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# The Impact of Enhancing the Egyptian Dry Ports on the Economy

Mr. Yahia Magdy, (Arab Academy for Science, Technology and Maritime Transport, Alexandria - Egypt) E-mail: yahya.magdy20@gmail.com

> Dr. Ahmed Ismail ( Deanery of admission, AAST\$MT, Alexandria, Egypt) E-mail: yaseenahmedismail@gmail.com

#### Abstract

# Purpose

Nowadays the trade cycle is very important whether import or export, and each country tries to decrease the Leadtime of the cargo movement can achieve better revenue from these transactions. from this the industrial cities are built and for that to facilitate the cargo movement the dry ports concept is found. Dry ports are same as the seaport with all procedures done there but it needs another mood can transfer cargo from this to there. With below research will call this, that will change the perspective of tucking from that the dry ports will relate to seaports by railroad instead of trucing that cost the country huge cost yearly for maintainer which will decrease the total cost which will affect the cargo unit cost whether is imported or exported.

### Design/methodology/approach

This research is following qualitative method; and will conduct through SWOT analysis on the Egyptian market.

### Findings

Dry ports are very important from each one deals with them; from Shipping line perspective, Freight forwarders perspective and Shipper perspectives

### **Research limitations/implications**

This research is limited to the new project started from January 2020 for build a dry port at  $6^{th}$  of October city.

# **Originality/value**

This research considered the first empirical study about enhancing the role of dry ports in Egypt.

Keywords: Seaport, Egyptian dry ports, October city, SWOT.

# 1. Introduction

This research aims to present previous research on the concept of dry ports and their connection to water or main ports and to review the dry ports existing in the world, that is, shipping stations that use the term "dry port" in their names. Therefore, the purpose of the paper is to clarify the concept by showing potential contradictions or similarities and agreements between theory and practice. Starting with a review of research and applications on the dry port concept, this study provides a review of the world's dry ports. In theory, many qualitative criteria can be established regarding the scope or features of services in dry ports, although the same may vary depending on customer demand. However, the end purpose of dry ports is the same, regardless of this range. (Lumsden, June 2010).

Dry ports are considered at present more important in terms of facilitating and reducing the time required to finish all the procedures required to prepare the goods for export. Therefore, if the idea succeeds, the possibility of accepting imported shipments to these dry ports will be discussed to terminate customs on them and to be delivered to the importer. By using the dry port, the lead time for the delivery of the container from the dry port to the seaport will reduce the cost of trucking, official receipts, and highway maintenance cost the other hand, which will help us save money and time on the source, the importer and the country.

Based on the above, we need to start investing in the railways from the Egyptian dry ports such as the 6th of October and the tenth of Ramadan and Badr City to the Egyptian seaport such as Alexandria, Dekhila Port, East, and West Port Said, Damietta, and Sokhna. By investigating and establishing work in these ports to implement railroads, we will be able to reduce the time and cost while reducing customs clearance procedures, and consequently, the shipping permit will be issued earlier than normal.

Egypt's vision today is to increase exports and reduce imports of goods to help other industries emerge. From this perspective, they built dry ports for Tenth of Ramadan City, Sixth of October City, and Badr City, so they could reduce time and customs cost for Egyptian products to be exported. But the cost from the other side will increase with trucking costs and other fees, to reduce these fees, this research will talk about how to do this by implementing a railroad with a fixed schedule linked to the shipping schedule to reduce the following:

The cost requested on the road as official receipts (military receipt). The time required to enter the container and submit the shipping permit. From the above, this paper will discuss how to build and operate this railway. This project started ht6 eht noof October City and will be operated by DB Schenker 3A and El Sewedy Electricity Company.

# 2. Literature Review

Initially, the "dry port" came to be described as an inland terminal from and to the effects of freight. Freight payments must be issued, with this concept initially applied to it would be closely related to all types of cargo (UNCTAD, 1982). However, in theory, and practice, the concept was not more effective to be closely related to the rapid growth of containers and the associated modifications in the handling of goods (UNCTAD, 1991), but also to be implemented in the publication of different contexts that have the unusual characteristic related to an indoor venue that performs unique outlet functions" (Cullinane and Wilmsmeier, 2011).

The dry port acts as a front end of an inland seaport: it is a multi-modal, inland terminal with miles on a direct and high-potential port. Dry ports are placed in strategic places, near factories and local markets, and to be connected to seaports. (Russo, March 12, 2019).

### A. The Features of Dry Ports in Mounting Countries

Dry port expansions are being used within existing research such as the Customs Clearance Depot (ICD) or the Inland Customs Depot, Empty Container Storage Yard and the aging of incoming and outgoing containers (Beresford and Dubey, 1990, ECE, 1998), inland terminals (UNCTAD, 1982), the warehouse inner container (Russo, 2005) and the inland port (ECE, 2001). The term dry port is defined as: "An intermodal inland terminal which is directly connected to the seaport (s) with a high-capacity transportation proposition (s), whereby customers can leave/select their standard equipment as if they were immediately at a seaport" (Rousseau et al., 2009).

The full spectrum dry port covers a wide range of competencies that includes customs clearance; storage; Consolidation of goods, an adaptation of goods to distinct delivery modes; Warehouse property discipline protection, repair, and price-added services. Rousseau et al. (2009) classified inland nodes as near, diversified, and dry outlets, based on the distance to seaports and location within the inland supply chain. This classification is very similar to the idea of satellite stations, transmission centers, and indoor load centers (Notteboom and Rodrigue, 2009). Some other methods of classifying dry ports depend entirely on the directional development, the ratio of their connection to the seaports, and their storage capacity for containers. (Wilmsmeier et al., 2011).

An external or sea-linked dry port method to be developed using a seaport authority, together with the port authority or terminal operator. This is mainly the case in advanced structures such as Europe and the northern United States where seaports have reached the stage of acclimatization (Notteboom and Rodrigue, 2005) through strong cooperation and coordination with inland logistics sites. The internal and external terminals are developed through the internal parties, which include the freight company and the transport companies, especially considering serving the local market.



Figure (1) 6th of October dry port.

Most inland terminals in developing economies are land-driven as they are built to service export-based industrial areas. Consequently, inland locations in developing economies dominated by the interests of players on the ground generally rely on a high level of multimodal integration with seaports through high-capacity, reliable and flexible trains, or components of inland waterways.

Dry ports in developing economies differ from dry ports in advanced systems also in other approaches. First, it is likely to be located near production bases, or possibly internal economic zones, as shown in the case research in India (Ng and Gujar, 2009), the Indochina region (UNESCAP, 2014), and South Africa (Cronje et al., 2009).). According to Ng and Cetin (2012), the cheaper version of dry port positioning, which works well in superior economies, may therefore be inappropriate for a developed system. They argue that inland nodes in growing international locations may be more "mass-oriented" than "chain-oriented" presentations.

Besides an area at the stopping point of the inland supply chain, dry ports in developing countries may also be in the middle of the chain for transporting goods between the marine and railway networks. Such a form of the dry port is hardly visible at the border places. Inland terminals close to seaports are rarely found in developing structures because this form of dry ports is mainly propelled by sea. Second, production bases in developing countries are numerous but spread over huge neighborhoods.

This supports the creation of several small ICDs that likewise complicate the assembly of cargo for multi-modal offerings and result in a heavy reliance on road freight to move cargo to/from seaports over medium or long distances. Dry ports in developing countries have greater risks in facing the loss of trained/experienced human resources and dire

information system assistance for inland transportation (see for example Garnwa et al., 2009 case on Nigeria).

#### **B**. B. Squeeze they wished to dry up the harbor railroad:

The dry port remains one by one because of typical accessibility and throughput, and matched market and depth function such as base and tracking policies and authorities. Geographical features related to typical availability and inland close access play a vital role in influencing the emergence and improvement of dry ports. Each domestic market has its potential that requires a unique shipping proposition. As a result, there may be no unmarried dry port strategy in conditional probability clauses where the local effect remains fundamental.

The development of global supply chains and the approach are instrumental in defining and allocating current freight. Circularly, this has forced players in a freight delivery enterprise (haulage agencies, terminal operators, and logistics carriers) to monitor supply chains as a whole and make legs aware where capacity and reliability are an issue.

Once the shipping networks and port activities were better incorporated, mostly through cooperative acquaintance between ocean freight and port operations. inland transportation became clean enough and centered on the inland terminals issue of this approach. This was especially the case in Western Europe and the Northern USA, which tended to be in the stalled reception of many container supplies and delivery chains where inbound logistics dominated. Also, the focus has shifted to thinking in the inbound terminals of the early ranges of global delivery chains (outbound logistics), that is, in locations with an export-oriented feature.

Indoor terminals have evolved from simple multi-modal locations to being integrated within logistics areas. Indoor stations (especially railways) have always been around due to being places where insurance is made unique in the market. The container transport process affected this insurance by selecting terminals that were serving a much wider market area. This longitudinal interchange has also arrived here with a meaningful alternative such as the Multimedia Terminals which are starting to enjoy the specialization of roles based entirely on their geographical surroundings, as well as their 'neighborhood' within the delivery chains. In many cases, dry ports have witnessed clustering of logistical sites in the vicinity, which is the main thing for logistical polarization technology and the emergence of logistical areas.

In addition to potential common issues and compatibility within the periphery, a dry port is an actively integrated area or in many cases, an emphasis is placed on its incorporation into control practices in the delivery chain. Moves to reap this goal require much paperwork that includes gathering freight distribution facilities, customs clearance, container warehouses, and 1/3 of celebration logistics (freight forwarders, truck drivers, and co-loaders). A dry port can also become a buffer in delivery chains, emerging as a temporary storage facility frequently linked to warehouse planning structures close to distribution facilities (Rodrigue and Notteboom, 2009).

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Customers can also be availed with the help of any such approach because they no longer pay for their orders until the container leaves the terminal, delaying settlement even though the stock is close and available. The arrival of dry ports in some cases underscores some paucity of traditional inland freight distribution that had to be mitigated.

First, when a deep offshore station facility has limited space available for augmentation, the promotion of activities at the main terminal begins to look for sites with the lower ground value that support less intense shipping activities. Second, capacity issues in seaport areas seem to be a major driver of dry port development as the inland terminal system increases the intermodal capacity for inland freight distribution. Third, with long-distance transport corridors, dry ports give a higher level of accessibility due to lower distribution costs and improved capacity. These high-capacity inland transport corridors allow ports to penetrate the local inland areas of the competing ports and thus expand their cargo base.

Dry ports are usually characterized as inland terminals with strong connections to the sea gateway ports through joint high-potential shipping services. Within the preparation of the delivery chain, dry ports should function as extensions of seaports or inland hubs to facilitate the movement of goods between seaports and remote areas. In developed economies, such as the northern United States or Europe, the seaports authority and operators are the main drivers of dry port development to fix limited capacity problems, natural restrictions, and external factors in seaports or improve access to remote areas, especially for imported goods.

In comparison with, Dry ports in developing economies are driven by land and are installed to collect (export) shipments from regional monetary areas and send them to seaports. In developing economies, dry port development is accelerating to enhance inland logistics performance (Ng and Cetin, 2012). Adjacent area planning is one of the vital issues for dry port development in developing economies. While reducing setup expenses and general logistics prices are essential elements in assessing the dry port area, other, more qualitative factors in the region are driven by using more than one concern stakeholder such as operators, customers, and the network.

#### Gap analysis:

From the previous research, the concept of the dry port is very important that helps in extra flow cargos, decrease the Leadtime, and cost which will help the factories to increase the production and the transactions of the trade whether import or export. But throw these studies the authors did not find any papers or articles talk about Egypt and the current 3 dry ports. The researcher will increase the flow of the cargos and help the Egyptian ports (dry port and seaport) to relate to each other by a railway road which will help in decreasing the time of gate in the cargo, decrease the time of the customs, decrease the cost of the official receipts will be lower than today and the costs needed to the maintenance of the road that appears from the heavy trucks use it.

### Contribution:

DB Schenker achieves another innovation in Egypt as the country scratches a new milestone in its history to construct its first dry port. Along with El Sewedy Electric, and 3A International; DB Schenker in Egypt won the bid of operating the USD 176 million hubs, which will be the biggest facility of its kind throughout Africa. The dry port is one of eight ports the Egyptian government plans to construct. Situated on the 6th of October City; outside the gates of Cairo; the hub is scheduled to become operational in 2022 and is predicted to handle 720 containers (20-Foot Equivalent Units) per day - a total of about 250,000 TEU per year. Lately 3A International had quitted the agreement and only El Sewedy Electric and DB Schenker are the only responsible with the Egyptian government for this project.

# **3. Research methodology**

Schwardt (2007) defines studies technique as a theory of ways an inquiry must continue. It includes evaluation of the assumptions, concepts, and techniques in a particular method of inquiry. consistent with Schwardt (2007), Creswell and Tashakkori (2007), and Teddlie and Tashakkori (2007), methodologies explicate and outline the forms of problems which are well worth investigating; what constitutes a researchable problem; testable hypotheses; a way to body a hassle in such a way that it can be investigated the use of designs and strategies; and a way to choose and expand the suitable way of gathering records.

### Quantitative research

Quantitative research, in line with Van der Kothari (2004), is a study approach supposed to test theories, defining statistics, representing relationships among variables, and forecasting consequences. Quantitative research makes use of tactics from the standard sciences that are designed to certify independence, generalizability, and dependability (Weinreich, 2009). The techniques used in quantitative studies include a random collection of studies contributors from the have a look at human beings in an independent way, the homogeneous survey or intrusion they acquire, and statistical strategies used to check encoded hypotheses concerning the connection between unique variables.

The researcher in quantitative research, in contrast to in the qualitative pattern where he/she is found as a high-quality research device due to his/her lively participation inside the studies method, is taken into consideration as being external to the actual studies, and results are anticipated to be replicable, no matter who conducts the studies.

### Qualitative studies

Qualitative research, is a research tactic aimed toward checking out ideas, determining facts, representing relationships between variables, and predicting consequences. Qualitative studies use strategies from the herbal sciences which might be designed to ensure objectivity, generalizability, and consistency. The strategies used in quantitative studies include accidental series of research participants from the study population in an unbiased manner, the standardized questionnaire or intervention they acquire, and statistical techniques used to check predetermined hypotheses concerning the relationship between specific variables. The researcher in quantitative studies, unlike within the qualitative paradigm in which he/she is

appeared as a remarkable study instrument due to his/her active participation in the studies procedure, is taken into consideration as being outside to the real studies, and consequences are predicted to be replicable, regardless of who conducts the studies. From the above, this research will be the qualitative method used and will conduct a SWOT analysis on the Egyptian market.

# 4. Findings and Discussion

Dry ports are very important and below the perspectives if it applied from each one deal with them.

### Shipping line perspective

Strength	Weakness
<ul> <li>They will offer a new service by each shipping line will apply his schedule for that the freight forwards, shipper and consignee will use this service to save more time and cost.</li> <li>They will gain much profit from this service also when we use this service also not for exporting also in the importing the consignees in these dry port cities will shift to use this service instead of choosing the best port to get their cargos.</li> </ul>	- The Egyptian Government will operate this railroad by themselves, so they must be sure form the daily schedule for each seaport.
Opportunity	Threats
<ul> <li>They will be responsible for the cargo, operating cost of the railroad, they will need to hire more employees to operate these dry port cities.</li> <li>They must manage the schedules of the railroad to be in parallel with vessel schedules to avoid and rollover.</li> </ul>	If they will rent the railroad from the government from this point of view, they will offer a combativeness price to attract the customers.

# Freight forwarders perspective

Strength	Weakness
For the export sector, it will be more useful as they will order each thing from their office at the dry ports from receiving the booking from the shipping line, get the container from the dry port city warehouse, till loading and submitting the S/O (shipping order of the booking). For the import sector, they will help the consignee to get his cargo near to his manufacturing plant will decrease the lead time for customs clearance and trucking.	If the shipping lines operate these dry ports railroad, they will have no other choice, but if the government is going to operate it with a fixed schedule to each seaport this will be good as the price will not varied.
Opportunity	Threats
They will not have any opportunity	The cot they will sell with to the customer whether importing or exporting.



Strength	Weakness
They will not need to load in a day and finish custom clearance the day after which will help them to use the employees efficiently. The cost of trucking will be very low due to replacing it with railroad transportation, so the budget for exporting will be much lower than usual.	They will not face any weakness in using dry ports.
Opportunity	Threats
They will not have any opportunity	They will not have any threats

# **5.** Conclusion

Dry ports will decrease man things as follow:

1. The time needed to release the container from the seaport and to be located at the loading or discharging yard of the factory.

- 2. The cost will decrease by a minimum of 15% for the shipper or consignee.
- 3. The depreciation cost of the truck will decrease as they will no need to take a truck from the seaport to the manufacturing city and only will need it in the dry port city area from the container and to the manufacturing loading yard.
- 4. The road maintenance will decrease as the use for it will only b the car owners.
- 5. Road accidents will decrease also.

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