







Economic Importance of FAW's Large Port and Its Role in Promoting Sustainable Development in Iraq

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Abstract:

The paper studies the economic importance of Grand Faw Port and how that would help develop a more sustainable Iraq. It identifies Iraq's strategic location as the most critical point in the connection of East and West, thus elucidating how the port could build a more resilient economy, better trade efficiencies, and accompany long-term development frameworks. It also examines how the Development Road project affiliated with the port could boost diversification by improving transport infrastructure in Iraq.

The study is deductive and descriptive in terms of approach: it assesses the impacts of the Grand Faw Port on the fortunes of the economy of Iraq. The results indicate that this port will offer a significant reduction in the time and cost of any transport operation while attracting foreign investments. Here are challenges such as poor infrastructure, political instability, and the necessity of legal reforms to encourage investment.

Results show that the Grand Faw Port will increase economic integration and provide job opportunities for citizens while boosting Iraq's role in global trade. The study urges speeding up implementation of the Development Road project, strengthening regional cooperation, and introducing investment-friendly policies. The study as a whole, therefore, proves to be seminal in terms of the role of the port in the context of economic sustainability by reducing dependence on oil revenues in Iraq and increasing efficiency in transport.

Keywords: Sustainable Development, Foreign Investment, FAW Grand Port Project; Economic Diversification; Transport Infrastructure.

1.Introduction:

Iraq suffers from poor infrastructure in general and neglect of roads and bridges. This is evident to us on most roads in Iraq, whether internal or external. Moreover, the unavailability of fast electric trains, which are available in most developed countries, Iraq is not keeping pace with developments in the transport sector and the rest of the economic sectors that drive development in general.

The importance of research lies in the Strategic Development Route Project, which is linked to FAW's large port through the waterborne corridor. It promotes the role of sustainable transport, especially road transport, by car, and train transport, noting that the development route is meant to complete the shipping journey of FAW's large port. It also provides significant employment opportunities for employees of stations that represent an integrated economic path. Thus, it drives the course of economic and social development and demonstrates its impact on the sustainable development of Iraq by achieving the planned plan of action for the development route with an industrial area adjacent to FAW's Grand Port.

Sustainable Transport "refers to a system that meets current mobility needs efficiently and without compromising future generations' access to transportation. It ensures economic, environmental, and social benefits while preserving non-renewable energy resources". (Leeuwen & Voyer, 2019)

The extent to which sustainable transport is interrelated with sustainable development goals can be identified from the characteristics of sustainable transport (Wenhea et al., 2019)

- Sustainable transport secures the basic human needs of individuals and societies securely and assuredly, whether in terms of transport or people or the transport of goods, without prejudice to public health or the ecosystem and prejudice to the interests of future generations and allows individuals to meet their basic needs safely.
- Sustainable transport is less polluting to the environment than air, water, and soil and less noise.
- Sustainable transport has fewer natural resources than fossil fuels, is the most energy-efficient, and benefits from renewable energy.
- Sustainable transportation is less expensive, enabling those wishing to move from their duty stations or educational institutions to move at the lowest cost.
- Sustainable transport can meet demand, decoupling economic growth from emissions of environmentally polluting gases.

The Iraqi transport sector suffers from weak infrastructure, which hurts the economic side because transport is one of the primary and supportive means of economic activity and because of the economic importance of transport and its means of transport of goods and people, whether it be the transport of them to manufacturing, the provision of services, the transfer of them to the consumer or even the private transport of entertainment. (Valentin, 2019)

Iraq has problems in this area: weak infrastructure and low investment expenditure relative to current expenditure. Investment expenditure is not a priority in the Iraqi budget. All of this is due to Iraq's fundamental problem, namely, the "Rentier Economy" of Iraq. This expenditure is directed at covering expenses by government, i.e., current expenditures and weak channeling of such funds to sovereign funds, which play a significant role in improving economic realities. So, the development project was developed, and the idea of the development road project is summarized by connecting Iraq's ports with dual rail lines to the ports of the Mediterranean Sea. (Michelle & Judith, 2019)

(The Turkish ports of Mersin, Tartus, and Latakia in Syria and the Jordanian port of Aqaba will be added at a later stage.) As part of a joint agreement between the countries concerned, at the Iraqi border, the trailers coming from Faw Al-Kabir port are linked to a Turkish or Syrian locomotive on the return flight. According to the Iraqi Government, one of the main pillars of the project is the completion of the phases of Faw Al-Kabir port. (Erika & Gundula, 2019)

2. Literature Review and Hypothesis Development:

(Sharafuddin & Madhavan, 2020) examines the competitive capacity of Iraqi ports, which have suffered from neglect and destruction over the past three decades. Despite Iraq's strategic geographic location, the ports' competitive ability is hindered by a lack of requirements. The study suggests that meeting these requirements could enhance their competitiveness, positioning Iraqi ports as strong contenders against neighboring ports. The research highlights the growing global importance of maritime ports and recommends developing a large, strategic port near international shipping lanes to improve Iraq's maritime infrastructure .

(Shigaeva & Darr, 2020) addresses the challenges Iraqi ports face, particularly the shallow depths of navigation channels and dock faces, which hinder trade and the ability to accommodate large vessels. The research highlights the potential of the Grand Faw Port as a solution to these issues, aiming to reduce pressure on existing ports and contribute to Iraq's import and export activities. The study emphasizes the need for investment in container docks, deeper water channels, and the creation of a modern, strategic port to boost Iraq's trade and reduce unemployment by creating thousands of jobs .

(Haghighi et al., 2020) My doctoral thesis examines the impact of technical efficiency on the competitiveness of Mediterranean container ports. The study highlights the growing involvement of the private sector in port ownership and management, as well as the importance of relationships between port service providers and users. It finds that private sector investment in infrastructure, as seen in Valencia and Barcelona, improves port efficiency. The study also emphasizes that factors like proximity to major trade routes are more critical to competitiveness than technical efficiency alone .

(El-Zubi & Shuaibi, 2021) Investigates the impact of maritime transport on economic growth in Sudan, analyzing the relationship between GDP and maritime transport revenues from 1990 to 2014. It identifies the challenges facing the sector and proposes solutions to improve it. The study finds a significant positive relationship between maritime transport, port revenues, and economic growth in Sudan. It recommends modernizing Sudanese ports and updating the national fleet to keep up with technological advancements, which would support further economic growth.

(Labadi et al., 2021) Examines the challenges Iraqi ports face, particularly their insufficient capacity to meet the growing trade demands and their weak competitiveness compared to Gulf ports. The research explores the current state of Iraqi ports, identifies the requirements for establishing the Grand Faw Port, and highlights its potential economic benefits. The study concludes that the Grand Faw Port could significantly diversify Iraq's income sources and recommends accelerating the development of the port and related infrastructure as part of strategic national projects .

(Al-Zahidee & Al-Edam, 2021) Focuses on the challenges facing Iraq's transport sector, particularly the weak performance of public transport and the difficulty in creating an investment-friendly environment for transport companies. The research analyzes the sector's financial indicators from 2007 to 2016 and proposes an optimal strategy for improving the sector's profitability and reducing losses. The study recommends implementing privatization laws and creating a legal framework to encourage local and foreign investment in Iraq's transport sector .

(Ahmadi-Gh & Bello-Pintado, 2022) Examines the performance efficiency of Iraqi ports, particularly considering the joint operations model with the private sector implemented from 2003 to 2021. The research assesses the ports' efficiency before and after adopting joint operations, focusing on container docks and identifying the most efficient operating companies. The study found that the joint operation model significantly improved port efficiency, reducing ship turnaround time from 86.4 hours to 57 hours. It also highlighted improvements in cargo handling and recommended using modern tools like Data Envelopment Analysis (DEA) to monitor port and operational performance.

As explained earlier, FAW's large associated port, which is part of the development project presented by the two researchers, will assist in supporting the Iraqi economy and promote the process of creating economic diversification through the creation of non-oil sources of the Iraqi budget by achieving an expected financial return in the best conditions between IQD 4-6 trillion and USD 3-4.5 billion upon completion of the project and its accessories according to global economic activity. (Andriamahefazafy et al., 2022)

The Hypothesis: The FAW Grand Port Project has a role in Iraq's long-term sustainable development. (Krzymowski, 2022)

3. Research Methodology:

3.1 Research Tools:

The study utilized interviews and quotations as research methods and tools.

3.2 Data Analysis:

The researcher used the inductive and deductive approaches to reach the results that clarify the hypothesis or not.

4. Results:

The Iraqi government has prioritized the establishment of the Grand Faw Port as one of its strategic developmental projects. The port is expected to be the twelfth most modern and geographically favorable port in the world, connecting Asia and Europe. Transport through this port will be faster than through the Suez Canal. (Pereira et al., 2022) It is noted that the Grand Faw Port project is expected to reduce transportation costs by approximately 35-45% and transportation time by 35-40% for shipping companies and transportation firms operating on this route. This makes the port attractive to carriers and investors, which will have a positive impact on the Iraqi economy in general, and the southern region in particular, as well as on important geopolitical dimensions. (Cross, 2022)

Table (1) Expected Annual Trade Volume for the Grand Faw Port

Year	Bulk Materials (Million Tons)	Containers (Million Tons)
2018	24	24
2028	40	32
2038	70	44

Source: Prepared by the researcher based on: Ministry of Transport, Planning and Follow-up Department, Al-Faw Port Project, Feasibility Study 2008.

The estimated cost to complete the port is approximately €4.4 billion, equivalent to \$7.239 billion. The Iraqi Ports Company has contracted with Daewoo, a South Korean company, to complete the first phase of the port, which consists of five projects signed at once, including the construction of five container berths. (Tondel et al., 2022) If these five projects are completed within four years as agreed upon, and as pledged by the executing Korean company, the production capacity will consist of five berths that can accommodate two million containers, with a maximum capacity of three million containers per year. (Zimmermann, 2022)

According to the feasibility study prepared by Italian companies, the port was originally scheduled to begin operations in 2018. However, due to the circumstances the country and the world went through, including the recent COVID-19 pandemic, the project's completion was delayed. (Ersoy & Terrapon-Pfaff, 2022) Work on the project has now resumed. The cost of completing the project is \$7.239 billion, as shown in the following table:

Table (2) Total Coast of Faw Port Project

Details	Cost (Million Dollar)
Filling	200.5
Berths	2118.3
Strengthening of Berths	529.3
Dry Bulk Berths	171.5
Breakwater	214.3
Dredging and Excavation	799.4
Equipment	1225.6
Ground Connections	277.4
Environmental Mitigation	44
Total	580.5
Emergency (5%)	279
Total Construction Cost	5859.6
Design and Surveys	234
Project Management and Site Supervision	267.4
General Expenses	239
Additional Expenses	586
Total	7239.9

Source: Feasibility study of the new Basra grand port, Volume1, Environmental Analyses, December 2008.

The division of the objectives of the Grand Faw Port project according to sustainability dimensions into general and detailed objectives, with specific indicators for each goal, shows us the relationship between the Grand Faw Port and sustainable development. Table (3) illustrates this as follow:(Labadi, 2022)

Table (3) Sustainable Transport Goals and Indicators and Achieving the Dimensions of Sustainable Development.

General objectives	Detailed objectives	Indicators
1.Economic goals		
1.1 Increasing economic productivity	-Improving the efficiency of transportation systems.	-Per capita GDP related to transportation
	-Achieving integration in the transportation system.	-Part of the budgets allocated to the transportation sector
	-Easy access.	-Pricing efficiency. (Roads, parking, insurance, fuel, etc.)
1.2 investigation. Economic development	Development and development in economics and entrepreneurship.	-Access to education and employment opportunities. -Support. Industries. Local.
1.3 Increase energy efficiency	-reduction in energy costs.	-Energy consumption per person in the transportation sector. - Per capita use of imported fuel.

<p>1.4 Achieving reasonable costs.</p>	<p>- Costs are affordable for all residents and facilitate access to services and activities that residents intend. .</p>	<p>Providing, quality and reasonable transportation means. (Walking, cycling, ride-sharing, and public transportation). -A portion of low-income families that spend more than 20% of their budgets on transportation.</p>
<p>1.5 Increasing the operational efficiency of transportation</p>	<p>- Maximizing the efficiency of operations and asset management.</p>	<p>-Results of performance reviews. -Unit costs of providing services compared to peers. -Quality of service.</p>
<p>2. Social goals</p>		
<p>2.1 Achieving shareholders' rights and justice</p>	<p>- Achieving a transportation system that accommodates all users, including the disabled, low-income people, and other restrictions.</p>	<p>-Diversity of transportation system. -Part of the destinations are accessible to people with disabilities and limited income.</p>
<p>2.2 Achieving safety, security, and health</p>	<p>-Reducing the risk of accidents and assaults and supporting physical fitness.</p>	<p>- Traffic injury rate (injury and death) per capita. -Rate of exposure to assault on a passenger (crime rates). -Part of the travel is by walking and cycling</p>
<p>2.3 Community development</p>	<p>- Helping create attractive urban communities and supporting the cohesion of local communities.</p>	<p>-Mixed land use. -Possibility of walking and possibility of using bicycles. -Quality of road and street environments.</p>
<p>2.4 Protection of cultural heritage</p>	<p>-Protecting and respecting cultural heritage. -Supporting cultural activities.</p>	<p>-Preserving resources and cultural traditions. -Response to traditional societies.</p>
<p>3.Environmental goals</p>		
<p>3.1 Maintaining climate stability</p>	<p>-Reducing gas emissions and global warming. - Mitigating the effects of climate change.</p>	<p>- Per capita greenhouse gas emissions from carbon dioxide, chlorofluorocarbons, and others.</p>
<p>3.2 Prevention of air pollution</p>	<p>-Reducing air pollution emissions. -Reducing exposure to harmful pollutants.</p>	<p>Emissions that affect individuals. -Air quality standards and management plans.</p>
<p>3.3 Noise prevention</p>	<p>-Reducing exposure to traffic noise.</p>	<p>-Transportation noise level.</p>
<p>3.4 Protecting water quality and reducing hydrological damage.</p>	<p>-Reducing water pollution. -Reducing the tiled surface area.</p>	<p>-Fuel consumption per person. -Management of used oil and rainwater leaks. - Per capita share of impervious surface area.</p>

<p>3.5 Protection of biodiversity and open areas</p>	<p>-Reducing transportation facilities in land use. -Encouraging more compact development.</p>	<p>-Lands allocated for transportation facilities for everyone. -Providing support for the development of smart growth. Policies to protect globally valuable agricultural lands.</p>
<p>4.Planning objectives</p>		
<p>4.1 Integrated, comprehensive, comprehensive, or urban planning</p>	<p>-Defining or clearly defining the planning process. -Integrated and comprehensive analysis. - Strongly involve citizens. - Low-cost planning or planning of financial lease costs and choosing more beneficial solutions.</p>	<p>-A clear definition of general and detailed objectives and indicators. - Availability of planning information and documents. Part of the population involved in planning decisions. -A set of objectives, impacts and options that have been adopted. The money could be spent on alternative means of transportation and demand management if it is more beneficial to society.</p>

Source: Prepared by author.

The duration for completing the Grand Faw Port project within the specified time can be determined by two crucial factors:

- The first factor is security stability in Iraq and the availability of political will to complete the project. This is evident through the statements made by those responsible for the project's execution and their sincere desire to complete it as quickly as possible. A body called the "Faw Grand Port Project Authority" was formed within the General Company for Ports of Iraq. It is tasked with overseeing and following up with the executing Korean company to ensure the project is completed according to the specified timeline and the outlined plans. (Citaristi, 2022)
- The second factor is the availability of financial allocations for the project's construction. Iraq is an oil-dependent country, and its budget allocations rely on oil revenues, which are subject to fluctuations in oil prices due to external factors determined by global oil markets. As a result, the project is vulnerable to external shocks. Suppose oil prices stabilize at levels that allow for adequate allocation of funds for the Al-Faw Grand Port project. In that case, the financing for the project's stages will continue according to the planned schedule without obstacles. (Mhlanga & Ndhlovu, 2023) The port will be operational in its first phase, with five berths and a design capacity by 2028 to handle 36-40 million tons of containers and 22-25 million tons of dry bulk. This phase requires the completion of the dry canal project in parallel with the completion of the first phase of the Al-Faw Grand Port. This will ensure greater efficiency and flexibility in the transportation of goods through railways and road transport routes. (Agboklou et al., 2024)

5.Discuss the Results:

5.1. Development Road Project Positive Impacts on Society and Social Relations The establishment of the Development Route Project and its linkage to the FAW Port will alter the social reality in Iraq and the beneficiary States through the existence of corridors and transit routes that will pass through FAW. (Rahiman et al., 2024)

5.2. All those governorates that will be captured by the Development Route Project have their advantages of ethnic and sectarian diversity; peaceful coexistence is prevalent and promotes increased security and stability for all Iraqi governorates without industrial zones accompanying the FAW Port Project. Iraq's competitive advantage is enhanced. The FAW Port Project will also have indirect economic effects on the financial returns it will generate, and its contribution to the transport sector is called GDP. (Mathew & Alkhamis, 2024) We will note the importance of the transport sector in the development of other economic sectors, in addition to the pivotal role that

the Development Road Project and FAW Port will have in conveying the positive picture of the security situation in Iraq and the availability of security and economic stability. Shipping and international transport agencies will pass through the FAW Port and Development Road Project. (Sungkawati, 2024)

5.3. The Iraqi Government has endeavored to facilitate foreign investments. Chapter V, article 15 of the Investment Act No. 50 of 2015 stipulates that: "The enterprise obtaining investment permits from the Authority shall enjoy exemption from taxes and fees for 10 years from the date of commencement of commercial operations for each stage of the project's establishment (Investment Act No. 50 of 2015). Therefore, it can be said that there are many positive signs to support investment processes and the creation of projects aimed at achieving development. (Sharif et al., 2024)

5.4. According to the findings, investment projects are a starting point for development in many areas. It has been concluded that the Development Roads Project and its accompanying and complementary projects are aimed at achieving the sustainable development goals to enhance Iraq's infrastructure, especially since Iraq needs such development projects to improve the economic and social realities of the State. (Ghani & Ashoor, 2024)

6. Conclusions:

After analyzing the data collected on development projects and FAW's Grand Port and identifying the economic and social benefits to Iraqi society, all data indicate that the FAW Grand Port Project will contribute significantly to the sustainable development of Iraq. Therefore, we reject the main and accept the alternative hypothesis: The FAW Grand Port Project has a role to play in Iraq's long-term sustainable development. The most important recommendations reached by the researcher are the need to expedite the establishment of the Development Road Project and the Great Faw Minar to benefit from a site linking East and West. The economic and social implications of the Development Road Project and the Great FAW Port must be exploited to achieve change in the realities of the Iraqi economy through transport route corridors. (Matindike et al., 2024)

There is a need to build cooperative relations between Iraq and the geographically surrounding states. This requires strengthening the spirit of initiative on regional issues and developing and expanding diplomatic activities to include cultural, religious, social, and humanitarian areas that support the activities of attracting sources of external financing to contribute to Iraq's development road project. Plus, speed up in. Completion of the Development Route Project and prioritizing it from the FAW Grand Port to connect the Port to Europe, and completion of the link between the world's countries, providing enormous financial returns to Iraq. (KOCAYAYA1, 2024)

Authors Declaration:

Conflicts of Interest: None

-We Hereby Confirm That All The Figures and Tables In The Manuscript Are Mine and Ours. Besides, The Figures and Images, which are Not Mine, Have Been Permitted Republication and Attached to The Manuscript.

- Ethical Clearance: The Research Was Approved by The Local Ethical Committee in The University.

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