of the following two ports:

1. Port Said East Bank (East of Port Said) – This project will add a large and modern port to increase capacity for container transshipments, and for loading and discharging grain and petroleum. Dredging and clearing operations have started. The project is expensive, and completion time will depend on the availability of financing.
2. North West Suez Project (South of Adabiya). The purpose of this port will be to serve the industries to located in the future Northern Gulf of Suez Free Industrial Zone.

3.3 Involvement of the Private Sector in Providing Port Services.

Much has changed in the area of privatizing port services since 1995. Decree 3/1993 allowed the Egyptian private companies to perform mechanical loading and unloading in Dekheila port. Decree 19/1996 allowed the same at Damietta, Port Said and the Suez ports. And Decree 30/1998 and 31/98 permitted privatization in Egyptian ports. As a result, the Dekheila is now operated by 7 companies that are managed, operated, and financed (some by foreign capital) by the private sector. Most of their activities are in the area of handling dry bulk, mostly grain and grain products. There are now 149 private shipping agencies servicing the Egyptian importers and exporters, and competing with a few of the original state-owned shipping agencies, and the one public shipping line (The Egyptian Navigation Company) is now facing stiff competition from the more than forty lines serving Egypt.

The privatization at the Dekheila bulk terminal has resulted in reducing the cost and time for discharging grain and grain products. For just one of these companies the cost of grain discharge has been reduced from L.E. 11 to L.E. 5.5 per ton for bulk grain, and from L.E. 16 to 7.5 for bagged grain. At that time the rate of bulk discharge was 7000 tons per day. Now it reaches 10,000 to 12,000 tons per day, and thereby cutting the stay in port of a 100,000 DWT bulk-grain carrier from 14 days to 8 days pending availability of trucking and storage capacity. Besides paying for its own investment and operating costs, the company pays a fee to the port authority of L.E. 2.5 per ton discharged. The port authority also collects revenue from truckers who pay fees, depending on the size of truck. Large grain trucks pay about L.E. 10 for entering the port to receive grain.

According to law No. 1/1998, Ministerial Decrees No. 30 and 31 were issued covering the executive regulations for giving licenses to the private sector to form companies offering maritime transport and other maritime services. This has resulted in the formation of 149 shipping agencies², and more than 80% of the shipping lines have shifted their relations from the former monopoly shipping agencies to the private shipping agencies. Before the changeover to private shipping agencies, the vessel owner was required to deal with one of the state owned shipping agents. However, since the public sector shipping agent did not provide the required level of service, the ship owner's hired private protection agents of ship's representatives. Though the latter were permitted to perform unofficial shipping agency functions of expediting the vessels operations in port, the ship owner still had to pay the idle state-owned shipping agent. Thus, ship owner often paid two shipping agents.

There is now only one state-owned shipping line, the Egyptian Navigation Company. The importers and exporters can work through any of the multitude of private companies that are calling at Egyptian ports. These shipping lines are competing intensively. During the past year shipping rates have decreased by 40%. Some of this was due to excess capacity created by the recession in Asia and to the increased competition provided by Asian shipping lines that moved some of their operations to the Mediterranean.

Container handling services at the ports remain exclusively under public sector ownership, although private firms may legally engage in this business. Attempts have been made to privatize specific container handling companies, but no acceptable offers have been received from the private sector. (High capital costs are cited as the reason for lack of buyers.) A successful program to privatize container handling companies should lead to much improved efficiency and lower costs for goods moving through these ports.

3.4 Reducing Ocean Freight Costs

Though this study has uncovered no evidence that ocean freight and port handling for Egypt are higher than those for neighboring countries, there is considerable scope for reducing these costs. This, of course, would improve the competitiveness of Egyptian exporters.

3.4.1 Empty containers: From 60% to 70% of the full import containers are reloaded empty on board the shipping line that delivered them. And there is concern that, were it not for this

² The function of the Shipping Agency is "expediting the movements of cargo and vessels through the port. They perform the indispensable task of ensuring the timely submission of correctly filled-out documentation and timely performance of necessary tasks of loading and unloading of vessels.

large percentage of empty containers taking up valuable space in container ships, freight rates could be lowered. The problem is caused in part by the fact that imports to Egypt exceed exports, and there simply is not enough cargo to fill all imported containers. The balance of trade in many of the other ports in the eastern Mediterranean is much better, and the percentage of empty export containers is considerably lower. For example, anecdotal evidence indicates that the percentage of empty containers for Haifa can be as low as 5%. Another cause of the problem, however, is that freight forwarders cannot find a return load for a container within the short grace period (7 days) allowed by the shipping line because there is no central large facility where freight is consolidated. The notion of an "inland port" or "dry" port discussed elsewhere in this report may reduce the number of empty containers by providing a large facility operated by a number of freight forwarders, and by providing better management of the utilization of containers.

3.4.2 **Hub Ports:** Egyptian exporters are concerned that there is a lack of shipping companies serving Egyptian ports, especially those serving new markets such as those in Africa. This is partly true because, indeed, the number of direct lines that call on Egyptian ports has decreased over the recent years. However, as shown in Table 3.6 below, the number of container/ro-ro lines that serve Egyptian ports directly or indirectly, i.e., via transshipment or "hub" ports³, is 48. These lines provide transport to all the world's ports with the large and traditional ports such as Baltimore served almost on a daily basis, and the with the prospective ports such as Maputo in Mozambique on the East coast of southern Africa served perhaps once a week. It is therefore almost always possible to reach any port. For example, an exporter can reach Abidjan by shipping via feeder vessel to the CMA hub port in Malta, from where it will be delivered to Abidjan. However, since the sailing frequency from Abidjan to Malta is about once a week, the transit time via transshipment is greater than the transit time

Table 3.6 Shipping Lines Serving Egypt

Lykes	CMA	DNOL	DELMAS
Zim	CMB	Messina	Turkon
MISC	Ellerman	Adriatica	Bulcon
Sea Land	NYK	NEDDLOYD	P&O
Gilanavie	BORCHARD	DANOUB	NECOL
CHOYANG	FARRELL	MAERSK	MSC
Croatia	Blue Container Line	SCL	Polish Ocean
Evergreen	NORASIA	COSCO	Hyundai Merchant
DSR/Senator	Hamburg Sud	Blasco	OTAL
UASC	WEC	Malaysian	SARLIS
Med Club Express	HEX	MOL	Canada maritime
Yang Ming	Tricon Service	ContShip	EVGE

³ The function of hub ports is to collect large quantities of containers and to serve as ports of call for the very large ships of the new generation. Though the large ships carry many containers, their operating costs are high. And their voyage cost of such ships would be greatly increased if they had to make time-consuming stops at various ports to pick up a small number of containers. It is far better to have smaller feeder ships with a capacity of, say, 200 TEU, call at ports where there are only a small number of containers waiting to be picked up. These feeder ships would collect the containers for delivery to or from the hub ports.

via direct shipment. The exporter can either contact a freight forwarder/shipping agent in Egypt's to choose the most appropriate shipping line, or he can contact brokers/shipping agents in Egypt or abroad to charter a ship for his exports.

As was shown earlier, up to the year 1995 Egypt experienced a rapid rise in transshipment trade, and a large container ships called at Egyptian ports, notably Port Said, to deliver and pick up containers. These large container ships, of course, also picked up and delivered containers of Egyptian importers and exporters. Transshipment trade, however, leveled off in 1995 at about 800,000 TEU's per year, and declined 50% to only 400,000 TEUs in 1998. The reason was the inability of Egypt's ports to compete with the new hub ports arising in the Mediterranean. The frequency of calls by large container ships to Egyptian ports has drastically reduced over the past few years. As a result, and as described above, Egyptian exporters must now ship their goods by feeder vessel to non-Egyptian hub ports. If Egypt were able to improve the efficiency of their operations and again be a leading provider of transshipment services in the Mediterranean, the extra cost of feeder service to a non-Egyptian hub port could be eliminated. This would significantly reduce the cost of shipping export containers.

4.0 Road Transport

4.1 The Road Transport System

Road transport is by far the dominant mode for carrying cargo to and from the ports, and in 1998 it carried 97% of the dry cargo tonnage to the port of Alexandria. The total length of the road network is 44,000 kilometers, of which 16,396 km are main roads (3,404 km are main roads from and to ports) and 24,200 km are local roads.

Egypt's foreign trade by road and rail is low, and could be expanded, especially for road. International road transport is severely hindered by large delays at border crossings, inadequate road infrastructure, and lack of cooperation among the trading countries regarding road haulage rights.

Table 4.1 shows the road system connecting the ports with major areas of production.

Table 4.1 Main Roads from Major Ports to Major Cities

Port	To	Type	Length (km)	Width (m)
Alex	Cairo (via agricultural road)	Double	220	10.5
Alex	Cairo (Desert Road)	Double	225	10.5
Alex	Libya border	Double	532	10.5
Alex	Port Said (Coastal road)	Double	280	10.5
Damietta	Tanta (Mid Delta)	Double	120	9.5
Damietta	Port Said (Coastal road)	Single	52	7.5
Suez	Halayb Safaga –Red Sea Coastal Road	Single	1080	7.5
Port Said	Cairo via Ismaela	Double	200	9.5
Suez	Cairo (Desert Road)	Double	130	10.5
Safaga	Qena (upper Egypt)	Single	160	7.5
Quesser	Qift (upper Egypt)	Single	180	7.5
Marsa Alam	Edfo (upper Egypt)	Single	225	7.5

The private sector could offer significant contributions through BOT projects to achieve development of the road system. Especially important would be an express way connecting Alexandria/Dekheila with Damietta, Suez and Cairo.

The trucking sector is almost totally operated by the private sector, and competition is good. As shown in the table below, the truck fleet is estimated to consist of about 76,985 vehicles with larger than 3.5 ton carrying capacity. Although data are not readily available, it is reported and becomes readily apparent from visual observation that more than 80% of the trucks are more than 8-10 years old. Operating costs of the old trucks are, of course, well above those for modern trucks. Though operating costs are high and the trucks are old, there

does not appear to be a shortage of trucks in Egypt: when there is freight to be hauled, a truck can be quickly found.

Table 4.2 gives an indication of the capacity of the trucking and truck ownership. The sector "government" in Table 4.2 represents vehicles owned and operated by government ministries for official use. The percentage of private trucks in the sector "public and private" is not certain, but is estimated at about 80%. Most of the trucking capacity therefore is owned by the private sector.

Table 4.2 Inventory of Trucking Fleet by Truck Capacity (Tons, Year 1996)

A. Size of Truck:

	< 3 ton	3	5	10	15	20 or more	Total
Government	15,910	2,187	7,909	1,212	30	92	27,340
Private and Public	255,499	16,845	43,480	4,490	223	517	321,054
Total	271,409	19,032	51,389	5,702	253	609	348,394

B. Type of Truck:

	Open	Closed	Dump	Flat	Reefer	Special	Total
Governmental	16,718	1,767	1,250	2,160	135	911	22,941
Private and Public	277,652	7,913	8,608	15,496	1,123	2,264	313,056
Total	294,370	9,680	9,858	17,656	1,258	3,175	335,997

Because of the high costs of maintenance and parts many trucks are in poor repair and lack power. Tires are often observed to be worn down to the casing, and safety is a concern. This is especially alarming considering the extent to which trucks are overloaded. Trucks leaving the harbor area of Alexandria carry loads exceeding the legal limit by 30% to 40%. The reasons for overloading are obvious. Firstly, the high operating costs encourage overloading. Secondly, overloading is very profitable and, in fact, it is not possible for a firm operating legally loaded trucks to compete with a firm which overloads its trucks. Thirdly, inadequate attention is given to the enforcement of legal load limits.

Overloading severely damages roads. The amount of damage done is roughly proportional to the fourth power of the extent of overloading. A road with a design life of 12 years can be ruined after 6 years with only moderate overloading. This is why in most countries overloading is strictly controlled and the penalties for overloading are severe.

Operating costs for a 6-axle articulated Egyptian truck (the most prevalent type for transport of containers) were calculated using the World Bank's Vehicle Operating cost sub-model of their Highway Design Model (HDM 3). The calculation was carried out for both a new truck and an old truck. And the calculation was for operation under "current" and under "normative" conditions.

The current costs are for operation at the present time, and where the road surfaces are rough congestion seriously increases travel times and accidents are frequent. Normative costs are what the costs would be in an environment where roads are in good condition and without

excessive congestion, and where other cost-reducing actions such as reduced sales taxes and other actions described below are introduced.

Table 4.3 presents the detailed results of the calculations for new trucks. These results indicate that current operating cost of new 6-axle articulated truck is high, but that this cost can be significantly reduced under normative conditions. For a new truck, the operating cost could be reduced from the current \$1.43 per vehicle kilometer to the normative \$.74 per vehicle kilometer, a reduction of almost 50%. The annual savings to the economy from such a reduction would amount to many millions of dollars.

The current operating cost for a new 6-axle truck in Egypt of \$1.43 per vehicle kilometer is well above the \$1 per vehicle/ kilometer experienced in Lebanon, Ghana, South Africa, and other countries in Africa. As indicated above, the main reason for these higher Egyptian costs are the low productivity and high purchase costs of new trucks. However, the normative cost for Egypt of \$.74 per vehicle kilometer is less than the \$.90 for countries such as Lebanon. The main reason is the very low price of diesel fuel in Egypt where diesel fuel sells for about \$0.50 per liter. In most other countries the cost is more than triple the Egyptian cost.

Quotes from several Egyptian trucking companies using very old trucks (very few companies use new trucks) indicate that their current transport costs are only about \$.80 per veh-km. This compares well with the cost calculated using the HDM VOC model of \$.74 per veh-km, and is substantially less than the \$1.43 per veh-km cited in Table 4.3 for new trucks. The reason is that these very old trucks are fully depreciated. Thus, there are few capital and interest costs. In addition, based on casual observation, the trucks are not well maintained and tires are used until they are totally worn out, and this lowers maintenance costs. The lower cost, of course, has the disadvantage of poorer service provided to the customer because of slow driving speeds and delays caused by break downs.

Table 4.3 Possible Operating Cost Reduction for a New Heavy Articulated Truck

Operating cost components for a 6-axle articulated truck with a new cost of \$170,000 (including taxes of 25-ton payload)			
	US\$/1000 vehicle kilometers		
<i>Component</i>	<i>Current</i>	<i>Normative</i>	<i>% Decrease</i>
Tires	261.8	76.3	-71%
Maintenance parts	545.5	242.7	-56%
Interest	159.2	55.1	-65%
Depreciation	181.4	107.1	-41%
Maintenance labor	68.0	57.0	-16%
Fuel	108.3	104.1	-4%
Crew time	30.7	27.7	-10%
Lubricants	3.0	2.8	-8%
Overhead	70.0	70.0	0%
Total, \$/1000 km	1,427.7	742.8	-48%
\$/vehicle kilometer	1.43	0.74	-48%

Measures to reduce costs include: Improving road driving surface, reducing import duties on trucks and parts (see Table 4.4 below for current import duties on transport equipment), encouraging a tire re-capping industry, increasing availability of finance for purchase of new trucks. In order to preserve comparability, annual utilization and extent of overloading were not changed. Actually, annual utilization would increase with the improvement of the road's surface, and would tend to reduce the operating cost for the "future" case.

Table 4.4 Egypt's Bound and Current Import Tariff Rates for Selected Transport-Related Commodities (9/1998)

HS Code	Description	Bound Tariff %	09/98 Tariff %
39.23.10.10	Packing materials: Plastic boxes, cases, crates for packing milk and milk products	40	30
39.23.10.90	Packing materials: Other plastic boxes, cases, crates	60	30
48.19.10.90	Paperboard: cartons, boxes, and cases	60	40
73.02.10.	Steel for railway track, ties, and other	30	5
84.27.10.	Fork lifts, self-propelled, fitted with lifting equipment	20	5
86.06.	Railway or tramway goods vans and wagons	30	10
87.01.20.	Road tractors for semi-trailer	60	30
87.04.23.90	Road Trucks, over 20 tons, diesel	60	45
87.09.00.00	Works trucks: self-propelled, not fitted with lifting or handling equipment, type used in factories, warehouses, dock areas or airports for short distance goods transport	20	5
87.16.31.	Tanker trailers	70	40
87.16.39.	Other, including reefer trailer*	70	40
87.16.40.	Trailer and semi-trailer	70	40
88.02.	Aircraft and aircraft engines	10	5
89.01.20.10	Tanker vessels (high seas)	30	1
89.01.20.90	Other (not for high seas)	30	10
89.01.30.10	Refrigerated vessels(high seas)	30	1
89.01.30.90	Refrigerated vessels(not for high seas)	30	10

* A 1998 Ministerial Decree reduced the tariff on reefer trailers from 40% to 5%.

Table 4.3 shows that by far the largest reduction in operating cost (about 71%) would be achieved by introducing the practice of re-capping tires. Tires can be recapped between two and three times, and the cost of recapping is only a fraction of the cost of a new tire. According to our interviews with truckers, re-capping is not used extensively in Egypt because of the poor quality of the re-capped tires currently available.

Next in importance are potential reductions from lower capital and interest costs that could be obtained by eliminating the high import duties and sales taxes on trucks and spare parts, and by making capital more available for purchase of new vehicles. For example, the cost of a new 5-axle refrigerated truck (reefer truck) is L.E. 750,000 (US\$ 220,000), compared to a cost of about \$115,000 for a reefer truck in the USA.

A reduction of fuel costs could be achieved by improving road surface. This reduction would be small (4%), because of the low cost of diesel fuel in Egypt (LE 0.40 per liter, or about \$0.50 per gallon). In a comprehensive transportation development plan one of the major recommendations would probably be to finance road maintenance and improvement through user fees such as fuel levies and vehicle license fees based on gross vehicle weight. Financing through user fees is desirable because sufficient public funds are usually not available to accomplish the required level of maintenance. Such user fees would substantially increase the price of diesel fuel to perhaps L.E. 2.00 per liter. Experience in many other countries has shown, however, that improved maintenance from more reliable and adequate funding would reduce vehicle operating costs by more than enough to compensate for the increase in fuel costs to the truckers.

The Ministry of Transport & Communication regulates the trucking sector; the Ministry of Interior Affairs controls Roads and traffic. Ministerial Decree 160/1984 promulgated the executive regulations of Law 146/ 1984 for the construction of toll roads. A toll road currently in operation is the Cairo to Alexandria “desert” road, which efficiently bypasses the severely congested agricultural road through the Nile Delta. Ministerial Decree 56/1987 has transformed Ahmed Hamdy’s Tunnel into a Toll Road.

To encourage the private sector to purchase trucks and to invest in refrigerated trucks, the GOE approved Law 8/1997, which superseded Law 230/1989 – except for Article 20 of the latter. Under this law, companies established in industrial zones and urban communities are granted tax holidays for ten years. Though helpful, what is really needed is an exemption from the high customs duties and taxes on new trucks and on spare parts such as tires. The idea of exemptions from customs duties and taxes is not new. For example, there are special exemptions to provide incentives for the establishment of projects in the free zone. All tools, machines and transportation equipment used in the free zone—except for personal cars—and required for operating the project are exempted from custom duties, sales tax, and other taxes and fees.

4.2 Impacts of Road Transport Costs on Total Freight Costs

This section looks at (1) the impact of road transport cost by “old” trucks on the total transport cost of a 40-foot container by sea from the point of production to a destination in northern Europe and, (2) the impact of all transport cost components (land, port, and ocean freight) as a percentage of the price of the commodity. The calculations are done for old trucks since very little export traffic is transported by new trucks.

The calculation is done for two situations: one with the cost of current high-cost truck transport, and the other with the cost of normative truck transport. The costs have been calculated for four land transport distances—100, 300, 500, and 1000 kilometers—to examine the impact of land transport distance. The operating cost for old trucks under current conditions is \$.74 per veh-km. Under normative conditions it would be reduced to \$.49 per veh-km. The port of origin is assumed as Alexandria/Dekheila, and the destination is Northern Europe.

Table 4.5 below shows the results for a land transport distance of 100 and 500 kilometers. Appendix A, Table 8, shows additional results for distances of 300 and 1000 kilometers. For cases where the land transport distance by truck from the point where the container is loaded

to the port is 500 kilometers, current road transport cost of \$370 per container is almost equal to the sum of the other costs consisting of port handling (\$80), port fees (40) and sea freight (\$255). For a trucking distance of 100 kilometers, the trucking cost is of course much lower, but is still almost equal to the port costs of US\$ 80.

To examine the impact of the transport costs on commodity prices, a commodity price of \$200 per ton is assumed. Assume further a 40' truck (25 tons), port handling costs of \$80, an agency fee of 50%, and compare the impact of reducing trucking costs from \$0.74/ton kilometer to the "normative" level of \$0.49 per ton kilometer. For land transport distances of 300 kilometers the trucking cost equals about 4% of the market price. For larger road transport distances, such as 1000 kilometers, the trucking cost from the source of production to the port is 66% of the total transport cost, and trucking costs are about 15% of the market price of the commodity. (See Appendix A, Table 8)

With a reduction in truck costs to normative level the situation improves. Trucking costs are still high, and account for 40% of the total transport cost for distances of 500 kilometers and comprise about 5% of the price of the commodity, compared with 7% for the case without improvement in truck operating costs. Thus, the exporter could reduce his market price to meet competition or improve his gross revenues net of trucking costs by about 2% if the operating costs of trucks could be reduced from "current" to "normative."

Table 4.5 Impact of Truck Transport Costs on Total Transport Costs
A. Current Truck Transport Costs

	Kilometers by land	
Distance by truck	100	500
Cost of truck transport, \$	\$ 74	\$ 370
Port handling, \$ per container	\$ 80	\$ 80
Shipping agency fee and misc.	\$ 40	\$ 40
Sea freight to Rotterdam	\$ 255	\$ 255
Total Transport Cost	\$ 449	\$ 745
World market price, \$ per container	\$ 5,000	\$ 5,000

B. Normative Truck Transport Costs

	Kilometers by land	
Distance by truck	100	500
Cost of truck transport, \$	\$ 49	\$ 245
Port handling, \$ per container	\$ 80	\$ 80
Shipping agency fee and misc.	\$ 40	\$ 40
Sea freight to Rotterdam	\$ 255	\$ 255
Total Transport Cost	\$ 424	\$ 620
World market price, \$ per container	\$ 5,000	\$ 5,000

Table 4.5 (Continued)**C. Actual Costs:**

Transport cost by mode, %		
Truck	16%	50%
Port and agency fees	27%	16%
Sea freight	57%	34%
Total	100%	100%
As % of world market price		
Land transport, %	1%	7%
Port handling and agency fee, %	2%	2%
Sea freight, %	5%	5%
Total transport, %	9%	15%

D. Normative Costs:

Transport cost by mode, %		
Truck	12%	40%
Port and agency fees	28%	19%
Sea freight	60%	41%
Total	100%	100%
As % of world market price		
Land transport, %	1%	5%
Port handling and agency fee, %	2%	2%
Sea freight, %	5%	5%
Total transport, %	8%	12%

See also Appendix A, Table 8.

5.0 RIVER TRANSPORT

5.1 River System and Costs

Egypt is blessed with a large river and canal transport system unsurpassed in extent compared with the almost non-existent inland water-transport system in the neighboring countries. None of these countries can avail themselves of the very low costs of an efficient river transport system. For example, the cost of barge transport for the very large barges (they range from 65 to 930 tons capacity) can be as low as 3 piasters per ton-km. This is well below that for rail, and such low cost is especially important for low-value export products such as coal, granite, and other bulk commodities.

The General Authority of River Transport Affairs (GARTA) was founded by a Presidential Decree 231/1958, after which it was transferred to the General Authority of River Transport (GART) by Presidential Decree 474/1979. The latter specifies the activities and services provided by the authority, including the operation of barge routes, locks, berthing, and anchorage. The private sector operates about 85% of the barge fleet and most of the shipyards are privately owned and operated. The performance of GART is described by laws, bylaws and ministerial decrees to provide safety of navigation, security, and regulation.

In 1998 the inland waterway system transported a total (including both domestic traffic and import/export traffic) of 2,848.582 tons with a fleet of 8417 barges. The efficiency of the system could be greatly improved by improving the connections with the seaports and inland destinations, modernizing the system of locks, installing a navigation system that would allow safe transport at night, and training the barge operators.

The potential for rapid improvement of the river and canal transport system through public and private investment is great, since about 85% of the barge fleet is operated by the private sector. As with the other modes, however, the inability to attract foreign investment to improve the efficiency and expand the capacity of the barge fleet is one of the largest obstacles to improvement.

Even though the inland water system is quite extensive, it carries only 4% of the total tonnage of goods carried by surface transport within Egypt. Raising the efficiency and productivity of river transport would be especially helpful in shifting bulk traffic (such as grain) away from the road mode, and would reduce the need for costly investments to expand the capacity of the road system.

5.2 River Ports

Egypt has three government owned and operated river ports at Aswan, Cairo, and Nubaria. In addition, there are 43 river ports owned by factories: 37 of these ports are in Upper Egypt with the remaining 6 in the Nile Delta.

The river port at Aswan has two berths, each of 140 meters length, the river port of Cairo has one berth 1000 meters long, and Nubaria has one berth 100 meters long.

5.3 River Navigation

There are a total of 1358 kilometers of canals controlled by 56 locks on the main river and principal canals, and spanning the following routes:

High Dam – Halfa (through Lake Nassar) and spanning 350 kilometers of which 50 kilometers are inside Sudan.

Aswan – Cairo (via the Nile River) and spanning 980 kilometers.

Cairo – Alexandria (through the Nobarria Canal) and spanning 220 kilometers.

Matarea – Port Said through El Manzala Lake, and spanning 20 kilometers.

The Ministry of Transport plans to connect the main ports with the river system as follows:

1. Port of Damietta through the Damietta branch.
2. Port of Dekheila through the Nuberia canal.
3. Port of Suez and Port Said through the Ismailia canal.

Table 5.1 Commodities Transported by River to and from Ports

Commodity	Loading Area	Discharge Area
Cement	Alexandria	Various
Phosphate	Alexandria	Various
Coal	Alexandria	Cairo, Tebeen
Coke	Cairo, Tebeen	Alexandria
Sulfur	Alexandria	Various
Molasses	Upper Egypt	Alexandria
Raw aluminum	Alexandria	Naga Hamady
Steel	Alexandria	Various
Timber	Alexandria	Various

Table 5.2 Quantity of Cargo Handled by the Barge Fleet

Year	Tons	Number of Barges
1995	2,843,667	8,941
1996	3,213,224	10,317
1997	3,092,825	9,696
1998	2,848,582	8,417

Table 5.3 Composition of the River Barge Fleet (1998)

Vessel Type	Public Sector	Private Sector
Un-powered Barge	271	611
Self-propelled	355	1093
Tugs	120	256
Total Vessels	676 (25.6%)	1960 (74.4%)

Note: The barges carrying capacity varies from 65 – 930 tons.

6.0 RAIL TRANSPORT

Egypt has a very long primary rail line system that spans the length of the Nile, connects (via a ferry) with the Sudan and Libya, and connects through the Sinai peninsula with the rail systems of other eastern Mediterranean countries. Though extensive, the rail line is not integrated with the other transport modes, and connections with the ports are not well developed. It also does not have the specialized rolling stock (see table below) designed for the efficient carriage of bulk, containers, and truck-trailers (piggy-back). As such, it cannot fulfill its vital function of serving intermodal transport. For this, significant investments will need to be made in sidings to factories as well as rolling stock. The management of the railway should also start planning on connecting the rail system with possible future inland ports.

Table 6.1 Composition of the Egyptian Rail Fleet for Freight Transport

June 1998							
Locomotives							
	Number	Horsepower					
	244	554,400					
	45	111,375					
	287	574,000					
	103	144,200					
	75	37,500					
	24	14,400					
	15	27,750					
	11	28,050					
	784	1,491,675					
Wagon Types for Freight Transport							
	Tanker	Hopper	Box Car	Flat	Other	Total	
Number	1932	1656	2516	1589	2581	10274	
Percent	18.8%	16.1%	24.5%	15.5%	25.1%	100.0%	
Tank Car Types							
Type	Petrol	Water	Benzene	Oil Product	Gasoline	Ammonia	Molasses
Number	1463	126	88	196	34	5	20
Hopper Car Cargo Types							
	Raw Iron	Grain	Stone	Total			
	46	1044	566	1656			

7.0 INTERMODAL TRANSPORT

Intermodal transport in Egypt is in its infancy. Intermodal transport is the smooth door-to-door transport of freight on two or more transportation modes. It is handled as one continuous through-shipment under the authority of a single bill of lading. Thus, for intermodal container freight, cargo remains in the same container throughout the entire trip. Intermodalism substantially increases the speed of transit of goods, and reduces spoilage and the cost of unproductive capital tied up in empty containers, idle trucks, empty rail cars, and vessel/aircraft delays in airports and ocean ports. An essential point is that intermodal transport does not involve just only the appropriate hardware. Rather, it is a “process” based on an integrated and systems approach to transport. The systems approach requires that all components in the chain of the intermodal freight transportation process have smooth interfaces and are totally reliable.

It is evident that intermodalism in Egypt is in its infancy. For example, ocean transport, there is a lack of empty containers at the factory site. Therefore, many of the export products are transported to the port to be stuffed into a container. The main reason for the lack of empty containers at the inland sites is the difficulty in finding a return load for the container. Thus, the empty container may have to spend more than the allowed days (it varies but is around seven days) away from the port during the search for a load. Since high rental fees at an escalating rate are charged. A corollary is that the excessive unstuffing in the port leads to congestion of the port terminal.

For air transport the extent of intermodalism is better, though, as with the ports, there is still excessive delivery at the airport of cargo that needs to be stuffed into the airline containers. The solution to the problem of the excessive transport of empty containers that has worked well in other countries is to establish a Container Freight Station (CFS) or inland port near major origins of cargo. Such a facility would be operated by a freight forwarder, or a group of freight forwarders, and would specialize in unstuffing import containers and consolidating cargo for export containers. Such a facility would have a full time Customs officer so that the container can be packed and sealed for direct shipment on board the ship.

8.0 OTHER FACTORS AFFECTING TRANSPORT COSTS

8.1 Customs

Customs is now efficiently processing exports at both sea ports and air ports. If the documentation is in order, containers and other goods can be cleared in less than one day, though vessel owners prefer to have the export containers in the stacking area of the port to allow adequate time for planning the loading operations.

For imports, the services carried out by Customs have not notably improved. Customs has the office equipment, computers, copy machines, fax machines, and other equipment necessary for electronic processing of customs documents. And Customs is equipped to carry out “risk analysis” but does not yet practice it. Most importantly, Customs sees its function solely of collecting the duties due to the State—admittedly an important one—but does so without regard to the obstacles it places in the path of trade. It does not have a clearly defined goal of maximizing the collection of customs duties and taxes without undue interference with the movement of trade.

Facilitation includes high-payoff measures such as simplified and harmonized documentation, training and certification of freight agents, pre-clearance and electronic data processing of customs clearance documents, and risk analysis towards a clearly defined goal of maximizing the collection of customs duties and taxes without undue interference with the movement of trade.

8.1.1 Harmonization and Simplification of Documents

A key element of integrated transport is the development of simplified and harmonized documentation which support the movement of cargoes along the length of the logistical chain. This has been accomplished for road transport. Egypt is a member of COMESA, and the COMESA Customs Declaration is a good single goods declaration valid within the COMESA region. Of more urgency, however, is to reduce the 30 documents or so that are required for imports of goods from non-COMESA members by sea and by air to a simplified document. The groundwork for this has also been laid. The EU Single Administrative Document (SAD) used throughout European Union, and also used along with the COMESA CD by a number of African states, can effectively reduce the large number of documents now used by Customs in Egypt to a single document. It is based on the United Nations layout key which is designed for processing using Electronic Data Interchange (EDI).

8.1.2 Training and Accreditation

Training of Customs: In the fast growing environment towards harmonization and standardization of Customs documentation and procedures, and the new emphasis on customs staff becoming a part of the solution to trade facilitation rather than part of the problem, a strong case can be made for the need for training of customs staff. There should be a better understanding by customs staff of what is required of them in trade facilitation, and how they should be able to respond to this requirement.

Although Egypt has an ongoing program for the training of Customs Officers, there is considerable scope for identifying additional training apart from the more common and generic areas. These could include—in addition to the conventional courses in Tariff Classification, Valuation, etc.—courses Customer Care and Public Relations, Business Ethics and Cooperation, Trade Economics, Commercial Business Procedures, and Management and Supervisory training.

Training of Clearing Agents: Surveys of exporters made it apparent that one of the major factors contributing to unnecessary delays at Customs was the lack of quality and expertise in the freight clearing and shipping agents. It is the job of these agents efficiently to prepare and submit the paperwork, post the bonds, and carry out other activities to clear goods at the borders. They form a vital link in the logistics chain and must possess the level of skill and knowledge that will allow them to perform their function effectively.

Unfortunately, the entry level requirements in Egypt for these agents does not appear to be effective in controlling the proliferation of incompetent agents.

Criteria for the accreditation of clearing agents should include two main elements: (1) achievement of some level of formal training to ensure that the basic skills, knowledge, and expertise are in place, and (2) given the very important responsibility of the clearing agent, some form of financial bond or fidelity guarantee should be required. Except for the short courses given by the Customs department, there do not appear to be specialized training courses available for clearing agents. There is therefore a pressing need for the establishment of training facilities. A possible solution may be to offer such training through correspondence courses supplemented by regular workshops. This minimizes the time away from the job, and reduces the training cost. This approach is effectively being used in Zimbabwe and South Africa.

Training of Importers and Exporters: One of the causes of delays at Customs is that documentation often is not complete or is incorrect. (We ignore the cases where the forms are deliberately falsified). It has been argued that, in many cases, the importer or exporter of the goods places the responsibility for documentation completion in the hands of a local clearing agent. But it is still necessary for the shipper of the goods to be aware of what special permits or other documents are needed for his shipment.

Training in logistics: From the limited number of interviews carried out under this study, there is concern that importers and exporters need to improve their understanding of modern logistics. There is a strong impression that the importers and exporters are not sufficiently involved in finding, together with their freight agent, the “least cost” shipping solution for their commodity. It may be useful to organize seminars or workshops on modern logistics and the advantages of intermodalism to both importers/exporters and freight forwarders.

8.1.3 Management, Operation and Funding

In addition to improved facilitation, improvements are needed in the design, management, operation and funding of Customs at the various ports and airports border posts. These, combined with better facilitation will significantly reduce Customs delays. Thus, it is necessary to establish better telephone and data exchange capabilities between the Customs offices in the various ports.

Since the Customs offices in the ports are not interconnected by computer, there is no way, even if the Customs so desired, to communicate important information concerning "risky" cargo. There is also no Government entity that sets performance objectives for the border posts, or that encourages cooperation and coordination to better control smuggling and illegal immigration and facilitates the smooth processing of goods of honest shippers carried by reliable transporters.

Improved communications and computerization is a necessary condition to achieve facilitation, however, it is not sufficient. Along with the means for the border posts to communicate, it is also necessary to provide the mechanism for coordination and cooperation.

If these two conditions were met, it would be possible to effectively introduce pre-clearance of cargo, to improve the effectiveness of risk analysis, and to install other facilitation procedures requiring that benefit from the vast amounts of data that should be communicated between the border posts.

The high duties on imports complicate Customs' task. Among the risks posed within Egypt which may make its situation different from Europe are: (1) higher rates of duty, leading to larger claim amounts; (2) greater encouragement to fraud and smuggling in transit resulting in part from higher rates of duty and import restrictions, leading to more frequent claims; (3) an established culture of fraud, smuggling and corruption, based on past experience, even when duty rates are lowered and import restrictions reduced; (4) a higher rate of bankruptcy, foreclosure, and other business failures; and (5) currency restrictions which impede the flow of claim payments and reimbursements. A typical problem caused by the high rates of duty is well described in Marks and Gianni, "Egypt: Comparison of Cost Effectiveness of Investment Incentives", December 1998, Chemonics International Inc. Washington, DC:

"Some companies have to employ specialized private agencies to assist expediting movement of cargo through Egyptian ports and dealing with customs. Some pay excessive import duties above the official rate, because customs establishes an artificial high reference price assuming under-invoicing in the case of low-cost inputs for the production process. To rectify such misguided decisions by Customs can require a very protracted, costly process. Low import duties would reduce the practice of under-invoicing by some importers."

The above inefficiencies can significantly inflate the costs of doing business and thus artificially enhance the importance and permanence of investment incentives for the viability of an enterprise in Egypt. By reducing or removing the above inefficiencies for affected companies, the cost effectiveness of investment incentives is lowered.

A number of countries in Latin America have reduced or eliminated the above types of impediments and with it also the granting of fiscal incentives. Chile, for example, has established a uniform, low 9% import duty on all imports, without exceptions, and thus essentially eliminated the problem of under-invoicing, arbitrariness and corruption at customs. Chile and other countries have been able to eliminate their fiscal incentives program and replace it with government guarantees, including long-term corporate tax rate stability in some cases as part of a long-term contract with individual foreign firms making large investments."

8.2 Institutions and Laws Governing Air Transport⁴

8.2.1 Legal Framework. Law 28/1981 is the basic civil aviation law in Egypt, with Law 1/1989, concerning the executive regulations of the civil aviation law. The establishment and delineation of the responsibilities and authority of the ECAA are defined in Presidential Decrees 2931/1971 and 482/1994.⁵ Law 119/1983 is the basic law specifying the facilities and services on which fees are to be levied and the amount of the charges. The latter law has been amended by Law 209/1991 and Law 107/1992. Other important laws are Presidential Decrees 600/1975 and 392/1993, establishing and defining the operations of Egypt Air, as well as the laws or decrees providing for the establishment and operations of air transport services owned by Egyptian investors in the private sector, and foreign companies.⁶ Private sector construction and operation of airports is a relevant and recent policy development. The approach is oriented toward fixed-term concessions, such as BOT arrangements.⁷

The civil aviation law, Law 28/1981, covers the general rules for aviation, and the establishment and use of airports and their facilities. Two chapters of the law deal with cargo transport. The law also legislates on airworthiness of aircraft, flight training and licenses, and documents and records, as well as aircraft maintenance, accidents involving aircraft, investment in aircraft, violations of civil aviation security and safety regulations and penalties. Rules and conditions with regard to foreign military aircraft and other aircraft are specified in its final chapters. Egypt Air is given the responsibility and authority by the civil aviation law to conclude trade accords with any foreign entity for air transport rights according to an international agreement on air transport commercial freedoms.

Law 119/1983, regarding charges applying to civil aviation, sets out the fees for the use of air rights, airports, buildings, and facilities, while revoking two preceding laws on service charges. It also revokes laws concerning the merger of Syrian Airlines and Egypt Air in 1960. This Law 119 and its two amendments, Law 209/1991 and Law 107/1992, determine fees to be levied on the following:

⁴ This section on the institutions and laws governing air transport is reproduced from an original paper by Maurice Thorne entitled *Air Freight Market In Egypt - A Sketch of the Situation*, DEPRA Project, Cairo, and was updated in April 1999.

⁵The ECAA was established, including the details of its functions and organization, by Presidential Decree 2931 effective 22 November 1991. Its institutional foundation was created in 1945 when it was known as the Aviation Department. PD 482, effective on 7 June 1994, annexed it to the Minister of Transport from the Ministry of Tourism.

⁶EgyptAir's history dates to 1932. It was reorganized in 1975 by PD 600, and annexed to the Prime Minister by PD 392 on 18 July 1993.

⁷The policy is formulated in Law 3/1997 concerning the awarding of public utility concessions for the establishment, management, and exploitation of airports and landing grounds. The implementation of the provisions of this law would usually be through a negotiated BOT arrangement. BOT is the acronym for a "Build-Operate-Transfer" concession negotiated with a government, which retains ownership of the land and existing infrastructure. Variants include temporary ownership by the developer, as well as various arrangements of finance, government guarantees to lenders, conditions and periods of ownership and transfer to the government, etc.

- airports and navigational services, such as aircraft landing, parking, “hangaring,” and navigational services on overflying and landing, and also including services to departing passengers, entry to terraces, and vehicle parking [Chap I];
- aircraft registration, airworthiness certificates, and weight approval [Chap II];
- aviation licenses for pilots, air navigator, aeronautical engineer, radio engineer, passenger cabin crew, maintenance engineer, aircraft dispatcher, etc [Chap III];
- enrollment and tuition at the National Institute of Training for Civil Aviation [Chap IV];
- aviation licenses and permits for private airports, air transport, general aviation, and operations [Chap V].

Until 1992, Egypt Air had been exempt from payment of fees for aircraft landing, parking, hangaring, and navigational services. The exemption was canceled, however, by Law 107/1992. Egypt Air is required to pay a fee for aircraft registration, but apparently remains exempt from certain registration fees, and other fees for certificates and approvals. The matter of charges for the utilization of air transport rights by foreign entities, which is to be determined in bilateral agreements and ministerial decrees, is also covered in Law 119/1983, as well as the creation of a fund, existing as an independent entity, for the development and improvement of aviation services. The fund participates in subsidization of air travel tickets, maintenance of airports and facilities, publicity, human resource development, and social services. The fund is financed from the various aviation fees, and from income earning investments.

Law 209/1991 is an amendment to Law 119/1983. It is a revision of the civil aviation charges, taking into account the applicable changes in GATT rules.

The regulatory practices in the field of civil aviation appear to include certain principles that are not covered by law. Although ECAA is the independent, final authority for controlling civil aviation licenses and regulations, it fashions or at least allows a civil aviation sector in which Egypt Air has a wealth of clear advantages over other operators. Egypt Air exercises a degree of influence which is said not to be provided under existing laws. For example, EgyptAir is the only carrier in the country operating scheduled, ticketed passenger services on the national air routes. Until recent years, Egypt Air was the only cargo handler on the airport apron, moving cargo between terminal buildings and aircraft.

In addition to the national laws on civil aviation, Egypt adheres to the Conventions of the Chicago Conference of 1944. The conventions cover five "Freedoms." Egypt, along with other nations, signed Freedoms 1 and 2, relating to technical matters, and adheres to Freedoms 3, 4, and 5, relating to commercial matters. Bilateral agreements between nations, concerning international route monopolies, rights to embark and disembark passengers, and to load and unload cargo, are made under these latter Freedoms. The freedoms are incorporated in the rules of IATA. These rules are applied regionally, as well as internationally. They do not apply to domestic air transport. A description of the Freedoms may be found in Appendix B.

8.2.2 Egypt Air. The national airline is the state-owned and operated Egypt Air. Although ECAA carries the government's main responsibility for controlling the movements of civilian aircraft—both national and international—within Egyptian territory, and for managing its civil airports, the directors of Egypt Air have a share of this authority. Egypt Air is the designated national carrier, and as such negotiates all bilateral and multilateral route sharing and tariff

setting agreements on behalf of the Government of Egypt. These agreements cover a number of conditions, such as the right to embark or disembark passengers, load or unload cargo, and the frequency of such activity.

8.2.3 Egypt Civil Aviation Authority. The functions and management of the Egypt Civil Aviation Authority (ECAA) are more or less in line with internationally recognized responsibilities for the administration of a network of civil airports and air routes for use by national and international air carriers of passengers and cargo. It grants the licenses and permits covered in Law 28/1981, and seems to be the collection agent for the fees specified in Law 119/1983 and its amendments.

ECAA's approval must be sought and given before an airline can operate either scheduled or chartered services in the country unless the airline already enjoys the 3rd and 4th freedoms of the conventions of the Chicago Conference. As a rule, ECAA has authority over all airside civilian aircraft operations, including passenger and freight air services — scheduled or chartered.

8.2.4 Cairo Airport Authority. The CAA has authority over all landside operations within the airport itself, with the perhaps the exception of granting apron handling rights. The right to construct cargo terminals or storage areas within Cairo airport must have approval from CAA.

Additionally, CAA has the power to block the development of air freight facilities based on its responsibility to approve, or withhold approval, on many civil aviation developments related to freight and passengers, baggage and cargo handling, loading and unloading, and buildings or other physical facilities for cargo handling and storage.

8.2.5 Other airlines. As of the start of 1997, ECAA has issued about 54 licenses for air taxi services. Several Egypt based companies offering either air taxi services or freight services operate nationally.

8.3 Policy Reforms To Date⁸

A policy measure of the first year of the USAID-funded Sector Policy Reform III Project (SPR III) (in SPR III, I.C.I)⁹ requires the GOE to take actions to reduce the costs of Egyptian air freight by, for example, ending EgyptAir's route monopoly, eliminating barriers to private entry into air cargo [transport], or permitting chartered aircraft to transport Egyptian goods without paying fees to Egypt Air. The objective, and expected effect of reduced air freight charges, to be achieved by improved efficiency, is to increase export competitiveness, and therefore increase private sector exports. These issues and progress to date are presented below.

⁸ This section on policy reforms to date is reproduced from an original paper by Maurice Thorne entitled "Air Freight Market In Egypt - A Sketch of the Situation," DEpra Project, Cairo, and was updated in April 1999.

⁹"SPR III (in SPR III, I.C.I)" refers to a cooperative agreement on economic policy between the Government of Egypt (GOE) and the US Agency for International Development.

8.3.1 Costs of Egyptian air freight. This issue can be considered from several angles:

- Costs of air cargo carried from Egypt relative to the charges of similar kinds and quantities of shipments to the same destinations from nearby places.
- Comparative air freight charges among international air cargo carriers, such as EgyptAir, KLM, Lufthansa, Saudi Airlines, and British Airways, on exports.
- Air freight costs for transfers of air cargo within Egypt.
- Costs other than air transport charges, such as costs of storage, handling, and delays.

Since the basic concern is direct costs of air shipment of exports from Egypt, attention is concentrated on the first item, regarding comparative costs of air freight on exports from the MENA region. The cost of air freight appears to be well in line with that of Egypt's export competitors. Egypt Air rates are well below those of international competitors. However, landside costs, including the costs of handling and spoilage, remain high. The monopoly of Egypt Air and EAS on apron handling services remain an issue to be addressed by policy reform.

8.3.2 Egypt Air's route monopoly. According to the Egypt Civil Aviation Authority (ECAA), Egypt Air has no air route monopoly. ECAA is the sole authority for granting licenses to air companies. While EgyptAir is the agent in all bilateral commercial flight agreements with foreign countries and has a privileged position on international routes relative to other Egyptian air companies, this is the norm for national carriers. This does not apply to routes within Egypt, where the sky is open to private Egyptian companies. An Egyptian air company can fly international routes, but would be required to get special permission in the foreign destinations for embarking or disembarking passengers and handling air cargo. EgyptAir already has limited special permission assured in the bilateral agreements.

ECAA approval must be given for a freighter to land in to Egypt and uplift cargo, whether on a scheduled or charter basis, unless the airline in question already has permission under its bilateral agreements with Egypt Air. The approval process takes little time now, between 24 hours and 4 days for most cases. Refusals are few, but there have been such occasions. ECAA claims that Egypt Air may have a representative present when decision is taken on approving either a request for additional scheduled flights or for a chartered freighter, but that Egypt Air has no power of approval or veto. The carriers freight forwarders agree with this statement, but believe that Egypt Air may still have some influence on ECAA's decisions.

8.3.3 Barriers to private entry into air cargo transport. Also, in this respect, ECAA says there are no barriers, other than requirements of law that apply equally to Egypt Air. ECAA is the sole authority to issue licenses for the operation of air companies; Egypt Air has no voice in the matter, and its approval is neither required nor sought. Most barriers concern normal safety regulations of civil aviation, such as air worthiness of aircraft, licensing requirements of pilots, navigators, mechanics, and cabin crew. ECAA is said to be represented on the board of EgyptAir, and the common opinion is that the head of EgyptAir has a strong personal influence on the management of ECAA—the heads of both organizations are former air command generals. Within this structure, there is scope for informal collusion or coordination of actions. There is no obvious reason why ECAA should be on the board of EgyptAir, but there is a strong reason against it due to an apparent conflict of interest.

8.3.4 Payment of fees to Egypt Air for transport of Egyptian goods by chartered aircraft. The IATA rules provide for regular scheduled services of a named national carrier of each country

to the agreement. The agreements, which can be modified at any time by mutual consent, limit the number of scheduled flights on each route. The significance of the arrangement is that the named national air carriers have priority for embarking and disembarking passengers and loading and off-loading cargo in both countries. Other air carriers, including chartered passenger, or cargo aircraft, must have special permission, and are subject to different rules. Air France, for example, can pick up and drop off cargo in Cairo, but any other French cargo carrier would need the permission of both Egypt Air and Air France and could be subject to a "royalty fee" charged by both airlines. Likewise, an Egyptian airline other than EgyptAir would be subject to similar impositions if it offered service to France.

Currently, no fees are paid by other freight carriers to EgyptAir except payments of charges for cargo loading or other cargo handling and a LE 3 fee for paperwork. According to the carriers, Egypt Air no longer collects fees for any service it does not provide, but one freight forwarder complained about being charged by Egypt Air for loading and unloading cargo which was not handled by Egypt Air because of a flight cancellation. Egypt Air no longer collects royalties from carriers landing under 5th freedom rights, although its right to collect royalty payments still exists in law.

8.3.5 Privatization. Egypt Air is not one of the 314 companies that can be privatized under Law 203/1991. Thus, privatization of Egypt Air is one option that cannot be included for the present time in a program to eliminate or relieve any of the constraints on efficiency in the air freight market. The common opinion is that the leadership of EgyptAir is intensely opposed to private sector competition on an equal footing with the national airline — in both passenger and freight markets. Judgment of ECAA is ambivalent: some say that it is supportive of market liberalization and growth of private enterprise. Others feel that ECAA more often than not yields to pressures from EgyptAir. Clearly, Egypt Air's position has not benefited it in terms of extracting monopoly rents on freight carried. If anything, the national carrier offers subsidized rates for the carriage of Egyptian exports.

9.0 RECOMMENDATIONS AND ACTION PLAN

This study has resulted in a large number of recommendations on how to reduce the cost of cargo exports. These recommendations are summarized below. However, the measures required to implement these recommendations are complex and interrelated. Simplistic implementation of a recommendation to, say, construct a dry port will, as experience in many developing countries has shown, result in abject failure. A dry port must fit into a complex system where the necessary supporting infrastructure (roads, railways) is in place, maintenance is assured, and the legislative, regulatory, and institutional systems are properly designed to optimize the involvement of both the public and the private sector.

The same is true with recommendations such as those regarding the “concessioning” of the railway, construction of a BOT toll road, or the privatization of a port terminal operation. Even measures which appear to be relatively simple to implement must be carefully analyzed. For example, improving road maintenance may be such a recommendation. Or the training and equipping of traffic police to enforce traffic regulations and thereby reduce road congestion may be another.

Even with such apparently simple measures we need to be careful, however. Experience in other countries has clearly shown that the major problem with road maintenance and police enforcement is not one of a lack of will by the Government. Rather, it is the result of the lack of sufficient and reliable funding for such functions, and the weakness of the institutional framework to properly administer such functions. As has been demonstrated by the success of programs initiated by the World Bank and other donor organizations, a shift in thinking regarding road maintenance and management is necessary. This new thinking involves difficult issues such as financing maintenance through road user charges, and with the planning and maintenance of roads managed by the private sector if necessary. Finding solutions requires a participatory approach involving the road users, the producers, and the public sector entities with the responsibility for roads.

To ensure that the recommendations will be implemented on a sound basis, this study makes its recommendations as elements that should be addressed in a comprehensive transport sector study covering all transport modes. A suggested scope of work for such a study, which is conventional except for its emphasis on intermodal aspects and on ways to involve the private sector, is outlined in Appendix D. The study would require about 5 months to complete and a total level of effort (LOE) of 27 person-months. It would produce an action plan on how to best implement the recommendations made in this study, along with other recommendations related to the transport of domestic cargo and passengers.

9.1 Air Freight Recommendations

There remains ample scope for reducing air freight costs in order to improve the competitive position of Egyptian exporters. Four factors contribute to higher costs for exporters shipping by air which could be addressed by a combination of policy changes and improved market information. These are:

- Cargo handling costs, which are excessively high

- Inadequate or inefficient air cargo facilities which result in higher costs, delays and spoilage
- Insufficient uplift capacity during peak seasons, which results in higher costs and missed export opportunities
- Lack of market information and logistics planning on the part of some exporters.
- Weak legislation that permits conflict of interest and places private operators at a disadvantage with regard to the government operator.

An action plan for the civil aviation sector should include the following elements:

9.1.1 Cargo Handling Costs. Reduce cargo handling costs by creating conditions for competitive private sector cargo handling services. Non-carrier private sector companies should be permitted to offer both warehouse and apron cargo handling services to all carriers, and the capital requirements of such companies should be reduced to reasonable limits to permit their entry to the industry. The Cairo Airport Authority should remove limits on the number and types of equipment that carriers and other companies are allowed to have, and should grant land adjacent to the tarmac to the private sector for the construction of storage sheds and equipment maintenance facilities.

9.1.2 Air Cargo Facilities. Improve air cargo facilities to allow direct increased export to international destinations from other locations and to reduce delays and spoilage. The conversion of Borg El Arab airport to civilian use is a first step to remedying this problem. A comprehensive master planning study for the civil aviation sector should be carried out and an action plan developed to gradually increase and upgrade existing airport infrastructure and services nationwide, emphasizing BOO/BOT arrangements and private sector participation. A ten year forecast needs to be made of demand for passenger and freight services in Egypt, and the regulatory and infrastructure requirements required to meet this demand should be identified and translated into an action plan to be shared with the private sector. Government of Egypt should identify resources to perform feasibility studies for expected infrastructure requirements, reviewing GOE financing sources and approaching organizations such as USTDA and the numerous European programs like the Euro-Mediterranean Partnership that support capital investment in infrastructure.

9.1.3 Uplift Capacity. The new civil aviation law should incorporate an "open sky" policy for freighters. This would attract lower cost cargo carrier services by encouraging African and other freighters bound for Europe and other destinations and overflying Egypt empty to pick up export cargo . Amending the civil aviation law to permit cargo carriers to land and to uplift cargo at all Egyptian airports will encourage the more cost effective cargo carriers to serve Egypt during high seasons. Some Egyptian horticultural products such as melons should probably be exported by sea, but many fragile products would not survive the longer voyage with present levels of cooling and environment control technology, and market windows for some items are very narrow in Europe. Export freight must find a route that is less costly than a turnaround freighter. About 25 thousand tons of freight must be exported on unscheduled freighters or charter flights, and if we assume that many of the chartered freighters are fully depreciated narrow body aircraft with a maximum capacity of 80 tons, then between 200 and 300 unscheduled flights must uplift cargo over four or five months of the year when horticultural exports are at their peak.

9.1.4 Market Information. Improve access to market information among freight forwarders, agents, and exporters, such as those belonging to the Egyptian Federation of Freight Forwarders (EFFF) and improve operations planning of exporters. An institutional capacity assessment should be performed which is focused on air freight service providers and users, and an action plan produced and promoted to assist this sector in developing better communications and increasing market information resources. Associations of Egyptian exporters should seek assistance from one of the many existing donor funded projects in Egypt to develop and offer a series of workshops and seminars focused on freight transportation as an element of export management and logistics planning. Programs which may be willing to support this activity include: export oriented projects operating under USAID's Growth Through Globalization program, the Euro-Mediterranean Partnership, and firms specialized in transportation which may be accessible through other contracting mechanisms.

9.1.5 Regulation: ECAA. The independence of the Egypt Civil Aviation Authority from influence outside the government should be assured by the new civil aviation law and other measures. The ECAA should not be a member of the board of any airline or air service provider, and should maintain an "arm's length" relationship with any such business. The ECAA should, however, summon representatives and experts from such companies as required for enforcement of the civil aviation laws, regulations, and standards of Egypt. The aviation law, or preferably an anti-monopoly law or corporate governance law, should prohibit any official or staff member of ECAA from serving on the board or in the employ of any aviation business, or soliciting or accepting payment, as well as any attempt to influence decisions of the ECAA with regard to matters such as licensing, and should make a violation of these strictures duly punishable. The government has long mentioned an intention to replace the fundamental law covering civil aviation with a new law, which will be in tune with the government's market liberalization program.

9.2 Port and Maritime Recommendations

Though current costs of port and maritime transport for exports are not out of line compared with those experienced by Egypt's competitors, there is ample scope for reducing these costs. The high-cost areas can be reduced by regulatory, policy, and legislative reform; encouragement of the private sector with investment and providing port services, commercialization and corporatization of port entities, and planning the transport system around the principles of intermodal operations. The costs could be reduced by addressing:

- Improvement of inefficient port operations.
- Reduce delays in processing of import cargo.
- Improve management of empty containers and reestablish efficiency of transshipment operations.
- Enhancement of the rail operations in serving the ports.
- Improve utilization of containers.

The action plan for the port/maritime sector should include the following elements:

9.2.1 Port handling costs (economic): Though the financial prices paid by exporters are low, the economic cost should be reduced by improving the rate of container handling, removing truck congestion inside the port, by more involvement of the private sector in appropriate port activities, and by encouraging private sector investment in port expansion.

9.2.2 Cargo Delays: Cargo delays for export are not serious. For imports, however, customs and other clearance procedures (quality control, health, hazardous materials) delay cargo and result in high storage and spoilage costs. Modernization of customs and other cargo clearance and inspection procedures and the application of new technology, such as EDI, could, in principle, reduce the cargo delays to less than one day.

9.2.3 Lowering Ocean Freight Rates: Shipping rates could be reduced by restoring the competitiveness of Port Said and other Egyptian ports as transshipment ports. The larger ships would start calling on Port Said again, and this would benefit Egyptian exporters by eliminating the need to send their cargo to foreign hub ports, such as Malta. It may also be possible to reduce freight rates by lowering the number of empty containers that need to be reloaded back on the ship.

9.2.4 Railway Capacity: Rail is not playing its proper role in servicing the port. Plans to improve the efficiency of rail as discussed under the railway recommendations need to include measures to improve the port/railway interface by appropriate investment and applications of intermodal principles.

9.2.5 Container Utilization: The low rate of containerization of Egypt's general trade cargo could be improved, the excessive rate of empty containers reloaded in the ports could be reduced, and port congestion could be moved out of the port through introduction of "dry" or inland ports where central freight consolidation, customs clearance, and the efficiency of assigning cargo to containers could be improved.

9.3 Road Transport Recommendations

Road transport costs in Egypt are significantly higher than those for other countries. The principal factors that need to be addressed are:

- the high cost of new trucks
- low productivity because of road congestion; and the need for better management of traffic, maintenance, overloading, safety, and driver discipline;
- lack of an information system linking road transporters with cargo availability;
- the need for investment in properly designed new roads.

9.3.1 High cost of new trucks: Accelerate reductions in duties and taxes for new imported and locally produced trucks. This will enable more rapid replacement of Egypt's existing truck fleet, of which more than 80% are obsolete. The benefits will be lower operating costs and easier entry by small operators into the trucking business.

9.3.2 Enhanced truck productivity: Over the short term, road congestion could be reduced somewhat by improving traffic management through training of traffic control officers and by providing them with the proper equipment. Better road maintenance resulting in smoother roads and shorter travel times with less wear and tear on trucks would also improve productivity. Over the longer term serious consideration should be given to modern techniques of traffic management, including road pricing and management of parking space, and the provision of more public transport.

The GOE should form a unit to conduct negotiations with traffic departments in Jordan, Saudi Arabia and other countries to liberalize the movement of trucks between the two countries,

and to allow trucks returning from Egypt, and vice versa, to pick up a load for the return trip. To eliminate the excessive delays at land border posts, Customs and other personnel should treat truckers from all countries without discrimination and efficiently.

The MOTS should enforce the safety inspection of vehicles to ensure that vehicles are in safe operating condition, especially with respect to tires, lighting, and brakes.

The GOE should establish training centers for drivers and traffic departments on the proper loading and maintenance of vehicles, and the business management of a trucking firm.

9.3.3 Cargo information system: As with the “empty” container problem, the “dry” or inland port discussed above can serve to link truckers with the availability of cargo. This will make it easier for truckers to find a return load after they have delivered their cargo.

9.3.4 New investment in roads: Consideration should be given to constructing new roads by building toll roads using BOT type projects, and designed to link sea and airports with cargo sources. Enhancing the role of railways and river transport in servicing sea ports should also reduce congestion by reducing the number of trucks on the road. Proper operation of weigh bridges to eliminate the excessive wear and tear imposed on roads by overloaded trucks should also receive high attention.

9.4 River Transport Recommendations

The productivity of barges using the Nile river and its canals is hampered by lack of canals connecting with the ports and with factory sites generating cargo, and by the lack of navigational devices. The productivity of the river barges could be improved by:

9.4.1 Improvement of canals and river system. Accelerate the schedule for the ongoing construction of new canals that are designed to connect the port system with major production centers. This should be accompanied by carrying out technical improvements to the locks and navigational aids, training barge operators, and intensifying maintenance dredging to preserve canal depth. Encourage through tax incentives and other measures the introduction of barges for carriage of specialized commodities, such as molasses.

9.5 Rail Transport Recommendations

The rail network is well established, and although a more detailed study is necessary for confirmation, there appears to be an adequate supply of rolling stock. Yet, unlike in many other countries, the railway carries only an insignificant amount of traffic to and from the ports. The reason is not one of costs: rail transport is cheap. Rather, the problem lies in the lack of good management and service provided to the client. There is no obvious reason why these deficiencies could not be removed, and why the role of the railway could not be enhanced. Solutions that have so successfully been applied in other countries with economies comparable to Egypt have shown that, with the proper policy and institutional reform, the performance of a railway can be significantly improved. However, the design of the reform program requires careful study, and can best be carried out within the context of the comprehensive transport survey.

As an indication of the type of actions possible, the GOE should be concessioning of some or all of the rail lines to the private sector, allowing it to operate and maintain the rolling stock

while ownership of infrastructure remains with the Government. There is also plenty of room to improve the technical efficiency of the rail system by improving signaling and communications, introducing specialized cars for containers, and introducing container “unit” trains that carry containers and other cargo from the “dry” ports to the sea and air ports on a reliable scheduled basis.

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Appendix A

STATISTICAL TABLES

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Table 1a. TACT Rates, General Cargo to Northern Europe (\$/kg)

	Amsterdam	Brussels	London	Munich	Paris
Alexandria	2.25	2.25	2.60	2.25	2.31
Cairo	1.95	1.95	2.25	1.95	2.01
Egypt Air	1.95	1.95	2.25	1.98	2.01
Average Others	2.18	1.52	2.16	1.41	1.86
Athens			1.40	1.22	1.22
Amman	2.05	1.13	1.76	1.13	1.18
Beirut	1.25	1.26	1.48	1.26	1.31
Casablanca	1.57	1.48	1.57	1.51	1.87
Damascus	3.78	2.11	3.29	2.11	2.18
Istanbul	2.83	2.71	3.53	2.30	3.24
Larnaca	1.40	1.31	1.12	1.12	1.12
Tel Aviv	3.64	1.26	4.30	1.26	3.75
Tunis	0.94	0.88	0.97	0.79	0.88

Table 1b. TACT Rates, Fruits and Vegetables to Northern Europe (\$/kg)

	Amsterdam	Brussels	London	Munich	Paris
Alexandria	1.18	1.03	1.12	1.03	1.06
Cairo	1.03	1.95	1.33	1.27	1.27
Egypt Air	0.98	1.03	1.12	1.03	1.06
Average Others	1.16	1.06	1.22	0.92	1.21
Amman	0.71	1.13	0.81	0.72	1.18
Athens			1.40	1.22	1.22
Beirut	1.25	1.26			
Casablanca	0.87	0.83	0.83	0.81	1.87
Damascus	3.78	2.11	3.29	1.31	2.18
Istanbul	0.81	0.77	0.80	0.75	0.85
Larnaca	0.56	0.71	0.58	0.52	0.52
Tel Aviv	0.93	1.26	1.07	1.26	0.97
Tunis	0.40	0.39	0.97	0.79	0.88

Table1c. TACT Rates, Textiles to Northern Europe (\$/kg)

	Amsterdam	Brussels	London	Munich	Paris
Alexandria	1.63	1.42	1.63	1.63	1.63
Cairo	1.63	1.63	1.63	1.63	1.63
Egypt Air	1.63	1.33	1.63	1.63	1.63
Average Others	1.68	1.17	1.65	0.98	1.58
Amman	2.05	1.13	1.76	1.13	
Athens					
Beirut	1.25	1.26			
Casablanca	0.93	0.86	0.86	0.95	1.87
Damascus	3.78	2.11			
Istanbul	1.45	1.43	1.97	1.28	1.67
Larnaca	1.18	0.88		0.75	1.10
Tel Aviv	2.29		2.69		2.39
Tunis	0.51	0.51	0.97	0.79	0.88

Table 2a. TACT Rates, General Cargo to Southern Europe (\$/kg)

	Athens	Istanbul	Madrid	Milan	Bucharest
Alexandria	1.24	0.95	2.66	2.28	1.92
Cairo	1.06	0.83	2.31	1.92	1.68
Egypt Air	1.06	0.83	2.31	1.92	1.68
Average Others	1.30	1.66	1.35	1.68	2.45
Amman	0.73	1.06	1.33	1.13	1.76
Beirut	0.77	0.93	1.48	1.26	1.26
Casablanca	2.04	2.66	0.66	1.29	2.87
Damascus	1.11	1.60	2.47	2.11	3.27
Tel Aviv	1.90	1.96	1.26	3.67	3.79
Tunis	1.23	1.73	0.89	0.64	1.73

Table 2b. TACT Rates, Fruits and Vegetables to Southern Europe (\$/kg)

	Athens	Istanbul	Madrid	Milan	Bucharest
Alexandria	0.56	0.47	1.09	0.86	1.92
Cairo	0.56	0.83	1.33	1.12	1.68
Egypt Air	0.56	0.53	1.09	0.86	1.68
Average Others	0.93	1.13	0.71	0.80	2.28
Amman			0.68		
Beirut	0.77	0.93			1.26
Casablanca	1.03	1.17	0.55	0.83	2.87
Damascus	1.11	1.60			3.27
Tel Aviv	0.95			0.94	
Tunis	0.77	0.82	0.89	0.64	1.73

Table 2c. TACT Rates, Textiles to Southern Europe (\$/kg)

	Athens	Istanbul	Madrid	Milan	Bucharest
Alexandria	1.24	0.47	2.66	2.28	1.92
Cairo	1.06	0.83	2.31	1.63	1.68
Egypt Air	1.06	0.83	1.54	1.63	1.68
Average Others	1.01	1.28	0.93	1.25	2.18
Amman	0.73	1.06	1.33	1.13	1.76
Beirut	0.77	0.93			1.26
Casablanca	1.08	1.23	0.56	0.86	2.87
Damascus	1.11	1.60			3.27
Tel Aviv	1.17	1.12		2.36	
Tunis	1.23	1.73	0.89	0.64	1.73

Table 3a. TACT Rates, General Cargo to Other Destinations (\$/kg)

	Dubai	Jeddah	Johannesburg	New York	Singapore
Cairo	1.01	0.74	2.36	2.90	4.46
Egypt Air	1.01	0.74	2.36		4.46
Average Others	2.46	1.67	3.03	3.49	6.67
Amman	1.38	0.65		2.93	6.06
Athens	1.37	0.98	1.88	1.43	3.28
Beirut	1.31	1.15		2.90	3.80
Casablanca	5.84	3.67			9.08
Damascus	2.31	1.80		6.49	11.73
Istanbul	3.82	2.61		3.22	6.87
Larnaca	1.10	0.75			2.25
Tel Aviv				5.55	11.57
Tunis	2.52	1.74	4.18	1.88	5.36

Table 3b. TACT Rates, Fruits and Vegetables to Other Destinations (\$/kg)

	Dubai	Jeddah	Johannesburg	New York	Singapore
Cairo	0.74	0.38	2.36		4.46
Egypt Air	0.74	0.38	2.36		4.46
Average Others	1.72	1.03	2.66	2.48	5.38
Amman	0.63	0.39			
Athens	1.37	0.98	1.14	1.12	
Beirut	1.31	1.15			
Casablanca	5.84	1.59			9.08
Damascus	1.16	0.96		5.51	
Istanbul	1.40	1.66		1.80	1.70
Larnaca	1.12	0.75			
Tel Aviv					
Tunis	0.91	0.76	4.18	1.50	5.36

Table 3c. TACT Rates, Textiles to Other Destinations (\$/kg)

	Dubai	Jeddah	Johannesburg	New York	Singapore
Cairo	0.92	0.44	2.36		4.46
Egypt Air	0.92	0.44	2.36		4.46
Average Others	2.19	1.12	2.74	2.38	4.79
Amman	1.38	0.65		2.41	
Athens	1.37	0.98	1.31	1.04	1.32
Beirut	1.31	1.15			
Casablanca	5.84	1.72			9.08
Damascus	1.51	1.33			
Istanbul	3.82	1.34		2.80	3.43
Larnaca	1.09	0.75			
Tel Aviv				3.78	
Tunis	1.23	1.01	4.18	1.87	5.36

Appendix A

Table 4. Calculation of Aircraft Landing Charges

Country & Airport	Landing Charges per m.t. (Aircraft weight)	Special landing charge for cargo	Time related charges	Parking fees per m.t.	Hangar charges	Other charges
Egypt	(US\$)					
Major int'l. airports	First 25 1.30 25 to 100 2.00 100-200 2.70 200 + 3.00		+25 % for night landing	First 25 0.24 25 to 100 0.16 100-200 0.14 200 + 0.12	First 25 3.35 25 to 100 1.80 100-200 1.35 200 + 1.00	Air navigation facilities charges applied.
	Nb. 5% facilities improvement charges applied to landing fee.					
Cyprus	(CE)					
Larnaca, Pafos	First 50 1.70 51-150 1.90 150 + 2.16	Cargo aircraft exercising traffic rights: 30 percent of landing charge 40 percent of the landing charge for additional unloading (freighters)	20 percent of landing charge during 1800-0400 GMT period.	12 percent of landing charge per 12 hour period after first 2 hours		
Israel	(US\$)					
	1 st 1.5 mt 14.07 each additional ton 9.39	\$0.34 per 10 kg for loaded or offloaded cargo (\$34 per mt)		25 percent of landing charge after first 3 hours		

Jordan	(JD Fils)					
	1 st 25 m.t. 1000 25-100 1500 100 + 1700 per m.t.		35 percent for landing or takeoff at night	1 st 25 m.t. .100 25-100 .70 100 + .40 rate per ton per hour		Air navigation facilities charges applied.
Lebanon	Lebanese Pounds					
	4,000 Lebanese pounds per ton		Runway lights 150,000 LP each landing and takeoff, 5,000 LP for every 5 minutes lights are used	Only after 8 hrs	3,000 LP for first 25 tons, 2,000 LP per ton +	
Morocco	Dirhams					
	1 st 25 m.t. 24 26- 50 49 26-80 71 26-81 88 26-82 101 200+ 92 per m.t.	Charter flights pay lower fees at aiother than Mohamed V	Lighting charges 451 per arrival or departure			
Tunisia	ECU's					
	1 st 25 m.t. 4.9 26-80 7.2 81+ 12.0		Lighting charges, ECU 24 per landing or takeoff			Air navigation charge approx. 420 ECU for any large aircraft plus air navigation meteorological charge

Turkey	USD					
	<p>1st 6 tons 12fixed 6 to 10 tons \$60 10+ 6.50 per ton surcharges: 30% for 5th and 6th days of the week, from 2100 to 0600 LMT, 100% between Dec 20 and Jan 10 and between Apr 1 and Oct 31</p> <p>Approach charge: 27.00 per landing</p>		<p>Lighting surcharge: 30.00 per takeoff or landing Parking surcharge: 25% for between sunset and sunrise for at least 3 hours with lighting, 100% between Dec 20 and Jan 10 and between Apr 1 and Oct 31</p>	<p>1st 6 tons 4.70 fixed 6 to 10 tons \$22.50 fixed 10+ 1.80 per ton (for each 24 hr period after the first 2 hours)</p>		<p>\$590 per hour for flights or delays causing an extension of declared operating hours Guide vehicle charge for aircraft over 6 tons: 33.00, Safety precautions charge for aircraft over 6 tons: 84.00 Air Navigation Facility Charge imposed</p>
Note: Data on exchange rates derived from July 1998 IMF rates						

Table 5. Maritime Freight Rates from Other Countries to Various Parts of the World

From	Destination	Dry Container		Reefer	
		20'	40'	20'	40'
Egypt	Rotterdam	\$ 250	\$ 500	\$ 2000	\$ 2500
Lebanon	Barcelona	\$ 400	\$ 700		
Lebanon	Marseilles	\$ 350	\$ 650		
Lebanon	Ravine	\$ 300	\$ 550		
Lebanon	Antwerp	\$ 243	\$ 432		
Lebanon	Dubai	\$ 750	\$ 1,300		
Lebanon	Genoa	\$ 300	\$ 550		
Lebanon	Hamburg	\$ 243	\$ 432		
Lebanon	Hong Kong	\$ 600	\$ 1,350		
Lebanon	Rotterdam	\$ 243	\$ 432		
Lebanon	Singapore	\$ 600	\$ 1,350		
Marseilles	S. Europe	\$ 250	\$ 300	\$ 750	\$ 1,300
Marseilles	Arab Gulf	\$ 600	\$ 1,000	\$ 1,100	\$ 2,000
Marseilles	N. America	\$ 400	\$ 600	\$ 900	\$ 1,600
Marseilles	Far East	\$ 250	\$ 300	\$ 750	\$ 1,300
From Cyprus	N. Europe	\$ 500	\$ 900	\$ 1,500	
From Cyprus	S. Europe	\$ 200	\$ 700	\$ 900	
From Cyprus	A. Gulf	\$ 650	\$ 1,150	\$ 1,900	
From Cyprus	N. America	\$ 1,400	\$ 2,600	\$ 2,500	
From Cyprus	Far East	\$ 500	\$ 800	\$ 1,500	

Source: Commercial Attaches at Egyptian Embassies, freight forwarders, shipping agents.

**Table 6. Comparative Port Handling Charges for 20 and 40 foot Export Containers
(U.S. \$)**

Country	Loading, Stacking, and Administrative charges.	
	20 ft, US\$	40 ft, US\$
Egypt	\$ 43	\$ 80
Israel	\$ 39	\$ 118
Tanzania	\$ 64	\$ 96
Kenya	\$ 70	\$ 80
Mozambique	\$ 70	\$ 120
Colombo	\$ 71	\$ 115
Latvia	\$ 90	\$ 110
Estonia	\$ 95	\$ 95
Lithuania	\$ 95	\$ 95
Surabaya	\$ 100	\$ 155
Russia	\$ 103	\$ 120
Canton	\$ 105	\$ 210
UK	\$ 112	\$ 112
Spain	\$ 116	
Malta	\$ 127	
Poland	\$ 135	\$ 155
Le Havre	\$ 137	\$ 137
Cyprus	\$ 140	\$ 180
Italy	\$ 143	\$ 143
Netherlands	\$ 154	\$ 154
Germany	\$ 161	\$ 161
Nantes	\$ 161	\$ 161
Marseilles	\$ 169	\$ 169
Bordeaux	\$ 305	\$ 390
Abu Dhabi	\$ 132	\$ 196

Source: Mesco, Zim Lines, Lykes, Danzig and the Egyptian commercial attaches

Appendix A

Table 7. Ocean Freight Statistics

Table 7a. Exports by Sea for 1989 - 1998 (1000 metric tons)

Year:	1989	90	91	92	93	94	95	96	97	98
GC and Containerized	1606	1740	2185	2484	2500	2473	2502	3492	3528	3236
Granular and metals	0	1	0	17	0	8	0	0	0	0
Coal	0	0	0	0	12	38	16	17	1	38
Cement	9	7	49	293	619	247	102	257	20	9
Phosphate	274	388	154	158	156	185	111	93	163	139
Other	3	4	0	98	268	251	454	287	384	273
Fertilizer and salts	128	190	327	633	434	756	589	686	682	570
Special cargo	9	20	1	2	8	28	41	30	30	38
Petrol	2526	2570	3420	2963	4682	4950	4662	5265	4381	3255
Molasses	168	101	131	154	180	171	246	223	186	250
Total	4,723	5,021	6,267	6,802	8,859	9,107	8,723	10,350	9,375	7,808

Egyptian Maritime Data Bank
Ministry of Maritime Transport
Alexandria, Egypt

Table 7. Ocean Freight Statistics (Cont.)

Table 7b. Imports by Sea 1989 - 1998 (thousand metric tons)
Total Imports by Sea, 1000 tons

Year:	1989	90	91	92	93	94	95	96	97	98
General Cargo and Containers.	6132	6917	7117	7318	6965	7694	8751	9920	10318	10740
Flour	1030	760	428	104	545	311	261	109	61	50
Grain	5915	5616	5048	5732	4652	5888	5877	6355	6920	6924
Corn	1074	1097	884	763	2297	2041	2712	2146	3266	3328
Cement and gypsum	612	98	32	6	3	458	1474	2428	2678	3840
Raw aluminum and scrap	2255	2515	2132	2245	2243	2245	1775	1976	3078	4657
Coal	1386	1549	1415	1505	1772	1876	1734	1944	1797	2034
Phosphate	0	0	0	0	33	0	0	0	0	0
Fertilizer and salts	684	602	569	138	288	158	262	397	207	204
Special cargo	1120	1252	1077	1056	1880	1924	2217	2009	2302	2628
Petrol	9865	9290	6806	2114	2040	1155	1184	2315	1658	1875
Oil and lubricants	548	609	746	679	864	733	867	988	862	886
Molasses	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	11	0	369	535	1133	888	645
	30621	30305	26254	21671	23582	24852	27649	31720	34035	37811

Egyptian Maritime Data Bank
 Ministry of Maritime Transport
 Alexandria, Egypt

Table 8a. Impact of current truck transport costs on total transport costs

	Commodity value, \$/ton =	200	\$/ton	
	40-ft capacity, tons	25		
	Value of container load	5,000		
	Port handling, \$	80		
	Agency fee, %	50%		
	Sea Freight, \$	\$255		
	trucking, \$/veh-km	0.74		
	Kilometers by land			
Distance by truck	100	300	500	1000
Cost of truck transport, \$	\$ 74	\$ 222	\$ 370	\$ 740
Port handling, \$ per container	\$ 80	\$ 80	\$ 80	\$ 80
Shipping agency fee and misc.	\$ 40	\$ 40	\$ 40	\$ 40
Sea freight to Rotterdam	\$ 255	\$ 255	\$ 255	\$ 255
Total Transport Cost	\$ 449	\$ 597	\$ 745	\$ 1,115
World market price, \$ per container	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000
Transport cost by mode, %				
Truck	16%	37%	50%	66%
Port and agency fees	27%	20%	16%	11%
Sea freight	57%	43%	34%	23%
Total	100%	100%	100%	100%
As % of world market price				
Land transport, %	1%	4%	7%	15%
Port handling and agency fee, %	2%	2%	2%	2%
Sea freight, %	5%	5%	5%	5%
Total transport, %	9%	12%	15%	22%

Table 8b. Impact of "normative" truck transport costs on total transport costs

	Commodity value, \$/ton =	200	\$/ton	
	40-ft capacity, tons	25		
	Value of container load	5,000		
	Port handling, \$	80		
	Agency fee, %	50%		
	Sea Freight, \$	\$255		
	trucking, \$/veh-km	0.49		
	Kilometers by land			
Distance by truck	100	300	500	1000
Cost of truck transport, \$	\$ 49	\$ 147	\$ 245	\$ 490
Port handling, \$ per container	\$ 80	\$ 80	\$ 80	\$ 80
Shipping agency fee and misc.	\$ 40	\$ 40	\$ 40	\$ 40
Sea freight to Rotterdam	\$ 255	\$ 255	\$ 255	\$ 255
Total Transport Cost	\$ 424	\$ 522	\$ 620	\$ 865
World market price, \$ per container	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000
Transport cost by mode, %				
Truck	12%	28%	40%	57%
Port and agency fees	28%	23%	19%	14%
Sea freight	60%	49%	41%	29%
Total	100%	100%	100%	100%
As % of world market price				
Land transport, %	1%	3%	5%	10%
Port handling and agency fee, %	2%	2%	2%	2%
Sea freight, %	5%	5%	5%	5%
Total transport, %	8%	10%	12%	17%

Appendix B

Freedoms of the Air Negotiated in Bilateral Air Services Agreements

First Freedom: The right to fly over another country without landing.

Second Freedom: The right to make a landing for technical reasons (e.g. refueling) in another country without picking up/setting down revenue traffic.

Third Freedom: The right to carry revenue traffic from your own country (A) to the country (B) of your treaty partner.

Fourth Freedom: The right to carry traffic from country B back to your own country A.

Fifth Freedom: The right of an airline from country A to carry revenue traffic between country B and other countries such as C or D. (This freedom cannot be used unless C or D also agree.)

SUPPLEMENTARY RIGHTS

Sixth Freedom: The use by an airline of country A of two sets of third and fourth freedom rights to carry traffic between two other countries but using its base at A as a transit point. For example, Royal Jordanian carries sixth freedom traffic between London and Middle East points via its base at Amman even though it has not been granted fifth freedom rights between these points and London.

Sixth freedom rights are not formally recognized in air services agreements, though several Confidential Memoranda of Understanding make implicit reference to them, especially when dealing with capacity issues.

Cabotage Rights: The right of airline of country A to carry revenue between two points in country B. For example, Air France for many years had cabotage rights between various points within Morocco.

Cabotage rights are very rarely granted. Nevertheless, several countries whose carriers are currently flying to the United States are pressing the US government for cabotage rights.

Appendix C

Definition of Airline Terms

Payload capacity: Total of aircraft capacity available for the carriage of passengers, baggage, cargo or mail. Measured in metric tonnes.

Capacity or available tonne-kilometres (ATK): This is a measure of airline output. ATKs are obtained by multiplying the payload capacity on a flight by the stage distance flown.

Revenue tonne-kilometres (RTK) or tonne-kilometres performed/carried: This measures the output actually sold. RTKs are obtained by multiplying the number of tonnes carried on a flight by the stage distance.

Weight load factor: Measures the proportion of the output actually sold. It is the RTKs expressed as a percentage of the ATKs.

Capacity or available seat-kilometres: This is obtained by multiplying the seats available on a flight by the stage distance.

Passenger-kilometres: The number of passengers on a flight multiplied by the stage distance. Passenger-km are normally converted to revenue or passenger tonne-km by assuming that 1 passenger with baggage equals 90kg (i.e. passenger-km divided by 11-111 equal passenger tonne-km).

Seat factor or passenger load factor: On a single sector this is obtained by expressing the passengers carried as a percentage of the seats available for sale. On a network of routes, the seat factor is obtained by expressing the total passenger-km as a percentage of the total seat-km available.

Tonne-kilometres per hour: This measures an aircraft's hourly productivity. It is the payload capacity multiplied by the average speed. The latter may be the average block speed or the cruise speed.

Stage or sector distance: Ideally this should be the air route distance between two airports. Many airlines and IATA use the great circle distance, which is shorter than the distance actually flown.

Average stage length: The weighted average of stage/sector lengths flown by an airline. This is most easily obtained by dividing an airline's total annual aircraft-km by the number of aircraft departures or flights recorded during the year.

Aircraft-kilometres: The distances flown by aircraft. They are derived from the stage lengths and the frequencies operated over each stage.

Length of (passenger) haul: The average distance flown by an airline's passengers. This is obtained by dividing an airline's total passenger-km by the number of passengers carried.

Block time: This is the time for each stage between engines being switched on at departure and off on arrival.

Block speed: The average speed for each stage calculated from the block time.

Flying or airborne time: The time from aircraft lift-off to touch-down on the runway.

Aircraft hours: The cumulative time that each aircraft is in use, calculated usually from the block times. Airborne or flying hours might also be calculated.

Aircraft utilization: The average number of block hours that each aircraft is in use. Utilization may be measured on a daily or an annual basis.

Yield: Measures the average revenue obtained per ATK or RTK. It is obtained by dividing an airline's total revenue by its total ATKs or RTKs.

Passenger yield: The average revenue per passenger-km or passenger/tonne-km. It is obtained by dividing total passenger revenue by the total passenger-km or passenger tonne-km. Freight yields are obtained in the same way.

Flight crew: Refers to the pilot, co-pilot and flight engineers if any.

Seat pitch: This is the standard way of measuring seating density on aircraft. It is the distance between the back of one seat and the same point on the back of the seat in front.

Appendix D

OUTLINE TERMS OF REFERENCE: COMPREHENSIVE STUDY OF EGYPT'S TRANSPORT SECTOR AND ACTION PLAN

The main objectives of this study are to prepare an action plan for the reduction of cost of transport especially as it pertains to the cost of transporting Egypt's export goods. The optimum methods for implementing the recommendations of the DEPRA report, "Reducing Transport Costs of Egypt's Exports," Cairo, May 1999, will be a major element of the action plan. The primary need is to initiate a study with the objective of proposing a road map for the development of an integrated land transport system where each mode fulfills its proper and most economical role. In such a system, for example, the river and canal network would carry out the transport functions at which they excel: the carriage of most of the nations low-value bulk products. In addition, and more importantly, rail could start getting involved in the carriage of containers to and from the ports via unit trains that operate on regular and reliable schedules between the ports, the industrial zones and the proposed inland or "dry" ports. Road would excel at carrying the high value commodities which are time sensitive, and the role of air transport would be the delivery of high-value and perishable agricultural products to international destinations.

The Scope of Work Would Include:

- to review existing and forecast transport demands for ports, road transport, rail transport, river transport, aviation imposed by requirements for efficiently accommodating Egypt's Import, Export, and Transshipment cargo.
- To identify gaps in the existing infrastructure with special reference to ports, road transport, rail transport, river transport, aviation;
- To extend economic pricing and cost recovery into all transport enterprises and activities;
- To assess the extent to which the transport market functions in a competitive, cost effective, and efficient environment;
- To evaluate the obstacles to efficient development of integrated modal transportation along the main existing or potential transport corridors for Egypt's import, export, and transshipment cargo; and with special attention to gaps in investment and equipment shortages, especially at the terminals and modal interfaces, price distortions, the policy and regulatory framework, and institutional and financial procedures and documentation.
- To determine the potential and modalities for increased private sector participation in the transport sector and to identify the obstacles to progress;
- To draw up an integrated action program, indicating priorities and appropriate timing for each of three successive five-year periods.

Principal Tasks

A traffic analysis to identify the present and recent volumes of import traffic, export traffic, transshipment traffic at the ports, domestic inland movement and the modal distribution of the principal types of freight traffic.

Review of the historical political, administrative, and economic constraints contribution to this distribution including the impact of customs and security procedures and documentation.

A comprehensive cost analysis by mode and inland corridor for a selected number of principal commodities. This analysis should include a comparison of road transport with appropriate combinations of road and rail transport, road and river transport, and the use of containers as compared with more traditional methods of handling cargo; proposals for an optimum institutional and administrative framework for maximum development of domestic and external movement of goods consistent with least cost estimates; and traffic forecasts based of a limited number of pragmatic assumptions affecting the removal of non-economic constraints to determine the future volume of traffic and its distribution.

Examine ongoing investment and rehabilitation programs and identify reasonable priorities and measures that should and could be taken to speed up implementation; identify gaps in the infrastructure and future investment needs in terms of the traffic demand analysis.

The analysis should cover the need to establish or improve technical facilities at the modal interfaces.

Investment proposals should include a minimum of fixed investment with the private sector being encouraged to take subsequent investment activities.

Special Study Areas

The development of backhaul traffic should be generally reviewed with special attention to utilizing empty containers.

Modalities for establishing and operating traffic consolidation and information bureaus. Development of auxiliary industries that can reduce the cost of transport such as tire recapping.

The need for specialized financing institutions specifically to encourage private sector participation in transport sector activities.

Measures to improve traffic management, vehicle overload control, and road safety.

Continue to promote privatization by appropriate legislation and regulations, and with emphasis on creating an enabling environment for the investor by clearly defining the bid and award process for privatization tenders.

Develop a strategic planning for privatization by inventorying state-owned or managed transport assets, and preparing a prioritized list of assets to be released for bid to the private sector.

Optimize the modalities of establishing and operating inland ports, traffic consolidation centers, information bureaus, and the development of back-haul traffic within the context of the widespread use of containers.

Other important outputs would be the definition of the proper role of Egypt's ports for transshipment and imports/exports, and traffic forecasts to ascertain the needs for port expansion and new ports.

Initiate detailed studies of the two more important transport modes for bulk: the river system and the rail system. Study topics would include traffic forecasts to assess the proper role of these modes, the age and composition and need for renewal of the rolling stock and barges, needs for realignment and improvement of track and canals, and the identification of appropriate procedures for privatizing these modes.

Continue to promote privatization by appropriate legislation and regulations, and with emphasis on creating an enabling environment for the investor by clearly defining the bid and award process for privatization tenders. Also included should be the development by the GOE, using the ample experience of other countries, of a plan for rationalizing and voluntary retirement of port labor within the container terminals.

Commence strategic planning for privatization by inventorying state-owned or managed transport assets, and preparing a prioritized list of assets to be released for bid to the private sector. This effort should be led by the MOTS in close coordination with the other Ministries responsible for public works, finance, and state-owned enterprises, and with representatives from the private sector business associations.

Staff Requirements

Team leader: a transport economist (5 months)

Senior highway engineer (3 months)

Senior port engineer (3 months)

Container shipping specialist (2 months)

Senior railway engineer (3 months)

Road transport specialist (3 months)

Air freight specialist (3 months)

Financial analyst (2 months)

Privatization specialist (3 months)

التقرير النهائي

تخفيض تكاليف النقل للصادرات المصرية

معد لأجل
حكومة جمهورية مصر العربية
وزارة التجارة والتموين

مقدمة إلى
الوكالة الأمريكية للتنمية الدولية

مقدمة من
شركة ناثان أسوشيتس إنكوربوريشن

عقد رقم
٢٦٣—C٠٠-٩٦-٠٠٠٠١-٠٠



يوليو ١٩٩٩

استهلال

هذا التقرير مبنى على دراسة قام بإعدادها مشروع تحليل وإصلاح السياسات الاقتصادية والتنمية (دبرا) ، من خلال عقد مع الوكالة الأمريكية للتنمية الدولية بالقاهرة - مصر (عقد رقم ٢٦٣-٢٠٠-٩٦-٠٠-٠٠-٠٠٠٠١-٠٠).

ويهدف مشروع دبرا إلى تشجيع ومساندة الإصلاح الاقتصادي في مصر، وذلك من خلال تقديم المعونة الفنية والخدمات إلى حكومة جمهورية مصر العربية، مع التركيز على الجوانب المرتبطة بتحرير التجارة والاستثمار الدوليين، وتحرير وتدعيم القطاع المالي.

وقام بإعداد هذه الدراسة فريق من الخبراء من مؤسسة ناثن أسوشييتس إنكوربوريشن للاستشارات الاقتصادية - أرلنجتون - فيرجينيا بالولايات المتحدة الأمريكية ، برئاسة الأستاذ/ تشارلز فاندرفورت ، والأستاذة/ ميشيل مورجان خبيرة نظم المعلومات. وفريق من الخبراء المصريين، ضم القبطان/ فاروق الصايغ صاحب الخبرة العريضة في مجال النقل البحري والمواني ، والأستاذ / محمد سعداوي صاحب الخبرة الكبيرة في مجال النقل الجوي وشركاته. قامت الدكتورة/ عادل رجب بإعداد الكثير من المعلومات المتعلقة بالتشريعات الخاصة بهذه المجالات. بالإضافة إلى جهود السيدة / راوية مختار، في ترتيب العديد من المقابلات الشخصية مع المصدرين ، بالإضافة إلى جهودها في إعداد جداول البيانات.

ويقدم فريق الدراسة عظيم الشكر لكل من الأستاذ/ مورييس ثورن منسق الدراسة من مشروع دبرا، والدكتور الدكتور/ رو لو إيريك المستشار بمشروع دبرا، على ما قدمه من مساعدات قيمة. كما يمتد الشكر إلى الأستاذ/ عبد الوهاب هيكل المستشار بالمشروع على إسهاماته المتعلقة بالترتيب للعديد من المقابلات مع المسؤولين بالقطاع العام وقطاع رجال الأعمال. كما تجدر الإشارة إلى ما قدمه الفريق الإداري لمشروع دبرا من دعم ومساندة.

ويعتبر فريق الدراسة هو المسئول عن كافة الآراء الواردة في هذا التقرير، والنتائج والتوصيات التي اشتمل عليها لا تعكس بالضرورة آراء وسياسات حكومة جمهورية مصر العربية أو الوكالة الأمريكية للتنمية الدولية.

ملخص تنفيذي

يركز هذا التقرير على سبل زيادة تنافسية الصادرات المصرية، ومن خلال تخفيض تكاليف النقل وما يرتبط بها من نفقات أخرى. وقد تم ذلك من خلال التركيز على ثلاثة موضوعات رئيسية هي:

١- هل يتحمل المصدرون المصريون تكاليف نقل أعلى مما يدفعه المنافسون في دول شرق المتوسط؟ وهل تقلل هذه التكاليف المرتفعة من القدرة التنافسية للصادرات المصرية؟

٢- وسواء كانت تكاليف النقل تقلل أو لا تقلل من القدرة التنافسية للصادرات المصرية، فإلى أي مدى يمكن تخفيض هذه التكاليف، وما هي المنافع المرتقبة من جراء هذا التخفيض؟

٣- ما هي الإجراءات المطلوب القيام بها لتخفيض تكاليف النقل؟

دلائل وجود فروق في تكاليف النقل:

المعدلات الدولية للنولون:

لا توجد براهين قوية على أن معدلات النولون البحري والجوي، تضع المصدرين المصريين في حالة عدم تميز عند مقارنتهم مع منافسيهم من دول شرق البحر المتوسط. إن معدلات النولون من مصر إلى الدول الأخرى تقع داخل المدى المتوسط أو المدى المنخفض بالنسبة لمعدلات النولون السائدة بالنسبة للشحنات الجوية والبحرية. ويعزى عدم وجود فروق في معدلات النولون الجوي إلى حقيقة أن سوق النقل الجوي في منطقة شرق المتوسط يعتبر من الأسواق المتجانسة من ناحية، ولأن شركات الطيران تضع معدلات نولون للشحنات الجوية بشكل تنافسي، وذلك على أساس موسمي. وفيما يتعلق بالنقل البحري، يعزى عدم وجود فروق، في الغالب الأعم، إلى طبيعة المنافسة الشديدة في النقل البحري، كما ساعد على ذلك أيضا، الكساد الاقتصادي الذي تشهده آسيا وأقاليم أخرى، الأمر الذي أدى إلى تحويل عمليات الشحن بعيداً عن المناطق التي تعاني من الركود، إلى منطقة البحر المتوسط. وتعتبر المنافسة القائمة بين عدد من الموانئ المحورية الجديدة التي تركزت في إقليم البحر المتوسط، أحد العوامل التي ساعدت على ذلك.

رسوم المطارات:

تعتبر رسوم الهبوط وغيرها من الرسوم التي تتقاضاها المطارات في نفس حدود ما يواجهه المنافسون في شرق البحر المتوسط. وبإضافة الرسوم الرئيسية للإيواء إلى فاتورة النولون نحصل على إجمالي فاتورة النولون الجوي، ولكن هذا التأثير لا يمثل عائقاً خطيراً أمام المصدرين المصريين.

رسوم الموانئ البحرية:

تتقاضى إسرائيل نحو ٣٩ دولار أمريكي كرسوم لحاوية التصدير سعة ٢٠ قدم، وتعتبر مصر تالية لإسرائيل، حيث يتم تحصيل رسوم تداول لحاوية التصدير بمقدار ٤٣ دولار أمريكي (ثاني أقل دولة من حيث رسوم التداول بالموانئ). وهناك اعتقاد بأن المعدلات السائدة في البلدين أقل من التكاليف الفعلية. أما باقي الدول الأخرى في إقليم البحر المتوسط، فهي تتقاضى معدلات أعلى من ذلك، حيث تصل الرسوم في قبرص إلى نحو ١٤٠ دولار أمريكي، وتبلغ هذه الرسوم في إيطاليا نحو ١٤٣ دولار أمريكي.

النقل البري بالشاحنات:

يعتبر النقل البري بالشاحنات في مصر مكلفاً، فهو يزيد على أسعار المنافسين بنسبة تتراوح من ٣٠% إلى ٨٠%. ففي مصر، على سبيل المثال، تزيد تكلفة الكيلومتر الواحد لتشغيل النقل الثقيل بمقطورة بمقدار ٥٠% على التكلفة المقارنة في لبنان. ويرجع السبب في التكلفة المرتفعة إلى الضرائب العالية المفروضة على الشاحنات الجديدة، وعدم ملائمة أجزاء معينة من شبكة الطرق. فهناك بعض الطرق الهامة تتسم بالوعورة، بالإضافة إلى الزحام في الطرق الرئيسية المؤدية للقاهرة والإسكندرية، وبعض الطرق داخلهما. كما أن الإضاءة الليلية في بعض الطرق يمكن تحسينها. وارتفاع تكلفة هذه الطرق يشكل عبئاً على المنتجات ذات القيمة المنخفضة مثل الموالح. فعلى سبيل المثال، بالنسبة لشحنة موالح قيمتها ٥٠٠ دولار للطن، نجد أن تكلفة النقل بالشاحنة تتراوح ما بين ٣% - ٥% من القيمة شاملة النقل البحري. وبالنسبة للدول المنافسة التي لديها نظام طرق حديث، وصناعة نقل بالشاحنات تتسم بالكفاءة، بالإضافة إلى وجود طرق أقصر للوصول إلى الموانئ، نجد أن تكلفة النقل البري أكثر انخفاضاً.

وهناك عدد من الأسباب يعزى إليها ارتفاع تكلفة النقل بالشاحنات. فالجمارك والضرائب على أنواع معينة من الشاحنات والمقطورات مرتفعة جداً، على الرغم من اتجاه هذه الضرائب

للانخفاض ببطء في ظل اتفاق منظمة التجارة العالمية. وحالياً، يصل مجموع هذه البنود نحو ٤٥% من التكلفة الرأسمالية للشاحنة ، الأمر الذي يرفع تكلفة التشغيل بدرجة كبيرة. إن نفقات تشغيل شاحنة كبيرة جديدة تصل نحو ١,٧ دولار أمريكي لكل كيلومتر، وهي ضعف التكلفة في الدول الأخرى (تبلغ نحو ٠,٨٥ دولار أمريكي). إن الازدحام في الطرق، ينتج عنه بطء حركة الانتقال بسبب عدم كفاية شبكة الطرق، ونقص المعلومات عن طرق العودة المتاحة أمام الشاحنات، أدى إلى حالة من التشغيل الناقص للشاحنات الثقيلة المستخدمة في نقل السلع المستوردة والمصدرة. إن حجم الطاقة العاطلة من الشاحنات، والحاويات الفارغة التي تتجه من القاهرة إلى المواني كبير بشكل مفرط. ومن الملاحظ أن بعد قيام الشاحنات بتفريغ حمولتها، وليس لدى القائم بالتشغيل معلومات جيدة عن كيفية الحصول على حمولات عند العودة. إن التسيير الفارغ للشحنات والحاويات يؤكد على الحاجة إلى وجود ميناء أرضي داخل المناطق الصناعية. إن وجود مثل هذا الميناء يحقق العديد من المزايا، من أهمها دمج الأحمال واستغلال الشاحنات عند عودتها.

إن نقص المعلومات المتاحة أمام أصحاب الشاحنات، ووكلاء الشحن، ومنسقي الشاحنات، بخصوص الشاحنات المتاحة، يخلق أوضاعاً غير منطقية، حيث يوجد فائض في الشاحنات المبردة التي تخدم المواني البحرية، على حين تعاني المواني الجوية من عجز في مثل هذه الشاحنات. إن تكلفة النقل بالشاحنات تكون أقل أهمية بالنسبة للنقل الجوي. فالمنتجات التي يتم نقلها جواً، مثل الأعشاب، تكون ذات قيمة مرتفعة، ولا تشكل تكلفة النقل البري بالنسبة لها سوى جزء صغير من التكلفة النهائية عند الوصول. والأمر الأكثر أهمية هو حقيقة ما يقوله بعض المصدرين، أن خدمات شركات النقل يمكن أن تتحسن من خلال بعض التدابير مثل تدريب السائقين بشكل عاجل، والحفاظ على الشاحنات في حالة جيدة، وعدم الابتعاد عن اقصر الطرق. بالإضافة إلى وجود عجز في الشاحنات المبردة التي يمكن الاعتماد عليها. وفي ظل هذه الظروف، يحدث أحياناً، انقطاع في سلسلة التبريد، الأمر الذي ينتج عنه خسائر كبيرة للمصدرين.

النقل النهري وبالسكك الحديدية:

لا تشكل هذه الأنواع من النقل أهمية كبيرة - بالرغم من ضرورة ذلك - بالنسبة لنقل الصادرات غير البترولية إلى المواني. ففي عام ١٩٩٨، تم استخدام النقل بالشاحنات، مرتفع التكلفة، في نقل حوالي ٩٧% من حركة النقل في المواني، أما النسبة الباقية ومقدارها ٣% فقد تركت للنقل النهري والسكك الحديدية. وتشير تجارب الدول الأخرى إلى أن إصلاح

السياسات وتحسين الإدارة، يساعد على توسيع دور النقل النهري والنقل وبالسكك الحديدية بقدر كبير، الأمر الذي يحقق وفورات كبيرة في تكاليف النقل للاقتصاد القومي.

النقل الجوي:

يعتبر نقل الركاب هو جوهر نشاط قطاع النقل الجوي في مصر. وتعتبر السياحة، وهي أحد المصادر الرئيسية للنقد الأجنبي في مصر، من أهم العوامل المحددة لعدد وحجم الطائرات التي تخدم الرحلات الدولية والداخلية. وخدمات النقل الجوي محدودة، لأن الشطر الأكبر من الواردات المصرية يأتي عن طريق البحر، وبالتالي تكون نسبة الواردات القادمة بطريق الجو صغيرة نسبياً. وبشكل عام، تعتبر أسعار الشحن الجوي أقل تقييداً للصادرات قياساً إلى مشكلة الفراغات المتاحة، بالرغم من أن بعض المنتجات ذات الربحية الحدية عند التصدير، يمكن أن تستفيد من الأسعار المنخفضة للشحن الجوي. وتعتبر تسهيلات الشحن الجوي في مصر غير كافية لتداول حجم الصادرات المنقولة جواً، سواء من حيث الفراغ أو الخدمة. إن النقص الحاد في البنية الأساسية اللازمة للنقل الجوي، يؤدي إلى خسائر كبيرة، بسبب التأخير والتلف. ومن الملاحظ وجود قصور في محطات الشحن، وأماكن التخزين المبردة، ومناطق التجميع المبردة، يؤدي إلى خسارة تصل إلى نحو ٢٥% من متحصلات بيع المنتجات الطازجة والمجمدة.

إن المؤسسات والقوانين التي تحكم النقل الجوي قد تم تحريرها بشكل كبير خلال السنوات الراهنة، ولكنها لا تزال تمنع المنافسة في مجالات معينة، والتي يمكن أن يترتب على وجودها انخفاض كبير في أسعار النولون الجوي. وتعتبر أسعار الشحن الجوي في مصر في الحدود السائدة التي يتحملها المنافسون لمصر، وليس من المحتمل أن تحقق المزيد من الانخفاض ما لم تنتهج مصر سياسة السماء المفتوحة أمام مختلف شركات النقل الجوي. ولا يزال النطاق واسعاً أمام تحقيق المزيد من الانخفاض في الفاتورة الإجمالية للنقل الجوي التي يدفعها المصدرون في الخارج لكل كيلومتر من النقل الجوي. إن العوامل الرئيسية التي يمكن التركيز عليها، من خلال توليفة من التغييرات في السياسة، وتحسين معلومات السوق، تتمثل في تكاليف تداول الشحنة، والفراغات المتاحة على الرحلات الخارجية، وعدم كفاية أو عدم كفاءة تسهيلات النقل الجوي، ونقص معلومات السوق، وتخطيط الإمدادات.

ولا زال كلا من شركة مصر للطيران - وهي الشركة الوطنية في هذا المجال - وهيئة ميناء القاهرة الجوى، تتمتعان بوضع احتكاري في مجال تقديم الخدمات والبنية الأساسية، الأمر الذي يسهم في ارتفاع نفقات الشحن بالنسبة للمصدرين. وتعتبر رسوم تداول الشحنات التي تحصلها مصر للطيران وهيئة الميناء، مرتفعة بشكل مفرط، ثم تتضخم نفقات التداول أكثر بسبب التنظيمات الإجرائية التي تطبقها هيئة ميناء القاهرة الجوى، والتي تضع قيوداً على معدات التداول المسموح بها لكل شركة ناقلة. وينبغي أن يتم السماح لشركات القطاع الخاص المؤهلة بتقديم كلا من خدمات التخزين، وخدمات تداول الشحن في ساحة المطار، لجميع الشركات الناقلة، بالإضافة إلى إلغاء جميع القيود غير الضرورية التي تقف أمام تقديم مثل هذه الخدمات.

وينبغي تشجيع شركات القطاع الخاص الوطنية والأجنبية، على بناء تسهيلات الشحن في مطار القاهرة وغيره من المطارات، على أسس تحررية، سواء من خلال نظام الإنشاء والتشغيل وتحويل الملكية BOT، أو عن طريق الاستثمار المباشر. ويجب القيام بإعداد دراسة تخطيطية شاملة لقطاع النقل الجوى المدني، وتطوير خطة عمل لإحداث زيادة تدريجية في البنية الأساسية وخدمات المطارات مع زيادة كفاءتها، مع التركيز على اتفاقات نظام الإنشاء والتشغيل وتحويل الملكية BOT، ونظام الإنشاء والتشغيل والتملك BOO، عن طريق مساهمة القطاع الخاص. ويتطلب الأمر القيام بعملية تنبؤ للطلب على خدمات نقل الركاب والبضائع في مصر لفترة عشر سنوات قادمة، والمتطلبات التنظيمية والبنية الأساسية اللازمة لمواجهة هذا الطلب، والتي ينبغي ترجمتها إلى خطة عمل يشارك فيها القطاع الخاص مع الدولة. وعلى الحكومة المصرية أن تبحث موارد مالية للقيام بدراسات الجدوى لمتطلبات البنية الأساسية المتوقعة.

النقل البحري:

عمليات النقل البحري:

تستوعب موانئ مصر الأربعة الكبيرة على البحر المتوسط (الإسكندرية، الدخيلة، دمياط، بورسعيد)، والموانئ التسعة القائمة على البحر الأحمر، كل تجارة مصر الخارجية تقريباً، وبلغت نحو ٥٠ مليون طن في عام ١٩٩٨، منها نحو ٤٠ مليون طن من الواردات، وحوالي ١٠ مليون طن من الصادرات. وموانئ الإسكندرية، والدخيلة، ودمياط، و بورسعيد، لكل

منها هيئة الميناء الخاصة بها. أما موانئ البحر الأحمر جميعها، فهي تحت إشراف هيئة موانئ للإقليم ككل.

وترتبط الموانئ المصرية الموجودة على البحر المتوسط، و موانئ سفاجا والسويس على البحر الأحمر، بالطرق البرية والسكك الحديدية بباقي مناطق مصر. كما ترتبط موانئ المتوسط، أيضا، بنظام النقل النهري. وقد سبقت الإشارة إلى أن شبكة الطرق البرية تعاني من الزحام، وان السكك الحديدية والنقل النهري تستوعب قدراً صغيراً من البضائع المستوردة والمصدرة.

وفيما يتعلق بالواردات، نجد أن أكبر مستوى منها في عام ١٩٩٨ كان الشحنات العامة، وشحنات الحاويات (نحو ١٠,٧ مليون طن، توازي ٢٨%)، يلي ذلك الأسمت، والجبس والألومنيوم الخام والخردة (نحو ١٠,٥ مليون طن، توازي نحو ٢٨%)، ثم الحبوب والذرة (١٠,٢ مليون طن أو ٢٧%). وعلى صعيد الصادرات، نجد أن أكبر مستويين من هما البترول (نحو ٣,٢٥ مليون طن، توازي نحو ٤٢%)، والشحنات العامة وشحنات الحاويات (٣,٢٣ مليون طن بنسبة ٤١%)، يلي ذلك البضائع الصب الجافة (١ مليون طن بنسبة ١٤%).

إن مستوى الواردات من الشحنات العامة والحاويات، الذي يبلغ ١٠,٧ مليون طن في عام ١٩٩٨ يفوق بشكل كبير الصادرات التي تبلغ ٣,٣ مليون طن. هذا الاختلال يولد فائضاً في الحاويات المتاحة لنقل الصادرات، وعدم وجود آلية للوصول بشكل سريع إلى شحنات لاستغلال هذه الحاويات الفارغة ينتج عنه وجود عدد كبير منها يتم تحميله فارغاً على السفن.

ولا تزال حركة الواردات عبر موانئ مصر بطيئة، فالزمن الذي تقبّع فيه الحاويات في ساحة الميناء بعد تفريغها من السفن يمكن أن تتجاوز عشرة أيام. ويرجع السبب الرئيسي للتأخير الطويل للشحنات إلى كفاءة عمليات وإجراءات التقدير والتخليص الجمركي. وحدث تأخير يصل إلى ما بين ٥ إلى ٢٠ يوماً بالنسبة للشحنات المستوردة، يعتبر من الأمور الشائعة، بينما يستغرق الزمن في الموانئ ذات الكفاءة مدة لا تزيد على يومين.

وبالنسبة للصادرات، نجد أن زمن التعامل، كنتيجة لسياسة الحكومة التي تهدف إلى تخفيض تكلفة الصادرات، قد تحسن بدرجة كبيرة. فالأمر لا يحتاج لأكثر من يومين أو ثلاثة للتخليص على الحاوية الموجودة في الميناء.

ومنذ عام ١٩٨٩، كان معدل نمو حركة الحاويات - معنية بما يعادل ٢٠ قدم - نحو ١٦% سنوياً. وقد انخفض معدل النمو، نتيجة للانخفاض الحاد في حركة الشحنات العابرة، بدءاً من عام ١٩٩٧. وحتى عام ١٩٩٥ شهدت مصر ارتفاعاً كبيراً في تجارة الشحنات العابرة، ووصول سفن الحاويات الكبيرة إلى الموانئ المصرية، وتحديداً ميناء بورسعيد، لتسليم وتحميل الحاويات من المصدرين والى المستوردين. وقد وصل حجم التجارة العابرة بالحاويات في عام ١٩٩٥ إلى نحو ٨٠٠,٠٠٠ وحدة حاوية تعادل ٢٠ قدم سنوياً، ثم انخفض حجم هذه التجارة بمقدار ٥٠% في عام ١٩٩٨ ليصل إلى ٤٠٠,٠٠ وحدة فقط. ويرجع السبب في هذا النقص إلى عدم قدرة الموانئ المصرية على المنافسة مع الموانئ المحورية الجديدة التي نشأت في البحر المتوسط.

وقد انخفض تكرار وصول سفن الحاويات العملاقة إلى الموانئ المصرية بشكل كبير خلال السنوات القليلة الماضية. وكان من نتيجة ذلك، أنه كان لزاماً على المصدرين المصريين شحن بضائعهم على سفن الإمداد إلى الموانئ المحورية غير المصرية. وإذا كانت مصر قادرة على استعادة وضعها وتحسين كفاءة عملياتها مرة أخرى، بحيث تصبح رائدة في تقديم خدمات الشحنات العابرة في البحر المتوسط، فإن التكلفة الإضافية لخدمة سفن الإمداد التي تخدم المصدرين في نقل بضائعهم إلى الموانئ المحورية غير المصرية، يمكن إلغائها. وينجم عن ذلك تخفيض تكلفة شحن الحاويات المصدرة.

إن عدد خطوط الحاويات التي تستخدم أسلوب الانزلاق (الدرجة) ، وتخدم الموانئ المصرية بشكل مباشر، أو بطريق غير مباشر، من خلال الشحنات العابرة أو الموانئ المحورية، يصل إلى ٤٨ خطاً. وتقدم هذه الخطوط خدمات النقل إلى جميع موانئ العالم، ومع الموانئ الكبيرة والتقليدية مثل ميناء بلتيمور، تصل الخدمة بشكل يومي تقريباً، ومع الموانئ الواعدة مثل ميناء "مايوتو" في موزمبيق التي تقع على الساحل الشرقي لجنوب أفريقيا، تقدم الخدمة مرة في الأسبوع تقريباً.

معدلات النولون البحري:

أوضح تحليل قاعدة البيانات الكاملة لعام، والتي قام بجمعها المكتب الأمريكي للتعداد، والتي تشمل على جميع الواردات القادمة بطريق البحر والجو إلى الولايات المتحدة، من جميع الدول، أنه بعد تونس والمغرب، تدفع مصر أقل معدلات نولون للنقل عبر المحيط بالنسبة لصادراتها إلى الولايات المتحدة. والتصنيف الأعلى لتونس والمغرب يكون معقولاً بالنظر إلى قرب هذه الدول من الولايات المتحدة بمسافة تصل نحو ٣٠٠٠، ٢٠٠٠ كيلو متر على الترتيب. ولا يوجد دليل من البيانات المتاحة، يشير إلى وجود تمييز ضد المصدرين المصريين من جانب خطوط النقل البحري التي تخدم الولايات المتحدة، من خلال تقاضى معدلات نولون أعلى مما تتقاضاه من المصدريين المنافسين في الدول الأخرى.

ولاختبار ما إذا كان الأمر صحيحاً من عدمه، بالنسبة لخطوط الشحن التي تخدم شمال أوروبا، والشرق الأقصى، وغيرها من الأقاليم، وحيث لم تتوافر عدة بيانات شاملة، فقد تم جمع بيانات عن عينة من معدلات النولون من المصدريين، ووكلاء الشحن، والخطوط الملاحية. وقد كان هناك تنوع كبير فيما يزيد على ٥٠ من معدلات النولون البحري، تم جمعها من خلال المقابلات الشخصية. على سبيل المثال، نجد أن خمسة من معدلات النولون لحاوية جافة حجمها ٢٠ قدم، من الإسكندرية/ أو الدخيلة، إلى الشرق الأقصى، تتراوح بين ٣٠٠، ٦٠٠ دولار أمريكي، بمتوسط مقداره ٤٨٥ دولار أمريكي. وتتراوح معدلات النولون إلى الشرق الأقصى، من أربع من الدول المجاورة بين ٢٥٠ دولار، ٦٠٠ دولار أمريكي، بمتوسط يصل إلى نحو ٤٨٧ دولار أمريكي. وتبلغ معدلات النولون من الإسكندرية/أو الدخيلة إلى شمال أوروبا بين ٢١٦ دولار أمريكي، ٥٣٣ دولار، بمتوسط يبلغ ٣٤٤ دولار أمريكي. وتبلغ معدلات النولون من لبنان وقبرص إلى شمال أوروبا، مبالغ تتراوح بين ٢٤٣ دولار، ٥٠٠ دولار أمريكي، بمتوسط يصل إلى نحو ٣٠٧ دولار أمريكي. وفيما يتعلق بالشحن إلى أقاليم أخرى مثل أمريكا الشمالية، والخليج العربي، وجنوب أوروبا، كانت معدلات النولون من الإسكندرية/ أو الدخيلة أقل مقارنة بنظيرتها في الدول المجاورة. وبالنسبة للشحن إلى أمريكا الشمالية، فإن البيانات تؤيد النتيجة التي توصل إليها المكتب الأمريكي للتعداد بأن معدلات النولون من مصر منخفضة.

جملة القول، أن البيانات توضح أن معدلات النولون البحري من مصر إلى الدول الأخرى منخفضة أو مقاربة للمعدلات السائدة في دول الجوار. ومع ذلك، وبالرغم من أن الجداول لا تقدم دليلاً مبدئياً على أن خطوط الشحن تتقاضى من المصدريين المصريين معدلات نولون

أعلى مما تتقاضاه من المصدرين في دول الجوار، فالبيانات ليست كافية للوصول إلى برهان إيجابي. وعلى خلاف الحالة التي تمت مناقشتها عاليه، حيث كانت البيانات مقدمة من المكتب الأمريكي للتعداد، وحيث يمكن الوصول منها إلى نتيجة إيجابية مفادها أن معدلات النولون بالنسبة لمصر تكون منخفضة، فإن حجم العينة صغير جداً، ودرجة التباير في البيانات مرتفعة جداً بحيث لا يمكن الوصول إلى نتيجة قاطعة بالنسبة للشحنات إلى دول أخرى غير الولايات المتحدة الأمريكية. على سبيل المثال، بالنسبة للنقل البحري إلى شمال أوروبا، كانت هناك سبع قوائم تسعير فقط متاحة للنقل من الإسكندرية/ أو الدخيلة، وكانت أسعار النولون تتراوح بين ٢١٦ دولار أمريكي، ٥٣٣ دولار. وبالنسبة لأسعار النولون من دول الجوار إلى شمال أوروبا، فقد توافرت فقط أربع قوائم تسعير، ثلاث منها كانت متطابقة لأنها من نفس الخط الملاحي. ومن وجهة النظر الإحصائية المدققة، فإن الفرق بين المتوسطين (٣٤٤ دولار أمريكي، ٣٠٧ دولار) ليس معنوياً.

إن مثل هذا التباير في أسعار الشحن عادي جداً، بعكس النقل الجوي، فهناك معدلات متفق عليها تستخدم كأساس للمساومة للحصول على خصومات. إن أسعار النقل البحري الموجودة بالجدول هي المعدلات الحاضرة، وهي تتأثر بعدد كبير من العوامل، أهمها المنافسة، والحركة الموسمية، ومدى توافر الفراغ على السفينة، ورغبة الخط الملاحي في كسب حصة من السوق في وقت تقديم عرض الأسعار والمنافسة شديدة في الوقت الراهن، بسبب انخفاض نشاط الشحن في الشرق الأقصى وأقاليم أخرى بسبب الكساد.

وقد تم تجميع بيانات مماثلة عن رسوم تداول الحاويات بالموانئ المصرية وموانئ الدول المنافسة في شرق البحر المتوسط. وتبلغ رسوم تداول الحاوية مقاس ٢٠ قدم المحملة بالصادرات، بحسب البيانات التي تنشرها هيئة الميناء في الإسكندرية والدخيلة، نحو ١١٥ جنيهاً مصرياً (تعادل ٣٥ دولار أمريكي). ويشتمل هذا المبلغ على العديد من رسوم عمليات التداول بما فيها نقل الحاوية من وإلى ساحة تخزين الحاويات، وكذلك تحميل الحاوية على سطح السفينة. ويضاف، فوق ذلك، ما يعادل ٣٠% في المتوسط، مقابل خدمات التوكيل الملاحي، وهي ما يصل بتكلفة إجمالي تداول حاوية التصدير إلى ٤٣ دولار أمريكي.

وعند مقارنة تكلفة تداول حاوية التصدير والتي تبلغ ٣٥ دولار، بتكلفة تداول حاوية الاستيراد والتي تبلغ ٧٥ دولار أمريكي، وحيث أن تكاليف التداول الفعلية واحدة في الحالتين، فينبغي

ان تكون التكلفة الكلية واحدة لهما أيضا. ويرجع السبب في انخفاض رسوم تداول حاوية التصدير إلى استخدام هذا المعدل المنخفض كمعدل تشجيعي بهدف تخفيض تكلفة الصادرات.

وتوضح بيانات التكلفة التي تم تجميعها أن تكلفة تداول حاوية التصدير في مصر تأتي في المرتبة الثانية كأقل تكلفة - حيث تنخفض التكلفة في إسرائيل فقط ، حيث تبلغ ٣٩ دولار للحاوية مقاس ٢٠ قدم. وقد أشار بعض العالمين ببواطن الأمور بإدارة الموانئ الإسرائيلية أن رسوم تداول الحاويات في الموانئ الإسرائيلية مدعم بشكل كبير. أما في الدول الأخرى القريبة من مصر، متضمنة قبرص، وإيطاليا، وأبو ظبي، والتي أمكن الحصول على بيانات بشأنها، فيتم تقاضي ثلاثة أمثال ما يتم تقاضيه من رسوم في مصر. لذلك، لا يبدو أن رسوم التداول في الموانئ المصرية تعوق المصدرين المصريين.

النقل النهري وبالسكك الحديدية:

إن إمكانية حدوث تحسين سريع في نظام النقل في النهر والترع من خلال الاستثمار العام والخاص تبدو كبيرة ، حيث أن نحو ٨٥% من أسطول نقل البضائع يعمل من خلال القطاع الخاص . وكما هو الحال مع الأنماط الأخرى من النقل، فإن جذب الاستثمار الأجنبي من أجل تحسين كفاءة وتوسيع طاقة أسطول نقل البضائع، يعتبر واحداً من أكبر العقبات التي تواجه حدوث التحسن.

وبالرغم من أن نظام النقل المائي الداخلي ممتد بشكل كبير، فإنه ينقل ٤ % فقط من إجمالي البضائع المنقولة داخل مصر. إن رفع كفاءة وإنتاجية النقل النهري يمكن أن يساعد، على وجه الخصوص، في تحويل حركة نقل البضائع الصب (مثل الحبوب) بعيداً عن شبكة الطرق، الأمر الذي يقلل من الحاجة القيام باستثمارات مكلفة من أجل توسيع طاقة شبكة النقل بالطرق.

وتملك مصر واحداً من أطول نظم النقل بالسكك الحديدية، يوازي طول نهر النيل، ويمتد حتى السودان وليبيا، كما يتصل أيضاً، من خلال شبه جزيرة سيناء بنظام السكك الحديدية في بعض دول شرق البحر المتوسط. وعلى الرغم من امتداد هذا الخط الحديدي، فإنه ليس متكاملًا مع نظم النقل الأخرى، كما أن اتصال هذا الخط الحديدي بالموانئ ليس متطوراً بقدر كاف. كما أنه غير مزود بأسلوب الانزلاق المتخصص، المصمم من أجل التعامل الكفاء مع

البضائع الصب، والحاويات، والشاحنات ذات المقطورة. وفي ظل هذا الوضع، لا يستطيع نظام السكك الحديدية أن ينجز الوظيفة الحيوية التي تتمثل في خدمة أشكال النقل الداخلي الأخرى. وبالنسبة لذلك، فالأمر يحتاج إلى استثمارات كبيرة بجانب المصانع، وكذلك في القاطرات. إن إدارة السكك الحديدية ينبغي أيضاً أن تبدأ في التخطيط لربط نظام السكك الحديدية بالمواني الداخلية المستقبلية المحتملة.

النقل باستخدام الوسائط المتعددة:

يعتبر النقل باستخدام الوسائط المتعددة في مصر في طور الحضارة. ويقصد بهذا النوع، نقل الشحنة من الباب إلى الباب، باستخدام اثنين أو أكثر من وسائط النقل. وتتم معاملة البضاعة كشحنة واحدة مستمرة تحت مسؤولية بوليصة شحن صادرة من جهة واحدة. ولذلك، وفي حالة النولون الخارجي بحاوية يتم نقلها باستخدام الوسائط المختلفة، تظل الشحنة موجودة بداخل نفس الحاوية خلال الرحلة بأكملها. ويزيد النقل باستخدام الوسائط المتعددة من سرعة انتقال الشحنة بدرجة كبيرة، ويقلل من احتمالات تلف الشحنة، ويقلل تكلفة رأس المال غير المنتج الذي يتمثل في الحاويات الفارغة، والشاحنات المعطلة، وعربات السكك الحديدية الفارغة، وتأخير السفن والطائرات في المواني والمطارات. ومن الأمور الأساسية المتعلقة بالنقل متعدد الوسائط أن هذا النوع من النقل لا يتضمن مجرد الوسائط الصلبة الملائمة، ولكنه عبارة عن عملية مبنية على منهج النقل باستخدام نظم متكاملة. ويتطلب منهج النظم أن تكون جميع العناصر الموجودة في سلسلة عملية النقل متعددة الوسائط في حالة مرونة، ويمكن الاعتماد عليها كلية.

ومن الواضح أن نظام النقل متعدد الوسائط في مصر لازال في طور الحضارة. على سبيل المثال، بالنسبة للنقل البحري، هناك نقص في الحاويات الفارغة عند موقع المصنع. لذلك، نجد أن العديد من السلع المصدرة يتم نقلها أولاً إلى المواني، حيث يتم وضعها داخل الحاوية. ويرجع السبب الأساسي لنقص الحاويات الفارغة في الأماكن الداخلية إلى وجود صعوبة في إيجاد حمولة عودة للحاوية. لذلك، تقضى الحاوية مدة أطول من المسموح لها (في المعتاد تكون في حدود سبعة أيام) بعيداً عن الميناء، خلال البحث عن حمولة، وبعد مرور المدة المسموح بها يتم تحصيل رسوم تأجير مرتفعة وبمعدل تصاعدي. والنتيجة الطبيعية لذلك هي وجود تكديس شديد في المواني يسهم في ازدحام ساحاتها.

وبالنسبة للنقل الجوي، نجد أن وضع النقل متعدد الوسائط يكون أفضل، بالرغم وجود - مثلما الحال في المواني - زيادة مفرطة في التسليم في المطارات لشحنات تحتاج إلى تعبئة داخل حاويات الطائرات. وأحد الحلول الممكنة لمشكلة نقل الحاويات الفارغة، والتي نجحت في دول أخرى، هي إقامة محطة للحاويات، أو إنشاء مواني داخلية قريبا من المصادر الرئيسية للشحنات. ويمكن تشغيل هذه المحطة عن طريق أحد وكلاء الشحن، أو مجموعة منهم، ويمكن إيجاد نوع من التخصص في تفريغ الشحنات المستوردة، ودمج الشحنات بالنسبة للحاويات المصدرة. ويمكن تعيين مسئول جمركي يعمل بكامل الوقت، بحيث يشرف على تعبئة وإغلاق الحاوية حتى يتم تحميلها مباشرة على ظهر الطائرة أو السفينة.

العوامل المؤسسية والتشريعية:

تعتبر الحكومة المصرية أن النظام القانوني والتنظيمي يجب أن يهيئ للقطاع الخاص البيئة الضرورية التي تشجع على الاستثمار المحلي والأجنبي، وتحقق المنافسة الكثيفة والعدالة، والتي تشجع على تحقيق الكفاءة وزيادة الإنتاجية. واستجابة لهذا الأمر، اتخذت الحكومة المصرية عدة خطوات إيجابية، وخاصة خلال السنوات الثلاث الأخيرة، لتخفيض أو إزالة صور التحيز لصالح شركات القطاع العام، ومن أجل تيسير الاستثمار.

وقد صدر عدد من القوانين والقرارات، كما بدأ العمل بالقانون رقم (١) العام ١٩٩٨، من أجل تحرير أنشطة خدمات المواني، مثل الشحن والتفريغ، وذلك بتعديل مواد القانون القديم رقم (٢١) والذي كان يشجع احتكارات الدولة. كما يسمح القرار الوزاري رقم (٢١٦) لعام ١٩٩٧ لشركات الطيران المرخصة بعمل ساحات للتداول خاصة برحلاتها الجوية. كما يسمح القانون رقم (٣) لعام ١٩٩٣ لشركات القطاع الخاص المصرية بأن تقوم بعمليات الشحن والتفريغ في ميناء الدخيلة بالنسبة للشحنات الصب الجافة (معظمها حبوب). وقد ترتب على ذلك انخفاض بنسبة ٥٠% في تكاليف التفريغ، وزيادة مقدارها ٥٠% في الإنتاجية عن الوضع السابق، حيث كانت شركة قطاع عام واحدة تعمل في مجال الشحن والتفريغ. كما تمت خصخصة، والسماح للقطاع الخاص بإعادة الاستثمار في إنشاء ساحات الحاويات، لكن العوائق التمويلية حالت دون وجود مشاركة مماثلة في مواني دمياط وبور سعيد والسويس. كما يسمح القرار رقم (٣٠) لعام ١٩٩٨ بالخصخصة في مواني مصرية أخرى.

ومع ذلك، يمكن تشجيع المزيد من مشاركة القطاع الخاص، في حالة صدور تشريع يجعل الاستثمار مفتوحا أمام المستثمر الأجنبي والمحلي، بشكل أكثر شفافية وأقل مخاطرة.

وقد اتخذت الحكومة عددا من التدابير لتشجيع مساهمة القطاع الخاص في استثمارات البنية الأساسية للنقل والخدمات المرتبطة، كما تمت الموافقة على خطة عامة لتشجيع الاستثمار من خلال قانون رقم (٨) ل ضمانات وحوافز الاستثمار لعام ١٩٩٧، والذي يهدف إلى تشجيع الإنتاج وزيادة الاستثمار الأجنبي من خلال إزالة الممارسات البيروقراطية، وتيسير الإجراءات. ويأتي تشجيع القطاع الخاص، بصفة أساسية، عن طريق تحسين الربحية بإعطاء حوافز ضريبية، وبالسماح بحرية أكبر في تحويل الأرباح للخارج. ولا خلاف على أهمية ما تم اتخاذه من تدابير، لكن المجال لازال مفتوحا لإجراء المزيد من التحسين.

وتحديدا، تحتاج عملية المشتريات أن تكون أكثر شفافية، وأيسر في التطبيق، ويتحقق ذلك من خلال التعريف الواضح، والكتابة الواضحة للخطوات، والشروط المؤهلة التي ينبغي توافرها مسبقا في الموردين، وعملية تقديم العطاءات، (مرحلة واحدة أو مرحلتين)، والمشاورات الإجبارية قبل تقديم العطاء، وعملية التقدم بالعطاء، والاستلام، وفتح العطاءات، ومعايير التقييم المستخدمة، والفترة الزمنية بين استلام العروض والتفاوض والإرساء، والإجراءات التي ينبغي اتخاذها بالنسبة للعروض غير الملحة، وإجراءات التفاوض، وتسوية المنازعات.

ويمكن الإسراع بعملية الخصخصة إذا قامت وزارة التجارة والتموين، بالتشاور مع الوزارات الأخرى والقطاع الخاص، بتنفيذ الاستثمار في مجال النقل، ورسم إستراتيجية تتعلق بذلك الأمر. ويمكن أن تقوم هذه إلى الاستراتيجية على جرد الأصول العامة التي يمكن تحويلها نحو الخاص، وتحديد أولويات لعملية التخلص من هذه الأصول بتحويلها للقطاع الخاص. وقد يتطلب الأمر نوعا من التخطيط الإستراتيجي تقوم به وزارة التجارة والتموين مع وجود تنسيق وثيق مع الوزارات المسؤولة عن الأشغال العامة، والنقل، والتمويل، وقطاع الأعمال، بالإضافة إلى ممثلين عن جمعيات رجال الأعمال.

لقد ترتب على خصخصة أنشطة الشحن والتفريغ حدوث تحسن كبير سواء في سرعة عمليات تفريغ الحبوب، وفي تخفيض تكلفة الشحن. إن هذا التحسن الذي تحقق في الإنتاجية، يمكن تحقيقه أيضا في مجال تداول الحاويات، وإن كان التشريع الخاص بخصخصة هذا النشاط يسير ببطء نوعا ما. وتبدو العقبة الرئيسية التي تواجه ذلك، في كيفية التعايش مع فائض القوة العاملة التي يمكن أن تنتج عن تحقيق درجة كفاءة أعلى في العمليات. وغنى عن البيان أن مشكلة فائض القوة العاملة قد تم حلها في العديد من الدول الأخرى. ويوصى

بإمكانية الاستفادة من تجارب الدول الأخرى التي واجهت هذه المشكلة بنجاح، وتشجيع خصخصة محطات الحاويات من خلال خطة لترشيد عمالة الموانئ، وتشجيع عمليات التقاعد الاختياري من جانب العمال.

الهيئات الجمركية وأجهزة الفحص:

بالنسبة للتصدير، تحسنت درجة التنسيق بين هيئات الجمارك وأجهزة الفحص الأخرى المختلفة، بشكل كبير خلال السنوات الثلاث الأخيرة. وبغض النظر عن الأمور المتعلقة بالمستندات - والتي لا تزال مفرطة - أصبحت الحاويات والبضائع لا تتأخر بشكل غير مبرر في الموانئ. ولا تزال الشحنات المنقولة بحرا يتم تسليمها مبكرا لأن السفن تفضل تواجد الحاويات في ساحات الموانئ، قبل يوم أو يومين من الإقلاع، حتى يمكن عمل حسابات الوزن الملائم والتوازن في موعدها. ومع ذلك، نجد أن الحاويات التي تصل صباح يوم الإقلاع يمكن التعامل معها طالما تم حجز الفراغ الخاص بها على السفينة. وفيما يتعلق بالشحن الجوي، نجد أن عمليات التخليص تتم في الموعد المحدد بشرط سلامة المستندات.

وبالنسبة للواردات، لم يتحقق الكثير من التحسن. فلا زال الوقت اللازم للتخليص على الشحنة الواردة يمكن أن تتجاوز (١٠) أيام. وأسباب هذا التأخير معقدة ومرتبطة ببعضها البعض. ولا يتوافر لكشافي الجمارك المعدات والأجهزة الحديثة، بالإضافة إلى عدم تدريبهم على التعامل مع التكنولوجيا الحديثة المطلوبة لعمليات التخليص المسبق على الشحنة، ويتطلب الأمر عمليات تشغيل إلكترونية للبيانات، حتى يتم تخفيض عمليات الفحص المادي باستخدام تحليل المخاطر. ويحتاج الأمر إلى أفعال عاجلة ثم تدابير لتبسيط المستندات وتناسقها، وتدريب وكلاء الشحن واعتمادهم، والتخليص المسبق وتشغيل البيانات الخاصة بمستندات التخليص إلكترونيا، وتحليل المخاطر، بحيث يتحقق هدف تعظيم الضرائب الجمركية وغيرها من الرسوم، دون الحاجة للتدخل في حركة التجارة. والأمر الأكثر أهمية، هو العمل على تغيير النظرة التي تحكم اتجاهات الإدارة الجمركية، بحيث تركز على أهمية الدور الذي ينبغي على الجمارك أن تلعبه لتشجيع التجارة من خلال تيسير الإجراءات، ويجب أن تصبح جزءا من الحل وليس جزءا من المشكلة. ويحتاج الأمر إلى برامج تدريبية وتعليمية تضم، بالإضافة إلى المناهج التقليدية الخاصة بالتصنيف الجمركي، والتقييم، وغير ذلك، مناهج تتعلق بحسن معاملة العميل، والعلاقات العامة، والقيم الخاصة بالنشاط الاقتصادي والتعاون،

واقتماديات التجارة، وإجراءات العمل التجاري، بالإضافة إلى التدريب على عمليات الإدارة والإشراف.

التوصيات وخطة العمل:

توصلت هذه الدراسة إلى وجود مدى وافر لإمكانية تخفيض تكلفة التصدير، ومن ثم تحسين الوضع التنافسي للمصدر المصري. وفيما يلي عدد من التوصيات التي تم عرضها بشكل موجز. ومن ناحية أخرى، نجد أن التدابير المطلوبة لتنفيذ هذه التوصيات معقدة ومعتمدة على بعضها البعض. إن التنفيذ المنفرد لإحدى التوصيات، لنقل مثلاً، إنشاء ميناء جاف، سوف يؤدي - كما تشير تجارب العديد من الدول النامية - إلى فشل ذريع. فالميناء الجاف ينبغي أن يأخذ مكانه داخل نظام معقد يشتمل على البنية الأساسية المساندة (الطرق، والسكك الحديدية)، وضمان القيام بعمليات الصيانة، وتوافر النظم التشريعية والتنظيمية والمؤسسية المصممة بشكل جيد، يساعد على ترشيد مشاركة القطاعين العام والخاص.

ويصح الأمر كذلك بالنسبة لتوصيات، مثل تلك التي ترتبط بمنح الامتيازات الخاصة بإنشاء سكك حديدية وطرق يدفع من يستخدمها رسوم استخدام، وذلك من خلال نظام البناء والتشغيل ونقل الملكية BOT، أو التحويل إلى شركات، أو خصخصة ساحات الموانئ. وحتى التدابير التي تبدو سهلة التنفيذ ينبغي تحليلها بعمق. فعلى سبيل المثال، نجد أن تحسين عمليات صيانة الطرق يمكن أن تمثل إحدى التوصيات. وكذلك تدريب رجال المرور وإعطائهم صلاحيات تنفيذ قواعد المرور، الأمر الذي يسهم في تخفيف ازدحام الطرق، يمكن أن يكون توصية أخرى.

وحتى مع هذه التدابير التي تبدو سهلة بشكل واضح، فإن العناية تكون مطلوبة. وتشير تجارب الدول الأخرى، بوضوح، إلى أن المشكلة الرئيسية المتعلقة بصيانة الطرق، وتنفيذ الشرطة للأحكام، لا تتعلق بعدم الرغبة من جانب الحكومة. لكن الأمر يرجع إلى عدم توافر التمويل الكافي الذي يمكن الاعتماد عليه للقيام بمثل هذه الوظائف، وضعف الإطار المؤسسي اللازم للإدارة السليمة لهذه الوظائف. وكما يتضح من نجاح البرامج التي استهلها البنك الدولي وغيره من المنظمات المانحة، فقد حدث تغيير في التفكير، بحيث تم اعتبار صيانة الطرق وإدارتها أمراً ضرورياً. هذا النمط الجديد من التفكير يشتمل على قضايا صعبة مثل تمويل عمليات الصيانة عن طريق الرسوم التي يدفعها مستخدمو الطريق، وأن تتم عمليات

تخطيط الطرق وصيانتها وإدارتها من خلال القطاع الخاص إذا كانت هناك ضرورة لذلك. إن إيجاد الحلول يحتاج إلى إتباع منهج المشاركة، الذي يضم مستخدمي الطرق، والمنتجين، وهيئات القطاع العام المسؤولة عن هذه الطرق.

ولكن نضمن أن يتم تنفيذ التوصيات على أساس سليم، قامت هذه الدراسة بوضع ما اقترحتَه من توصيات في شكل عناصر ينبغي التركيز عليها في إطار دراسة شاملة لقطاع النقل تغطي كافة أنواع النقل. ويضم الملحق (د) من هذه الدراسة إطاراً مقترحاً لمثل هذه الدراسة، وهي تقليدية فيما عدا التركيز على مجالات الوسائط المتعددة، وعلى طرق اندماج القطاع الخاص فيها. وتحتاج هذه الدراسة إلى نحو (٥) شهور لإنجازها، وتتطلب جهد من الخبراء يوازي (٢٧) شخص/شهر. وتقدم مثل هذه الدراسة خطة عمل عن كيفية الوصول لأفضل تنفيذ للتوصيات التي قدمتها الدراسة الحالية، بالإضافة إلى التوصيات الأخرى المرتبطة بالنقل المحلي للبضائع والركاب.

التوصيات الخاصة بالنقل الجوي:

- تحسين كفاءة وكفاية تسهيلات النقل الجوي لتخفيض التكاليف وإلغاء التأخير والتلف.
- توسيع طاقة الرفع خلال مواسم الذروة من أجل تخفيض النفقات المرتفعة، وعدم ضياع الفرص التصديرية التي تتوافر في ذلك الوقت.
- تقديم المعلومات السوقية، والتدريب على تخطيط الإمدادات من جانب بعض المصدرين.
- تدعيم التشريع حتى يتم تجنب تعارض المصالح والتحيز ضد القطاع الخاص الذي يعمل في هذا النشاط في مواجهة القطاع العام.

التوصيات الخاصة بالمواني وقطاع النقل البحري:

- تحسين كفاءة عمليات المواني من خلال عمليات التحديث المستمر.
- زيادة طاقة المواني من خلال تيسير إنشاء المواني الجافة، ومن خلال الاختبار الواعي للاستثمارات المطلوبة لتوسيع المواني وتحديثها.
- الاستمرار في عمليات ترشيد إدارة المواني وعملياتها عن طريق إعادة تعريف وتحديد الأدوار الخاصة بالقطاعين العام والخاص، وتقديم إطار قانوني ومؤسسي جديد،

والسماح بإعطاء كافة الامتيازات الخاصة بالعمليات التجارية للقطاع الخاص، مع تحويل هيئات الموانئ إلى هيئات مالكة.

- تخفيض زمن التأخير في التعامل مع الشحنات الواردة من خلال إجراء إصلاح جمركي، واتباع التكنولوجيا الجديدة التي تقوم على تبادل البيانات إلكترونياً.
- تحسين إدارة الحاويات الفارغة، وإعادة كفاءة عمليات الشحنات العابرة.
- تحسين عمليات السكك الحديدية التي تخدم الموانئ من خلال تحسين الوصلات بين الموانئ وخط السكك الحديدية.

التوصيات الخاصة بالنقل البري:

- تخفيض التكاليف المرتفعة المرتبطة بالشاحنات الجديدة، وذلك من خلال تخفيض الضرائب والرسوم والجمارك.
- تحسين إنتاجية الشاحنة عن طريق تخفيف زحام الطرق، وذلك من خلال إدارة أفضل لحركة المرور، وصيانة الطرق، وعدم التحميل الزائد، وزيادة الأمان، وانضباط السائقين.
- تيسير إنشاء نظم معلومات تربط القائمين بعمليات النقل البري مع الشحنات المتاحة.
- توسيع شبكات الطرق، زيادة مشاركة القطاع الخاص لأقصى درجة من خلال القيام بمشروعات الإنشاء والتشغيل وتحويل الملكية BOT.
- الإسراع بالجدول الخاص بتحديث وإنشاء الترع، وربط هذه الممرات المائية بالموانئ ومراكز الشحن الداخلية .
- إعادة إنشاء السكك الحديدية لدورها الاقتصادي السليم في نقل الشحنات الصب منخفضة التكلفة، وتطوير دورها الجديد في نقل الحاويات، من خلال إعادة صياغة الإدارة والتشغيل. والهدف من ذلك هو أن تعمل السكك الحديدية كمشروع تجارى قابل للاستمرار، ويتم ذلك عن طريق التحديد الدقيق لدور القطاعين العام والخاص.