

# Abidjan Ivory Coast

Case study on **historical improvements** in water provision



# QUICK STATS



**Location:**  
West Africa



**Country income classification:**  
Lower-middle



**National water resources stress level:**  
Low



**Informal housing (across all urban areas):**  
61%



**City population (2018):**  
4.9 million



**Average annual growth (2013–2018):**  
2.8%



**Access to household piped water:**  
90%



**Access to basic sanitation:**  
60%

An aerial view of a city skyline featuring several modern high-rise buildings. A prominent construction crane is visible in the center, positioned against a blue sky with scattered white clouds. The buildings vary in architectural style, with some having glass facades and others more traditional. The overall scene depicts a bustling urban environment.

## DID YOU KNOW?

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A special type of lease that creates a contract between the public and private sector is called an “affermage” in French. The private operator takes responsibility for operating and maintaining a water or sewer utility, but has only a fixed-term right to use the government-owned infrastructure and equipment.

# UTILITY OPERATION

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Abidjan's water supply comes from a national private operator called SODECI (Societe de Distribution d'Eau de Côte d'Ivoire). It is considered the oldest and largest public-private partnership in the world, dating back to the country's independence from French colonial rule in 1960. Just prior to independence, the country released an international invitation for companies to bid for Abidjan's water supply contract. SAUR, a private French company active in West Africa at the time, won the contract; however, due to a requirement for majority ownership by Ivorian shareholders, SODECI was formed with SAUR as the largest international shareholder. As of 2022, a different French company owns 46% of SODECI shares, while Ivorian shareholders own the rest.

Since its formation, SODECI has signed a number of concession contracts (called "affermages") with the Ivorian government that both renewed and reformed some services. The first (1967) transferred most infrastructure investment obligations to the government and limited SODECI's responsibilities to operations and maintenance. This utility vs. government division of responsibilities has remained fairly stable over time. In 1974, SODECI assumed nationwide responsibility for operating urban water systems. This enabled the subsidization of poorer parts of the country

using revenues from richer areas, such as Abidjan. Separately, SODECI received a management contract for limited operation and maintenance of sewerage systems.

# REGULATORY OVERSIGHT

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A 1988 macroeconomic crisis spurred governance reform in Ivory Coast. It split responsibility for water system oversight between a ministry and a technical agency directly under the country's Prime Minister. The new setup led to overlapping responsibilities and costly inefficiencies. In response, a new autonomous state corporation (called ONEP, or Office National de l'Eau Potable) arose in 2006 to serve as the sole agency for infrastructure development, asset management, and regulation of the water sector. Their duties include oversight of SODECI's performance contract. ONEP reports to the Ministry of Economic Infrastructure and the Ministry of Water and Sanitation, who retain infrastructure ownership, approve consumer pricing (aka "tariffs"), and develop sector strategies. ONEP can access a national water development fund to finance investment expenditures. SODECI, in contrast, remits a portion of tariff revenue back into the national water fund to repay loans.

# BROADER POLITICS

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Post-independence, the Ivorian government remained stable for nearly 40 years with a single party dominating politics. The party originated from wealthy coffee and cocoa planters who promoted capitalism and strong relations with previous colonial powers. While the government enjoyed gross domestic product growth for two decades, a drop in cocoa and coffee prices around 1979 led to a sudden economic decline. During this time, the government was obligated to reduce public sector spending. When the economic crisis hit a climax in 1990, public sector worker-led strikes ushered in formal democracy and a multi-party system.

After a decade of the new political system, civil wars erupted, first from 2002 to 2007 and again from 2010 to 2011. During the civil wars, SODECI struggled to keep up with water demand. After 2011, large donor investment programs helped close the gap between supply and demand; from 2011 to 2015, water production capacity in Abidjan doubled from 500,000 cubic meters to 1 million cubic meters per day. ONEP's role in infrastructure investments likely contributed to this success.

## TRIVIA

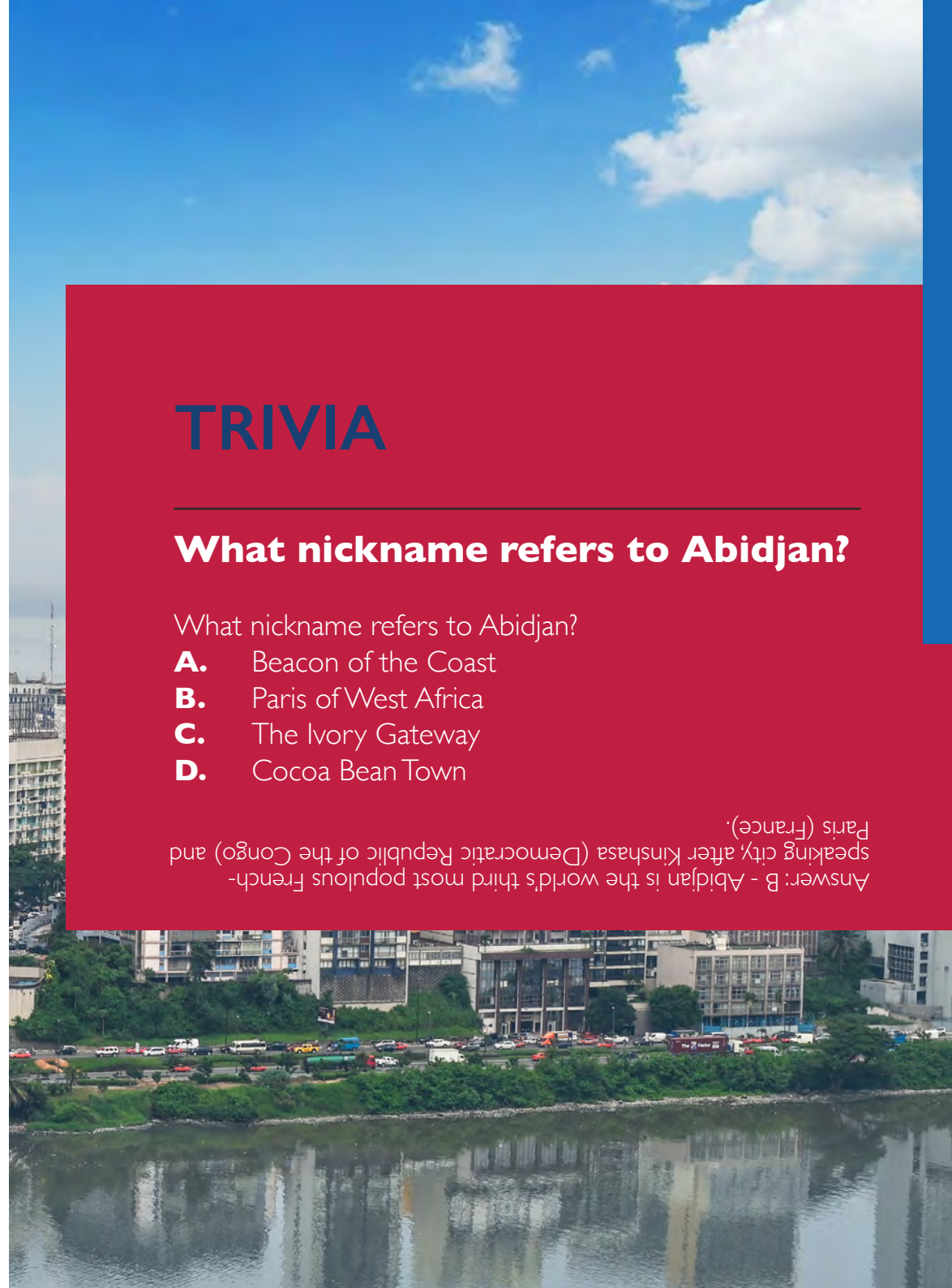
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### What nickname refers to Abidjan?

What nickname refers to Abidjan?

- A.** Beacon of the Coast
- B.** Paris of West Africa
- C.** The Ivory Gateway
- D.** Cocoa Bean Town

Answer: B - Abidjan is the world's third most populous French-speaking city, after Kinshasa (Democratic Republic of the Congo) and Paris (France).







# PERFORMANCE HIGHLIGHTS

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Despite institutional and contractual changes over the decades, the public-private partnership has performed well since its inception. Throughout the 1960s and 1970s, the rate of new water connections exceeded population growth rates. Rates of unaccounted-for or “non-revenue” water losses have hovered around 20%, slightly below the regional average. The water distribution system’s total length expanded from 176 km in 1960 to 10,000 km (within and outside Abidjan) by 1995. SODECI’s investments in its workforce and introduction of pro-poor programs are both credited with this success. In terms of workforce development, employees received high salaries and merit-based promotions, while social funds helped meet basic needs like housing, savings, loans, and retirement.

Additionally, a government social connection program initiated in the 1970s provided subsidies for low-income customers, financed by revenue from increasing block tariffs and a surcharge for high-volume customers. Between 1986 and 1998, 87% of new connections installed in Abidjan received subsidies, doubling the customer base. By 1998, 63% of Abidjan households had water connections; by 2000, Abidjan’s water connection coverage had outperformed all other West African cities. Critics of the subsidy

## KEY SUCCESS FACTORS

-  **REGULATION OF PRIVATE OPERATOR**
-  **INFRASTRUCTURE IMPROVEMENT FUND**
-  **INVESTMENTS IN WATER SUPPLIER WORKFORCE**
-  **INTRODUCTION OF PRO-POOR CONNECTION SUBSIDIES**

program pointed out that segments of the population found even subsidized water connections unaffordable, while others could not afford the cost of extending water mains to their area of the city. The program also failed to address issues of land tenure, bypassing those living in illegal settlements since they remain ineligible for service provision.

**“[ZADI] WAS THE ONE WHO REALLY BROUGHT BIG IDEAS ON MANAGEMENT... IDEAS THAT WERE DESIGNED SPECIFICALLY FOR THE AFRICAN, OR IVORIAN CULTURE.”**

– Sylvain Usher, African Water Association, describing how Ivory Coast water and sanitation managers invested in their workforce



Past and present champions: Sylvain Usher (left) works at the African Water Association, encouraging partnership for African populations' sustainable access to potable water and sanitation services. He recognized the legacy of former Ivorian water utility CEO, Marcel Zadi Kessy (1936–2020; right), who wrote several books on innovative management adaptations.

# FINANCIAL SUSTAINABILITY

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The social connection program remains in place but relies on bilateral donor agencies. This shift in funding sources is consistent with evidence that customer tariffs (service charges) have remained frozen since 2004 and have not kept pace with costs. Although the contracts stipulated that nationally uniform tariffs will be renegotiated and approved by the heads of the Ministries every five years, in practice, tariff setting has been ad hoc since 1988. The ongoing freeze resulted in the government subsidizing SODECI's operations. This places financial strain on ONEP and the national water fund, but has not yet led to performance issues.

# WATER QUALITY

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ONEP's regulatory activity has strengthened transparency around water quality. SODECI reports water quality results to ONEP at least twice per year to assess compliance with World Health Organization water quality standards. More than 97% of samples reportedly comply with microbiological parameters and 92% with physiochemical parameters. SODECI has introduced remote in-line sensors that automatically monitor water pH and conductivity within the network, sending electronic alerts when water quality exceeds set limits. Customers can access water quality information in annually published reports or by requesting data from SODECI. Customers also contact ONEP's call center to register any complaints.



# EQUITY AND INCLUSION

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The Ivorian government has attempted to address service provision for informal dwellings since the late 1970s, when the city population was growing at an annual rate of 8.5%. Evaluations suggest they only succeeded in regularizing land ownership, without adding adequate infrastructure or services. In addition to these “under-equipped” settlements, Abidjan hosts "precarious" settlements where land tenure has not yet been addressed and peri-urban villages along Ébrié Lagoon. These villages have been granted land security and water connections, but suffer from encroachment and pollution due to residents’ relatively weaker political connections and fewer organized advocacy efforts. The civil wars further strained low-income areas, as populations from other parts of the country fled there, driving evictions and demolitions as authorities sought hidden rebels and arms. In 2018, an estimated one million people lived in illegal or underserved areas. Within this complex landscape, SODECI’s attempts at pro-poor service provision can be viewed as a relative success, although more frequent and in-depth data on service quality and provision in low-income settlements is required.





# ONGOING CHALLENGES

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Despite impressive water quality results and piped household water coverage greater than 90% in regulated service areas, segments of Abidjan's population in informal settlements remain at higher risk of receiving unsafe water. A 2018 study of peri-urban settlements in the city's lowest-income district revealed that 40% of households relied on illegally resold SODECI water, which is often contaminated. SODECI attempted to regulate resellers in the 1980s by issuing special licenses in areas where it could not operate. Licensed resellers were not provided connection subsidies, though, and paid the same increasing block tariff as domestic consumers, leading to higher costs. Although an organized body of authorized resellers attempted to lobby for better working conditions, the number of licensed resellers ultimately decreased, suggesting the disincentives were never addressed and many resellers remain undeclared. SODECI has attempted to operate regular and coin-operated standpipes in informal areas; as of 2000, only 52% of all the standpipes in Abidjan were functional, helping to explain why only 2% of low-income populations rely on standpipe water today.

# TIMELINE OF KEY HISTORICAL EVENTS



## SERVICE PROVISION

- 1959**  
International call for water supply concession contractor
- 1974**  
Connection subsidies and social tariff introduced
- 1986-1998**  
87% of connections installed granted subsidies
- 2004**  
Most recent tariff increase
- 2010-2015**  
Donor investment programs double water production in Abidjan



## GOVERNANCE

- 1960s**  
Government signed 30-year concession contract with SODECI
- 1967**  
Investment responsibility transferred to government
- 1974**  
SODECI signed 15-year contract to operate all Ivorian urban water systems
- 1988**  
New 20-year SODECI contract effected, with continued government oversight
- 2006-09**  
ONEP created as a state corporation and granted sole responsibility for oversight and regulation of contract; new contract signed



## SOCIAL, ECONOMIC, AND POLITICAL CONTEXT

- 1960**  
Independence from French Colonial Rule
- 1970**  
Government initiated programs to upgrade informal settlements
- 1979**  
Drop in cocoa and coffee prices led to cuts in public spending
- 1990**  
Strikes by public sector workers
- 2002-2007**  
First civil war began
- 2010-2011**  
Second civil war began
- 2019**  
Country ranked as 3rd largest economy in West Africa

# FURTHER READING

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