

A Study on the Economic Development of Dakar Port in Senegal

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Abstract: Dakar Port serves as both the economic hub of Senegal and a pivotal trade nexus within the West African region, boasting excellent deep-water conditions. With the growing volume of bilateral trade between China and Senegal, Senegal's port construction investment policies will receive further preferential financial support. Despite numerous challenges stemming from inadequate infrastructure and external environmental constraints, the economic development of Dakar Port holds profound significance for regional trade, industrial growth, and the nation's economic transformation. This paper examines the geographical advantages, industrial contributions, and developmental bottlenecks of Dakar Port; analyzes its strengths, current status, economic impact, challenges, and practical implementation pathways; explores its evolving role and the challenges it faces in the context of globalization; and, in alignment with the Senegal government's strategic initiatives, proposes sustainable development strategies for the port economy. These strategies focus on a dual approach — enhancing the "hard infrastructure" and upgrading "soft power" — through infrastructure modernization, regional collaborative cooperation, and the adoption of green technologies, thereby overcoming spatial limitations and competitive pressures to solidify the port's strategic position within the African–Atlantic Economic Corridor.

Keywords: Dakar Port; Port Economic Development; Trade Cooperation; Regional Impact.

1. Introduction

The global shipping landscape is undergoing significant transformation; the establishment of the African Continental Free Trade Area has entered a critical phase, and the port economy of West Africa serves as a key driver of Africa's economic transformation. Dakar Port, located at the westernmost tip of Senegal, leverages its strategic location and deep-water advantages to function as a vital international trade transit hub and logistics center in West Africa, as well as a cornerstone of Senegal's national economy.

China-Serbia economic and trade cooperation has been deepened; following the alignment of the "Belt and Road" initiative with Senegal's development strategy, Dakar Port has received financial and policy support, undergone infrastructure upgrades, and seen an increased contribution to regional trade. However, the port faces internal challenges such as aging facilities, low operational efficiency, and a rigid management system; coupled with the external pressures arising from the restructuring of global supply chains, its locational advantages have not been fully realized.

There has been a lack of systematic academic research on the Port of Dakar. This paper takes the Port of Dakar as its subject of study, analyzes its locational value, economic contribution, and current challenges, and explores pathways for sustainable development; it can serve as a reference for port development, China–Africa port cooperation, and the regional integration of West Africa.

2. The Historical Evolution and Core Advantages of Dakar's Port Economic Development

Dakar Port is located on the western coast of the Senegal Bay, on the Cape Verde Peninsula – the westernmost point of the African continent.[1] It serves as a crucial node on the Atlantic Ocean shipping routes and has historically been a central hub for West African trade and logistics, acting as a "maritime bridge" connecting Europe, the Americas, and the inland regions of West Africa.[2]

The port was established in 1861 as a coal supply station for the French colony; later, with the development of the railway network, it evolved into a central trade hub in West Africa. During the period when the Suez Canal was closed due to the Middle East War, the port experienced peak operational activity. Throughout the 20th century, it underwent multiple expansions, acquiring oil terminals and container terminals, thereby forming a modern, integrated port system.

The Dakar Port has a water depth of 12–15 meters, making it a rare natural harbor in West Africa capable of accommodating cargo vessels with a tonnage of up to 200,000 tons. In recent years, the Senegalese government has been advancing its "West African Trade Hub" strategy to leverage its strategic location and create a regional trade "siphon effect";

approximately 40% of the transshipment trade among the member states of the Economic Community of West Africa passes through this port. The Dakar Port is closely linked to the capital, Dakar, and serves as a central hub for regional politics, economics, and transportation, thereby strengthening the region's resource aggregation effect.

3. The Economic Contribution and Industrial Linkages of the Port of Dakar

3.1 Trade Hub and Regional Radiation Development

Leveraging its strategic location and efficient operations, Dakar Port has become a key trade hub connecting West Africa's interior with the global market, reshaping the regional economic landscape. Through a multimodal transport network comprising railways and highways, it links the hinterland of West Africa with international markets, serving as a vital maritime gateway for the region's inland countries and handling approximately 30% of the region's transit cargo movements; in 2020, regional trade contributed 18% to Senegal's GDP.

Infrastructure integration and policy coordination continue to amplify their spillover effects: Upon completion, the new port will form a "dual-port drive" with Dakar Port, increasing its annual handling capacity to 3 million TEUs and aligning with the "Afrikaner Kontinentale Freihandelszone" (Africa Continental Free Trade Area) strategy, while simultaneously activating the regional service sector network. This hub-based development model strengthens Senegal's leading role within the West African Economic Community and accelerates economic integration along the Atlantic coast of Africa.

3.2 Dual-driven development of the industrial and fisheries economies

Dakar Port serves as Senegal's core economic engine, fostering a regional industrial chain development model driven by both industrial and fisheries sectors. The port's industrial cluster attracts supporting industries, creating a comprehensive "fishery resources – processing – export" value chain that promotes the diversified development of the marine economy.

Industrial development leverages port-based bonded zone policies and logistics networks: the Dakar Port Bonded Zone offers tariff incentives and warehousing convenience, attracting foreign investment to establish regional centers. Industrial growth in turn supports the fisheries sector: the shipbuilding industry supplies modern fishing vessels, while fishing processing waste is converted into bioenergy to supply the industrial park.[3]

This two-way driving mechanism strengthens the resilience of industrial chains and fosters technological innovation; in the future, industry and fisheries will leverage the deep integration of infrastructure to propel Senegal's transformation from a resource-exporting country into a regional value chain hub.

3.3 Promoting Employment and Revitalizing the Regional Economy

Dakar Port has revitalized the economy of West Africa through multifaceted employment creation and the integration of regional resources. It directly employs over 15,000 people; its spillover employment effect helps alleviate urban unemployment pressures. Additionally, through skills training programs, thousands of workers have been equipped with expertise in smart logistics technologies, building a talent pool for the region's industrial upgrading.

The Dakar Port's integrated development of inland resources revitalizes the regional economy: Following the expansion of its road and rail networks, the port connects the hinterland's agricultural zones and fishing bases with global markets, attracts foreign investment, and establishes a "Port + Manufacturing" synergistic model.

Employment creation and regional revitalization have propelled Dakar Port's transformation from a mere logistics hub into a regional growth engine; meanwhile, technological spillovers have accelerated the integration process of the West African Economic Community, marking a leap from localized prosperity to comprehensive regional activation.

4. Internal Contradictions and External Pressures in the Economic Development of the Port of Dakar

As a vital trade hub for Senegal and West Africa, Dakar Port has faced significant internal developmental challenges and external competitive pressures in recent years, hindering its sustainable development.

4.1 Internal Development Contradictions

4.1.1 Management System: The Conflict Between Administrative Functions and Market-Oriented Management

The operation of Dakar Port faces an inherent contradiction between administrative intervention and market-driven demands. As a state-led mixed economy entity, its management system must fulfill both administrative functions for industry regulation and strategic control, while also accommodating market-oriented operations. This dual role limits the port's flexibility in attracting foreign investment and fostering technological innovation. Although the mixed economy model is

common in Western countries, Senegal lacks a mature legal governance framework with clear delineations between public and private property rights, further exacerbating issues of poor management efficiency and low investment confidence.

4.1.2 Infrastructure: The mismatch between traditional and modernization requirements

Despite its considerable draft, Dakar Port's infrastructure has gradually become inadequate for modern shipping demands. Moreover, some berths have water depths of less than 10 meters, limiting the berthing capacity for large vessels. In recent years, operational volumes have declined significantly, largely due to inefficiencies caused by aging facilities. Although modernization plans were initiated in 2012, funding shortages and delayed policy implementation have hindered progress. Meanwhile, expansion projects at ports such as Lagos Port in Nigeria further highlight Dakar Port's infrastructure deficiencies.

4.1.3 Economic Structure: The Dilemma Between Single-Export Dependence and Diversification Transformation

The economic activities at Dakar Port are highly dependent on traditional primary product exports. This single-structure model makes the port vulnerable to fluctuations in international commodity prices and weakens its risk resilience. Additionally, the port has failed to effectively integrate into high-value-added industrial chains; despite its rich fishery resources, it lacks sufficient deep-processing capacity and still primarily focuses on raw material exports. In contrast, the Port of Gwadar, operated by China, integrates logistics and industry through the China-Pakistan Economic Corridor, thereby significantly lagging behind Dakar Port in terms of diversified development.

4.2 External competitive pressure

4.2.1 Intensified international competitive pressure

As the third-largest deep-water port in West Africa, Dakar Port faces intense competition among regional ports: Abidjan Port has been established as the "Gateway to West Africa" thanks to its modern facilities; Lagos Port leverages Nigeria's economic size to secure a trade advantage and is poised to become one of the largest deep-water ports in West Africa, serving as a key container transport hub across Africa.[4] However, constrained by aging infrastructure and capacity limitations, Dakar Port is increasingly at a disadvantage in terms of transshipment efficiency and cost competitiveness; its container terminal throughput falls below the regional benchmark, making it difficult to attract large shipping alliances to call at its facilities, and its international transshipment cargo is frequently diverted.

4.2.2 Regional economic integration and changes in trade patterns

The implementation of the African Continental Free Trade Area is driving a restructuring of regional trade. Dakar Port, serving as the maritime gateway for the landlocked countries Mali and Niger, must adapt to more complex trade rules and logistics demands. However, Senegal faces significant domestic economic imbalances: high unemployment rates and fiscal deficits, coupled with substantial regional development disparities. Although Dakar Port plans to enhance its hub status through new port expansion, the lengthy construction timeline makes it difficult to address existing challenges in the short term, potentially causing the country to miss opportunities for reshaping the regional trade network.

4.2.3 Dual constraints from policies and regulations

The stringent oversight imposed by Senegal's Customs and Immigration authorities on vessels has significantly increased port operating costs. Frequent customs penalties, coupled with overlapping responsibilities among agencies, have prolonged clearance procedures, resulting in substantially longer average vessel detention times compared to regional ports. The Immigration Department's rigorous review of crew documentation, combined with language barriers, exacerbates enforcement conflicts and further elevates corporate compliance costs. Such policy environment undermines the trade accessibility of Dakar Port, contrasting sharply with the institutional advantages of neighboring ports.

4.3 Issues related to the environment and sustainable development

Dakar Port faces significant environmental challenges, with the core issue being the mismatch between lagging environmental management practices and the demands of sustainable development. Noise pollution from port operations adversely affects nearby communities; untreated wastewater is discharged directly into the sea; and the lack of effective industrial waste management has exacerbated ecological degradation.

The tension between port expansion and ecological conservation is acute; consequently, the Senegalese government is driving the modernization and upgrading of its ports, yet aging infrastructure continues to hinder its role as a regional trade hub. Although green technologies have been introduced to strengthen environmental management, the pace of pollution control has lagged behind development demands. Tightening environmental regulations have compelled the port authorities to increase investment in pollution control measures, yet the substantial historical environmental liabilities make a green transition unlikely in the short term.

5. Prospects and Practical Approaches for the Economic Development of the Port of Dakar

5.1 The economic development prospects of Dakar Port

The economic development prospects of Dakar Port boast strategic depth and multidimensional potential. Situated at a strategic hub along the Atlantic shipping routes and leveraging Senegal's pivotal political and economic role, the port connects Europe, the United States, and the African interior, handling an annual cargo throughput of over 12 million tons – accounting for 90% of Senegal's import and export freight volume. Through its railway network, it extends its reach to inland countries such as Mali, making it an indispensable node within the West African supply chain.

The Senegalese government has incorporated its port economy into the "Senegal Revitalization Plan" and the "2050 Vision," leveraging tax incentives and infrastructure investment to optimize the business environment. Under the Belt and Road framework, China-Senegal cooperation has yielded significant results, with Chinese enterprises showing active investment in port construction and fishery processing sectors.

Currently, Dakar Port is unleashing growth momentum through modernization initiatives and enhancing its regional logistics capacity, with urban infrastructure development and the Digital Dakar Initiative advancing in tandem. However, challenges remain; moving forward, it is essential to strike a balance between investment in infrastructure upgrades and operational efficiency, while deepening international collaboration, in order to solidify its position as a key hub in West Africa and achieve sustainable development. As the global economic and trade landscape gradually stabilizes and Africa's economy continues its long-term growth, there will be strong demand for port investment across Africa, the regional port landscape will continue to evolve, and the integration of ports with urban development as well as the construction of land-based logistics corridors will accelerate.[5]

5.2 The practical approach to economic development at the Port of Dakar

As a pivotal trade hub in West Africa, Dakar Port must adopt a multi-pronged approach to its economic development strategy to overcome current challenges and unlock growth potential.

5.2.1 New Port Collaborative Development

Dakar Port is undergoing a transformative upgrade through expansion and modernization. Key projects include the Endayeane Port initiative developed in collaboration with Dubai's Global Ports Group, covering 1,200 hectares with a draft depth exceeding 18 meters. Upon completion in 2026, it is projected to become West Africa's third-largest container port, significantly enhancing regional logistics capacity. Concurrently, efforts are underway to upgrade the railway network, improving intermodal transport efficiency with landlocked countries like Mali and reducing cargo transit times. Dakar Port serves Senegal's four major traditional foreign exchange generators: fisheries, peanuts, phosphate minerals, and tourism. Furthermore, newly discovered oil and gas resources — including the Sangoma Oil Field and Greater Tertu Gas Field — are set to be exported via the port, expected to generate substantial revenue for the country over the next two decades and inject new momentum into the port economy.

5.2.2 Regional Integration Development and Value Chain Integration

Vigorously promote the standardization of cross-border logistics within the Economic Community of West African States, establish a combined road-rail transport system along the Dakar-Bamako railway corridor to shorten cargo transit times in landlocked countries. By integrating the African Free Trade Area into regional trade rules, enhance bargaining power. It should also be noted that Dakar Port suffers from high fees and lengthy loading/unloading times, which deter most shipping fleets; its annual throughput approaches 10,000 tons and is declining. The renovation plan focuses primarily on container handling equipment to improve security and efficiency.[6]

5.2.3 The Green Economy and Industrial Transformation

Utilize revenues from oil and gas development to invest in green hydrogen and solar energy projects, thereby establishing a synergistic "traditional energy – clean energy" system that reduces the carbon footprint of port operations. Promote the digital management of fishery resources, implement fishing quotas and ecological compensation mechanisms, and achieve sustainable development. Dakar Port should advance the deployment of green technologies: install solar-powered lighting systems, promote the use of electric loading and unloading equipment, and establish sewage treatment and waste recycling systems; develop environmental protection standards in line with international norms, set up an environmental monitoring mechanism, and regularly publish ecological reports to rebuild community trust; launch the Hain Bay Ecological Restoration Initiative and collaborate with surrounding fishing villages to develop sustainable fisheries, balancing economic growth with ecological conservation.

5.2.4 International Cooperation and Independent Innovation

China's investment in African ports aims to foster China–Africa cooperation and drive Africa's growth and development. [7] The Dakar Port should strengthen its alignment with China's Belt and Road Initiative, expand the participation of Chinese enterprises in port construction and operation, learn from the management practices of European and American companies, and mitigate cultural conflicts and operational risks. A local Dakar Research Fund should be established, and partnerships with multinational corporations should be forged to set up an energy technology center, thereby enhancing independent innovation capabilities, adopting advanced technologies, and avoiding technological dependence.

6. Summary

Dakar Port has evolved from a colonial-era resource-exporting port into a modern, comprehensive logistics hub; its current development trajectory reflects the characteristics of Senegal's transitional period: its strengths lie in the unleashing of locational potential, the impetus provided by new infrastructure initiatives, and diverse cooperation opportunities; its weaknesses include the limitations of traditional operational models, pressures from the external environment, and social tensions.

The Senegalese government needs to advance structural reforms by leveraging three pathways — constructing new ports, applying green technologies, and fostering regional collaborative cooperation — to enhance trade capacity, create jobs, optimize logistics networks, and extend industrial chains, thereby helping Dakar Port overcome its bottlenecks. Moving forward, it must balance efficiency improvements with ecological sustainability, strengthen the synergy between "hard infrastructure" and "soft power," deepen the integration between the port and the city, drive technological upgrading and policy innovation, and achieve a transition from a "logistics hub" to an "economic hub." This will enable Senegal to secure a strategic position in the reshaping of the global shipping landscape, set an exemplary model for the port economy of West Africa, and contribute practical cases to global South-South cooperation and the implementation of the Belt and Road Initiative.

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