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# **OMAN AS A FUTURE LOGISTICS HUB: A CONCEPTUAL STUDY**

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#### Abstract

The paper aims to explore the relationship between logistics infrastructures and economic growth in Oman. The method used for this conceptual paper is based on literature reviews from journal articles, conferences, books and online news which are related to the keywords and research area. Logistics infrastructure and logistics educational needs are the crucial elements for a national economic growth. Issues encountered for Oman as a future logistics hub are developing effective coordination between free trade zone areas and logistics infrastructure, and upgrading logistics programs in higher education institutions. There is a need for a greater study on determining the relationship between logistics infrastructures, logistics educational needs and economic growth although a lot of researches solely done on the general economic and education dimensions in Oman. Further research, both empirical and non-empirical, must be done in order to uncover more issues in this area. Plus, the study only covers the logistics and neglects the element of supply chain management.

Keywords: Oman, logistics infrastructure, logistics educational needs, logistics hub

#### INTRODUCTION

Recognizing today's endless globalization and internalization, companies are required to improve their logistic capacity. The developments and advancements in logistics sector have facilitated major business functions such as production, distribution, and marketing. This provides a significant competitive advantage in international trade transactions. It is argued that



effective and accurate planning of logistics sector is able to contribute to the economic growth of a nation (Engman, 2005). Logistics sector is increasingly becoming a vital component of an international trade for assisting a nation's economic growth. Developing and improving logistic sector in one nation contributes to the competitive advantage of the nation (Lean, Huang & Hong, 2014).

Logistics activities are driven by the comprehensive movement of goods. Ballou (2007) explains logistics activities as a movement of goods from raw material source to the last market destination. From the perspective of logistics management, the Council of Supply Chain Management Professionals or CSMP defines it a process of active and productive planning, implementing, and controlling of good, labor, information flow and storage from starting point to last consumer point (Stadtler, 2005). For these logistics activities to perform in a productive manner, every Government in a country must provide logistics infrastructures (Navickas, Sujeta & Vojtovich., 2011). These infrastructures include transportation networks, information and communication devices, storage systems and packing services.

For the developed countries, there are no issues in providing logistics infrastructures (see Arroyo, Gaytan & de Boer, 2006; Bookbinder, 2003). However, for the third world countries, this could be an issue due to the limited economic outputs for the logistics investments (Devlin & Yee, 2005). Investing and developing of logistics infrastructures in the third world countries is a must for these countries to gain a competitive advantage in the international trade. Furthermore, it can create more employment opportunities and provide low costs in import and export activities (Kotzab & Wünsche, 2015).

The Sultanate of Oman (or Oman) is one of the developing countries that focusing on the investment and developing latest logistics infrastructure. It is a country which locates in the Middle East. In 2016, the Growth Domestic Product (GDP) of Oman was USD 66.29 billion (Trading Economics, 2018). The GDP from the service sector, which included logistics, contributed USD 35426.48 million in the same year. The country views logistics is one of the nonoil economic sectors which can strengthen its economy. Oman's strategy of becoming one of the world's leading logistical centers by 2040 received a major boost with the formation of Asyad, an umbrella organization that will oversee Oman's transformation into a hub and charts out the nation's logistics framework (Times of Oman, 2017). Emphasizing on logistics for investment will help corporation and nation gain a competitive advantage in the economy. Kwasnicki (2013) supported the above statement with his view that investment in logistics support activities would broad investments for micro and also macroeconomics. The economy of Oman still depends on the energy sector (oil and gas). Under the Asyad program, Oman is looking for logistics sector as an alternative attributor to its economic growth. Totally depending on the energy sector in the long



run make the Oman economy in danger due to the deterioration in production capacity, high production costs, and fluctuating oil prices (Hakro & Ommezzine, 2016).

Despite the importance of logistics sector for a country economic growth, a research on the impact of logistics activities on economic growth in Oman is still lacking. This country is located at the gateway to the Gulf and has a logical distribution hub for the Indian subcontinent and nations in East Africa. Despite its attractive location, its massive investment in road and port infrastructure is beyond the limits due to independence and limited coordination between current transport and distribution system and other constituents in the logistics system. In addition, the weakness of soft systems including customs/border procedures, company incorporation, and legal and documentary procedures that failed to keep pace with other developments. Hence, a clear and integrated strategy is urgently required for trade facilitation. There is a real need to urge for alternative economic drivers like logistics to boost the economic growth of Oman. This can be achieved by assessing, monitoring and integrating all logistics activities in terms of its infrastructure.

This research seeks to propose the idea of developing Oman as a logistics hub through directing the investments for on-going logistics infrastructures. The Government of Oman needs to accurately and effectively plan their logistic activities in order to achieve advantages in costs and efficiency. In addition to that, logistics activities in Oman will play a great role in developing and also increasing the standard of living.

Therefore, a specific research question is derived from this research: to what extent the development of logistics infrastructures will affect the economic growth of Oman?

This research provides salient information for both practitioner and academic. It provides the Government of Oman handful information on how logistics activities will impact the country's economic growth. Logistics sector can focus on improving the overall situation of the country by creating opportunities for job employment. As for the academic, it helps higher education institutions in Oman to develop logistics programs compatible with the needs of the country.

#### LOGISTICS INFRASTRUCTURE GROWTH IN THE SULTANATE OF OMAN

Oman's economy depends mainly on oil production. The petroleum sector contributes to 87 percent of budget revenues, 51 percent of GDP and 60 percent of total exports (Trading Economics, 2018). However, oil reserves are diminishing in recent years. This has forced the Government of Oman to consider economic diversification by focusing on other industry such as logistics service. Falling oil prices continue to challenge Oman's economy when the Organization of Petroleum Exporting Countries (OPEC) members have agreed to decrease their oil production in 2017. Starting this point, the Government has started its economic diversification plan for future survival.



The logistics system in the Sultanate of Oman is undertaking a transformation to solve infrastructure bottleneck, lack of investment in port handling capacity, and poor land transport connectivity with other GCC countries (Middle East Logistics, 2016). For this reason, Oman Government has provided unlimited support to major infrastructure projects. This will enable logistics system in Oman to enhance its capacity and productivity. Oman's logistics sector is becoming important in the 21st century. It is expected to support Oman GDP growth when the country becomes the global hub in the year 2040 (Finance Tribune, 2018). Focus areas will be on the development of modern seaports, airports and land transport (road and rail).

Under the Asyad program, Oman can exploit its strengths by focusing on logistics activities. For instance, in the year 2016, Oman's infrastructure grew by 3.4 percent compared to the year 2015 (Al Barwani, 2016). In another infrastructure development, there is a high priority given to the development of national rail network to link with the Gulf Cooperation Council (GCC) countries (Smith, 2016).

The shortage of skilled manpower in Oman is significant (Al-lamki, 2000). The "Omanization" as described by AI-lamki is focusing on developing competitive HR development program in all sectors including logistics. In another study, Issan and Gomaa (2010) found that graduates knowledge and skills do not match industrial requirements in Oman.

From a logistics demand point of view, skilled manpower in Oman is needed to meet the demand for Oman industrial free trade zones (FTZs). There are four FTZs in Oman. Three FTZs are located nearby to the deep water ports in Sohar, Dugm, and Salalah where each of the FTZ engages in port-free zone industrial and commercial cluster. The fourth one is located in Mazyona, 4 km from Yemen, where it provides border gateway for local and international investors with efficient access to the Yemen market. Figure 1 shows these four FTZ.



Figure 1: The Free Trade Zones in Oman



These four FTZs have huge commercial land areas. Al-Shanfari (2012) has described one of the economic challenges in Oman is to develop modern infrastructure for its FTZs. The FTZs must be fully equipped with road networks, telecommunications and other necessary utilities and services.

#### Logistics Educational Needs in Oman

The "educational needs" is a condition of the necessity for education on a specific topic identified by a gap in professional or working practice (Daud, 2012; Lai, 2010). In relation to logistics, it is a situation that refers to the gap between what the logistics practices expect to be a competent logistician and what actually occurs at present. Studies regarding the relationship between logistics programs offered by higher education institutions (HEIs) and logistics educational needs (LEN) have received considerable attention in the logistics education literature (for examples see Gravier & Farris, 2008; Wu, 2007). Such interest might be attributed to the belief that logistics programs facilitate logistics graduates' knowledge of logistics. The logistics programs offered by higher education institutions must match the development of logistics itself. From the logistics practitioners' perspective, they prefer applied logistics program over the traditional comprehensive university logistics programs.

In Oman, majority of the previous studies have focused on English language (Al Barwani, Al-Mekhlafi & Nagaratnam, 2013), general higher education (Al-Lamki, 2010; Issan & Gomaa, 2010; Carroll, Razvi, Goodliffe & Al-Habsi, 2009) and adoption of new technology in education (Al-Mukhaini, Al-Qayoudhi & Al-Badi, 2014). Meanwhile, Al'Abri (2011) has emphasized the importance of changing education policy in Oman due to globalization. An argument is presented that education policy in Oman has been affected seriously by globalization processes, leading to deep shifts and changes in the ways in which education policies are developed, implemented and evaluated.

From the above discussion, a proposition is derived. The proposed proposition is: There is a relationship between logistics infrastructure, logistics educational needs and future logistics hub for Oman.

From the above proposition, a conceptual framework is developed for the future study. The conceptual framework (figure 2) shows the relationship between logistics infrastructure, logistics educational needs and logistics hub. These three dimensions are specifically designed for the Sultanate of Oman. Focusing on this area will benefit both for logistics practitioners and academicians. Those who are in the logistics operations will be able to identify areas in logistics infrastructures and competent logisticians needed for transforming Oman into a global logistics hub.



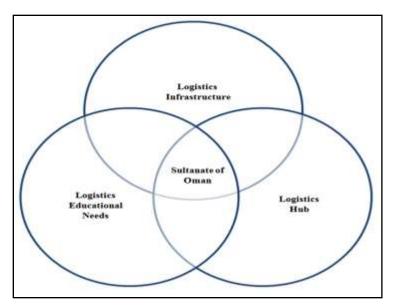


Figure 2: A Conceptual Framework

The conceptual framework will assist:

- Economic policymakers in the Oman Government to have a constructive long-term strategy on the development of logistics infrastructure;
- Oman Government to ensure the roles of logistics infrastructure match with the plans to transform Oman into a global logistics hub;
- A roadmap for the above logistics hub contribute positively to Oman's GDP;
- Employers to identify key areas of knowledge and skills which are critical for Oman's logistics graduates to acquire before they can work in logistics working environment; and
- The Ministry of Manpower Oman to develop effective training needs analysis for existing Oman's key persons who are currently working in logistics.

As for the contribution to theory (academic), the conceptual framework will assist higher education institutions in Oman to review back the existing logistics program for future employability of graduates. It will have learning outcomes that provide appropriate knowledge and skills for future logisticians.

## **CONCLUSION & WAY FORWARD**

The conceptual framework in this study needs to be explored in accordance with Oman's local and global trends in the logistics industry. Logistics infrastructures need to be developed in accordance with the Oman strategic plan to become an international logistics hub. The Oman



logistics graduates must be able to apply logistics knowledge they acquired from the higher education institutions in their working environment. This leads to logistician competency which can contribute to productivity and later to the country economic growth. Effective collaboration between logistics practitioners, the Government of Oman and higher educational institutions will ensure a holistic planning that will be able to make Oman as an important logistics hub. The way forward for further research about the relationship between logistics educational needs, logistics infrastructure and logistics hub must be done in future.

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