



ECOWAS

ECOWAS: Scenarios

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Last updated 02 April 2024 using IFs v8.16

Table of contents

ECOWAS: Scenarios	3
Briefly	3
Demographics and Health scenario	4
Agriculture scenario	7
Education scenario	9
Manufacturing scenario	11
AfCFTA scenario	13
Large Infrastructure and Leapfrogging scenario	15
Financial Flows scenario	18
Governance scenario	20
Endnotes	22
Reuse our work	22
Cite this research	22

ECOWAS: Scenarios

- [Briefly](#)
- [Demographics and Health scenario](#)
- [Agriculture scenario](#)
- [Education scenario](#)
- [Manufacturing scenario](#)
- [AfCFTA scenario](#)
- [Large Infrastructure and Leapfrogging scenario](#)
- [Financial Flows scenario](#)
- [Governance scenario](#)

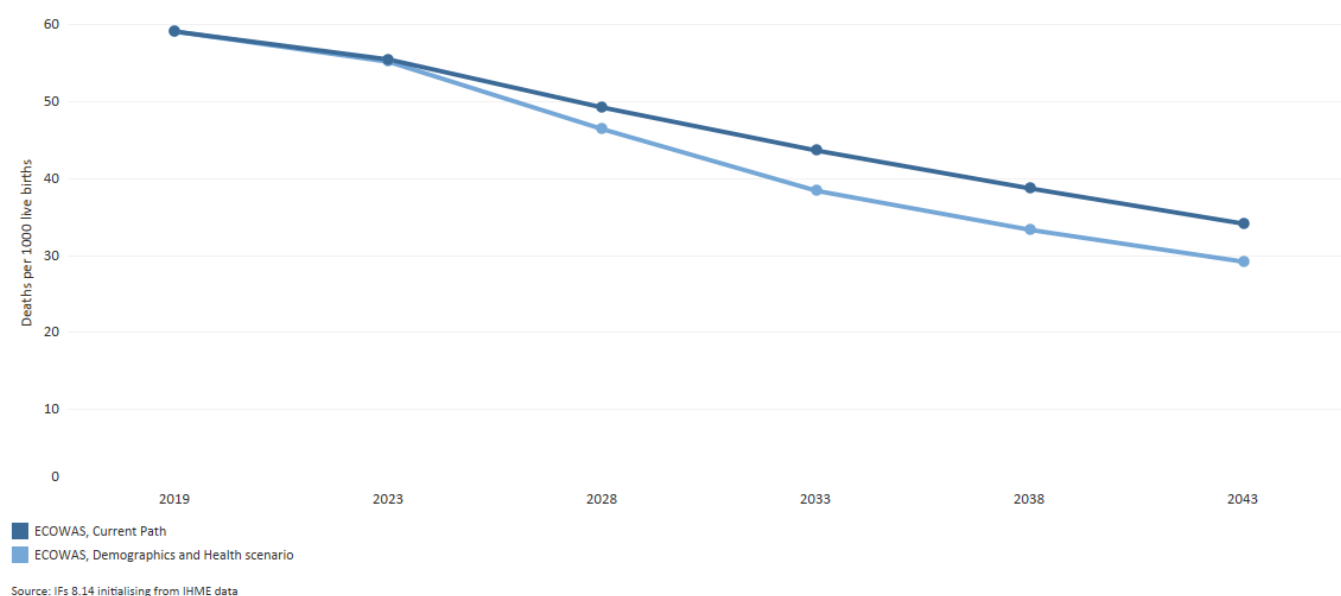
Briefly

Sectoral approach to development

The eight sectoral scenarios as well as their relationship to the Current Path forecast and the Combined Agenda 2063 scenario are explained in more detail separately. Please read more on the website's [About Page](#).

Demographics and Health scenario

Chart 11: Infant mortality rate in Current Path and Demographics and Health scenario, 2019-2043



The Demographics and Health scenario envisions ambitious improvements in child and maternal mortality rates, enhanced access to modern contraception, and decreased mortality from communicable diseases (e.g., AIDS, diarrhoea, malaria, respiratory infections) and non-communicable diseases (e.g., diabetes), alongside advancements in safe water access and sanitation. This scenario assumes a swift demographic transition supported by heightened investments in health and water, sanitation, and hygiene (WaSH) infrastructure.

Visit the themes on [Demographics](#) and [Health/WaSH](#) for more detail on the scenario structure and interventions.

Chart 11 presents the infant mortality rate in the Current Path and the Demographics and Health scenario.

In this scenario, we assume a more rapid [demographic](#) transition and increased investments in better [health](#) and water, sanitation and hygiene (WaSH) infrastructure.

The infant mortality rate is the probability of a child born in a specific year dying before reaching the age of one. It measures the child-born survival rate and reflects the social, economic and environmental conditions in which children live, including their health care. It is measured as the number of infant deaths per 1 000 live births and is an important marker of the overall quality of the health system in a country.

In 2019, the infant mortality rate in ECOWAS was 59.1 which means that for every 1 000 infants who were born about 59 died. This is higher than the average of 46.9 for Africa and also the highest among all RECs. Sierra Leone, Mali and Nigeria have the highest infant mortality rates (74.8, 69.4 and 63.9 deaths per 1 000 live births, respectively). The rate is lowest in Senegal, The Gambia and Cabo Verde (34.5, 33.3 and 17.1 deaths per 1 000 live births, respectively).

In the Demographic and Health scenario, infant mortality in the region will decline to 29.2 deaths per 1 000 live births, which will be slightly above Africa's average of 25.6, yet lower than the 32.2 in the Current Path forecast. Nigeria (38), Sierra Leone (27.2) and Liberia (23.3) will have the highest infant mortality rates in the Demographic and Health scenario by 2043,

while rates are lowest for Senegal (12.4), The Gambia (11.4) and Cabo Verde (8.4). The Demographic and Health scenario will have the greatest impact on Sierra Leone, Guinea and Liberia, where the infant mortality rates will drop by 13.5, 9.9 and 9.6 deaths per 1 000 live births, respectively. Niger, Cabo Verde and Nigeria will experience the smallest reductions in this scenario, namely a drop of 1.9, 1.7 and 0.6 per 1 000 live births, respectively.

Chart 12: Demographic dividend in Current Path and Demographics and Health scenario, 2019-2043

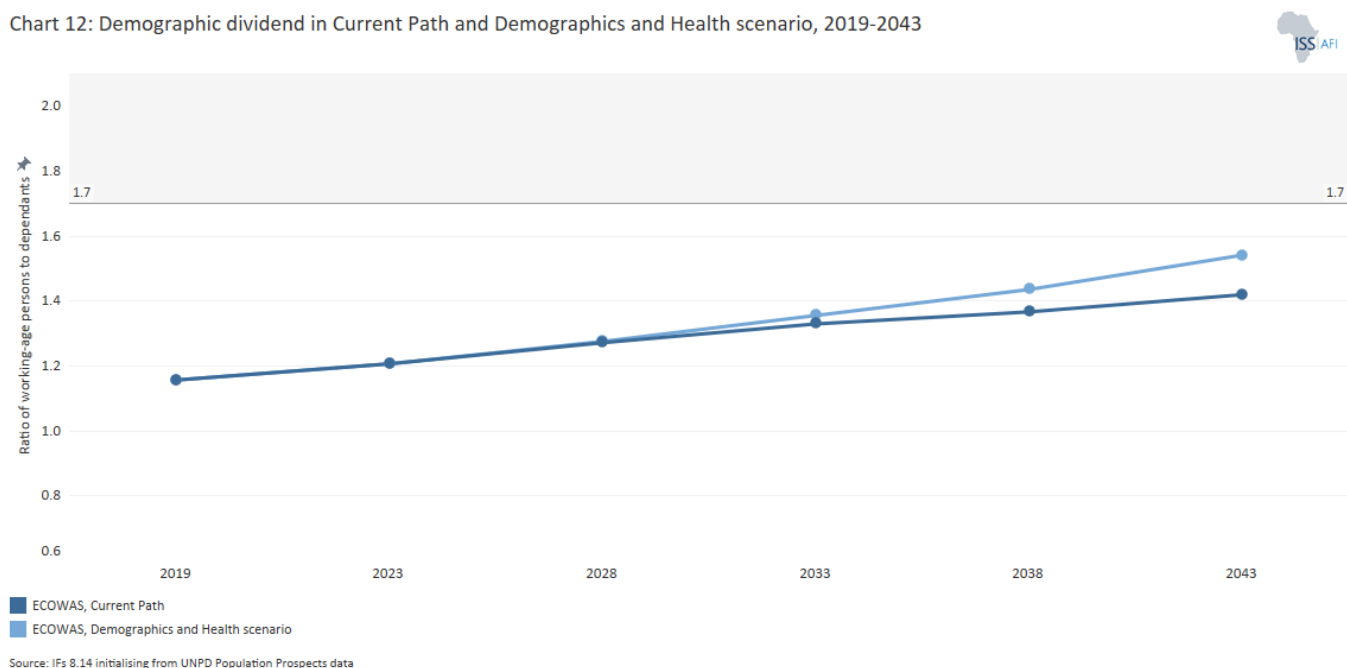


Chart 12 presents the demographic dividend in the Current Path and in the Demographics and Health scenario.

Demographers typically differentiate between a first, second and even a third demographic dividend. We focus here on the contribution of the size of the labour force (between 15 and 64 years of age) relative to dependants (children and the elderly) as part of the first dividend. A window of opportunity opens when the ratio of the working-age population to dependents is equal to or surpasses 1.7.

In 2019, the ratio of the working-age population to dependents for ECOWAS was 1.2:1 which means that for every 1.2 persons of working age one dependent was supported. This was lower than the ratio of 1.26:1 recorded for Africa and the third lowest ratio among the RECs, after ECCAS (1.08:1) and EAC (1.12:1). ECOWAS has a relatively high number of dependent populations compared with other RECs which constrains the rate of economic growth. At 1.82:1, the AMU has the highest ratio since the median age of its population is the highest amongst all RECs.

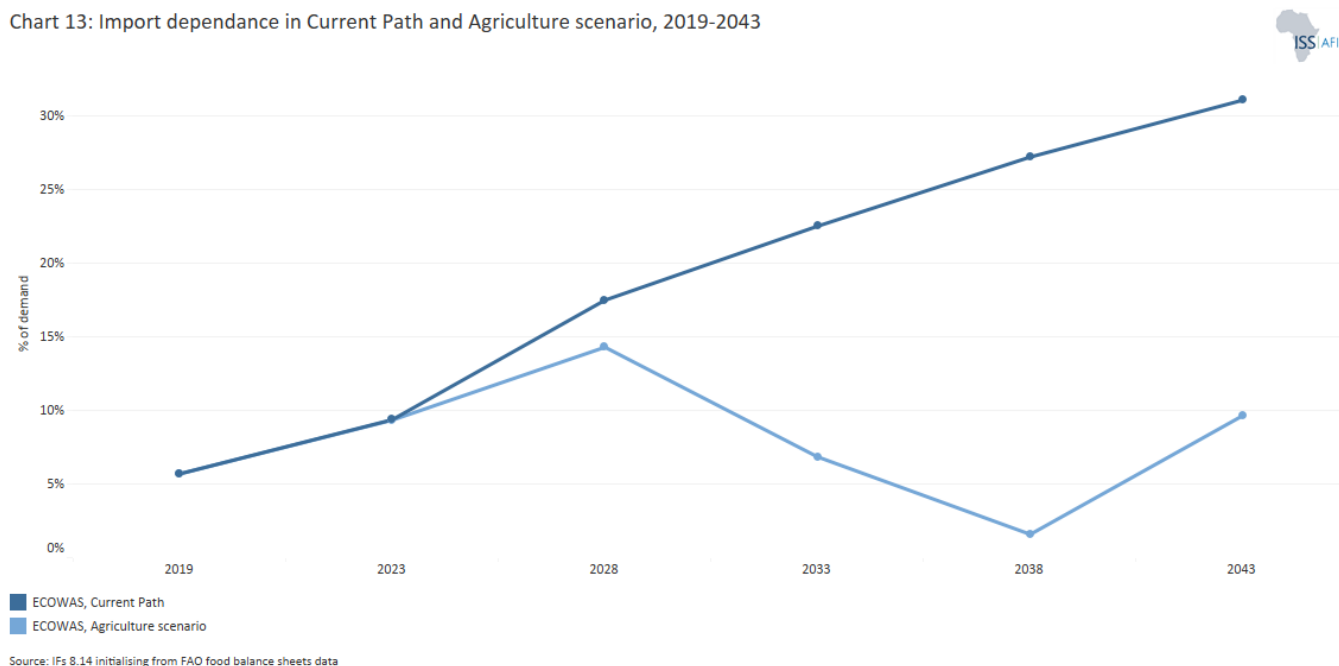
Cabo Verde has the highest ratio of working-age population to dependents (about 2.05:1). The country is, therefore, the only ECOWAS member state that has entered a potential demographic window of opportunity, followed by Ghana and Sierra Leone (1.43:1 and 1.31:1, respectively). The ratio is worst in Burkina Faso, Mali and Niger (1.11:1, 0.99:1 and 0.95:1, respectively). In these countries, their large youthful populations mean that economic growth has to be particularly rapid if it is to translate into income growth.

The Demographic and Health scenario will increase this ratio to 1.54:1 by 2043 for the region, meaning it will not enter a potential demographic window of opportunity even by then. The ratio will be slightly below the average of 1.56:1 for Africa but 0.11 higher than on the Current Path. The impact of the scenario among member countries will differ, with ratios ranging from 2.1:1 (Cabo Verde) to 1.3:1 (Niger).

The countries that will experience the greatest change in their ratio as a result of the Demographic and Health scenario are Burkina Faso, Togo and Ghana, which would be on the cusp of entering a potential demographic window of opportunity in a subsequent decade. Niger and Benin will see the smallest change in their ratios. Because the contribution that labour makes to economic growth is particularly important at lower levels of development, the slow demographic transition in these countries serves as an important drag on income growth.

Agriculture scenario

Chart 13: Import dependence in Current Path and Agriculture scenario, 2019-2043



The Agriculture scenario envisions an agricultural revolution that ensures food security through ambitious yet feasible increases in yields per hectare, thanks to improved management, seed, and fertiliser technology, as well as expanded irrigation and equipped land. Efforts to reduce food loss and waste are emphasised, with increased calorie consumption serving as an indicator of self-sufficiency and prioritising it over food exports. Additionally, enhanced forest protection signifies a commitment to sustainable land use practices.

Visit the theme on [Agriculture](#) for our conceptualisation and details on the scenario structure and interventions.

Chart 13 presents import dependence in the Current Path forecast and the Agriculture scenario.

The agricultural sector is an important source of livelihood for ECOWAS. It **employs** about 60% of the active labour force and provides jobs to 290 million people in the region, making it the largest employer. However, the potential of the sector is threatened by the devastating impacts of climate change. Agriculture has also been unattractive for various reasons, especially to young people who associate it with poverty and suffering. Low investment in the sector, mainly lack of infrastructure such as storage facilities and roads hampers progress. Problems with the land tenure system and land accessibility in most of the region constraints agricultural activities. Moreover, the adoption and use of outmoded and rudimentary agricultural tools are still prevalent.

Despite its high agricultural potential, food insecurity in the region is increasing. Between 2014 to 2017, food insecurity rose by almost 9 percentage points (from 20.7% to 29.5%). Cases of malnutrition are also worsening. As of 2015, 14.2% of the people in the region were affected by undernutrition. This is an increase of **42.2%** from 2018 to 2021, the highest on the continent. The average net agricultural import as percentage of total agricultural demand in ECOWAS was 5.7% in 2019, below the average of 9.0% for Africa. It was also below the averages for AMU, CEN-SAD, COMESA and IGAD.

Agricultural imports differ significantly across member countries. For example, Cabo Verde imports 64% of its agricultural demand, followed by The Gambia and Liberia, which import 55.1% and 21.4% of total demand, respectively. In contrast,

Niger and Burkina Faso have relatively low food import dependence at 4.1% and 3.3% of total demand, respectively. Only Côte d'Ivoire produced enough for its domestic consumption, with a surplus equivalent to 0.7% of total demand in 2019. Because food security is important for national development, Cote d'Ivoire is better placed than other countries in ECOWAS to feed its population and provide it with sufficient nutrients.

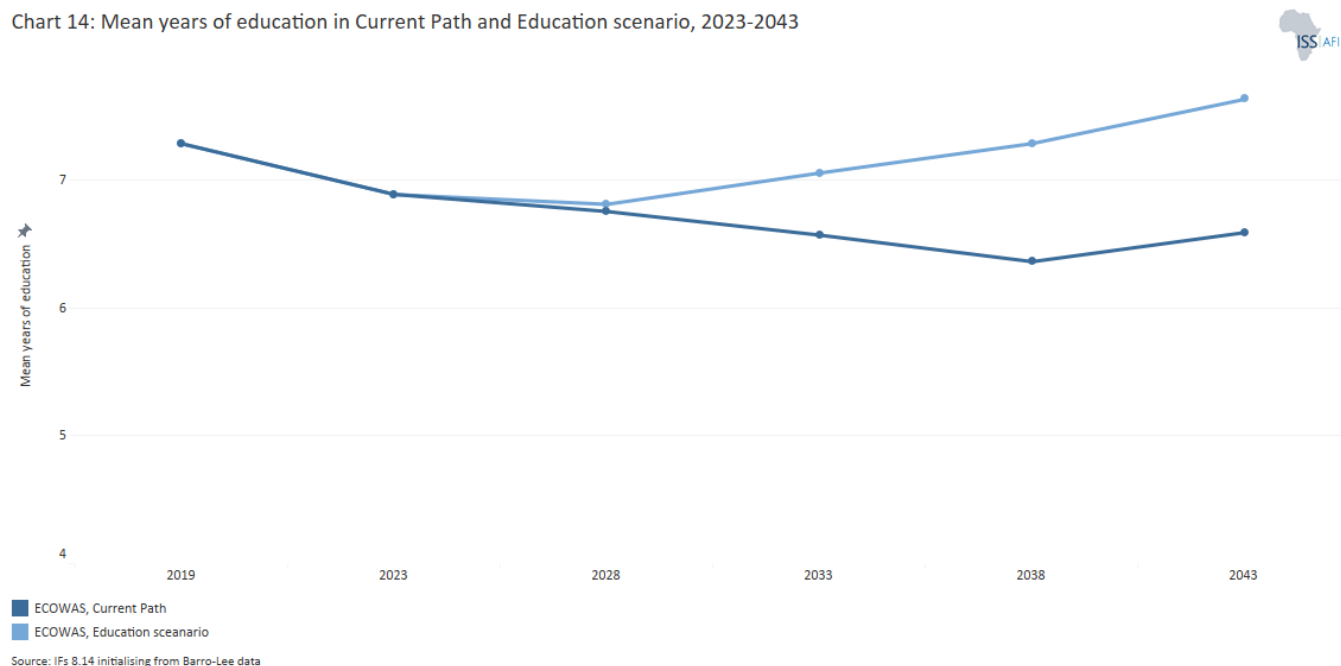
The food insecurity in the region is worsened by the impacts of climate change and natural disasters and the lasting effect of COVID-19 pandemic. According to the [UN](#), more than 25 million people in the region could not meet basic food needs. This represents a 35% increase compared to the situation in 2020. In conflict areas such as the Lake Chad Basin, Liptako-Gourma and the Sahel Region, the problem is worse.

In the Current Path forecast, net agricultural imports in the ECOWAS region will grow to 32% of total demand by 2043. At this rate, it will be above the average of 29.5% for Africa and will be the highest among the RECs, signalling a growing food insecurity. This situation is mitigated in the Agriculture scenario so that by 2043, net agricultural imports will be 7.9% of total demand. This is lower than the average of 34.5% for Africa. In the Agriculture scenario, Ghana and Côte d'Ivoire will all become net exporters of agricultural products equivalent to about 13.2% and 4.1% of total demand, respectively. Other countries in the region will continue to depend on agricultural imports, with The Gambia and Cabo Verde importing a little over 65% of their total demand by 2043.

The Agriculture scenario will reduce agricultural import dependency by 34.2% of total demand in Côte d'Ivoire, 27.1% in Benin and 26.0% in Senegal. This suggests that these countries have the potential to become food-sufficient if the right policies are implemented to benefit their agricultural potential. Countries that will experience the smallest reduction in agricultural import dependency are Cabo Verde, The Gambia and Niger, with reductions equivalent to 4.2%, 4.3% and 5.8% of total demand, respectively. These are countries with limited agricultural potential due to small arable lands and unfavourable climates.

Education scenario

Chart 14: Mean years of education in Current Path and Education scenario, 2023-2043



The Education scenario represents reasonable but ambitious improved intake, transition and graduation rates from primary to tertiary levels and better quality of education at primary and secondary levels. It also models substantive progress towards gender parity at all levels, additional vocational training at the secondary school level and increases in the share of science and engineering graduates.

Visit the theme on [Education](#) for our conceptualisation and details on the scenario structure and interventions.

Chart 14 presents mean years of education in the Current Path forecast and the Education scenario for the 15 to 24-year age group.

The average years of education in the adult population aged 15 to 24 is a good first indicator of how the stock of knowledge in society is changing.

Access to education in ECOWAS has increased significantly over recent years, largely due to the implementation of free basic education in most member countries. Adults aged between 15-24 years received 7.3 years of education in 2019. This is below the average of 7.9 years for Africa. ECOWAS recorded the third lowest duration among the continent's RECs after IGAD and ECCAS. The mean years of education for men was 7.5 years compared with 7.0 years for women, meaning that, on average, men will attain slightly longer education compared with women. Among member countries, Ghana, Togo and Cabo Verde have the highest mean years of education, with averages of 10.0, 9.6 and 8.9 years, respectively. These are all countries with free compulsory primary and secondary education which have contributed to high enrolments. Guinea Bissau, Mali and Niger have the lowest means, at 5.7, 5.3 and 4.5 years, respectively.

In the Education scenario, the mean years of education in ECOWAS will rise to 7.6 years which will be higher than the Current Path forecast of 6.6 years and the average of 6.9 years for Africa. The Education scenario also reduces the gender gap between men and women in ECOWAS. By 2043, Cabo Verde will have the highest mean years of education (9.0 years), followed by Ghana (8.1 years) in the scenario. Countries with the lowest mean years of education will be Burkina Faso (6.9

years), Niger (6.8 years) and Senegal (6.7 years). Compared with the Current path forecast, countries that will benefit most from the Education scenario are Niger, Guinea and Liberia with improvements of 1.8 years, 1.7 years and 1.4 years of education, respectively. Ghana, Gambia and Guinea Bissau will benefit least in the Education scenario.

Although most member countries have made significant progress towards the attainment of universal access to education, the issue of quality remains a challenge. The **low quality** in the region can be attributed to the limited resources and capacities coupled with the difficulties of overcoming cultural and social barriers. According to UNESCO, all countries in the region have less than 4% of young people enrolled in technical and vocational courses. Further, there are issues with the quality of their training and suitability for the labour market.

An important measure of the quality of education is the test scores of students. In 2019, the average test score for primary learners in the ECOWAS was 30.0, which was slightly below Africa's average of 30.9 and only higher than in IGAD. Ghana, Nigeria and Cabo Verde have the highest test scores for primary learners in the region, at 34.5, 32.5 and 31.9, respectively. Guinea Bissau, Niger, and Burkina Faso have the lowest test scores for primary learners, at 25.2, 24.7 and 21.5, respectively.

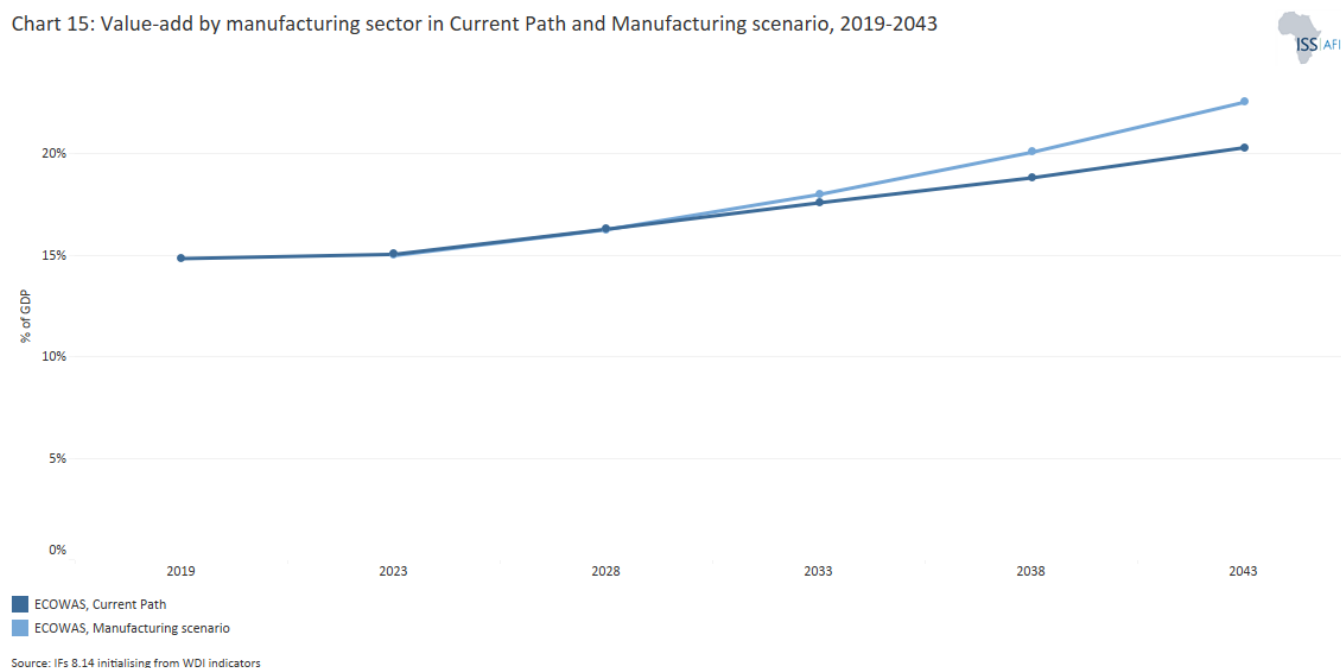
In the Education scenario, the average test score for primary learners is set to increase to 42.8, which is above both the Current Path forecast of 33.1 and Africa's average of 34.3. It will range from 50.0 in Cabo Verde to 30.7 in Burkina Faso among member countries. Compared to the Current Path forecast, The Gambia, Nigeria and Ghana will record the greatest improvement in the scenario while Benin, Senegal and Burkina Faso will record the least improvement.

In 2019, the average test score for secondary learners in the region was 38.5, close to the average of 39.2 for Africa. It was only higher than in IGAD. Nigeria, Cabo Verde and Togo have the highest test scores for secondary learners, averaging 41.8, 41.3 and 38.6, respectively. The countries with the lowest performance in the region are Burkina Faso (33.5), Mali (32.5) and Niger (31.9).

In the Current Path forecast, the average test score is 40.4 for secondary learners. In the Education scenario, the average test score for secondary learners will improve to 49.1 by 2043, which will be higher than the average of 41.5 for Africa by then. Cabo Verde will fare best, with a score of 59.5, followed by Togo and Gambia, with scores of 54.5 and 51.5, respectively. Mali, Burkina Faso and Niger will record the lowest performance in the region, with test scores of 44.9, 42.9 and 40.5, respectively. Compared with the Current Path forecast, countries that will record the greatest improvements are Cabo Verde, Togo and Sierra Leone, while Liberia, Burkina Faso and Niger will record the smallest improvements in average test scores.

Manufacturing scenario

Chart 15: Value-add by manufacturing sector in Current Path and Manufacturing scenario, 2019-2043



In the Manufacturing scenario, reasonable but ambitious growth in manufacturing is envisaged through increased investment in the sector, in research and development (R&D), and through improved government regulation of businesses. This is aimed at enhancing total labour participation rates, particularly among females where appropriate, and is accompanied by increased welfare transfers to unskilled workers to mitigate the initial rises in inequality typically associated with a low-end manufacturing transition.

Visit the theme on [Manufacturing](#) for our conceptualisation and details on the scenario structure and interventions.

Chart 15 presents the contribution of the manufacturing sector to GDP in the Current Path forecast and in the Manufacturing scenario[1].

The manufacturing sector in West Africa primarily produces low-end manufacturing goods such as food and beverages, textile and clothing. Irregular power supply, unfriendly business environment/regulations, corruption, inadequate access to finance, lack of skilled human capital, poor infrastructure and in some countries insecurity are some factors that **hinder** the activities of the sector.

The three largest contributors to the economy in ECOWAS are services, agriculture and manufacturing. The service sector dominates across the region, having contributed about 51.6% to GDP in 2019 (translating to US\$326.4 billion) with few exceptions (Liberia, Mali and Sierra Leone). The growing internet penetration and mobile banking expansion also account for an increasing share of the service sector. The contribution of the service sector ranges from 74.4% in Cabo Verde to 40.9% in Guinea. The Gambia, Senegal, Nigeria, Burkina Faso, Côte d'Ivoire, Ghana, Nigeria, Benin and Guinea Bissau all have service sectors that contributed more than 50% to GDP in 2019.

Agriculture contributed 21.1% to GDP in 2019, equivalent to US\$133.4 billion, while the manufacturing sector's contribution amounted to US\$93.9 billion, representing 14.3% of GDP. The contribution of agriculture to GDP varies substantially between member countries, ranging from 39.9% in Sierra Leone to 6.5% in Cabo Verde; in Côte d'Ivoire,

Senegal, Ghana and Togo the agriculture sector contributes less than 20% to GDP. The manufacturing sector contributed more than 20% to GDP only in Côte d'Ivoire, Togo and Senegal in 2019, with contributions as low as 4.3% in Liberia and 8.2% in Sierra Leone and Cabo Verde.

The energy sector contributed 6.5% to the GDP of the region while the ICT and materials sectors contributed to 4.7% and 1.4%, respectively. Cabo Verde had the largest share of ICT in the region at 7.6%, whilst Niger had the lowest at 3.4% in 2019. Guinea and Liberia had a relatively large materials sector, accounting for almost 9.2% and 7.2% of GDP in 2019.

Consistent with the structural transformation of the economy, the contribution of the service sector is expected to increase in absolute and relative contribution. By 2043, the contribution of the service sector in the region will balloon to about US\$1.3 trillion, representing 58.4% of GDP. This will be driven by the growth in services in Cabo Verde (78.5%), The Gambia (70.9%) and Nigeria (61.5%). The contribution of agriculture to GDP will decline to 8.7% (equivalent to US\$194.8 billion), while that of manufacturing will rise to 21% (US\$469.2 billion). The manufacturing sector will contribute 27.6% and 26.4% of GDP in Côte d'Ivoire and Mali, respectively, but only 8% in Liberia and Cabo Verde. Only Sierra Leone will have agriculture as a substantial contributor to the economy (about 24.6%) by 2043; in other countries, agriculture's contribution will range from 3.2% (Cabo Verde) to 12.5% (Guinea Bissau).

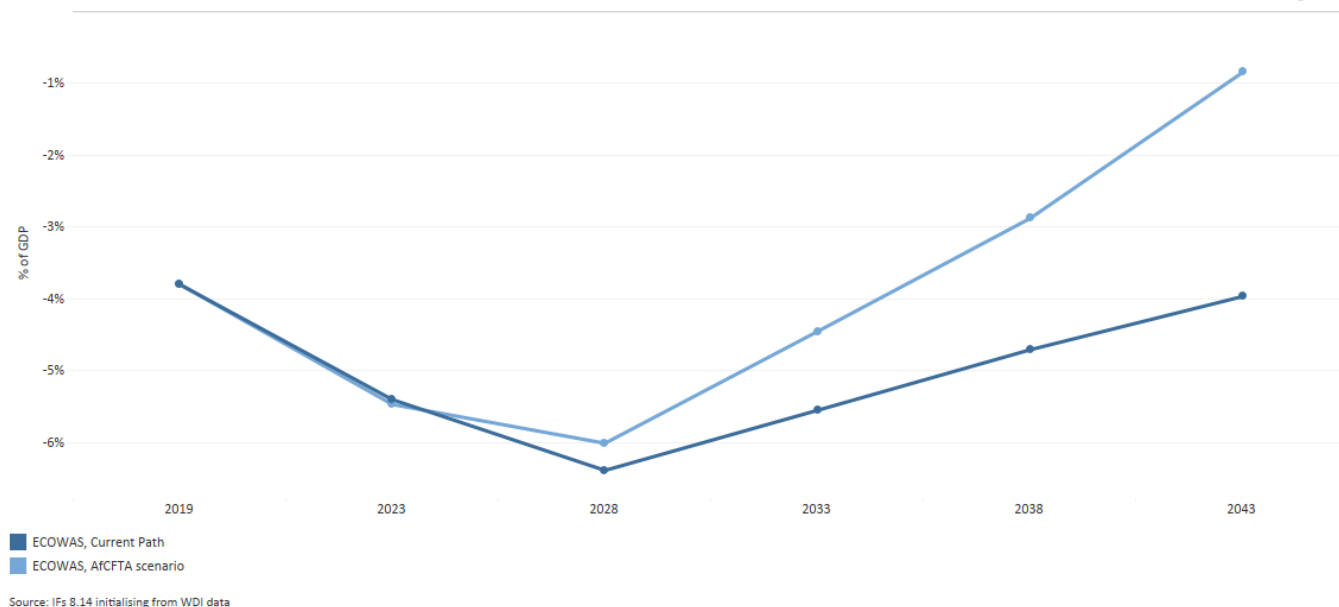
Guinea-Bissau will have the highest contribution of ICT to GDP (7.6%), whereas Sierra Leone is expected to have the lowest contribution from this sector (3.5%). Guinea and Liberia will still have the highest contribution of materials to GDP (16.2% and 18.7%), whereas in Nigeria and Cabo Verde, it will be less than 1%. The sector will contribute less than 2% to the economies of The Gambia, Guinea Bissau, Mali and Cabo Verde. The contribution of energy will be highest in Nigeria at 9.2%. Ghana, The Gambia and Sierra Leone will have their energy sectors contributing slightly above 3% to GDP. On the other hand, Mali, Togo, Senegal and Benin will have the lowest contribution from the energy sector.

In the Manufacturing scenario, all sectors are expected to increase in size compared with the Current Path forecast in 2043. The service sector will be the leading contributor to GDP in ECOWAS by 2043, and its contribution will be about US\$75 billion larger in the Manufacturing scenario than in the Current Path forecast. As a percentage of GDP, the contribution of the service sector will contribute 56.9% to GDP, which will be slightly below the Current Path by 2043. The manufacturing sector, which is the second largest contributor to GDP, will contribute an additional US\$81.2 billion to GDP in the scenario. This corresponds to a share of 22.5% to GDP, which is about 2.2 percentage points above the Current Path forecast. The contribution of agriculture will increase modestly (US\$1.5 billion) by 2043, although in relative terms, its contribution of 8.9% will decline to 0.7 percentage points below the Current Path forecast. ICT will contribute an additional US\$7.8 billion to GDP in the scenario by 2043. The contribution of energy and materials to GDP in the scenario will be an extra US\$610 million and US\$4.4 billion by 2043.

Sectoral contribution to GDP differs across member countries. Nigeria will experience the largest absolute increase in the service sector in the Manufacturing scenario, adding US\$38.8 billion. This will be followed by Côte d'Ivoire and Niger, with contributions of US\$12.2 billion and US\$5.2 billion, respectively. The smallest increase in absolute terms from the service sector will be experienced by Liberia, Cabo Verde and Guinea-Bissau, with contributions below US\$510 million. Only Mali will witness a decline in the absolute value of its service sector. Nigeria, Côte d'Ivoire and Ghana will experience the largest contributions from manufacturing, valued at US\$33.6 billion, US\$14.6 billion and US\$9.8 billion, respectively. Manufacturing will contribute least in Liberia, Guinea Bissau and Cabo Verde, with values of US\$143 million, US\$115 million and US\$107 million, respectively. Agriculture's contribution in the Manufacturing scenario will range from US\$358 billion in Nigeria to US\$2 million in Cabo Verde.

AfCFTA scenario

Chart 16: Trade balance in Current Path and AfCFTA scenario, 2019-2043



The AfCFTA scenario represents the impact of fully implementing the African Continental Free Trade Agreement by 2034. The scenario increases exports in manufacturing, agriculture, services, ICT, materials and energy. It also includes an improvement in multifactor productivity growth emanating from trade and a reduction in tariffs for all sectors.

Visit the theme on [AfCFTA](#) for our conceptualisation and details on the scenario structure and interventions.

Chart 16 compares the trade balance in the Current Path forecast with the AfCFTA scenario.

Intra-regional trade in ECOWAS, albeit low, is improving. In 2019, the region recorded an improvement of 12% in intra-regional trade. However, several **factors still impede** trade among member countries. The poor transportation networks increase the cost and time of travel between countries. Numerous border and customs clearances, roadblocks, and checkpoints make travel difficult across the region. Moreover, the common external tariffs and the ECOWAS trade liberalisation scheme have not yet been fully operationalised. These, coupled with the high duties and taxes and burdensome bureaucratic procedures, make traders resort to informal instead of **formal cross-border exchanges**. Informal unrecorded cross-border trade in the region is huge. For agricultural products, for example, the value of informal trade exceeds formal trade. For instance, the Accra-Ouagadougou corridor is **estimated** to record an average of 17 500 tons of cereals and 96 000 heads of livestock in informal trade annually, equivalent to US\$5.5 million and US\$68 million, respectively.

In 2019, the total export value of ECOWAS was US\$123.9 billion, representing 19.6% of GDP while its total imports were valued at US\$157.8 billion, constituting 24.9% of GDP. Exports in the region are increasingly becoming diversified. According to the FERDI Export Concentration Index, ECOWAS scores have declined from 0.63 in 2006 to 0.46 in 2020, depicting an improvement over the years. The main **export of ECOWAS** is oil, largely from Nigeria, which accounts for 75% of its exports. Other notable exports include cocoa and cocoa food processing (mainly from Ghana and Côte d'Ivoire), precious stones, cotton, wood and wood products, fish and shellfish, edible fruit, plastics and rubbers among others.

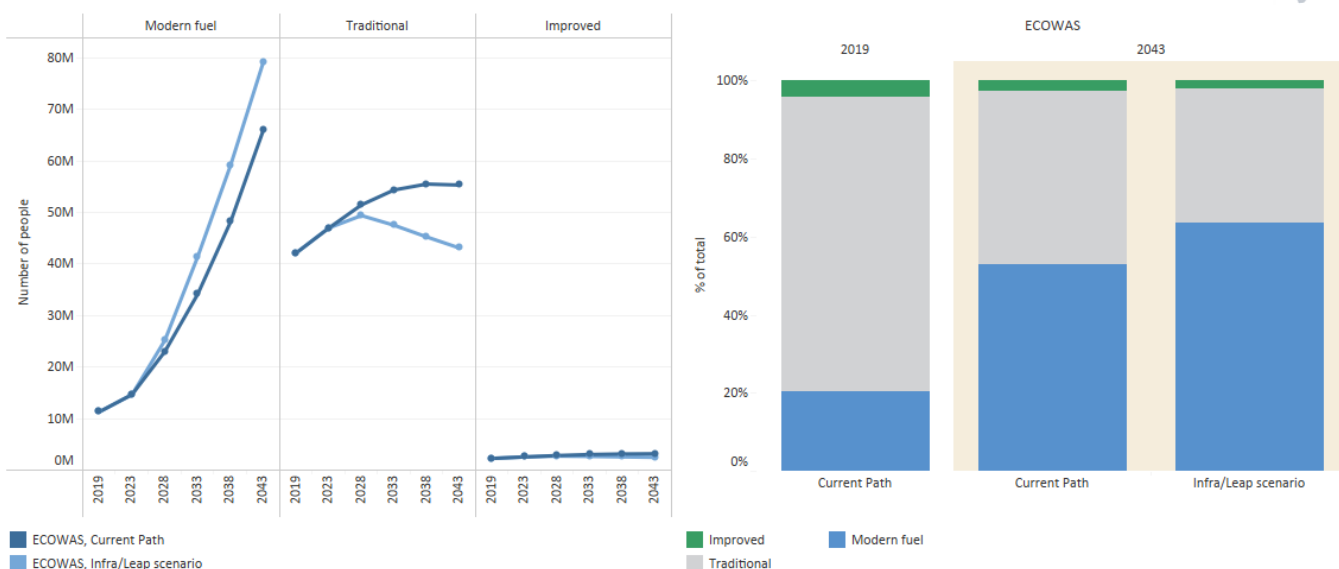
Nigeria, the economic giant in the region, accounts for over two-thirds (77%) of total exports, followed by Côte d'Ivoire, which accounts for 10%. Exports from Ghana, Senegal and Mali constitute 4%, 2% and 1.7%, respectively. Benin, Burkina Faso, Guinea, Niger and Togo also contribute 1% each of total export. The major export destinations are America, Europe and Asia, which receive 40%, 23% and 16% of the total. In terms of **imported commodities**, fuel constitutes the largest representing 24% of total imports, in spite of its status as a net exported commodity. The region also imports large quantities of vehicles, machinery and electrical appliances, cereals, fish and seafoods, plastics, pharmaceutical products and more. Imports to Nigeria are the largest, accounting for 41%, followed by Ghana, accounting for 18%. Import to WAEMU countries represents 36% of the total, while the remaining five countries account for the rest.

As a result of exports exceeding imports, the total trade deficit of the region stood at 5.4% of GDP, above the average of 4.4% for Africa. Among the RECs, it is the fourth lowest after ECCAS, AMU and SADC. All ECOWAS member countries recorded a trade deficit, with the exception of Côte d'Ivoire which recorded a surplus of 1.5% of GDP in 2019. The deficit ranges as high as 43.2% of GDP to as low as 1.9% in Ghana. In the AfCFTA scenario, ECOWAS trade balance improves such that by 2043 it will record a deficit of only 0.8% of GDP. This will be three percentage points lower than the average of 3.8% of GDP in the Current Path and average for Africa.

In the AfCFTA scenario, only Benin, Guinea and Nigeria will have a trade surplus by 2043 of about 3.3%, 1.6% and 0.1% of GDP, respectively. The remaining countries will all have trade deficits, ranging from 0.4% of GDP in Burkina Faso to 17.7% of GDP in The Gambia. The countries that will experience the most significant improvements in trade balance compared to the Current Path forecast are Guinea and Benin, with 6.4 and 5.9 percentage points, respectively. It shows that a lot can be done to improve regional trade, including removing regulatory restrictions and building the appropriate infrastructure to facilitate the free movement of goods and services. The creation of ECO (common currency) will further facilitate regional trade.

Large Infrastructure and Leapfrogging scenario

Chart 17: Cookstoves usage in Current Path and Large Infrastructure and Leapfrogging scenario, 2019-2043



Source: IFs 8.14 initialising from IEA data

The Large Infrastructure and Leapfrogging scenario involves ambitious investments in road and renewable energy infrastructure, alongside improved electricity access and accelerated broadband connectivity. It emphasises the adoption of modern technologies to enhance government efficiency and the rapid formalisation of the informal sector, incorporating significant investments in major infrastructure projects like rail, ports, and airports, while highlighting the positive impacts of renewables and ICT.

Visit the themes on [Large Infrastructure](#) and [Leapfrogging](#) for our conceptualisation and details on the scenario structure and interventions.

Chart 17 presents cookstove usage in the Current Path forecast and the Large Infrastructure and Leapfrogging scenario.

In 2019, 52.5% of the ECOWAS population had access to electricity. This was below the average for Africa (55.1%) and the fourth highest among the RECs after AMU (95.3%), CEN-SAD (63.5%) and COMESA (53.6%). Access is disparate with 82.1% of urban residents having access to electricity compared with only 28.5% of rural dwellers. Countries with high electricity access rates in the region are Cabo Verde (91.4%), Ghana (83.4%) and Senegal (70.4%). At the bottom are Sierra Leone, Niger, and Burkina Faso with 22.7%, 18.5% and 17.6%, respectively. To improve electricity access, the region has established the West African Power Pool (WAPP) and the ECOWAS Regional Electricity Authority (ERERA) structures for regulating electricity. It has also promoted renewable energy through the ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREE). However, low production and high cost of access to electricity remain a challenge.

The relatively low electricity access rate in the region, particularly in the rural areas, reflects the widespread use of cookstoves that predominates. The scenario distinguishes between three types of cooking stoves: traditional, improved and modern. In 2019, 75.6% of households in the region used traditional stoves such as firewood or charcoal for cooking, making it the fourth highest region on the continent after EAC (87.2%), IGAD (85.9%) and ECCAS (80%). A similar trend is observed in most countries in Africa with an average of 61% of households using traditional cookstoves. Among member countries, only Cabo Verde had less than half (31%) of its households relying on traditional cookstoves in 2019. Indeed,

Burkina Faso, Liberia, Togo, Guinea, Sierra Leone and Guinea Bissau had at least 90% of households using traditional stoves for cooking. The high rate of traditional cookstove usage raises concern about pollution and carbon emissions in the region and its negative impacts on the health of these households.

About 4.1% of households in ECOWAS used improved cookstoves while 20.3% used modern stoves for cooking. Cabo Verde had 68% of households using modern fuel for cooking making it the highest in the region. This was followed by Senegal and Nigeria at 48.6% and 25.6%, respectively. As access to electricity in urban and rural areas increases, more households will switch from traditional cookstoves to improved and modern fuel stoves, such as electric and gas cookers.

Based on the Infrastructure and Leapfrogging scenario, 81.3% of people residing in ECOWAS will have access to electricity by 2043, compared to 73.6% in the Current Path forecast. Consequently, the proportion of households that will use modern fuel for cooking in the region will rise to 63.5% by 2043 instead of 54.8% in the Current Path. It will also be higher than the average of 58.5% for Africa by 2043. This will reduce the use of traditional cookstoves to 34.5% of households in the scenario compared to 42.7% in the Current Path. Among member countries, only Guinea Bissau (32.4%), Sierra Leone (30.3%), Liberia (29.8%) and Niger (25.9%) will have less than half of households using modern fuel for cooking in the scenario. Cabo Verde, Senegal and Côte d'Ivoire will have at least 80% of households using modern fuel for cooking. The countries that will witness the greatest switch to modern fuel in the scenario compared to the Current Path are Guinea, Burkina Faso, Togo and Mali with more than 10 percentage points. Cabo Verde and Senegal, which already have very high usage of modern fuel cookstoves among households, will witness minimal improvement at 2.6 and 5.3 percentage points, respectively, by 2043.

This development will reduce health-related challenges and carbon emissions arising from the use of traditional cookstoves in these countries. However, countries such as Niger, Sierra Leone, Guinea Bissau and Liberia will still have over 60% of the population using traditional cookstoves by 2043 due to their low electricity access rates.

Chart 18: Mobile and fixed broadband access in Current Path and Large Infrastructure and Leapfrogging scenario, 2019-2043

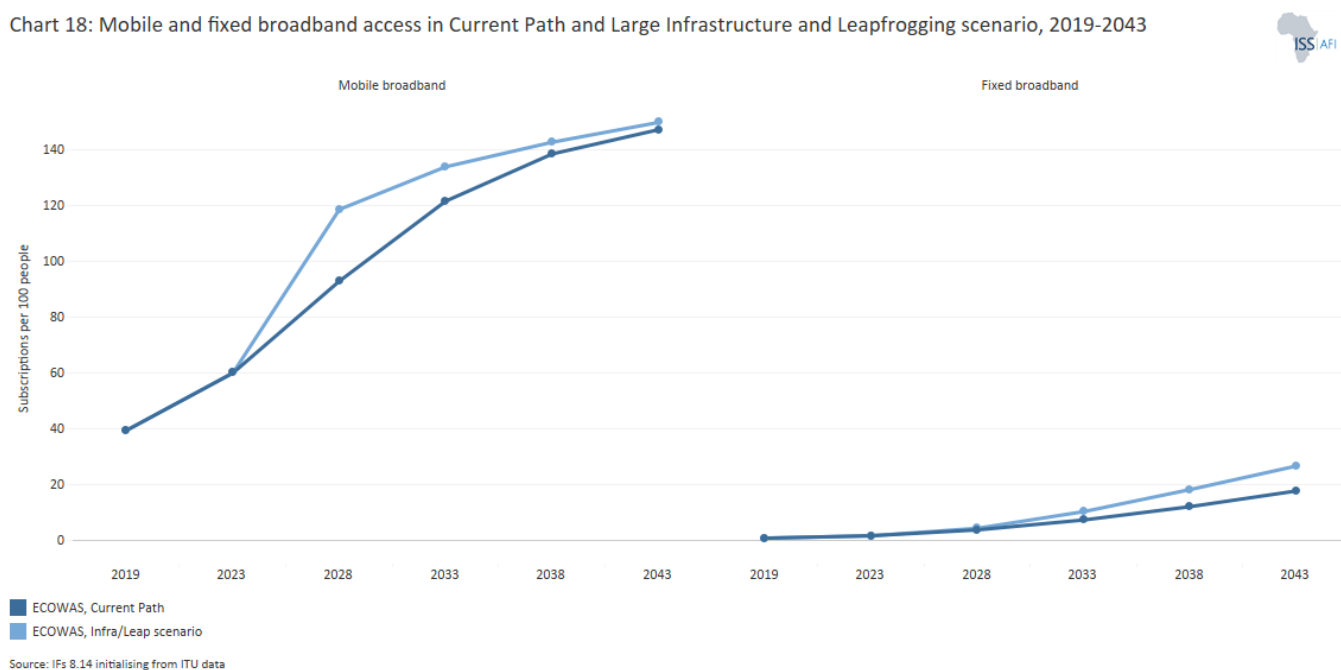


Chart 18 presents access to mobile and fixed broadband in the Current Path and the Large Infrastructure and Leapfrogging scenario.

Fixed broadband includes cable modem internet connections, DSL internet connections of at least 256 KB/s, fibre and

other fixed broadband technology connections (such as satellite broadband internet, ethernet local area networks, fixed wireless access, wireless local area networks, WiMAX, etc.). In 2019, the total number of fixed broadband subscriptions in ECOWAS averaged 0.2 subscriptions per 100 people. It was the lowest among the RECs and far below the average of 1.5 subscriptions per 100 people in Africa. These fixed broadband subscriptions ranged from about 3.5 per 100 people in Cabo Verde to 0.002 per 100 people in Sierra Leone.

In the Infrastructure and Leapfrogging scenario, fixed broadband subscriptions will increase to 26.8 per 100 people by 2043, which will be above the average of 21.6 per 100 people for Africa. It means that compared with the Current Path forecast, the Leapfrogging scenario could improve fixed broadband subscriptions by an additional 8.7 per 100 people. Cabo Verde, Benin and Guinea will have the highest subscription rate for fixed broadband by 2043 in the scenario at 44.8, 39 and 36.9 subscriptions per 100 people, respectively. Niger, Nigeria and Liberia's subscription rate of 16.4 per 100 people will be the lowest in the region in the scenario. Countries that will experience the largest increase in subscriptions in the scenario are Cabo Verde, Benin and Sierra Leone, with gains of, respectively, 15.2, 12.7 and 12.2 subscriptions per 100 people compared with the Current Path forecast. The Gambia, Côte d'Ivoire and Mali will see the smallest growth compared with the Current Path forecast.

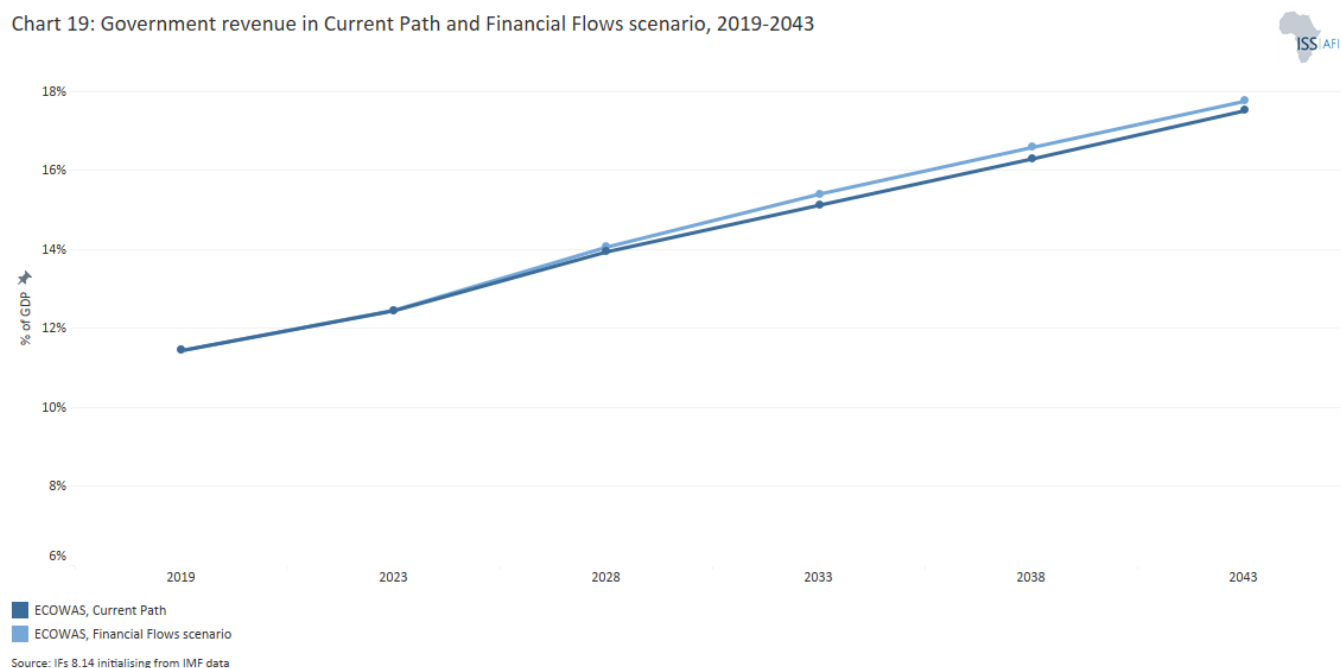
Mobile broadband refers to wireless internet access delivered through cellular towers to computers and other digital devices. The growth of mobile broadband on the continent has been more rapid than fixed broadband. By 2019, the average mobile broadband subscription for ECOWAS was 39.2 subscriptions per 100 people, slightly above the average of 38.6 subscriptions per 100 people for Africa. Among the RECs, it was only lower than the rates in AMU and CEN-SAD at 77.4 and 42.8 subscriptions per 100 people. Ghana had the highest number of mobile broadband subscriptions in 2019 at 96.4 per 100 people. It was followed by Cabo Verde and Côte d'Ivoire. Nigeria, Liberia and Sierra Leone had the lowest subscription rates at 5.0, 8.0 and 14.3 per 100 people, respectively.

Between 2024 and 2033, the Infrastructure and Leapfrogging scenario will lead to a substantial improvement in access to mobile broadband such that, by 2033, it would contribute an additional 12 subscriptions per 100 people compared with the Current Path forecast. In the long term, the two forecasts converge so that, by 2043, the difference will be just two subscriptions per 100 people. At 150 subscriptions per 100 people in the Infrastructure and Leapfrogging scenario, ECOWAS will have more subscriptions than the average of 141.0 for Africa by 2043. Côte d'Ivoire, Guinea Bissau and Ghana will have the highest mobile subscription rates, while Togo, Liberia and Niger will have the lowest rates.

Niger benefits the most from the Infrastructure scenario, gaining an additional 14 subscriptions over the Current Path forecast. This is followed by Sierra Leone and Guinea, gaining 6.6 and 5.1 subscriptions per 100 people, respectively. Nigeria, Guinea Bissau, Ghana, Mali, Cabo Verde, Benin, The Gambia, Senegal and Burkina Faso will benefit least in the scenario, all gaining less than 1 subscription per 100 people.

Financial Flows scenario

Chart 19: Government revenue in Current Path and Financial Flows scenario, 2019-2043



The Financial Flows scenario represents a reasonable but ambitious increase in inward flows of worker remittances, aid to poor countries and an increase in the stock of foreign direct investment (FDI) and additional portfolio investment inflows. We reduce outward financial flows to emulate a reduction in illicit financial outflows.

Visit the theme on [Financial Flows](#) for our conceptualisation and details on the scenario structure and interventions.

Chart 19 presents government revenues in the Current Path and Financial Flows scenario.

The ECOWAS region **receives** high volumes of financial flows. In 2021, FDI inflows to ECOWAS represented 16.6% of total inflows to Africa, valued at US\$83 billion. Most FDI to the region went to Nigeria (US\$4.8 billion), Ghana (US\$2.6 billion), Senegal (US\$1.4 billion) and Côte d'Ivoire (US\$1.4) accounting for 80% of total inflows. The large inflows to Nigeria are due to the resumption in oil investment and gas expansion projects as well as large commercial and residential real estate projects. In the case of Ghana, the inflows were a result of the projects in the extractive sector such as the construction of US\$850 million gold mines by Newmont Corp and a cement factory by Ciment d'Afrique. These FDI inflows together with other external inflows, such as aid and remittances, increase government revenue through corporate and income taxes, royalties and indirectly through value-added tax.

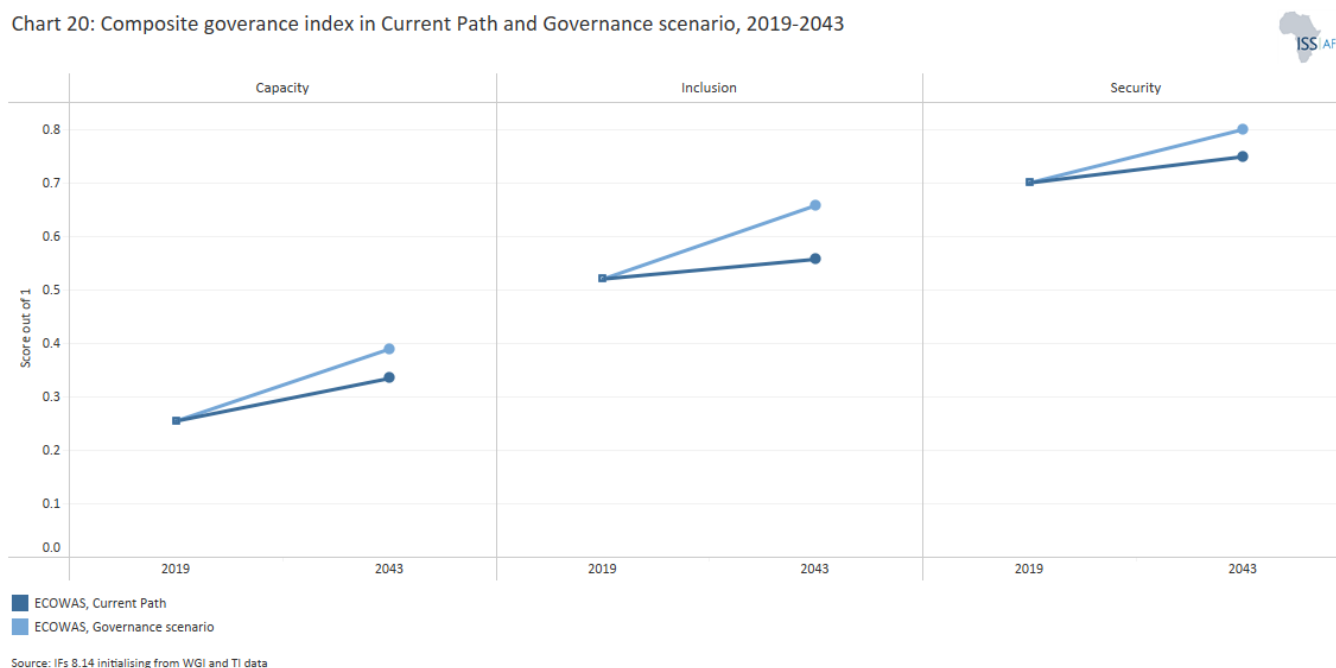
In 2019, the government's total revenue in ECOWAS amounted to US\$72.4 billion, equivalent to 11.4% of GDP which was the lowest among the RECS and far below the average of 20% of GDP for Africa. Among member countries, it ranged from 29% of GDP in Liberia to just about 8% of GDP in Nigeria. Aside from Nigeria, which depends heavily on revenue from its oil production, all countries in the region rely on taxes as the main source of government revenue. The tax to GDP ratio is largest in Cabo Verde at 24% and lowest in Nigeria (2.8%) which to an extent reflects the levels of formalisation of the economy in these countries.

In the Financial Flows scenario, government revenue will rise to US\$366 billion in 2043, representing 17.8% of GDP still below the average of 22.8% for Africa. Compared to the Current Path, the scenario can improve government revenue by

an additional US\$16.5 billion by 2043. Liberia, Cabo Verde and Mali will have the highest government revenue to GDP ratios at 32.8%, 30% and 26.6%, respectively. Guinea (19.3%), Ghana (19.3%) and Nigeria (14.5%) will record the lowest government revenue to GDP ratios in the scenario by 2043. Nigeria's low ratio is particularly concerning since it translates into low levels of expenditure on health, education, security and infrastructure, amongst others.

Governance scenario

Chart 20: Composite governance index in Current Path and Governance scenario, 2019-2043



In 2019, the region scored 0.70 on the Governance Security Index, which was second highest among the RECs after AMU, and above Africa's average of 0.69. Cabo Verde, Ghana and Senegal had the highest scores (0.01, 0.78 and 0.77, respectively). This points to a relatively higher level of stability in these countries although, since 2023, Senegal has been experiencing political tension and insecurity associated with the decision to postpone its general elections initially scheduled for February 2023. Niger, Nigeria and Mali had the lowest scores (0.66, 0.66 and 0.67, respectively). These are countries with histories of either political instability, war or threat of violent extremism and terrorism.

The ECOWAS region has had its fair share of instability due to political upheaval, civil wars (Liberia, Sierra Leone, Guinea Bissau, Côte d'Ivoire), religious clashes (Benin, Nigeria, Mali) or coups d'état (The Gambia, Niger, Togo, Guinea) and terrorist attacks or violent extremism. Since 2000, the region has witnessed a decline in civil war. Despite this decline, other security threats are emerging in the region. Terrorism has become the leading security challenge for many countries in the area. It has spread to Burkina Faso and Côte d'Ivoire from the initially affected countries in the Sahel (Mali and Niger) and Nigeria. Other coastal countries, such as Ghana, are also living in fear of terror attacks. In the past three years, terror attacks in the region have risen by 400%. In the first six months of 2023, 1 800 terrorist attacks caused the deaths of over 4 600 people. Further, the region is battling with money laundering, human, drug and arms trafficking, cybercrime, as well as cross-border insecurity.

In the Governance scenario, ECOWAS' score on the government security index will improve to 0.80 by 2043, which will be higher than the Current Path forecast of 0.76 and the average of 0.75 for Africa. In this scenario, Cabo Verde, Ghana and Senegal will still have the highest scores, while Liberia, Togo and Guinea-Bissau will have the lowest scores. Nigeria, Côte d'Ivoire and Mali recorded the largest improvement in the scenario of 0.06, 0.052 and 0.042, respectively. Ghana (0.02), Togo and Cabo Verde (both 0.18) recorded the least improvement in the scenario relative to the Current Path.

The score of ECOWAS on the government capacity index in 2019 was 0.26 which was lower than Africa's average of 0.30 but higher than the averages for IGAD, EAC and ECCAS. The high performing member countries in this regard are Cabo Verde (0.50), Senegal (0.39) and Ghana (0.35). Sierra Leone, Nigeria and Guinea Bissau are the worst performing member countries on the government capacity index with scores of 0.23, 0.21 and 0.16, respectively, in 2019. The low performance

on this index is not surprising given the widespread corruption and low levels of government revenues. For instance, only Cabo Verde is ranked highly (3rd) in Africa on the 2023 Transparency International Corruption Perception Index. All other countries in the region are in the red zone scoring below 50%. This is also reflected in the low tax revenue ratios among many member countries.

In the Governance scenario, the score of ECOWAS on the governance capacity index will reach 0.39 by 2043. This will be a 15% improvement over the Current Path forecast and 4.6% above the average for Africa. Cabo Verde, Senegal and Ghana will continue to extend their lead in the scenario by scoring 0.65, 0.52 and 0.49, respectively, by 2043. Sierra Leone, Nigeria and Guinea Bissau will still be the worst performers in the region. The greatest improvement in the scenario over the Current Path is recorded in Cabo Verde, Senegal and The Gambia while the lowest improvements are recorded in Guinea, Guinea Bissau and Togo.

Although it performs poorly on the government capacity index, ECOWAS is more inclusive than most RECs. In 2019, its governance inclusion score of 0.52 was above Africa's average of 0.48 and almost at par with SADC which is the highest among the RECs. This high score is mainly boosted by high performance in a few countries such as Cabo Verde (0.68), Ghana (0.60) and Sierra Leone (0.57). These have been stable democracies over several years, with periodic elections leading to successful changes in government. Despite this, the quality of democratic governance across the region largely remains poor except in Cabo Verde. Although there are periodic elections, the credibility and quality is questionable in most cases. The weak governance in the region is manifested in the many coups that have plagued the region in recent years. Mali, Niger, Guinea, and Burkina Faso have all had military coups in the last three years. Frequent disputes about the electoral process, election results, and constitutional amendments are all challenges that the region is grappling with. These democratic challenges have had severe political and institutional ramifications and are threatening the stability of the region. Guinea (0.48), Côte d'Ivoire (0.43) and Togo (0.29) are the least inclusive countries in the region.

By 2043, the ECOWAS score on government inclusion will reach 0.66 in the Governance scenario, which will be 17.5% more than the Current Path and 21.8% above Africa's average. Among the member countries, Cabo Verde, Guinea Bissau and The Gambia will have the highest score in the scenario by 2043. Nigeria, Côte d'Ivoire and Togo will be the worst performers in the region. The Gambia, Niger and Guinea will witness the highest improvement in the scenario over the Current Path while Togo, Ghana and Cabo Verde will witness the lowest improvement.

Endnotes

1. The IFs platform uses data from the Global Trade and Analysis Project (GTAP) to classify economic activity into six sectors: agriculture, energy, materials (including mining), manufacturing, services and information and communication technologies (ICT). Most other sources use a threefold distinction between only agriculture, industry and services, with the result that data may differ.

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Cite this research

Enoch Randy Aikins (2024) ECOWAS. Published online at futures.issafrica.org. Retrieved from <https://futures.issafrica.org/geographic/recs/ecowas/> [Online Resource] Updated 02 April 2024.

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