



An Analytical Study of the Development of Foreign Trade through Algerian Seaports (2012–2020)

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ABSTRACT

This study aims to analyze the development of foreign trade activities through Algerian commercial seaports during the period (2012–2020). It also explores a description of commercial ports in Algeria and identifies the most significant problems and challenges they face. This contributes to enhancing the understanding of the Algerian commercial port sector and highlighting its impact on foreign trade. The study focused on a selection of major Algerian commercial ports, including ten primary ports: Algiers Port, Oran Port, Annaba Port, Bejaia Port, Skikda Port, Mostaganem Port, Jijel Port, Arzew Port, Tenes Port, and Ghazaouet Port.

The study found that trade exchanges relying on maritime transport in Algeria are characterized by an imbalance between imports and exports. Even in the third millennium, the Algerian economy remains heavily dependent on hydrocarbon revenues, with hydrocarbon exports accounting for 96% of the total export volume. These exports are primarily handled by specialized oil ports (Arzew, Skikda, and Bejaia), which exclusively facilitate petroleum transportation, reflecting the dominance of the oil sector in Algerian exports. Meanwhile, the other ports primarily serve as import hubs.

Keywords: Algeria, commercial ports, foreign trade, maritime transport, Algerian ports

1. Introduction:

accounts for the largest share of international commerce. Commercial seaports play a vital role in the maritime transport chain, serving as a link between land and sea transport. Without commercial seaports, global trade cannot thrive.

Given Algeria's location on the Mediterranean Sea, the country boasts a coastline of approximately 1,200 kilometers, providing significant potential to enhance the role of its commercial and oil ports in supporting foreign trade, particularly with Euro-Mediterranean countries. Algeria has a long history of port construction for purposes such as trade, defense, and fishing.

Algerian seaports are critical hubs for maritime activities and various exchanges that support the national economy. Maritime trade exchanges have become key drivers of the national economy, with Algerian ports facilitating foreign trade by enabling diverse commercial interactions. This creates opportunities to attract traders and business operators.

1.1. Problem Statement:

Within this conceptual framework, the main problem of the study is to examine the contribution of Algerian commercial seaports to boosting foreign trade activities. The study addresses the following central question: *What is the contribution of Algerian commercial seaports to enhancing foreign trade activities during the period 2012–2020?*

To further clarify this question, several sub-questions are posed:

- What are commercial seaports, and what is their significance?
- What is the role and importance of Algerian seaports in exports and imports?
- What are the main challenges facing commercial seaports in Algeria?

1.2. Study Hypotheses

Based on the study's problem, the following hypotheses are proposed:

- International maritime transport is one of the most critical factors for foreign trade development. Its importance lies in determining the volume of international trade, as transportation costs impact product prices. A robust maritime transport fleet and port logistics services can enhance a country's capabilities, supporting logistical operations such as shipping, unloading, transportation, storage, and distribution, thereby providing a competitive edge that stimulates foreign trade.
- Due to their infrastructure and strategic geographic location, Algerian seaports play two primary roles: exporting goods, particularly oil, gas, and other materials, to global markets, and importing goods from various countries for local markets.
- The main goal of any port is to provide high-quality services to its users. Algerian ports are a mix of import hubs for various goods and export points for oil products. However, many ports lack the appropriate equipment, modern handling methods, and effective operational organization, which negatively impacts the quality of logistics services and affects the flow of exported and imported goods.

1.3. Significance of the Study

The significance of this study lies in its focus on the vital role of commercial seaports in facilitating the movement of goods, serving foreign trade, especially in the context of economic liberalization, transition to a market economy, and international partnerships. The study also emphasizes the importance of maritime transport as one of the three essential means of transportation for foreign trade. Moreover, the study highlights Algeria's top ten seaports, analyzing their activities and the capabilities that position them to play a strategic role in stimulating foreign trade.

1.4. Study Methodology

To analyze the research problem and validate the hypotheses, the study adopts a descriptive and analytical methodology. These approaches help in understanding the subject matter, focusing on Algerian seaports and foreign trade through commercial maritime ports. The study examines the development of exports and imports from 2012 to 2020.

2. General Overview of Seaports

Seaports are the cornerstone of international maritime trade, with a strong correlation between maritime transport and foreign trade, where both mutually reinforce each other. As trade grows and flourishes, maritime activity increases, prompting further development to meet the demands of global trade.

2.1. Definition of Seaports

- A seaport is defined as a location where ships load and unload goods and cargo. It is equipped with facilities and machinery used in cargo (1) handling operations. A seaport is situated on the edges of oceans, rivers, or lakes and serves as a point where ships arrive to load or unload cargo, and where passengers embark and disembark.
- It is also described as a coastal area designated by the administrative authorities to facilitate commercial maritime operations.
- From these definitions, a comprehensive definition can be derived: A seaport is a coastal facility comprising one or more harbors located on the shores of seas, oceans, rivers, or lakes. It serves as a site for loading and unloading goods and passengers and is equipped with cranes, docks, warehouses, and ships (2).

2.2. Importance of Seaports

The importance of seaports lies in their role in facilitating international trade. Maritime transport is closely linked to foreign trade, serving as the foundation and infrastructure for the movement of exports, imports, and re-exports between various countries worldwide.

As maritime transport methods and port facilities for loading and unloading improve, the potential for transporting goods across countries expands (3).

Maritime transport is a critical pillar of economic development globally, contributing to the improvement of a country's balance of payments, creating job opportunities for the local workforce, and fostering the growth of coastal cities through the development of maritime projects such as ports, shipyards, shipping companies, and factories. These benefits increase with greater reliance on maritime transport (4). Maritime transport is also the most cost-effective mode of transportation in terms of financial expenses and capacity. It requires infrastructure only at the start and endpoints of shipping routes, such as ports and docks, and does not involve costly maintenance or repairs like land or river transport. Additionally, maritime transport avoids obstacles such as waterfalls or rapids (5).

2.3. Role of Seaports in Foreign Trade

Over the past decades, maritime transport has significantly evolved, now covering around 90% of the global intercontinental shipping market (6). Its advantage lies not in speed but in its capacity and coverage of vast areas worldwide, which rail transport cannot match in terms of geographical scope and trade volume. For this reason, heavy industries are often located near seaports (7).

Maritime transport plays a vital role in international trade through its strong connection to the movement of

global commerce. It is the foundation and infrastructure for the growth of exports, imports, and re-exports. As maritime transport services and port facilities improve, the ability to transport goods between nations expands, broadening foreign trade activities and creating new markets and trade opportunities (8).

Maritime transport also facilitates the international division of labor by promoting regional specialization among countries. Some nations excel in producing certain goods, while others specialize in different products, making each country a market for the products of others. Maritime transport has supported this regional and international specialization by expanding markets for goods and reducing the costs of various products due to productive, human, and material advantages (9).

Additionally, maritime transport supports global trade, enhancing the global economy. Trade cannot exist without transportation, and transportation cannot occur without trade. The relationship between commerce and maritime transport is closely intertwined—trade is the goal, and transport is the means to achieve it. Maritime transport has eliminated barriers between countries, enabling fruitful economic interaction and progress for humanity.

3. Commercial Seaports in Algeria

Algeria boasts a significant number of seaports along its coastline, including the ports of Algiers, Annaba, Arzew, Béjaïa, Jijel (Jijel Port), Ghazaouet, Mostaganem, Skikda, Tenes, and Oran. In this section, we will provide an overview of these Algerian commercial ports.

3.1. Main Seaports

Port of Algiers

- **Total Area:** Approximately 126 hectares.
- **Basins and Docks:** Three basins covering an area of 184 hectares, with a total quay length of 8,609 meters (10).
- **Northern Entrance:** Width of 176 meters and depth of 22 meters.
- **Southern Entrance:** Width of 240 meters and depth of 16 meters.
- **Specialized Facilities:**
 - A maritime terminal with a capacity of 350,000 passengers per year.
 - A grain silo with a capacity of 30,000 tons.
 - Two dry docks:
 - A large dry dock (15.5m x 136m x 18.5m) with a depth of 8m.
 - A smaller dry dock (74m x 15.5m) with a depth of 5m.
 - A container terminal, operational since 1998, covering 17 hectares with a storage capacity of 6,200 standard containers over three levels. The terminal is connected to a railway and has direct access to the eastern highway, equipped with a container scanner (11).

Port of Annaba

- **Total Area:** Approximately 89 hectares.
- **Basins and Docks:** Three basins covering an area of 104 hectares, with a total quay length of 3,455 meters.
- **Entrance Specifications:**
 - Main entrance: Width of 245 meters and depth of 13.5 meters.
 - Large basin entrance: Width of 250 meters and depth of 12.5 meters.
 - Small basin entrance: Width of 183 meters and depth of 12.5 meters.
- **Specialized Facilities:**
 - A maritime terminal with a capacity of 30,000 passengers per year.
 - A grain silo with a capacity of 16,000 tons.
 - A container terminal, operational since 1997, covering an area of 10 hectares (12).

Port of Oran

- **Total Area:** Covered area of approximately 16 hectares.
- **Basins and Docks:** Seven basins covering 164 hectares, with a total quay length of 4,200 meters (13).
- **Entrance Specifications:**
 - Northern entrance: Width of 89 meters and depth of 42 meters.
 - Southern entrance: Width of 350 meters and depth of 23 meters.
- **Specialized Facilities:**
 - A maritime terminal with a capacity of 4,500 operations per day.
 - A grain silo with a capacity of 40,000 tons.
 - A container terminal covering 11 hectares with a storage capacity of 4,200 standard containers.
 - 33 berths, seven of which are specialized.
 - Roll-on/roll-off (RoRo) ramp for ferries.
 - Storage facilities include 16 hectares of open space, five warehouses (2.6 hectares), and a 2.3-hectare repair yard (14).

3.2. Oil Ports

The oil ports in Algeria include Arzew, Skikda, and Béjaïa.

Port of Arzew

- **Total Area:** Approximately 24 hectares, including 1 hectare covered.
- **Basins and Docks:** Three basins covering 153 hectares, with a total quay length of 1,730 meters (15).
- **Entrance Specifications:** Single entrance, 400 meters wide and 20 meters deep.
- **Specialized Facilities:**
 - A cement silo with a capacity of 1,800 tons.
 - A waste disposal station with a capacity of 6,000 m³ (16).

Port of Skikda

- **Total Area:** Approximately 51 hectares, including 17 hectares covered.
- **Basins and Docks:** Two basins covering 43 hectares, with a total quay length of 1,860 meters.
- **Entrance Specifications:** Single entrance, 120 meters wide.
- **Specialized Facilities:**
 - A maritime terminal with a capacity of 12,000 passengers per year.
 - A grain silo with a capacity of 20,000 tons (17).

Port of Béjaïa

- **Total Area:** Approximately 44 hectares, including 2 hectares covered.
- **Basins and Docks:** Three basins covering 156 hectares, with a total quay length of 2,200 meters.
- **Entrance Specifications:**
 - Northern entrance: Width of 120 meters and depth of 13 meters.
 - Southeastern entrance: Width of 330 meters and depth of 15 meters.
- **Specialized Facilities:**
 - A maritime terminal with a capacity of 45,000 passengers per year.
 - Two grain silos:
 - One with a capacity of 30,000 tons.
 - Another (Sévital silo) with a capacity of 120,000 tons.
 - A floating dock with a capacity of 15,000 tons (18).

3.3. Other Commercial Ports

These include Jijel Port, Mostaganem Port, Ghazaouet Port, and Tenes Port.

Port of Jijel (Jijel Port)

- **Total Area:** Approximately 104 hectares, including 1 hectare covered.
- **Basins and Docks:** One basin covering 180 hectares, with three quays totaling 1,995 meters in length.
- **Entrance Specifications:** Northwestern entrance, 560 meters wide and 18.8 meters deep.
- **Specialized Facilities:**
 - A railway network extending 23 kilometers.
 - A container terminal (since 1998) covering 65 hectares with a capacity of 6,200 standard containers (19).

Port of Mostaganem

- **Total Area:** Approximately 68 hectares, including 2 hectares covered.
- **Basins and Docks:** Two basins, one covering 14 hectares (depth: 6.77m–8.17m), and the other 16 hectares (depth: 6.95m–8.22m). Total quay length: 1,995 meters.
- **Entrance Specifications:** Northwestern entrance, 100 meters wide and 12 meters deep.
- **Specialized Facilities:**
 - A bitumen station with a capacity of 4,700 tons.
 - A grain silo with a capacity of 30,000 tons (20).

Port of Ghazaouet

- **Total Area:** Approximately 28 hectares, including 1 hectare covered.
- **Basins and Docks:** Three basins covering 153 hectares, with a total quay length of 1,800 meters.
- **Entrance Specifications:** Single entrance, 400 meters wide and 20 meters deep.
- **Specialized Facilities:**
 - A grain silo with a capacity of 1,800 tons (21).
 - A waste disposal station with a capacity of 6,000 m³.

Port of Tenes

- **Total Area:** Approximately 75 hectares.
- **Basins and Docks:** One basin covering 17 hectares, with a total quay length of 4,200 meters (22).
- **Entrance Specifications:**
 - Western entrance: Width of 180 meters and depth of 14 meters.
 - Eastern entrance: Width of 130 meters and depth of 12 meters.
- **Specialized Facilities:**
 - A grain silo with a capacity of 5,500 tons.
 - A weighbridge with a 50-ton capacity (23).

4. Development of Foreign Trade Movements through Algeria's Seaports

4.1. Analysis of Shipping and Cargo Movements (2012–2020)

This section examines Algeria's shipping and cargo movements between 2012 and 2020. The analysis focuses on both imports and exports. Like most developing countries, Algeria's exports are predominantly single-sector, heavily reliant on natural resources, particularly hydrocarbons, which constitute the bulk of its exports. Algeria's foreign trade is characterized by exporting raw materials (mainly hydrocarbons) and importing industrial goods and food products.

Table 1: Shipping and Cargo Movements (2012–2020) *Unit: Million Tons*

Year	Imports		Exports		Total	
	ships	cargo	ships	cargo	ships	cargo
2012	10390	34196316	10384	83695323	10390	34196316
2013	10140	37695371	10164	80461216	10140	37695371
2014	10345	42302444	10297	75497714	10345	42302444
2015	10560	46116246	10525	71931968	10560	46116246
2016	11261	52575561	11264	77132047	11261	52575561
2017	11224	56078229	11228	77363537	11224	56078229
2018	10292	51992095	10314	76995707	10292	51992095
2019	9021	45871572	9022	63548374	9021	45871572
2020	9032	45681592	9036	74483635	9032	45681592

Source: Prepared by researchers based on annual customs reports of Algeria (Ministry of Transport, General Directorate of Algerian Customs)

The table demonstrates a direct relationship between the number of ships entering commercial ports and the volume of cargo, representing a significant portion of Algeria's imports.

We observe an acceleration in the volume of imports via commercial ports, primarily focusing on equipment and consumer goods. From 2012 to 2017, imports increased from 8.70% to 15.43%. However, starting in 2018, imports began declining, dropping from 14.04% to 13.38% in 2020.

The table also highlights a positive correlation between the number of ships departing commercial ports and the volume of exported goods, which represents a significant portion of Algeria's exports. The export volume, concentrated on raw and semi-processed materials (especially petroleum products), increased steadily from 2012 (15.28%), but declined between 2014 and 2015 (13.13%). It then rose again from 2016 to 2018 (14.06%) before dropping in 2020 to 13.22%.

2.4. Distribution of Foreign Trade Movements across Commercial Ports (2012–2020)

Foreign trade is a critical economic sector for any country, providing hard currency and meeting the population's needs. This section aims to describe and analyze Algeria's foreign trade movements through its commercial ports.

Distribution of Total Imports by Commercial Ports

Table 2: Total Imports by Commercial Ports (2012–2020)

Unit: Million Tons

Ports	2012	2013	2014	2015	2016	2017	2018	2019	2020
Alger	9288779	7128643	7535808	8570717	9288779	13450057	13554591	12668276	13173938
Annaba	4666288	3486660	4133772	4226826	4666288	4864132	3675937	3043240	3051320
Arzew	2618396	2355209	2432029	2485532	2618396	3094539	3017158	2580302	2561174
Béjaïa	11773839	9876089	10618525	11424286	11773839	12286764	11627009	9640106	10452773
Djen Djen	4711216	2982729	3819572	3835511	4711216	4725732	3880475	2965560	2819093
Ghazaouet	1363118	1335369	1228029	1175095	1363118	1216486	952476	700817	986238
Mostaganem	1508627	1150513	1027484	1264490	1508627	1443620	985702	1041050	1411243
Oran	6892057	4726951	4947112	5838327	6892057	8025787	8226861	8094952	7793525
Skikda	5369620	3752249	5372100	6082141	5369620	5595363	4879717	4506555	4411847
Ténès	1264916	900959	1188012	1213321	1264916	1375747	1192166	630715	723258
Total	34196316	371.695.371	42302444	46116246	49456857	56078227	51992091	45871572	47384409

Source: *Compiled by researchers based on statistical reports from Algeria's commercial ports, General Directorate of Maritime Commerce, Ministry of Transport.*

The table reveals that Algiers Port captures the largest share of Algeria's total imports via commercial ports during the study period, followed by Béjaïa Port and then Oran Port. The other Algerian commercial ports handle smaller shares, as observed with Tenes Port, the smallest among them.

The table also shows a consistent growth in Algeria's imports through its ports until 2016, driven by improved financial conditions in the country and additional factors:

- **Massive Public Investment Programs:** These programs aim to improve infrastructure and expand the availability of services.
- **Increase in Workers' and Employees' Salaries:** Starting from January 2012, retroactive increases were applied from 2008, ranging between 10% and 30% of the base salary. This increase contributed to higher consumption levels.
- **Increase in Imports from the European Union:** This is attributed to the partnership agreement between Algeria and the European Union.

Post-2017 Growth Decline: A slowdown in growth was observed after 2017 due to budget deficits, declining oil prices, and government austerity policies.

Import Distribution by Port in 2020:

In 2020, the Port of Algiers ranked first in terms of imports, accounting for 27.80%. It was followed by the Port of Béjaïa at 22.05% and the Port of Oran at 10.47%. The ports of Tenes, Mostaganem, and Ghazaouet ranked lowest, with respective import shares of 0.97%, 1.89%, and 2.08%.

Total Export Distribution by Commercial Ports

Table 3: Total Export Movements by Commercial Ports (2012–2020) Unit: Million Tons

Ports	2012	2013	2014	2015	2016	2017	2018	2019	2020
Alger	1922864	1784656	1827845	1718482	1922864	2424817	2387092	2518610	2036913
Annaba	1513874	1606837	1545419	1341940	1513874	1493781	1536660	1394972	1697483
Arzew	38358908	50550056	43933027	40257369	38358908	41803251	42461490	39801441	42245437
Béjaïa	9382966	3729413	9307182	8852173	9382966	7871679	7889815	9147946	8867201
Djen Djen	23365	-	2700	29998	23365	10575	12666	31612	553075
Ghazaouet	71951	68696	61692	54067	71951	73092	53842	36024	45763
Mostaganem	16524	38473	23452	27852	16524	11319	20192	44707	105928
Oran	431332	321721	304268	409332	431332	459637	419718	427991	669788
Skikda	24876116	22361250	18492127	19240755	24876116	23215383	22214228	21080321	19109089
Ténès	-	114	2	-	-	-	-	11	-
Total	83.695.323	80.461.216	75497714	71931968	76597900	77363534	76995703	74483635	75330677

Source: Compiled by researchers based on data from the Commercial Ports Statistics Guide, General Directorate of Maritime Commerce, Algerian Ministry of Transport.

From the above table, it is evident that the Port of Arzew holds the largest share of Algeria's total exports during the study years, followed by the Port of Skikda. This dominance is due to these ports specializing in hydrocarbon transportation, which accounts for approximately 95% of Algeria's exports. Similar to many developing countries, Algeria's exports are characterized by a single-sector dependency, with hydrocarbons dominating the export portfolio due to the country's natural comparative advantage in this sector. Other major exporting ports include Algiers, Annaba, and Béjaïa, while the ports of Tenes, Ghazaouet, and Mostaganem rank lowest in export activity.

In 2020, the Port of Arzew maintained its leading position, accounting for 56.07% of Algeria's exports, followed by the Port of Skikda at 25.36%. This was due to the specialization of these ports in hydrocarbon transportation. Béjaïa ranked third, with 11.77% of exports, while Tenes, Ghazaouet, and Mostaganem remained at the bottom of the rankings.

Non-Hydrocarbon Foreign Trade Distribution by Ports

Table 4: Import Movements of Non-Hydrocarbon Goods by Commercial Ports (2012–2020) Unit: Million tons

Ports	2012	2013	2014	2015	2016	2017	2018	2019	2020
Alger	3868550	3897196	4001981	4620230	5528930	8960930	9230667	8610498	8844463
Annaba	2548935	2839062	3270155	3208846	3756550	4000629	3537317	2978968	2997685
Arzew	256427	157549	256466	541658	651953	834094	627211	484563	359528
Béjaïa	8271284	8815935	9499405	10279570	10550709	11198656	10596987	8777574	9579928
Djen Djen	2653765	2916155	3773523	3767106	4620449	4638193	3791895	2891364	2746291
Ghazaouet	1019013	1270090	1157535	1101710	1276555	1122170	879957	645758	956175
Mostaganem	1031667	1110851	963940	1197006	1458961	1342767	904536	971959	1316449
Oran	4327406	4648180	4837974	5738775	6822479	7876882	7985343	7865622	7575554
Skikda	2352782	2684195	3202526	3561927	4094192	4263.825	3954875	3138444	2795907
Ténès	762859	842952	1139324	1145734	1222415	1.299757	1125526	580014	693243
Total	17092688	29182164	32102829	35162562	39983193	45537902	42634313	36944764	37865223

Source: Compiled by researchers based on data from the Commercial Ports Statistics Guide, General Directorate of Maritime Commerce, Algerian Ministry of Transport.

From the above table, the Port of Béjaïa ranked first in terms of Algeria's non-hydrocarbon imports in 2020, accounting for 25.30%, followed by the Port of Algiers at 23.35%, and the Port of Oran at 20%. The lowest rankings were held by the ports of Tenes (1.83%), Ghazaouet (2.52%), and Mostaganem (3.47%).

Table 5: Movement of Non-Hydrocarbon Exports by Commercial Ports (2012–2020)
Unit: Million Tons

Ports	2012	2013	2014	2015	2016	2017	2018	2019	2020
Algier	520407	517150	481715	493718	598599	1078802	1204260	1185806	1254653
Annaba	1970480	1606837	1299646	1162184	1330479	1493781	1253649	1128983	1485376
Arzew	132997	99983	49024	135015	840834	1429312	2083414	1423058	3760579
Béjaïa	617698	577965	598979	760491	725671	694786	808317	836774	855231
Djen Djen	2760	-	2700	29998	23365	10575	12666	31612	553075
Ghazaouet	100353	68696	61692	54067	71951	73094	53842	36024	45763
Mostaganem	31385	38473	23452	27852	16524	11319	20192	44707	105928
Oran	571295	317391	298336	400906	428757	456055	409024	427991	663166
Skikda	136655	147260	146122	169091	190446	198787	214651	240656	243013
Ténès	3294	114	2	-	-	-	-	11	-
Total	4087324	3373869	2961668	3233322	4226627	5446511	6060015	5355622	8966784

Source: Prepared by researchers based on data from the Port Statistics Guide, Directorate General of Maritime Trade, Algerian Ministry of Transport.

From Table 5, it is evident that both Algiers Port and Annaba Port occupied the first and second positions, respectively, in terms of non-hydrocarbon exports for most of the studied years. Béjaïa Port ranks third, followed by Oran Port in fourth place. In contrast, Arzew Port, which was ranked first in terms of total exports, falls to the lower ranks for non-hydrocarbon exports, as does Skikda Port, which drops from second place for total exports to fifth for non-hydrocarbon exports. In general, it is clear that the largest proportion of Algeria's non-hydrocarbon trade is conducted through four commercial ports: Algiers, Béjaïa, Annaba, and Oran. Conversely, the bulk of Algeria's hydrocarbon exports are channeled through Arzew and Skikda Ports. Additionally, Table 5 indicates that in 2020, Arzew Port led in non-hydrocarbon exports, accounting for 41.93% of the total, followed by Algiers Port at 13.99%, and Béjaïa Port at 9.53%. The lowest contributions came from Tenes, Ghazaouet, and Mostaganem Ports, collectively accounting for just 1.69%.

4.3. Distribution of Container Cargo Traffic by Commercial Ports

Ports play a crucial role in the economies of nations, serving as vital arteries for foreign trade. They contribute to reducing export costs for national shippers and ensure the competitiveness of their imports compared to rivals, fostering genuine competition in foreign trade.

Imports of Goods via Containers by Commercial Ports

Table 6: Movement of Imported Goods via Containers by Commercial Ports (2012–2020)

Unit: Million Tons

Ports	2012	2013	2014	2015	2016	2017	2018	2019	2020
Algier	1547847	1628006	1701024	1974628	2151345	1994654	1826199	4730542	4779648
Annaba	371115	475937	685586	727903	799226	830892	837490	737400	873471
Arzew	5035	525	2111	10	282	11458	83707	117495	126230
Béjaïa	984235	1120090	1341027	1502264	1431545	1526848	1649517	1455736	1555369
Djen Djen	-	-	1853	4274	18972	66719	96775	200357	273470
Ghazaouet	85781	152422	174289	207428	280053	272145	184474	114645	185954
Mostaganem	20144	25553	17627	14214	36778	29509	24162	48613	77405
Oran	1266808	1316262	1397528	1289517	1517551	1887086	1968901	1755911	1530931
Skikda	510735	511204	513954	604561	724737	724737	771102	661086	702011
Ténès	-	80	-	15	-	-	-	-	-
Total	3.216.922	5.230.079	5.834.999	6.324.815	6.960.489	9.870.773	10.624.706	9.821.785	10.077.488

Source: Prepared by researchers based on data from the Port Statistics Guide, Directorate General of Maritime Trade, Algerian Ministry of Transport.

The table above shows that Algiers Port consistently ranked first during the study period in terms of containerized imports, followed by Oran Port in second place and Béjaïa Port in third. Skikda Port occupies fourth place. Notably, Oran Port, which previously ranked third after Béjaïa in general imports, rose to second place for containerized imports due to its specialization in container transport.

In 2020, Algiers Port accounted for the largest share of Algeria's containerized imports, with 47.42%, followed by Oran Port with 15.19%, and Annaba Port with 8.66%. At the lower end of the rankings were Tenes, Arzew, and Béjaïa Ports, which collectively represented just 0.27%.

Exports of Goods via Containers by Commercial Ports

Algiers Port also dominates in terms of Algeria's containerized exports for most of the study period. Béjaïa Port ranks second, followed by Oran Port in third, and Skikda Port in fourth. The following table illustrates this distribution over the study period.

Table 7: Movement of Exported Goods via Containers by Commercial Ports (2012–2020)
Unit: Million Tons

Ports	2012	2013	2014	2015	2016	2017	2018	2019	2020
Alger	47407	38858	36200	43622	50817	47547	51962	142553	193690
Annaba	26444	10792	11104	6653	2077	2824	11886	18048	5700
Arzew	124	170	941	862	53	1535	16650	32424	40432
Béjaïa	257550	29991	324071	393143	316600	227472	211870	535969	576874
Djen Djen	-	-	106	513	4489	7925	12409	29225	63392
Ghazaouet	2409	3185	3457	6494	7331	5194	2052	1438	2326
Mostaganem	154	509	470	1295	977	196	7035	7258	10252
Oran	266555	263616	278089	74771	56982	382413	333421	345636	60705
Skikda	4784	4834	2702	7906	12129	5363	5945	9565	9111
Ténès	-	-	1	-	-	-	-	-	-
Total	107.589	315.955	657.141	535.258	451.455	680.468	653.230	922.256	962.481

Source: Prepared by researchers based on data from the Port Statistics Guide, Directorate General of Maritime Trade, Algerian Ministry of Transport.

From the above table, it is noted that Béjaïa Port ranked first in 2020 in terms of Algerian exports of goods via containers through commercial ports, with a share of **59.93%**, followed by Algiers Port at **20.12%**, and Oran Port in third place with **6.70%**. Ports such as Tenes, Ghazaouet, and Annaba were ranked lowest, collectively accounting for approximately **0.83%**.

5. Problems and Challenges Facing Algerian Commercial Ports

5.1 Problems Facing Algerian Commercial Ports

Algerian ports face numerous problems, the most significant of which include (24):

- **Weak Algerian Commercial Fleet:** Algeria's fleet consists of only 16 ships, 13 of which are specialized in transporting hydrocarbons and 3 for passenger transport. The average age of these ships is approximately 22 years, and maintenance investments are characterized by high costs.
- **Lack of Equipment and Machinery:** Algerian commercial ports suffer from a lack of modern machinery. Algiers Port is the only port equipped with a 300-ton self-propelled crane. Additionally, grain carriers do not meet international standards, even though Algeria is ranked among the largest grain-importing countries.
- **Ports Located Within Urban Areas:** This location affects road efficiency, complicating the movement of goods to and from the ports. Transporting goods through Algerian ports is highly costly for businesses and the national economy.
- **Investment Focus on Oil Ports:** Investment in Algeria is mainly directed toward oil ports. Other ports suffer from aging infrastructure, which forces shipping companies and port services to use smaller cargo loads.
- **Low Efficiency of Algerian Ports:** Algerian ports are among the least efficient in the Mediterranean. Since independence, port management has suffered from mishandling by local companies and major shipping agencies in Algeria.
- **Loss of the National Shipping Fleet:** Algeria once had a fleet of around 120 ships. Today, it is at the mercy of foreign shipping companies. The number of containers transported by the national fleet—consisting of just four ships owned by the National Maritime Transport Company—accounts for only **1.5%** of the annual total of **1 million containers** imported.

- **High Shipping Costs:** National spending on general cargo exceeds **\$3 billion**, representing over a third of the total cargo value. This spending needs to be reduced by relying on national facilities and means, as well as ensuring that shipping service providers operate in a regulated and competitive environment in Algeria (25).

5.2 Challenges Facing Algerian Ports

Algerian ports face several future challenges, the most notable of which include:

- **High Costs of Chartering Ships:** Algeria loses approximately **\$1.2 billion annually** in chartering costs for shipping vessels to import various goods. For instance, shipping costs reached **88 billion DZD (\$1.1 billion)** in 2011—an amount sufficient to rebuild a fleet of 40 large cargo ships, each priced at \$25 million.
- **Partial Port Privatization:** Through partial privatization, the Algerian government hopes to improve port efficiency and expand infrastructure. However, reforms are needed to adapt port policies to global economic changes. Algeria lags behind other countries in port privatization due to outdated cargo-handling equipment, which requires urgent modernization, as well as the establishment of dry ports to ease congestion at traditional ports. Despite the nascent stage of logistics in Algeria, private sector operators are working to reduce port and foreign trade burdens (26).
- **Government Investments:** The Ministry of Public Works allocated over **100 billion DZD** in its 2010–2014 plan to fund projects and develop port infrastructure. Post-plan public investments allocated nearly **40%** of resources to further infrastructure development, aiming to expand and modernize port networks, increase capacity, and rebuild the fleet after in-depth studies.
- **Outdated First-Generation Ports:** Algerian ports, inherited from the colonial era, remain largely unchanged. These ports feature small and narrow basins, close storage areas, and narrow docks separated by barriers. While suitable for smaller vessels and simpler cargo handling in the past, they no longer meet modern maritime transport requirements (27).

6. Conclusion

Commercial ports in Algeria, as a logistical base, are one of the main pillars in managing the flow of foreign trade. The development of Algerian foreign trade indicates a significant reliance on oil exports, which primarily cover Algeria's imports of equipment, food consumer goods, construction materials, and agricultural products. Due to the shortcomings of the policy pursued by the Algerian state in promoting exports outside the hydrocarbon sector, Algerian commercial ports, despite their role in the percentage of trade transactions they handle, remain unable to activate and elevate foreign trade to the levels of available capacities and resources, especially concerning diversifying the commodity structure and the geographical areas in which they operate. Through the analysis of foreign trade movement via Algerian commercial ports, it is evident that these ports can be divided into those that dominate foreign trade volume and others that specialize in hydrocarbons. Algiers Port dominates most Algerian trade exchanges, while Arzew Port controls the trade exchanges related to hydrocarbons. Additionally, Oran Port ranks as the second port after Algiers in terms of Algerian trade via containers.

It is also noted that the lack of competition has resulted in poor performance in port services, consequently leading to increased costs and suboptimal utilization of capacities. This situation is reflected in the concentration of activity in certain ports and the underutilization of theoretical capacities in others.

Recommendations

Based on the findings, we present a series of relevant recommendations as follows:

- **Connect Marine Ports with Transportation Networks:** Establish connections between marine ports and road, railway, and airport networks to enhance port efficiency through multimodal transport.
- **Enhance Logistics Centers:** Make every effort to ensure the success of logistics centers in Algerian ports by modernizing the dealing agencies, customs procedures, and improving the infrastructure and communication networks.
- **Upgrade the Commercial Fleet:** Work on equipping the Algerian commercial fleet with container ships and vessels for transporting oil and liquefied gas, as these two types of ships are among the most important in the global commercial fleet.
- **Expand Beyond Port Limits:** Allocate storage spaces adjacent to highways and railways to relieve pressure on the ports and facilitate the flow of containers toward the port hinterland.
- **Utilize Information and Communication Technologies:** Implement information and communication technologies in managing container movements within port boundaries, aiming to reduce waiting times for ships in the port to the lowest possible levels.
- **Develop Specialized Ports:** Enhance port capabilities to accommodate trade movements between Algeria and other countries by constructing specialized ports equipped with all necessary facilities, machinery, and warehouses to serve loading, unloading, and storage operations.

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