

Ex-Ante Evaluation (for Japanese ODA Loan)

Africa Division 4, Africa Department
Japan International Cooperation Agency

1. Name of the Project

- (1) Country: Republic of Côte d'Ivoire
 - (2) Project Site / Target Area: Abidjan Autonomous District (population: 6.11 million people in 2021)
 - (3) Project: Abidjan Port Cereal Berth Construction Project (II)
- Loan Agreement: March 19, 2024

2. Background and Necessity of the Project

- (1) Current State and Issues of the Port Sector and the Priority of the Project in Côte d'Ivoire

As the largest economy in the West African Economic and Monetary Union (UEMOA), the Republic of Côte d'Ivoire occupies an important position as a driver of the regional economy. Developed in the 1970s, Abidjan Port, which boasts the largest port infrastructure in the UEMOA zone, functions as a gateway to inland countries in the Sahel region. However, due to the impact of economic and political turmoil, there has been a lack of new investment since the 1980s, and upgrading of existing facilities has not kept up with the growth in cargo demand. While the volume of cereal cargo handled, excluding wheat, is expected to increase by about 17% from 1.97 million tons in 2014 to 2.3 million tons in 2030, in 2014 the cereal berth occupancy rate already exceeded 70% and was approaching the berth's limit of 80% (Final Report of the Preparatory Survey on the Abidjan Autonomous Port Cereal Berth Improvement Project, JICA, May 2017). Furthermore, the volume handled increased to 2.16 million tons in 2021 and the berth occupancy rate was calculated to be reaching 78%. The development of new cereal berths is therefore an urgent issue. With respect to this situation, the Côte d'Ivoire government created a National Development Plan (NDP) to further accelerate the sustained economic growth that was occurring prior to the COVID-19 pandemic, and it positioned the development of Abidjan Port as a priority project with the aim of increasing the port's cargo handling volume and improving operational efficiency (NDP 2021–2025).

Based on the above context, the Abidjan Port Cereal Berth Construction Project (the "Project") yen loan agreement was signed in March 2017. Construction of berths got under way in October 2019, and civil engineering works other than the Harbor Master Watchtower (the "Watchtower") were

completed in March 2023. However, due to the impact of factors such as 1) the spread of COVID-19 from December 2019 onward, 2) the increased volume of dredging and reclamation work, 3) design changes related to the Watchtower, and 4) exchange rate fluctuations, the project costs have increased. The Watchtower, whose construction has not been completed, will handle approval and management for berthing/departing vessels and vessels entering/exiting the port and duties related to ensuring safety for ship traffic in the harbor. It is indispensable in managing the new berths, and its development is therefore necessary for the Project.

(2) Japan's and JICA's Policy Cooperation Policy and Operations in the Port Sector

At the 8th Tokyo International Conference on African Development (TICAD8), Japan set one of its initiatives as “Strengthening a free and open international economic system” which aims to invest in high-quality infrastructure that connects regions. The Project will contribute to realizing a “Growth Ring” in West Africa, which is one of the three core corridors Japan announced the support in the TICAD process. Japan's Country Assistance Policy for the Republic of Côte d'Ivoire (March 2018) identifies “promoting sustainable economic growth” as a priority area and supports infrastructure development through technical cooperation for development planning (Project on the Corridor Development for West Africa Growth Ring Master Plan), ODA loan (Project for Construction of Three Intersections in Abidjan), ODA grant (Project for Improvement of the Japan-Ivorian Friendship Intersection Phase 2), etc. In its global agenda for the transportation (JICA's 20 Strategies for Global Development), JICA identifies building a global network as a priority target, and expresses its engagement in developing/expanding ports and strengthening port operation functions. JICA's Country Analysis Paper for the Republic of Côte d'Ivoire (March 2023) also supports development of infrastructure such as transportation that benefits wide areas, and the Project is consistent with these policies and analysis. Moreover, it is also consistent with the following policy announced in the G7 Hiroshima Leaders' Communiqué on May 20, 2023: “Keeping in mind the situations in West Africa and the Sahel, the Horn of Africa, and the Great Lakes regions, we will work together to support African-led efforts on peace, stability and prosperity on the continent.” It may also be considered as contributing to SDG 9 (building resilient infrastructure).

(3) Other Donors' Activities

In Abidjan Port, the Export-Import Bank of China is supporting the deepening of the Vridi Canal, expansion of its entrance, and developing a second container terminal and Ro-Ro terminal. The West African Development Bank is supporting the development of industrial land. The World Bank is supporting the paving of the access roads to Abidjan Port, while the U.S.-backed Millennium Challenge Corporation (MCC) is supporting the repairment of Vridi Boulevard, which connects to the access roads.

3. Project Description

(1) Project Description

① Project Objective

The Project aims to meet the increasing demand for transportation of cereals in Côte d'Ivoire and inland Sahel countries by constructing new cereal berths at Abidjan Port, thereby contributing to more efficient regional logistics.

② Project Components

a) Details of Facilities, Equipment, etc.: Construction of new cereal berths (international competitive bidding (tied))

- Development of front quay and north quay, dredging, reclamation, construction of mooring facility for small boats (e.g., tugboats) and Harbor Master Watchtower, etc.

b) Consulting Services (Shortlist Method)

- Bidding assistance, construction supervision, etc.

③ Project Beneficiaries (Target Group)

Direct beneficiaries: Abidjan Autonomous Port stakeholders, Abidjan Port cereal berth users

Indirect beneficiaries: Logistics operators, producers, wholesalers, and consumers who benefit from the increased volume of cereal cargo handled at Abidjan Port

(2) Estimated Project Cost

Total project cost: 14,012 million yen (amount of present Japanese ODA loan amount: 2,455 million yen)

(3) Schedule (Cooperation Period)

Planned for March 2017 – August 2026 (total of 114 months). The Project will be completed when the facility enters into service (August 2025).

(4) Project Implementation Structure

1) Borrower: The Government of the Republic of Côte d'Ivoire

- 2) Guarantor: None
- 3) Executing Agency: Abidjan Autonomous Port Authority
- 4) Operation and Maintenance System: Abidjan Autonomous Port Authority
- (5) Collaboration and Sharing of Roles with Other Donors
 - 1) Japan's Activity

The Project will contribute to realizing the master plan formulated in the Project on the Corridor Development for West Africa Growth Ring Master Plan (2015–2018), a technical cooperation for development planning project. The Project for Improvement of the Japan-Ivorian Friendship Intersection Phase 2, which is an ODA grant project, is also currently being implemented in Abidjan. In addition, development based on a yen loan agreement, the Project for Construction of Three Intersections in Abidjan (loan agreement signed in January 2019), is expected to facilitate logistics in the international corridors extending east-west and north-south with Abidjan Port as the starting point.

2) Other Donors' Activity

In relation to the French Development Agency (AFD), the Japan-France Plan for Sustainable Development, Health and Security in Africa adopted by the prime ministers of both countries in October 2015 views Abidjan as a model city for sustainable urban development. Both countries will contribute to its sustainable urban development, with JICA cooperating in the field of transportation and the AFD cooperating in fields such as water, sanitation, etc. The Project is considered as one of JICA's transportation projects under the Plan.

(6) Environmental and Social Considerations

- ① Category: B
- ② Reason for Categorization

This Project is not considered to have a significant adverse impact on the environment because it is not a large-scale port project, as described in the JICA Guidelines for Environmental and Social Considerations (effective as of April 2010). This Project is also not associated with sensitive characteristics or areas as described in the JICA Guidelines.

③ Environmental Permit

Approval of the environmental and social impact assessment (ESIA) report for the Project was obtained from the National Environmental Agency (ANDE) of Côte d'Ivoire on October 10, 2018.

④ Anti-Pollution Measures

Measures such as water spraying and vehicle maintenance will be taken for

dust and exhaust gas generated during construction. The Project involves dredging and reclamation, but careful attention will be paid to international treaties, related environmental laws and regulations, etc. when getting rid of dredged soil, which will be disposed of in designated offshore zones. A waste disposal plan will be created, based on which waste will be handled by specialized operators or transported to designated disposal sites. There is expected to be an adverse impact on air quality due to the increase in traffic when the facility enters into service, so measures will be considered to ease traffic congestion on nearby roads.

⑤ Natural Environment

The project site is not located in or near a sensitive area such as a national park, and it is considered to have minimal adverse impact on the natural environment.

⑥ Social Environment

Since the Project is being carried out in the existing port district owned by the Autonomous Port of Abidjan, it does not involve any resettlement or land acquisition.

⑦ Other/Monitoring

Air pollution, water contamination, and waste disposal will be monitored during facility construction and operation, with the Autonomous Port of Abidjan playing a central role.

(7) Cross-Sectoral Issues: Not applicable.

(8) Gender Category: GI (gender mainstreaming needs survey and analysis)

<Details of Activities/Reason for Categorization> While gender mainstreaming needs were surveyed, it did not lead to implementing initiatives that will contribute to gender mainstreaming, including specific indicators, etc. The Project is planning to develop a female worker-friendly environment by promoting recruitment of women at the construction site, installing facilities tailored to women's needs, etc.

(9) Other Important Issues: Steel pipe sheet piles, hat-shaped steel sheet piles, and H-shaped steel will be used for berth construction, and construction methods for these steel materials were introduced using Japanese companies' expertise and technologies.

4. Targeted Outcomes

(1) Quantitative Effects

Outcomes (Operation and Effect Indicators)

Indicator	Baseline (Actual value in 2017)	Target (2027) [2 years after project completion]
Volume of grain cargo handled (tons/year)	1,997,000	2,360,000
Maximum draft of incoming grain vessels (m)	10	13
Average load of grain cargo (tons/ship)	30,000	40,000
Loading efficiency (tons/berth/day)	2,000–2,200	3,700
Berth occupancy rate (%)	71	73

(2) Qualitative Effects: By increasing the volume of cereal cargo handled, the Project will increase the distribution of cereals in Côte d'Ivoire and inland Sahel countries, contribute to economic development, and enhance food security.

(3) Internal Rate of Return:

Based on the preconditions listed below, the economic internal rate of return (EIRR) for the Project is 17.2%, and the financial internal rate of return (FIRR) is 2.2%.

[EIRR]

- Cost: Project cost (excluding taxes), operating and maintenance costs
- Benefit: Difference between case in which new cereal berths are developed and case in which they are not (improving demurrage conditions and transportation costs if cargo is unloaded at other ports and transported overland)
- Project Life: 40 years

[FIRR]

- Cost: Project cost, operating and maintenance costs
- Benefit: Port dues, cargo handling charges, cargo loading/unloading fees, warehousing fees
- Project Life: 40 years

5. External Factors and Risk Control

- (1) Preconditions: Not applicable.
- (2) External Factors: Not applicable.

6. Lessons Learned from Past Projects

In the ex-post evaluation (2005) of the Qinhuangdao Port E and F Berth Construction Project, a loan project in the People's Republic of China, the following lesson was learned: "Cargo demand increased due to the rapid economic growth following the appraisal of the project. This needed repeated design changes and changes to the plan for the entire port, significantly lowering project efficiency. We should have therefore clarified the roles of the target port, formulated a detailed plan based on long-term supply-demand projections, been actively involved in the plan changes, and made appropriate proposals to the recipient government." In addition, the ex-post evaluation (2011) of the Batangas Port Development Project, a loan project for the Republic of the Philippines, notes as a lesson learned that demand projections should consider not only macroeconomic indicators but also, if possible, factors such as the mid- to long-term outlook for the industrial structure in the port's hinterlands and trends among the shipping companies that actually handle cargo.

With Côte d'Ivoire achieving rapid economic growth, JICA is ensuring that the Project's cereal berths will increase cargo loading/unloading efficiency by being used as dedicated cereal berths and expanding the reclaimed land area for use as a warehouse site to ensure adequate storage space. When making demand projections (cargo handling volume projections), the volume handled and development plans at nearby rival ports are considered, and comparisons of conditions related to port usage (e.g., port duties) are included as well. These are reflected in the Project plan, and at the present stage, no issues have arisen.

Furthermore, the ex-post evaluation (2019) for the Mombasa Port Development Project, a loan project in Kenya, states: "The plan for the privatization of the operating rights was suspended, yet the design that was premised on privatization was not revised. As a result, the operation of the facilities developed under this project was affected." Given that operation of the new cereal berths is planned based on concession agreements with private companies, with the exception of quay maintenance and management, the Project will be pursued while verifying progress to ensure that these agreements are signed by the time the work is complete, with no delays.

7. Evaluation Results

The Project aims to meet the increasing demand for the transportation of cereals in Côte d'Ivoire and inland Sahel countries by constructing new cereal berths at Abidjan Port, thereby contributing to more efficient regional logistics. It is therefore consistent with Côte d'Ivoire's development challenges and policies and Japan and JICA's cooperation policies and analyses. Since the Project may also be considered to contribute to SDG 9 (building resilient infrastructure), it is highly necessary to support its implementation.

8. Plan for Future Evaluation

(1) Indicators to Be Used

As indicated in Section 4.

(2) Future Evaluation Schedule

Ex-post evaluation: 2 years after the project completion

END

Attached Material: Abidjan Port Cereal Berth Construction Project (II) – Maps

Abidjan Port Cereal Berth Construction Project (II) – Maps

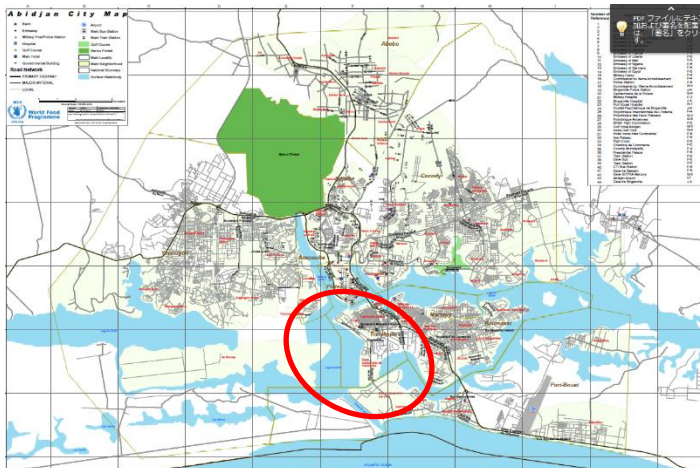
Locations of Key Ports in West Africa



(Source: Microsoft Bing)

Port of Abidjan Location Map

Cereal Berth Location Map



Vridi Canal



New Cereal Berths: Overview Image