ECOWAS

ECOWAS: Scenario Comparisons

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Chart 21: GDP per capita in Current Path and scenarios, 2019-2043

GDP per capita in 2033

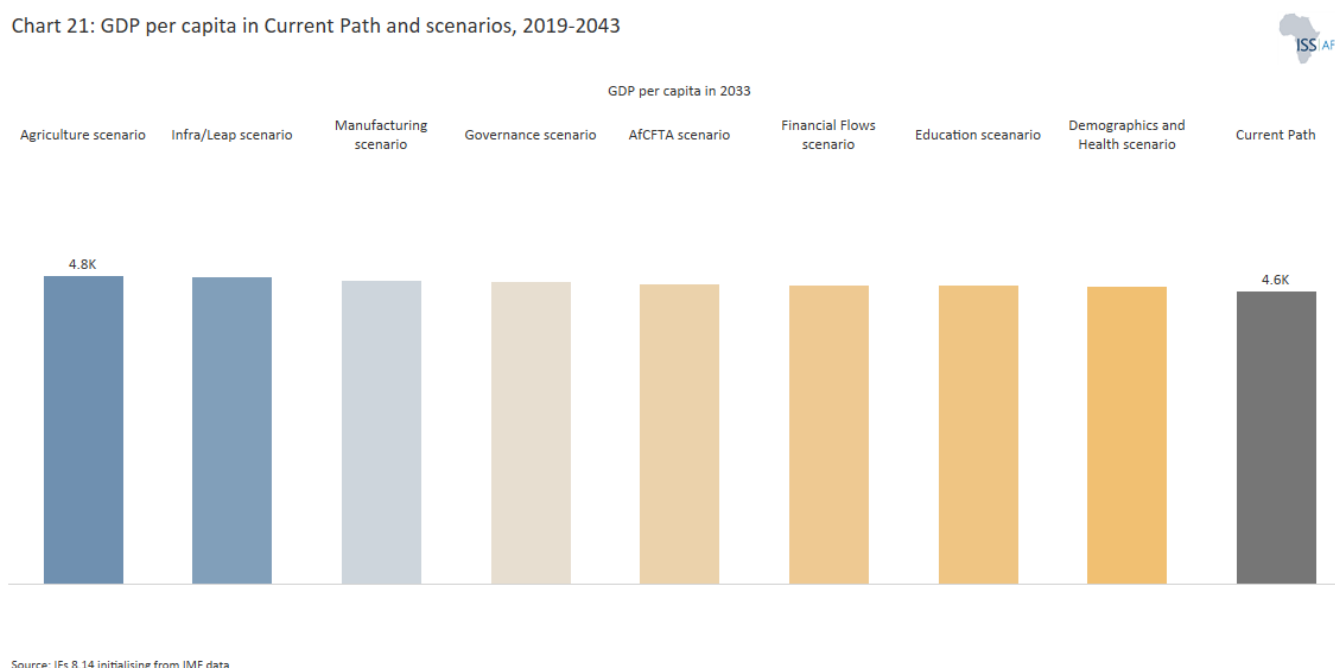| Agriculture scenario | Infra/Leap scenario | Manufacturing scenario | Governance scenario | AfCFTA scenario | Financial Flows scenario | Education sceanario | Demographics and Health scenario | Current Path |

Source: IFs 8.14 initialising from IMF data

Chart 21 presents a stacked area graph of the contribution of each scenario to GDP per capita. The cumulative impact of better education, health, infrastructure, leapfrogging, etc. means an additional benefit in the integrated IFs forecasting platform that we refer to as the synergistic effect.

The scenario with the greatest impact on GDP per capita by 2043 is the Governance scenario, followed by the AfCFTA and Infrastructure and Leapfrogging scenarios. In the Governance scenario, ECOWAS' GDP per capita will increase to US$6 125 which will be US$371 or 6.4% more than the Current Path forecast. In the AfCFTA scenario, ECOWAS' GDP per capita will be US$350 or 6.1% more than the Current Path forecast while the Infrastructure and Leapfrogging scenario will contribute US$335 (5.8%) by 2043. This means that the region needs to address its numerous governance challenges and ensure that member countries ratify and fully implement the continental free trade agreement to realise its development potential. It must invest in both physical and digital infrastructure which is key to development to catalyse its growth potential. The scenarios with the least impact on GDP per capita are the Financial Flows and the Demographic and Health scenarios - the latter because the region does not enter a demographic window of opportunity by 2043, meaning its impact is delayed.

The AfCFTA, Education, Governance, Financial Flows, Manufacturing and the Infrastructure and Leapfrogging scenarios have the greatest impact on GDP per capita in Côte d'Ivoire, Ghana and Cabo Verde. In the Agriculture scenario, Nigeria, Sierra Leone and Liberia will achieve the highest improvements in GDP per capita over the Current Path by 2043. The Demographics and Health scenario is most effective at raising GDP per capita above the Current Path in Côte d'Ivoire, Ghana and Senegal.

Poverty rate in 2033

| Current Path | Financial Flows scenario | AfCFTA scenario | Demographics and Health scenario | Education sceanario | Governance scenario | Agriculture scenario | Infra/Leap scenario | Manufacturing scenario |

37.2%

34.0%

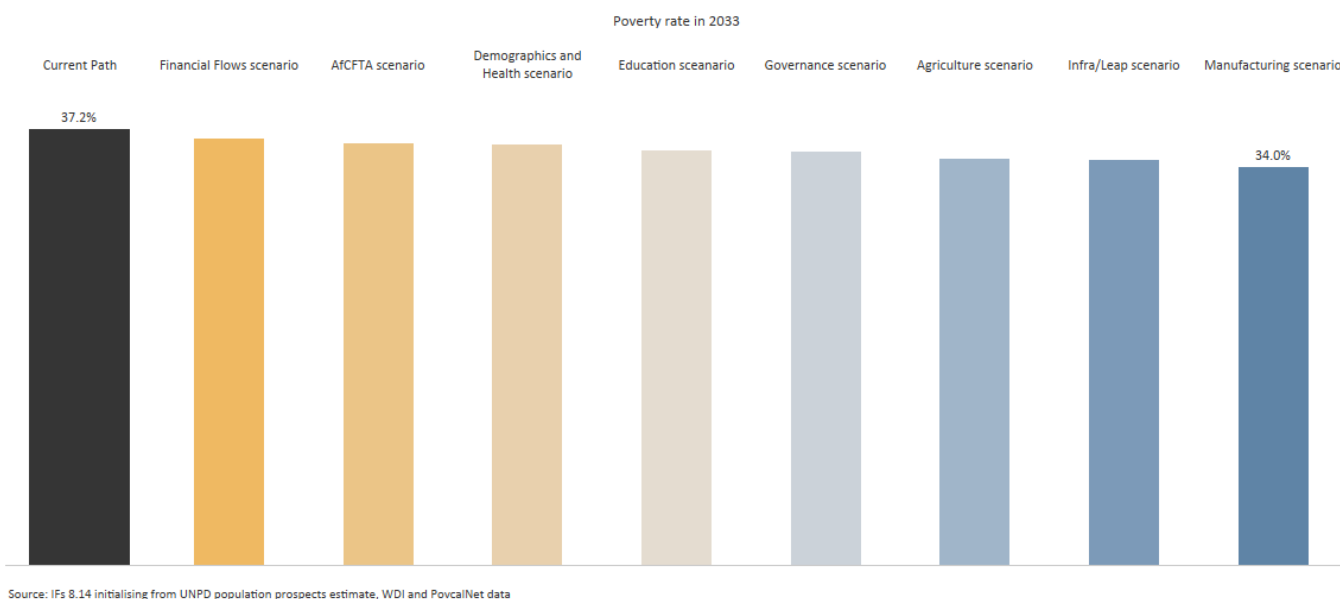Source: IFs 8.14 initialising from UNPD population prospects estimate, WDI and PovcalNet data

Chart 22 presents the impact of each scenario on extreme poverty by 2043. The user can select the number of extremely poor people or the per cent of the population.

The scenarios with the greatest potential to reduce extreme poverty by 2043 in ECOWAS are the Education, Manufacturing and the Agriculture scenarios. In the Education scenario, there will be 20.5 million fewer extremely poor people compared to the Current Path forecast. Education is an important tool to reduce extreme poverty. Increasing access and quality of education equips people with the requisite skills to either start a business or acquire a job which increases their income and ultimately improves their living standards. Indeed a recent report by UNESCO confirms that if students in low-income countries have at least basic reading skills, 171 million people can escape extreme poverty. The Manufacturing and the Agriculture scenarios have the potential to reduce extreme poverty in the region by 19.7 million and 17.1 million people, respectively. The impact of the manufacturing scenario in poverty reduction can be explained by its potential to provide jobs due to its forward and backward linkages with the agriculture and services sector. It means that countries in the region can reduce extreme poverty by aggressively pursuing a low-end manufacturing growth path that includes investment in research and development and promoting trade. However, such a growth path needs to be accompanied by social transfers to unskilled labourers due to its potential to displace such workers at initial stages. In the case of the agriculture sector, its impact on poverty is not surprising given that it employs over 60% of the active labour force in the region. As such, an agricultural revolution that increases production can reduce food insecurity in the region and increase incomes of many households, especially rural populations.

Different scenarios have different impacts among member countries. The AfCFTA scenario reduces extreme poverty quicker in Niger, Ghana and Sierra Leone while the Agriculture scenario reduces extreme poverty rates quickly in Sierra Leone, Liberia and Niger. Extreme poverty rates decline faster in Liberia, Niger and Nigeria in the Demographic and Health scenario. In the Education scenario, Niger, Nigeria and Liberia achieve the greatest reduction in extreme poverty whereas in the Financial Flows scenario, it is Liberia, Sierra Leone and Guinea Bissau. The Governance and the Manufacturing scenarios have the potential to reduce extreme poverty quickly in Liberia, Niger and Sierra Leone while Infrastructure reduces poverty quicker in Liberia, Sierra Leone and Guinea Bissau.

Chart 23: GDP (MER) in Current Path and Combined scenario, 2019-2043

ECOWAS, Current Path
ECOWAS, Combined Agenda 2063 scenario

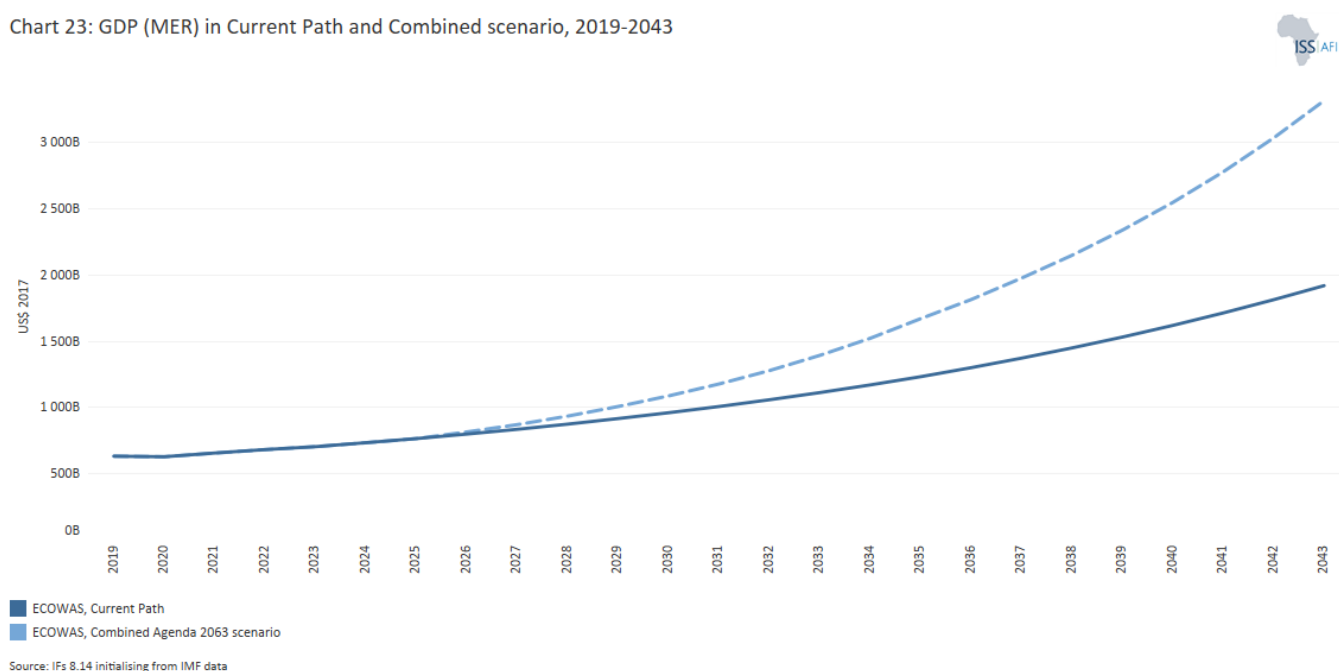Source: IFs 8.14 initialising from IMF data

Chart 23 compares the size of the economy in the Current Path with the Combined Agenda 2063 scenario at market exchange rates (MER).

The Combined Agenda 2063 scenario consists of the combination of all eight sectoral scenarios, namely Governance, Demographics and Health, Education, Infrastructure/Leapfrogging, Agriculture, Manufacturing, AfCFTA and Financial Flows.

The GDP of ECOWAS will increase from US$633.1 billion in 2019 to US$3.3 trillion by 2043 in the Combined Agenda 2063 scenario. This represents an increase of 424% within this period. The size of the ECOWAS economy will be 66.5% larger in the Combined Agenda 2063 scenario than in the Current Path forecast at almost US$2 trillion. The large increase will be driven by Nigeria's economy, which will account for 53.1% of total GDP in the region by 2043 followed by Côte d'Ivoire and Ghana at 13.2% and 11.2%, respectively. Liberia records the largest improvement in the Combined Agenda 2063 scenario with the economy growing by 152% more than the Current Path forecast. This is followed by Sierra Leone and Niger with 98.6% and 90.4% improvement. Nigeria, The Gambia, Benin and Cabo Verde will see the smallest relative changes in GDP from the Combined Agenda 2063 scenario, with gains in Gambia (64%), Benin (59.2%) and Cabo Verde (58.4%).

ECOWAS, Current Path
ECOWAS, Combined Agenda 2063 scenario

Source: IFs 8.14 initialising from IMF data
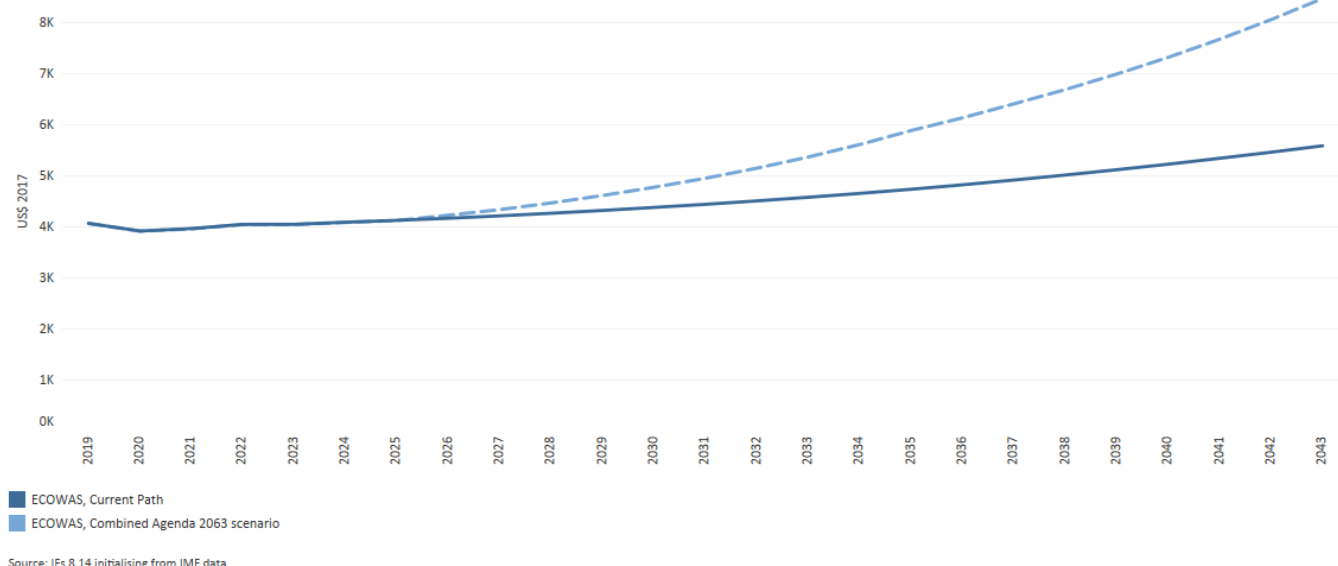
By 2043, the Combined Agenda 2063 will increase ECOWAS' GDP per capita to US$8 476. This represents an increase of 47.3% compared with the Current Path forecast. The Combined Agenda 2063 scenario could therefore improve GDP per capita by an extra US$2 722. The average GDP per capita for ECOWAS in the Combined Agenda 2063 scenario will also be 16% higher than the average of US$7 310 for Africa in the same year.

The dramatic impact of the Combined Agenda 2063 scenario on GDP per capita shows that a policy push across all sectors is necessary to achieve sustained growth and development in the region. By 2043, Cabo Verde, Côte d'Ivoire and Ghana will have the highest GDP per capita in the Combined Agenda 2063 scenario with income levels of US$15 830, US$14 900 and US$12 960, respectively. Guinea Bissau (US$3, 883) Niger (US$3 863) and Sierra Leone (US$3 833) will have the lowest GDP per capita in the region.

Countries that will witness the greatest improvement over the Current Path in the Combined Agenda 2063 scenario are Côte d'Ivoire, Ghana and Cabo Verde with gains of US$5 154, US$4 331 and US$4 272, respectively. GDP per capita will increase least in Niger (US$1 512), Sierra Leone (US$1 492) and Guinea Bissau (US$1 254).

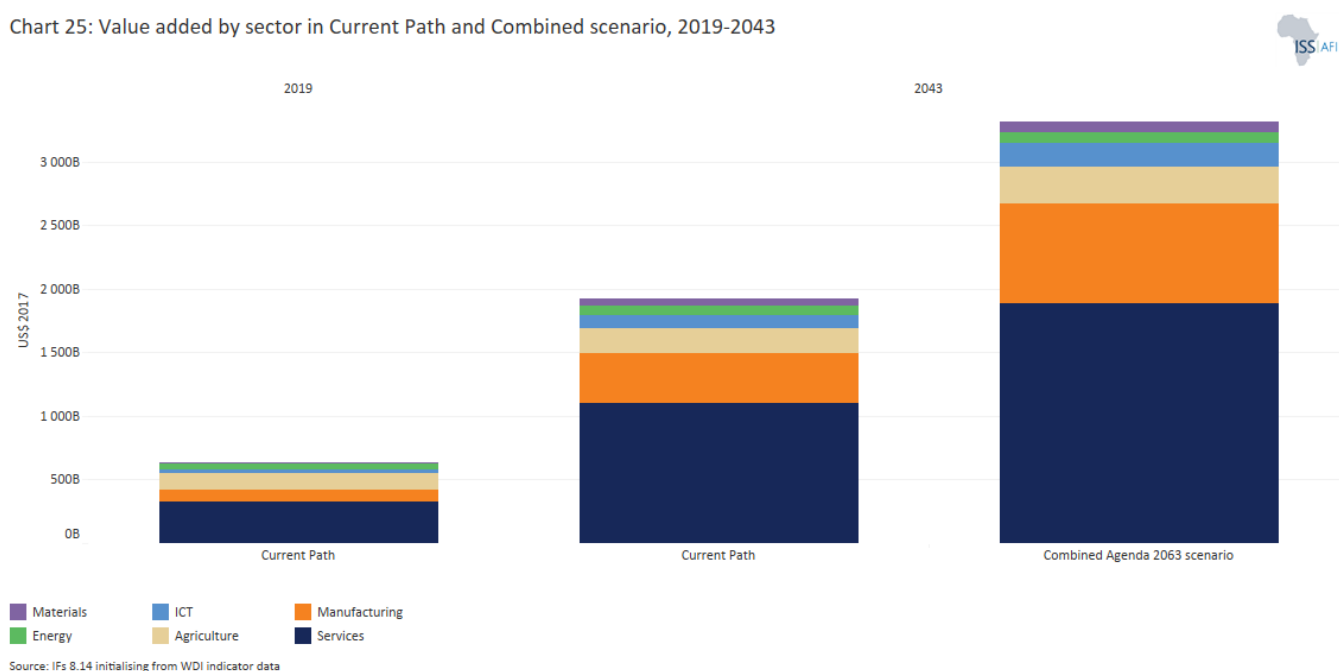Source: IFs 8.14 initialising from WDI indicator data

Chart 25 presents the change in the economy's structure, comparing the Current Path forecast with the Combined Agenda 2063 scenario from 2019 to 2043.

In the Combined Agenda 2063 scenario, the service sector's contribution to GDP will be US$732 billion larger than in the Current Path forecast for 2043, equivalent to 56.9% of GDP. Manufacturing will overtake agriculture as the second largest contributor, adding US$380.9 billion to the regional economy above the Current Path to constitute 23.7% of the ECOWAS economy in the scenario. The agriculture sector will also contribute US$94.2 billion more in the scenario than in the Current Path equivalent to 8.6% of GDP. ICT will contribute US$78 billion above the Current Path, accounting for 5.6% of GDP in the scenario. The contributions of materials and energy will account for 2.5% and 2.8%, respectively, translating to US$32.2 and US$8.1 more than in the Current Path by 2043.

In the Combined Agenda 2063 scenario, the service sector in Cabo Verde will contribute 81.6% to GDP, the largest contribution in the region, while that of Mali will be the lowest at 35.2% of GDP. At 45.1%, Mali's manufacturing sector will be the largest in the region while Liberia's contribution of 6.8% to manufacturing in the scenario will be the lowest. The contribution of agriculture to GDP in the scenario will range from 20.4% in Liberia to a paltry 2.7% in Cabo Verde by 2043. The ICT sector in Liberia will be largest in the region contributing 7.1% while the energy sector in Nigeria (6%) and the material sector in Liberia (19.5%) will be the largest in the region.

Chart 26: Life expectancy in Current Path and Combined scenario, 2019-2043

ECOWAS, Current Path
ECOWAS, Combined Agenda 2063 scenario

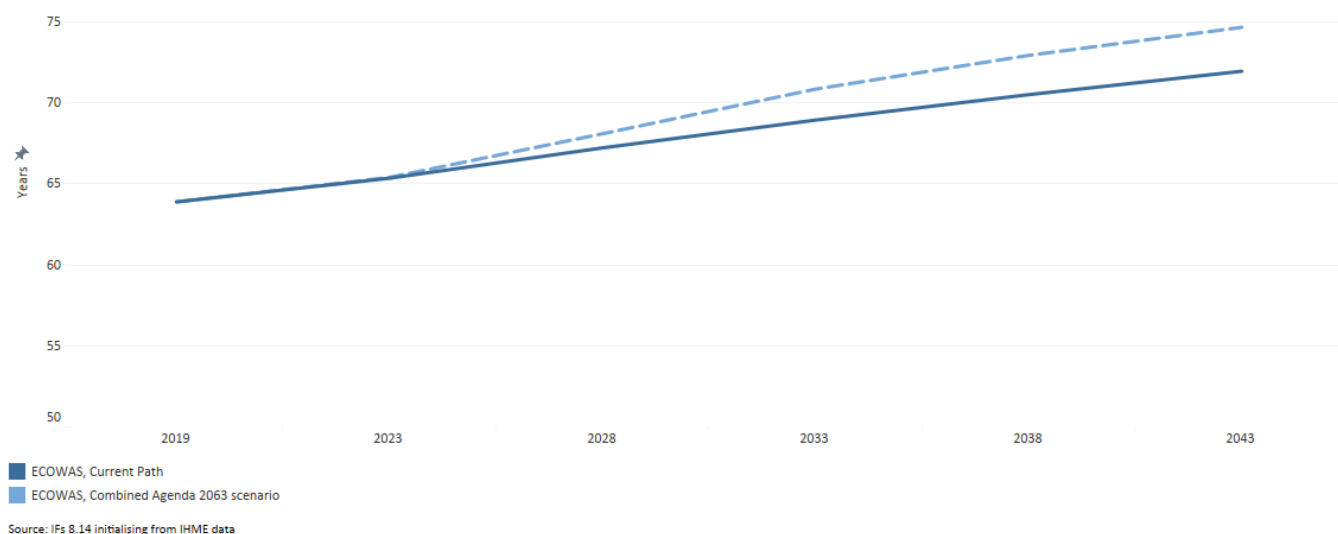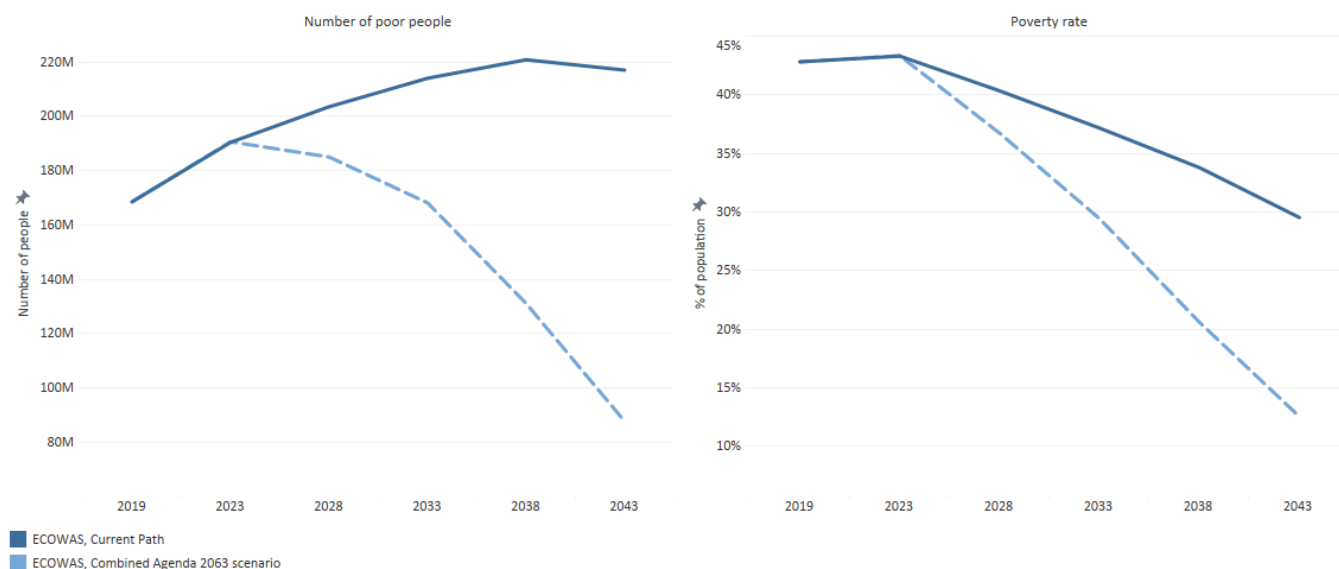Source: IFs 8.14 initialising from IHME data

Chart 26 compares life expectancy in the Current Path forecast with the Combined Agenda 2063 scenario.

In 2019, the average life expectancy for people in the ECOWAS region was 63.9 years, which was lower than the average of 65.1 years for Africa. It was the fifth highest among the RECs (after AMU, CEN-SAD, COMESA and IGAD). On average, females in ECOWAS live about 3 years longer than males. Among member countries, life expectancy was highest in Cabo Verde (73.7 years) and The Gambia (67.4 years) and lowest in Sierra Leone (59.1 years) and Guinea-Bissau (58.9 years). In the Current Path forecast, life expectancy in the region will increase to 72.3 years by 2043. However, the Combined Agenda 2063 scenario leads to a greater increase such that, by 2043, the average life expectancy in ECOWAS will be around 74.7 years, higher than the average of 71.7 years for Africa in the same year.

In the Combined Agenda scenario, Cabo Verde will still have the highest life expectancy in the region at 79.7 years. This will be followed by Nigeria and Ghana at 75.5 years and 75.2 years, respectively. Togo, Sierra Leone and Guinea will have the lowest life expectancies (72 years, 70.6 years and 68.3 years, respectively). The largest increase in life expectancy between the Current Path and Combined Agenda 2063 scenario will occur in Guinea, Sierra Leone and Liberia which will see averages increase by 3.4, 3.1 and 2.9 years, respectively. The smallest increments will be seen in Benin, Senegal and The Gambia with life expectancies lengthening by only 1.3, 1.1 and 0.9 years, respectively.

Number of poor people

Poverty rate

ECOWAS, Current Path

ECOWAS, Combined Agenda 2063 scenario

Source: IFs 8.14 initialising from UNPD population prospects estimate, WDI and PovcalNet data

The Combined Agenda 2063 scenario will lead to a reduction in both the number and proportion of people living in extreme poverty by 2043. The number of poor people living on less than US$2.15 per day will decline from 106.8 million in 2019 to 36.4 million in 2043. This corresponds to a reduction from 27.2% of the population to 5.2%. Compared with the Current Path forecast, 80.7 million fewer people will live in extreme poverty in the Combined Agenda 2063 scenario, constituting a decline in poverty rate of 22 percentage points. The considerable reduction in the Combined Agenda 2063 scenario shows that a concerted policy push across sectors could significantly reduce poverty in ECOWAS.

Among member states, Liberia, The Gambia, Cote D'Ivoire and Senegal will have eliminated extreme poverty rates, with just less than 1% of the population living in extreme poverty by 2043. Sierra Leone, Togo, Burkina Faso, Guinea Bissau and Nigeria will still have over 5% of their population living below the extreme poverty line. The largest reduction in poverty rate will be seen in Liberia (29.6 percentage points), followed by Niger and Sierra Leone (19.1 and 17.6 percentage points, respectively). It means that in the long term, Sierra Leone, Niger and Liberia stand to benefit the most if the various policy interventions underpinning the Combined Agenda 2063 scenario are implemented. In contrast, the poverty rate will decline by only 1.5, 1.1 and 1.1 percentage points, respectively, in Cabo Verde, Senegal and Côte d'Ivoire in the Combined Agenda 2064 scenario. This is mainly because these countries already have very low extreme poverty rates.

Chart 28: Domestic Gini in Current Path and Combined scenario, 2019-2043

ECOWAS, Current Path
ECOWAS, Combined Agenda 2063 scenario

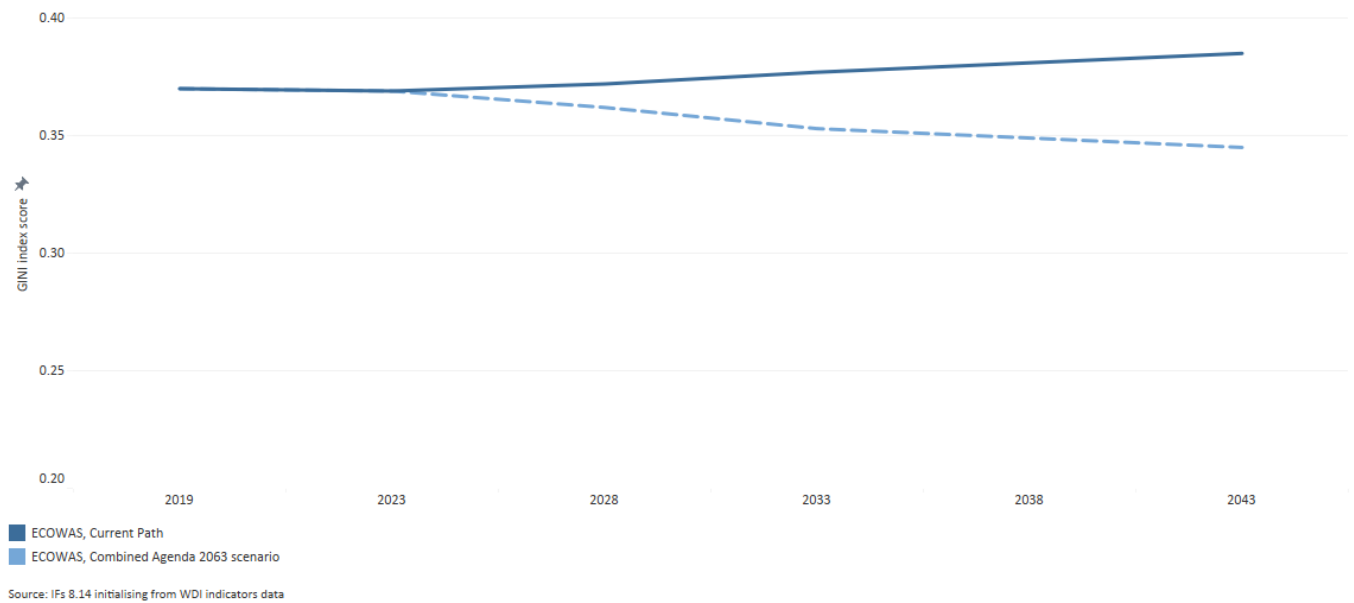Source: IFs 8.14 initialising from WDI indicators data

Chart 28 compares the Gini coefficient in the Current Path forecast with the Combined Agenda 2063 scenario.

Inequality has increased in all countries in the region since 2000. According to OXFAM, the wealthiest 1% in the region owns more than the rest of the population. The Gini coefficient is the standard measure of the level of inequality in a country.[1] In 2019, ECOWAS' Gini coefficient was 0.37 compared to the average of 0.40 for Africa. This makes ECOWAS the third most equal region among the RECs. Among member states, it ranges from 0.47 in Burkina Faso to 0.30 in Guinea. The Manufacturing scenario has the greatest potential to reduce income inequality in ECOWAS followed by the Education and Agriculture scenarios.

On the Current Path, income inequality in ECOWAS will increase with a Gini coefficient of 0.38 by 2043. This reflects the lack of commitment by governments in West Africa to policies and measures to reduce inequality. In the Combined Agenda 2063 scenario, inequality in ECOWAS will be slightly lower than the Current Path forecast with a Gini coefficient of 0.35 by 2043. This means that rapid economic growth in the scenario will not be sufficiently inclusive. Among member countries, Burkina Faso (0.46) will continue to be the most unequal country in the region followed by Togo and Cabo Verde at 0.44. Niger (0.31), Guinea (0.29) and Liberia (0.27) will be the least unequal countries. The greatest reduction in inequality occurs in Liberia, Niger and Gambia while the lowest reduction occurs in Guinea Bissau, Cabo Verde and Togo.

Chart 29: Carbon emissions in Current Path and Combined scenario, 2019-2043

ECOWAS, Combined Agenda 2063 scenario
ECOWAS, Current Path

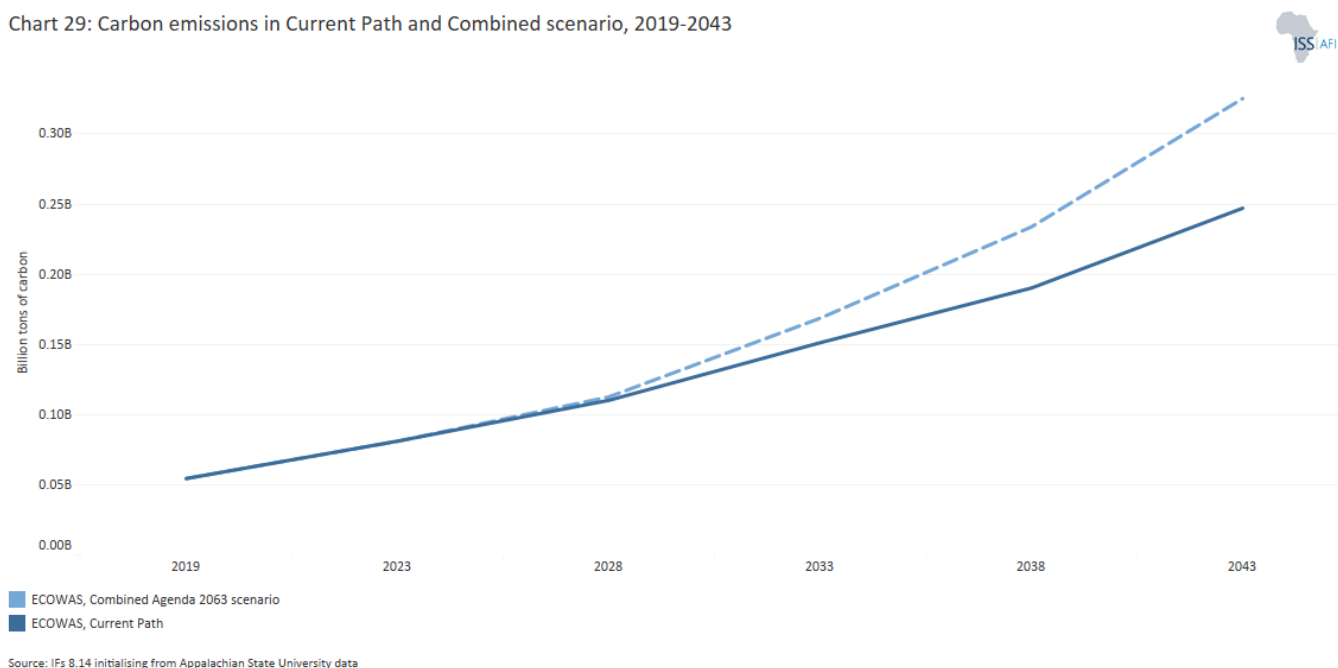Source: IFs 8.14 initialising from Appalachian State University data

Chart 29 compares carbon emissions in the Current Path forecast with the Combined Agenda 2063 scenario.

In 1990, ECOWAS emitted a total of 15.4 million tons of carbon from fossil fuels. This increased to 54.4 million tons in 2019, representing an increase of 253.2% and constituting about 14.2% of total emissions in Africa. Among member countries, Nigeria was the highest emitter of carbon (35 million tons; 64.8% of total emissions) because of its economy size and large oil and gas sectors. Nigeria is followed by Ghana (8.7% of the region's emissions) and Côte d'Ivoire (6.0%).

Despite being a small emitter of carbon, adverse climate change is having a devastating impact on ECOWAS, including migration, food insecurity and loss of productivity equivalent to 8% of GDP. In the past forty years, these climate change impacts have exposed the region's vulnerability. The coastal regions are threatened by rising sea levels and temperatures. Recurrent droughts, floods and storms are threatening other parts of the region. It is projected that the arid lands in West Africa lying south of the Sahara Desert, the Sahel, will suffer the most significant effects of climate-induced conflicts, mainly due to competition over declining fertile land and grazing land. Guinea Bissau, Mali, Liberia and Niger rank among the most vulnerable countries to climate change and environmental hazards globally.

By 2043, total carbon emissions will have more than quadrupled to 253 million tons in the Current Path forecast. In the Combined Agenda 2063 scenario, the region will emit 325 million tons of carbon by 2043, which is 28.4% above the Current Path forecast. Governments in ECOWAS should adopt mitigating strategies, such as using its high renewable energy deposits, to reduce carbon emissions.

The Governance, Manufacturing and AfCFTA scenarios are the most carbon-intensive as they involve high growth (Governance), aggressive manufacturing of low-end manufacturing goods (Manufacturing) and trade (AfCFTA) that will imply more fossil fuel usage. The Financial Flows, Large Infrastructure and Leapfrogging and the Demographics and Health scenarios are the least carbon-intensive for ECOWAS. In the Combined Agenda 2063 scenario, Nigeria will reduce its share of carbon emission in the region to 61.6% (although still high) and Ghana to 4.8% while Côte d'Ivoire increases its share to 9.3%. The higher emissions in Nigeria reflect the country's expected economic growth and the huge volumes of oil and gas it will utilise. The reduction in the shares of countries like Ghana in emission rates can be attributed to moving from conventional energy sources to other renewables. Emissions in Liberia, The Gambia, Guinea Bissau and Cabo Verde will contribute less than 1% to the region's emission.

Endnotes

1. A higher score depicts greater inequality while a lower score shows a more equal country.

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About the authors

Mr Enoch Randy Aikins joined the AFI in May 2021 as a Researcher. Before that, Enoch was a research and programmes officer at the Institute for Democratic Governance in Accra in charge of local governance reforms, poverty and inequality and public sector reforms. He also worked as a research assistant (economic division) with the Institute for Statistical Social and Economic Research at the University of Ghana. Enoch's interests include African politics and governance, economic development, public sector reform, poverty and inequality. Enoch is a Young African Fellow at the School of Transnational Governance, European University Institute in Florence and has an MPhil in economics from the University of Ghana, Legon.

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Scenarios and forecasting can help Africa identify and respond to opportunities and threats. The work of the African Futures & Innovation (AFI) program at the Institute for Security Studies aims to understand and address a widening gap between indices of wellbeing in Africa and elsewhere in the world. The AFI helps stakeholders understand likely future developments. Research findings and their policy implications are widely disseminated, often in collaboration with in-country partners. Forecasting tools inspire debate and provide insights into possible trajectories that inform planning, prioritisation and effective resource allocation. Africa's future depends on today's choices and actions by governments and their non-governmental and international partners. The AFI provides empirical data that informs short- and medium-term decisions with long-term implications. The AFI enhances Africa's capacity to prepare for and respond to future challenges. The program is headed by Dr Jakkie Cilliers.