

Western Africa Regional Study on Health Economics

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ABSTRACT

Health economics in Western Africa is shaped by systemic, financial, and human resource challenges, compounded by regional efforts to improve health outcomes and policy frameworks. The region faces a dual burden of fragile health systems and economic constraints.

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INTRODUCTION

Health economics in Western Africa is shaped by systemic, financial, and human resource challenges, compounded by regional efforts to improve health outcomes and policy frameworks. The region faces a dual burden of fragile health systems and economic constraints. Despite projected economic growth of 4.3% by 2025, health infrastructure remains underfunded, access to care is inequitable, and reliance on volatile external aid persists. Only three African nations—Rwanda, Botswana, and Cabo Verde—meet the Abuja Declaration target of allocating 15% of national budgets to health, while most West African countries fall below 10%. The Economic Community of West African States (ECOWAS), comprising 15 member states and over 360 million people, grapples with some of the world's highest disease burdens. Although, life expectancy has marginally improved to 57.5 years, and under-five mortality has declined to 66.7 deaths per 1,000 live births, health outcomes remain far below global benchmarks. Structural obstacles—such as constrained public budgets, out-of-pocket payment dependencies, and unstable donor funding—hinder progress toward universal health coverage (UHC).

HEALTH FINANCING STREAMS AND OUTCOMES

1. Public Health Expenditure

ECOWAS countries allocated an average of 6.06% (SD 2.73) of government budgets to health from 2001 to 2020. Fully Modified Ordinary Least Squares (FMOLS) regression indicates that a one-percentage-point increase in public health spending correlates with a 0.20-year rise in life expectancy. Paradoxically, higher public expenditure was linked to 1.5 additional infant deaths per 1,000 live births, suggesting inefficiencies in resource allocation or absorptive capacity limitations.

2. Private and External Financing

Private per-capita health expenditure (mean US \$25.33, SD 15.90) and external funding (mean 20.70% of total health spending, SD 15.07) reduced under-five mortality. Each increase in private spending lowered mortality by 2.1 deaths per 1,000, while external aid reduced it by 1.8 deaths per 1,000. These results highlight the importance of diversified financing for pediatric health.

3. Equity and Access Considerations

Despite aggregate gains, disparities persist. Private spending disproportionately benefits urban and wealthier populations, widening rural-urban gaps. External aid often prioritizes vertical programs (e.g., HIV/AIDS, malaria), sidelining primary care needs. Policy solutions must include targeted subsidies and performance-based incentives to ensure equitable resource distribution.

Economic Context and Health Financing Landscape

Health spending in West Africa positively correlates with outcomes. A 2025 panel study of 15 countries (1996–2021) found that a 1% increase in health expenditure reduces infant mortality by 0.8% and under-five mortality by 1.2%. However, stark disparities endure:

- Nigeria allocates 5.7% of its budget to health, contributing to a maternal mortality rate of 512 per 100,000 live births.
- Ghana dedicates 6.2% to health, yet out-of-pocket payments constitute 45% of total health spending, deepening poverty.

West Africa's ECOWAS member states exhibit remarkable economic diversity, shaped by their unique resource endowments, sectoral compositions, and fiscal trajectories. Below, we present a narrative account of each country's economic state, highlighting recent performance, key industries, and trade dynamics.

Benin's economy, with an estimated GDP of US \$17.8 billion in 2023, has grown steadily at around 4.5% per annum, driven largely by agriculture and regional trade. Cotton production remains the cornerstone of rural livelihoods, complemented by burgeoning cashew and palm oil sectors. The service industries—particularly transport and commerce centered on the bustling ports of Cotonou and Porto-Novo—contribute nearly half of national output. Despite modest inflation near 2.1%, fiscal pressures persist as public debt hovers at 54% of GDP, prompting strategic investments in logistics infrastructure to enhance competitiveness.

Burkina Faso's economy is anchored by mining and agriculture. With a GDP of US \$18.5 billion and growth of roughly 4% in 2023, gold mining accounts for over one-fifth of GDP and four-fifths of export revenues, while cotton remains its primary cash crop. Per capita income remains low (around US \$850), and volatility in global gold and cotton prices, coupled with security challenges, drives a general government deficit of about 5% of GDP. Foreign direct investment flows predominantly into exploration, and public-private partnerships in agribusiness aim to foster value addition. Cabo Verde represents, a distinctive island model within ECOWAS.

With GDP at approximately, US\$2.0 billion and pre-pandemic annual growth surpassing 6%, the nation's economy leans heavily on tourism—accounting for a quarter of GDP—and fishing. High public debt, estimated at 125% of GDP, finances critical infrastructure in ports and renewable energy, while per capita income (US\$3,200) is the region's highest. Economic diversification efforts include blue economy initiatives and diaspora bond issuances to bolster fiscal resilience.

Côte d'Ivoire, the region's economic powerhouse, reported a GDP of US\$87 billion in 2023 and growth of 7.2%. Agricultural commodities, notably cocoa (it is the world's top producer), coffee, and rubber, underpin rural economies, while oil and gas contribute roughly 10% of GDP. Ongoing fiscal consolidation has trimmed the deficit to 3% of GDP, and moderate inflation near 3% fosters stability. The government's push for agro-processing and infrastructure expansion—backed by both EU and Chinese partnerships—aims at deeper diversification beyond primary exports. The Gambia's small economy (US\$2.3 billion GDP) grew at 4.2% in 2023, relying on groundnuts, fish processing, and tourism (nearly 20% of GDP). Remittances and foreign aid remain vital for balance of payments support, while inflation has reached 8.5%. Structural reforms endorsed by the IMF target revenue mobilization and a shift toward ecotourism, as the country seeks to reduce debt levels (currently 60% of GDP) and broaden its export base.

Ghana, with GDP at US \$90.4 billion, experienced slowed expansion—3.5% in 2023—amid spiking inflation (35%) and debt above 80% of GDP. Gold and cocoa remain export mainstays, complemented by oil and gas revenues that historically financed public services. The government's IMF supported stabilization program focuses on debt restructuring and fiscal consolidation, while initiatives to modernize agriculture and formalize artisanal mining aim to stabilize incomes and shore up foreign exchange. Guinea's US\$15.4 billion economy grew by about 5% in 2023, riding on its vast mining sector—bauxite, alumina, and iron ore comprise nearly 60% of exports. Agricultural staples like coffee and bananas nonetheless provide livelihoods for a majority of the workforce. Inflation at 10.5% and public debt at 45% of GDP reflect both commodity price swings and infrastructure financing, including a China backed rail link to Conakry port. Recent policy thrusts focus on downstream mining value addition and diversified agro-processing.

Guinea-Bissau remains one of the region's most economically fragile states, with GDP around US\$1.9 billion and volatile annual growth ranging from -1.5% to 6%. Cashew exports account for 90% of foreign earnings, yet weak governance, and climate sensitivity sustain a fiscal deficit near 7% of GDP. Efforts by the IMF and development partners to bolster processing

capacity and public financial management aim to transition the economy from raw nut export toward value added production. Liberia's post Ebola recovery saw GDP rebound to US \$4.4 billion, and 3.8% growth in 2023. Iron ore, rubber, and timber form the export base, with Chinese and Indian concessions underwriting major mining operations. Domestic inflation of 12% and debt at 59% of GDP present macro challenges, while World Bank-financed road rehabilitation, and agribusiness development initiatives seek to diversify Liberia's economic outlook beyond extractives.

Mali, endowed with gold reserves that rank it Africa's third largest producer, posted a GDP of US \$24.2 billion. Growth averaged 5.5% before recent political upheavals, slowing to

2.4% in 2023. Cotton and livestock remain vital for rural incomes. Inflation of 14% and debt at 58% of GDP reflect both security induced fiscal strains and infrastructure spending. International peacebuilding investments aim to restore market access and revive nascent agro-industrial corridors along the Niger River. Niger's economy, with GDP of US \$15.2 billion, stands out for high relative growth (7.8% in 2023) buoyed by uranium exports and emerging oil pipeline receipts. Per capita income is among the lowest (US \$610), and inflation is moderate (5.1%). Public debt at 50% of GDP funds expansion of rural electrification and transport networks—often via African Development Bank projects—while long term plans focus on diversifying from subsistence farming toward mineral processing.

Table 1: Healthcare Infrastructure of West Africa.

Country	Facilities	Physicians/10k	Nurses/10k	Primary Financing Models	Recent Reforms & Initiatives
Benin	6,000 health huts; district & tertiary hospitals	0.6	2.3	User fees (sliding scale); 4.5% budget allocation; donor grants	Expansion of community health huts; task-shifting policies
Burkina Faso	1,300 primary centers; 65 district hospitals; 2 teaching hospitals	0.3	1.8	Out-of-pocket; pilot community-based insurance	Community Health Worker expansion; insurance pilots
Cabo Verde	13 island hospitals; primary clinics; referral network	2.1	6.5	Tax-funded NHS; tourism levies; donor support	Telemedicine rollout; universal coverage via tourism levies
Côte d'Ivoire	1,500 health posts; 80 general; 15 tertiary centers	0.5	3.0	User fees; formal-sector insurance rollout	Public-private clinic contracting; insurance expansion
The Gambia	45 clinics; 6 regional; 1 tertiary referral hospital	1.2	7.0	Telecom levy; maternal health vouchers; OOP	Boat ambulances; telecom solidarity levy
Ghana	1,500 CHPS; 200 health centers; teaching hospitals	0.9	8.5	NHIS (~40% coverage); VAT & payroll deductions	CHPS scale-up; NHIS digital enrollment
Guinea	600 health posts; 33 prefectural; 8 regional hospitals	0.2	1.5	5% budget allocation; NGO-supported programs	Planning National Health Insurance; NGO partnerships
Guinea-Bissau	1 central hospital; 4 regional; community clinics	0.1	1.0	Donor-funded Basic Package; OOP	Basic Package of Health Services implementation
Liberia	15 county hospitals; 625 community health units	0.3	1.8	Pooled donor funds; Basic Package financing	Midwife training expansion; community health unit scale-up
Mali	49 district hospitals; University Hospital; mobile clinics	0.4	2.0	User fees; 6% budget allocation	Health sector resilience plan; mobile outreach programs
Niger	42 district hospitals; 8 regional centers; health huts	0.15	1.7	8% budget allocation; World Bank credits	Expanded immunization; National Health Development Plan
Nigeria	More than 30,000 facilities (public & private)	1.9 (urban); 0.2 (rural)	4.5	OOP (~70%); NHIS (~5%); state insurance pilots	Community-based insurance pilots; private sector engagement
Senegal	Community huts; health posts; district & teaching hospitals	0.7	5.2	7% budget allocation; public funds	Digital health records; telemedicine integration
Sierra Leone	1,200 peripheral units; 21 district hospitals; teaching complex	0.2	2.0	Donor-funded recovery plan; OOP	Workforce development; supply chain strengthening

Nigeria, Africa's largest economy (GDP US \$520 billion), grew a modest 2.3% in 2023 amid inflation of 22% and debt approaching 40% of GDP. The hydrocarbons sector—accounting for 80% of export earnings—remains both an engine and a vulnerability. Efforts to privatize power and rail sectors and to spur FDI in fintech and manufacturing aim to broaden the economic base, though agricultural staples like cassava and cocoa continue to undergird rural livelihoods. Senegal's dynamic US \$29.6 billion economy expanded at 6.5% in 2023, with services (banking, tourism), and phosphate mining leading value creation. The government's 'Plan for an Emerging Senegal' channels Chinese and EU funds into industrial parks and digital infrastructure. Moderate inflation (4.2%) and debt at 65% of GDP underscore the need for prudent fiscal management as the country scales up its light manufacturing and agribusiness ambitions.

Sierra Leone has seen its US \$6.2 billion economy recover post Ebola to 3.0% growth in 2023. Mineral exports (diamonds, rutile, iron ore) predominate, while subsistence agriculture—rice and cocoa—feeds most households. Inflation at 8.0%, and debt at around 60% of GDP accompany ongoing efforts to formalize artisanal mining and enhance agricultural research, supported by the World Bank and other partners.

Togo, with GDP of US \$7.3 billion, maintains steady 5.0% growth, buoyed by phosphate mining, cotton, and the strategic Port of Lomé—a transshipment hub for the region. Low inflation (2.5%) and public debt near 52% of GDP reflect cautious fiscal policy. Recent French and Chinese investments in port upgrades and special economic zones have attracted light manufacturing, positioning Togo as a logistics and industrial gateway in West Africa. External funding remains vital but unstable. Official Development Assistance (ODA) for health in Africa plummeted by 70% between, 2021 and 2025, creating a \$12 billion gap. For instance, Uganda risks losing 63% of its HIV/AIDS funding due to PEPFAR cuts, Nigeria's Basic Health Care Provision Fund, domestically financed, now allocates 1% of consolidated revenue (~\$150 million annually), expanding primary care access for 8 million people.

CHALLENGES AND MITIGATION STRATEGIES IN THE HEALTH SYSTEMS OF WEST AFRICAN COUNTRIES

1. Fiscal Policy and Health Outcomes

A regional analysis of Sub-Saharan Africa, including West Africa, highlights the significant positive impact of fiscal policy shocks such as fluctuations in government health

spending on health outcomes. This underscores the critical role of stable and increased public funding in improving regional health indicators. However, the study reveals that private health expenditure shocks exert minimal influence on outcomes, emphasizing the dominance of public financing. The findings advocate for diversifying health financing beyond traditional public and private models to achieve sustainable progress.

2. Evidence-Based Policymaking

The West African Health Organization (WAHO) has prioritized evidence-based policy-making (EBPM) to strengthen health systems across ECOWAS member states. Policymakers acknowledge the urgent need for structured EBPM guidance to overcome barriers in translating research into actionable policies. Regional health leaders emphasize capacity-building and standardized frameworks to ensure maternal and child health policies are informed by robust evidence.

3. Health Research Environment

From 2009 to 2013, WAHO spearheaded initiatives to bolster West Africa's health research environment. By fostering regional collaboration, building local research capacity, and addressing shared health challenges, these efforts cultivated a more supportive ecosystem for research and policy development.

4. Maternal Health Services Utilization

Maternal health remains a critical concern. Analysis of demographic surveys across twelve West African countries reveals that only 23.8% of women fully utilize essential maternal health services—antenatal care, skilled delivery, and postnatal care—while 66.4% access them partially. This underutilization contributes to persistently high maternal mortality rates, necessitating targeted economic interventions to enhance service uptake.

5. Human Resource Challenges and Migration

Health worker migration continues to strain West Africa's health sector. Younger, single professionals with limited experience are disproportionately driven to emigrate due to heavy workloads, limited promotion opportunities, and occupational risks. This "brain drain" exacerbates workforce shortages, undermining efforts to strengthen health systems.

CONCLUSION

West Africa's health economics landscape demands urgent structural reforms. While initiatives like the West Africa Network for Emerging Leaders (WANEL) and Nigeria's BHCPF

show promise, sustained political commitment to domestic financing, regional collaboration, and workforce development is imperative. The 2025 Africa Health Agenda International Conference (AHAIC) in Kigali underscores the need for African-led solutions prioritizing primary care and climate-resilient systems. Aligning economic growth with health equity will be pivotal to achieving UHC and mitigating crises.

Sustainable progress hinges on optimizing financing portfolios, building fiscal resilience, and institutionalizing EBPM frameworks. Policymakers must adopt mixed-financing models, establish fiscal buffers, and formalize evidence-to-policy pathways to ensure equitable and resilient health systems.

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