Morocco

Morocco: Scenarios

Jakkie Cilliers

Last updated 07 November 2023 using IFs 7.84

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Relationship between scenarios

Chart 9: Current Path and scenarios

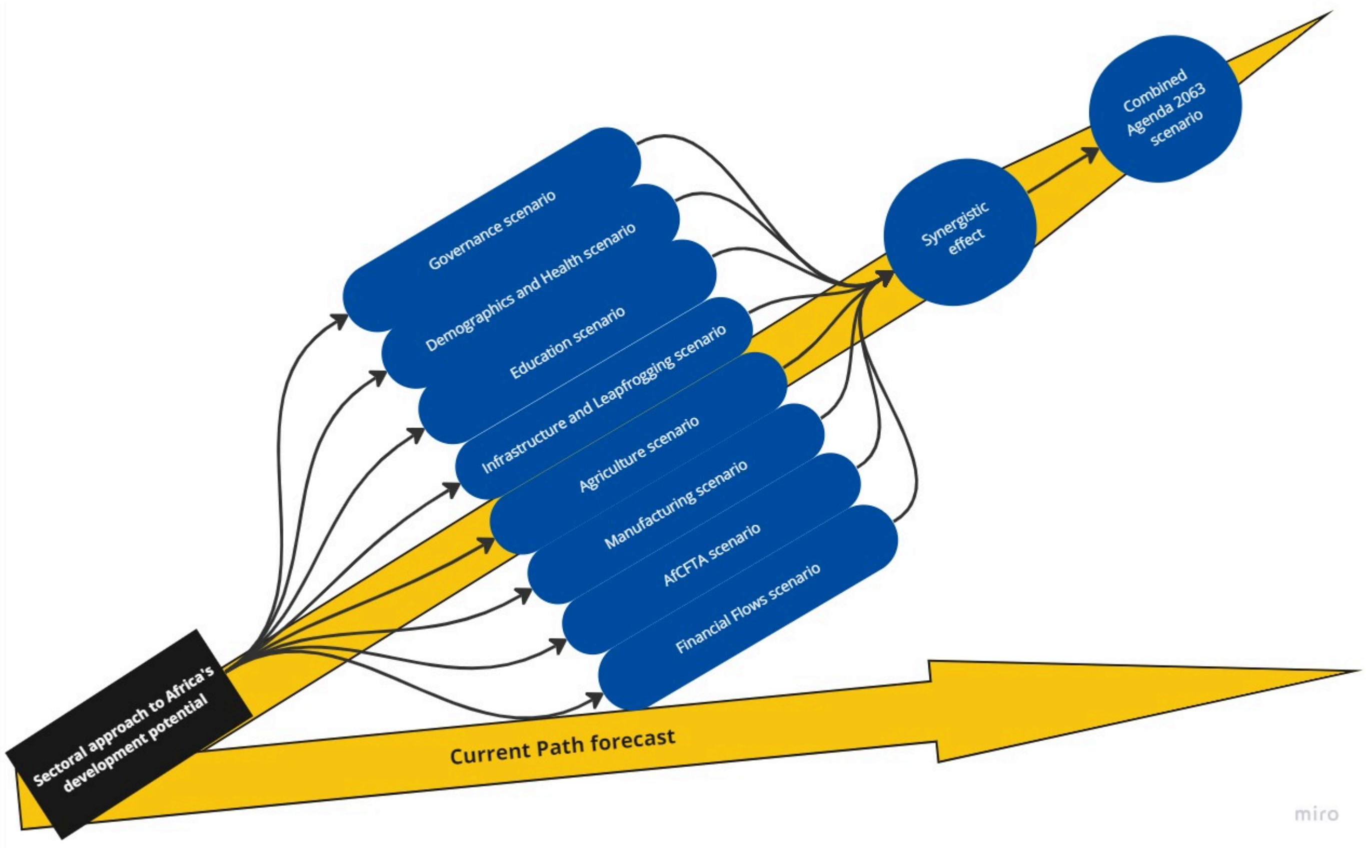


Chart 9 depicts the relationship between the Current Path forecast, the various sectoral scenarios and the Combined Agenda 2063 scenario.

The Current Path forecast is a dynamic scenario in the International Futures forecasting platform that imitates continuing current policies and environmental conditions, updated with more recent national data as outlined in the annexure

The eight sectoral scenarios are each explained in the various themes on the website, and the impact on each is compared with the Current Path forecast and a Combined Agenda 2063 scenario. The eight scenarios are:

- A more rapid demographic transition and investments in better health and water, sanitation and hygiene (WaSH) infrastructure
- Better and more education (looking at quantity, quality and relevance)
- Large infrastructure and leapfrogging (the impact of renewables, ICT and the more rapid formalisation of the informal sector)
- Food security and an agricultural revolution
- A low-end manufacturing transition
- The full implementation of the African Continental Free Trade Area (AfCFTA)
- More inward financial flows (consisting of aid, foreign direct investment, remittances and illicit financial flows), and
- Better governance (consisting of stability, capacity and inclusion).

The Combined Agenda 2063 scenario is a combination of all eight sectoral scenarios.

The impact of these scenarios on jobs/employment and greenhouse gas emissions and energy are presented in separate themes.

A final theme models the effect of alternative global scenarios on Africa's development potential.

The interventions within IFs are detailed in an annexure at the end of this page.

Demographics and Health scenario

Chart 10: Demographics and Health scenario

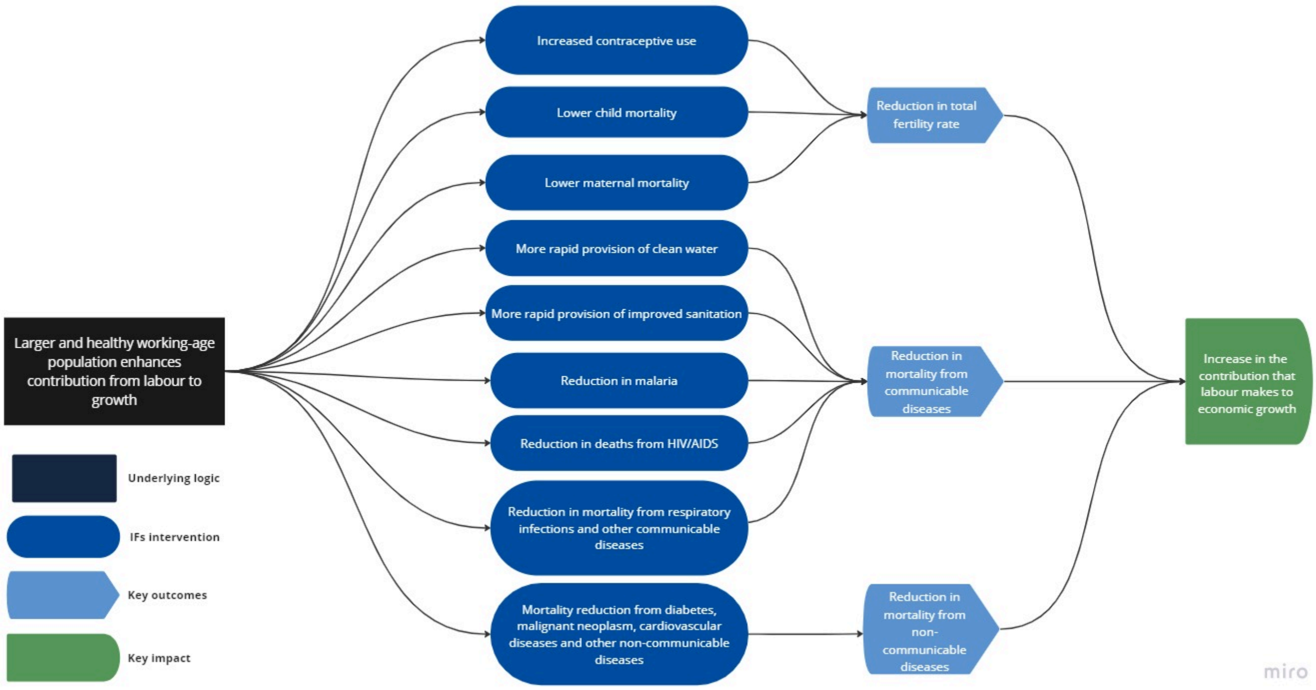
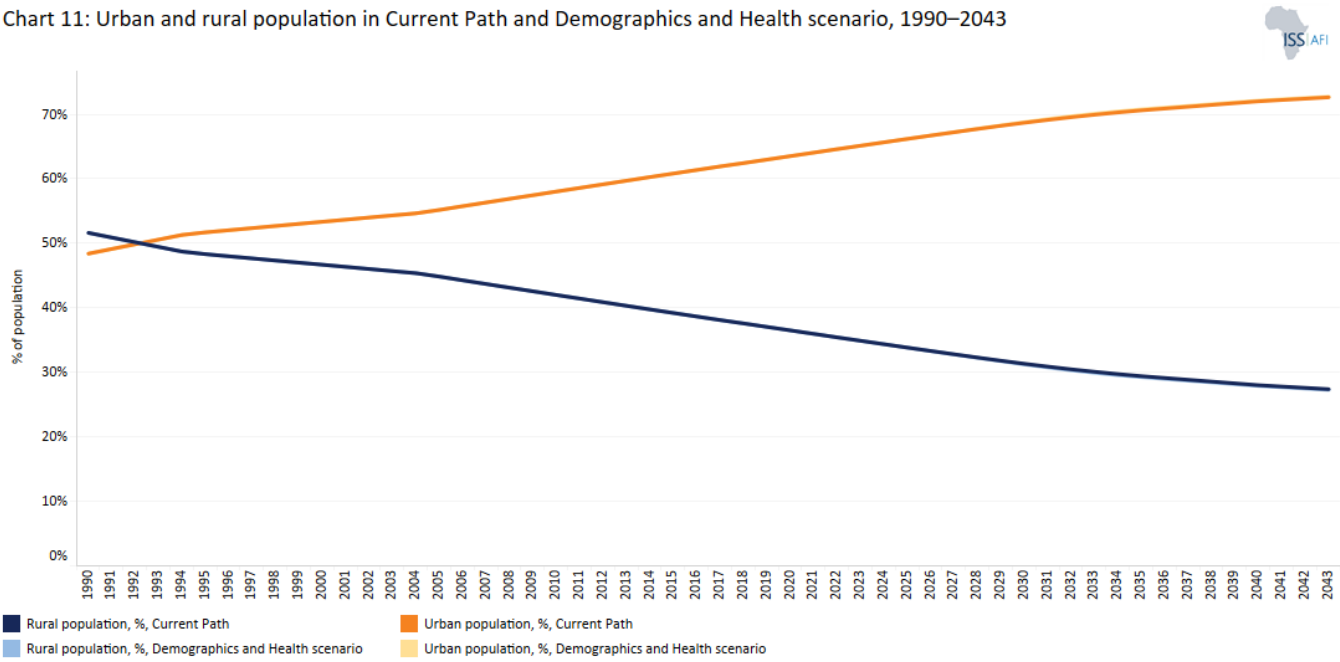


Chart 10 present the structure of the Demographics and Health scenario as modelled in IFs that advances the demographic dividend and improves health.

The Demographic and Health scenario consists of reasonable but ambitious reductions in child and maternal mortality ratio, increased access to modern contraception and reductions in the mortality rates associated with both communicable diseases (e.g. AIDS, diarrhoea, malaria and respiratory infections) and non-communicable diseases (e.g. diabetes), as well as improvements in access to safe water and better sanitation.

Visit the themes on Demographics and Health/WaSH for more detail on the scenario structure and interventions.

Chart 11: Urban and rural population in Current Path and Demographics and Health scenario, 1990–2043



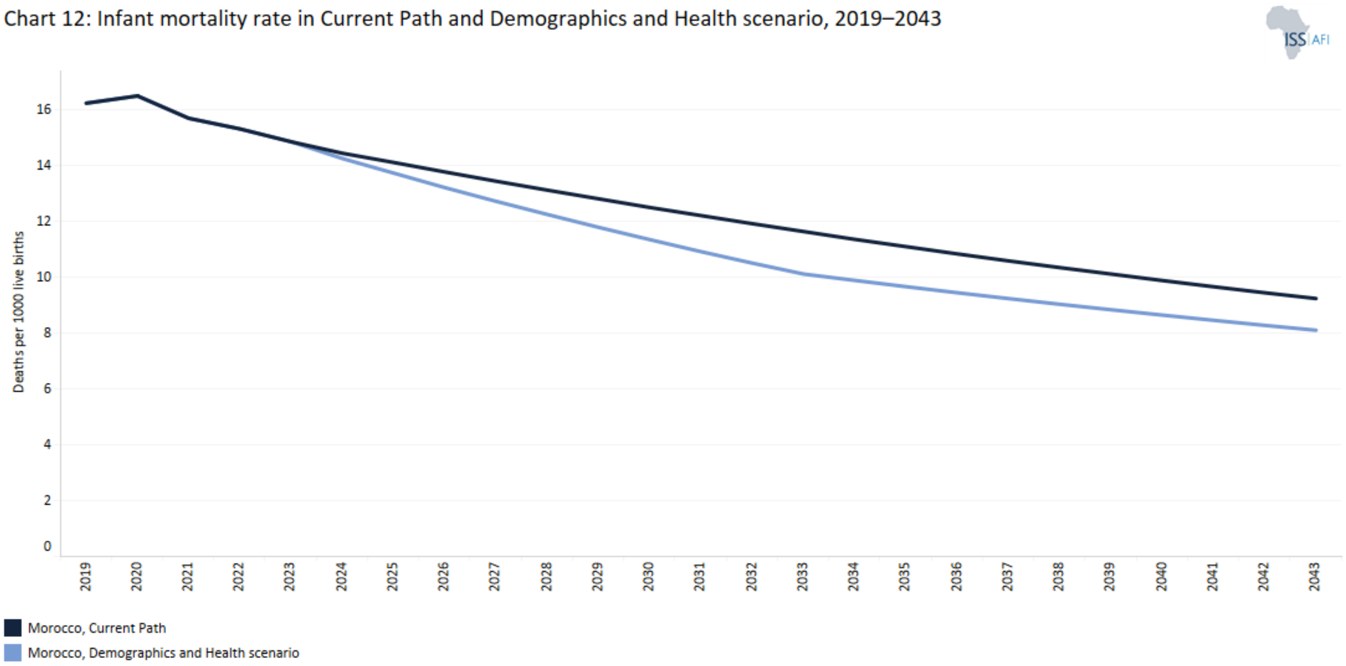
Source: IFs 7.84 initialising from UN world urbanization prospects data

Chart 11 compare urban and rural populations in the Current Path and the Demographics and Health scenario.

In line with its demographic profile, Morocco already is a predominantly urban country: 63% of the population lives in cities and towns and only 37% inhabit rural areas. Out of the 23 million Moroccans that live in urban areas, about 3.8 live in Casablanca,[1] the country's largest city, port and financial centre. Casablanca is followed by Fez, Tangier and Marrakech, also important urban population centres.

The Demographic and Health scenario has little impact on urbanisation. By 2043, the share of Moroccans living in cities and towns will increase to 72.7%, which is the equivalent of 31.3 million people, only 0.1 percentage points above the Current Path forecast. This is significantly above the anticipated average rate of 59.4% for its low-middle-income peer group on the continent. In North Africa, however, Libya, Algeria and Tunisia are more urbanised than Morocco.

Chart 12: Infant mortality rate in Current Path and Demographics and Health scenario, 2019–2043



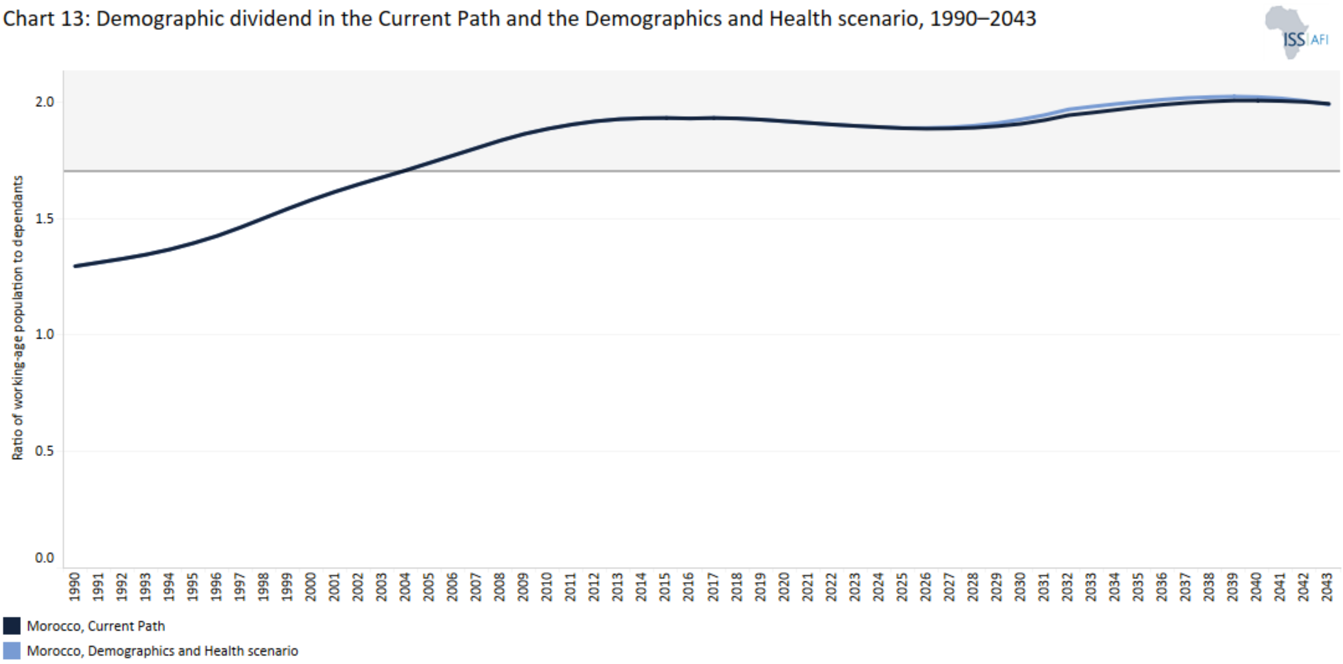
Source: IFs 7.84 initialising from IHME data

Chart 12 presents the infant mortality rate in the Current Path and the Demographics and Health scenario.

Infant mortality rate is the probability of a child born in a specific year or period 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.

At 16.2 infant deaths per 1 000 live births in 2019, infant mortality in Morocco was much better than in Mauritania and slightly lower than that of Algeria but worse than rates in Egypt, Tunisia and Libya. Morocco does much better than the average low-middle-income African country, at 43.6. Infant mortality in Morocco has improved greatly since 1990 when it stood at 59.6 deaths per 1 000 live births. The Demographics and Health scenario will reduce infant mortality rates in Morocco to 8.1 deaths per 1 000 live births by 2043 compared to 9.2 deaths in the Current Path forecast.

Chart 13: Demographic dividend in the Current Path and the Demographics and Health scenario, 1990–2043



Source: IFs 7.84 initialising from UNPD Population Prospects data

Chart 13 presents the demographic dividend in the Current Path, and in the Demographics and Health scenario,

The demographic dividend is the window of economic growth opportunity that opens when the ratio of working age persons to dependents increases to 1.7:1 and higher.

Morocco has already entered a demographic window of opportunity, meaning that the ratio of working-age persons to dependents is above 1.7:1. Given Morocco's current stage in the demographic transition, increased access to modern contraception will only have a modest impact on the country's total fertility rate which was estimated at 2.4 children per fertile woman in 2019. In the Demographic and Health scenario, fertility rates will decline more quickly than on the Current Path. By 2029, the average fertility rate will already be 1.9 births per woman. On the Current Path, that rate will only be achieved five years later. A lower average fertility rate slows population growth and translates into a slightly smaller population by 2043: 43.9 million instead of 43.93 million people.

The interventions in the Demographic and Health scenario have a marginal impact on Morocco's demographic dividend, with a slightly earlier and higher peak, translating into a GDP per capita gain of US$63 in 2043, reflected in Chart 29.

Morocco is well into an epidemiological transition characterized by a shift in the overall burden of morbidity and mortality from infectious diseases to noncommunicable diseases and injuries. Chronic diseases now account for more than 80 % of all deaths meaning that expanding healthcare to the underserved is a high priority.

Agriculture scenario

Chart 14: Agriculture scenario

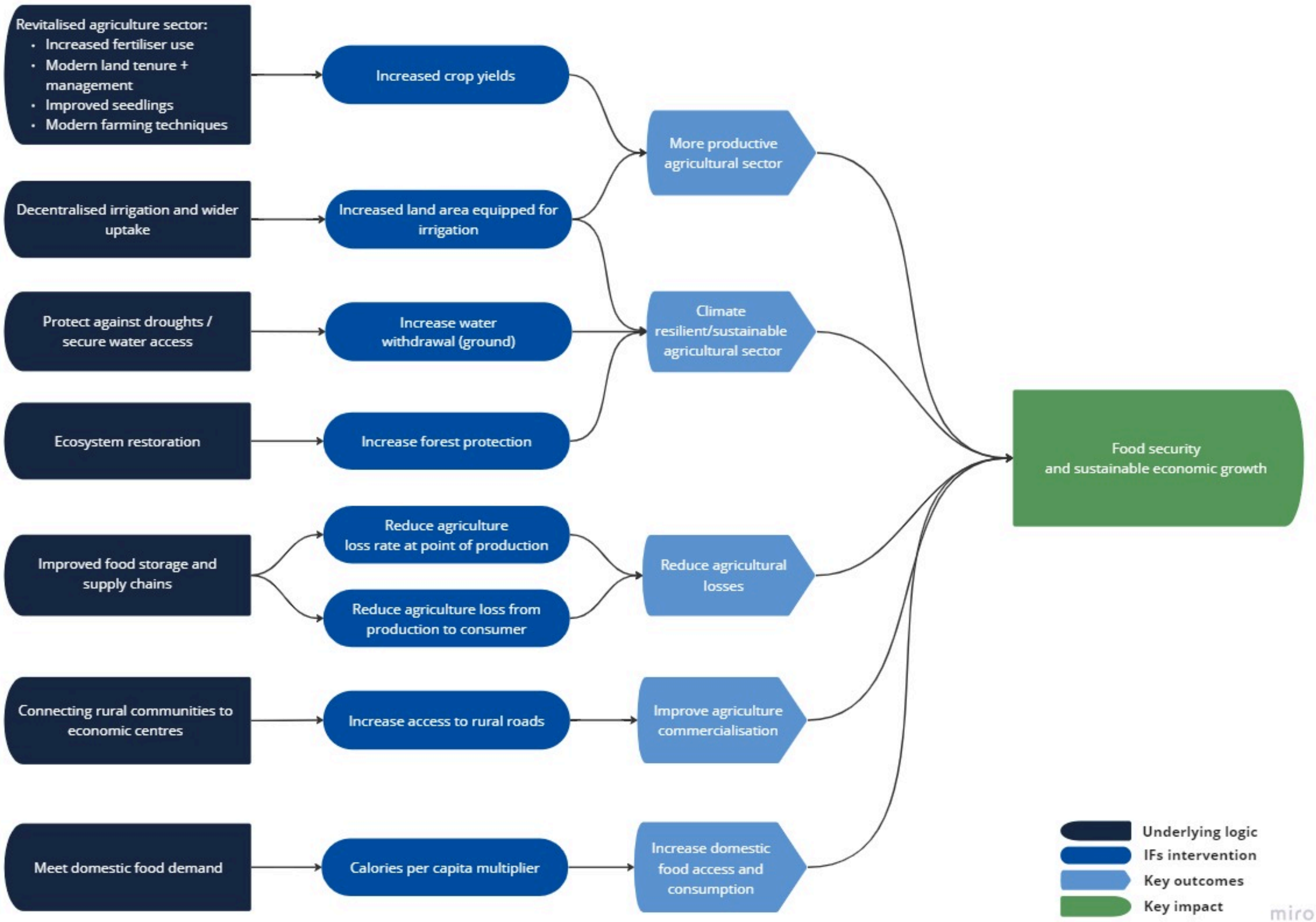


Chart 14 sets out the composition of the Agriculture scenario to advance food security.

The Agriculture scenario represents reasonable but ambitious increases in yields per hectare (reflecting better management and seed and fertiliser technology), increased land equipped and under irrigation and reductions in food loss and waste. We use increased calorie consumption as a proxy for food self-sufficiency above food exports as a desirable policy objective.

The increase in forest protection reflects sustainable land use practices.

Visit the theme on Agriculture for our conceptualisation and details on the scenario structure and interventions.

In 2019, Morocco's agriculture sector accounted for 15.2% of GDP, in IFs, roughly in line with the average for low-middle-income economies on the continent. Its crop yields at 3.2 tons per hectare are comparable to countries such as Kenya, Comoros and Algeria, i.e. towards the low end of the group. The average for African low-income countries is just over 5 tons, but the group includes high-yield countries such as Eswatini and Egypt.

The reason for the relatively low yields is that many of Morocco's agriculture producers are in the informal sector and still rely on traditional technologies, have limited access to fertilisers, pesticides and mechanisation and effectively farm small plots of un-irrigated arable land, which has poor agricultural potential. Because farmers often lack formal title to land, it is difficult for them to obtain credit necessary to diversify their sources of income.[2]

According to the US International Trade Administration 'The prevalence of small farms, complicated land title issues, and increasing land prices pose serious challenges .... Policymakers struggle with the conflicting principles of economies of scale, the capitalization requirements necessary to modernize the agricultural sector, and the desire to alleviate poverty and maintain the social structure of traditional rural society.'[3] The challenges of achieving an agricultural transformation are highlighted by the irony that Morocco is the world's biggest exporter of Phosphoric Acid and Calcium Phosphates.

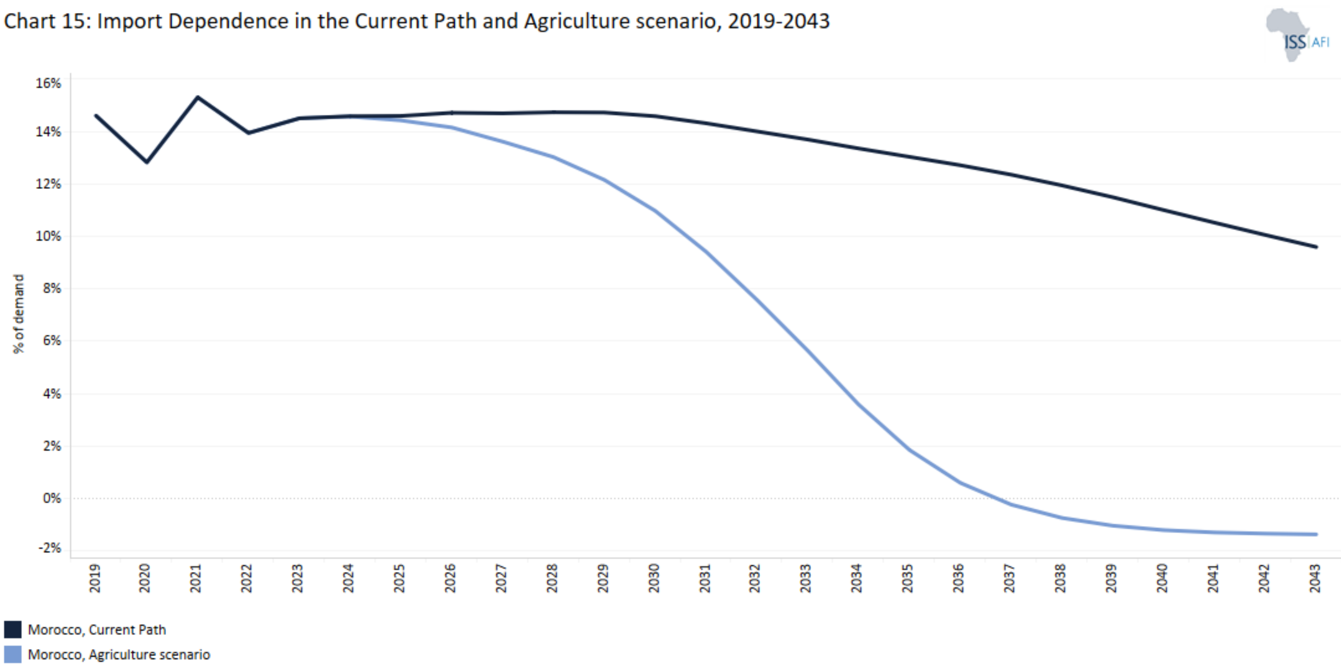
Food security is an important strategic objective for Morrocco and the country has seen several strategies and policies to improve its situation in this regard since independence. The Agriculture scenario emulates the successful implementation of the government's second agricultural strategic plan, launched in February 2020. "Generation Green 2020-2030"[4] sets out an agricultural development strategy through 2030, resting on two pillars:

- 'Develop a new agricultural middle class representing between 350 000 and 400 000 households by supporting young entrepreneurs through the mobilization of one million hectares of collective lands and the creation of 350 000 jobs with a focus on high-value agriculture.

- Promote human and social development.'[5]

The strategy includes the digital transformation of Moroccan agriculture, particularly since smallholder farms are in the middle of the approaching climate change challenges. Implementation depends on expanded water access and harnessing innovation to support agriculture, national resource management and rural development in Morocco.

Chart 15: Import Dependence in the Current Path and Agriculture scenario, 2019-2043



Source: IFs 7.84 initialising from FAO Food Balance Sheets data

Chart 15 presents import dependence in the Current Path forecast and the Agriculture scenario.

The data on agricultural production and demand in the IFs forecasting platform initialises from data provided on food balances by the Food and Agriculture Organization (FAO). IFs contain data on numerous types of agriculture but aggregate its forecast into crops, meat and fish, presented in million metric tons.

Morocco is a net importer of agriculture and related products, with most of its related trade occurring with the European Union.

In 2019, Morocco's post-loss agricultural production (crop, meat and fish) stood at 35.6 million metric tons, falling short of matching agricultural demand of 41 million tons. The Current Path forecast is for an unmet demand gap of more than 5 million metric tons by 2043. At this point, Morocco will produce the equivalent of 48.3 million metric tons compared to a demand of 53.4 million metric tons. Cereals and sugar beet are among Morocco's leading agricultural products. In 2021, the country produced over 7.5 million metric tons of wheat, around 2.8 million metric tons of barley, and 2.6 million metric tons of sugar beet. Other major crops in the country were potatoes, olives, tomatoes, and citrus fruit.[6]

Instead of yields improving to 4 tons per hectare by 2043, in the Agriculture scenario, they improve to 4.9 tons. The impact is an increase of 21.4% in production (a total of 58.6 instead of 48.3 million metric tons for crop, meat and fish), with crop production increasing by 25.3% and meat by 10.7%. These numbers already account for reduced agriculture losses that decline by 14% in 2043.

The Agriculture scenario will significantly improve Morocco's food security. By 2043, exports will exceed imports by 1.3% of demand. On the Current Path, Morroco would have imported 9.6% of its agriculture demand.

Education scenario

Chart 16: Education scenario

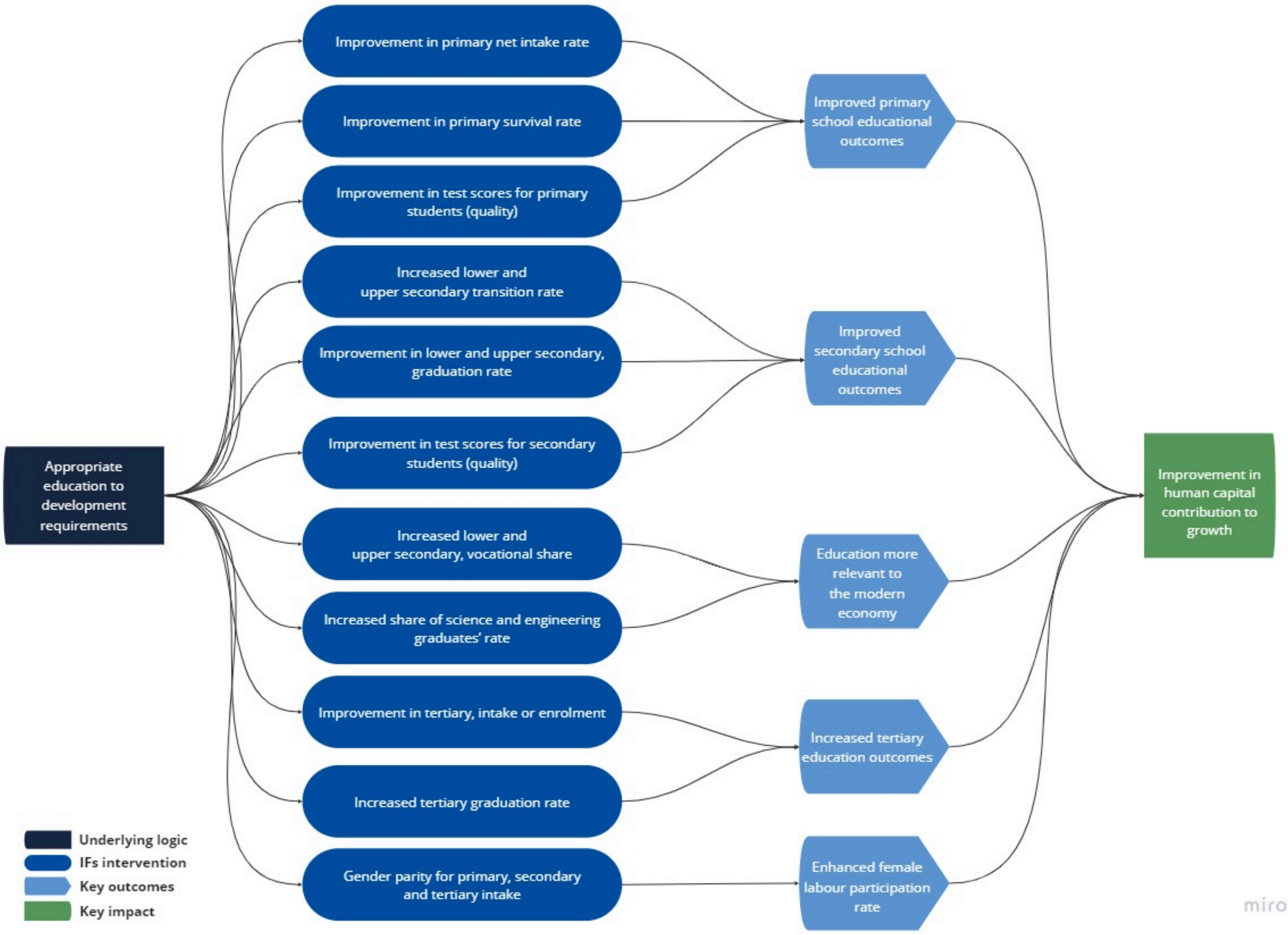


Chart 16 presents the structure of the Education scenario as modelled in IFs. The scenario improves the quantity and quality of education and its relevance to job requirements.

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.

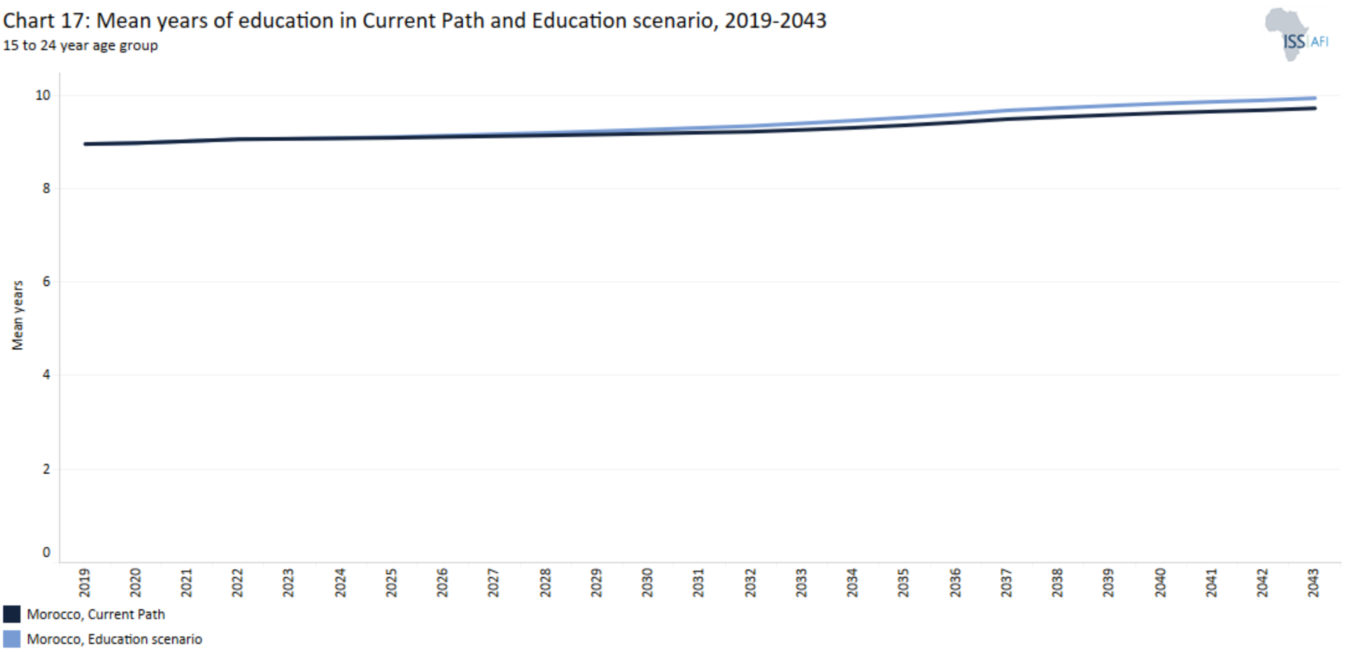
Education is among the top priorities for the Moroccan Government, reflected in its 2015–2030 education vision plan and the new Education Act passed in 2019. Education is mandatory for all children between the ages of seven and 16. After five years of primary education, students attend lower-secondary education for four years. Tertiary enrollment has increased significantly recently, particularly among women.[7]

Reflecting the situation in most North African states, mean years of education in Morocco have improved rapidly in the last three decades, although Morocco is below the average for the region. Historically levels of adult education (i.e. for +15 year age cohort) in Morocco were more than a year below the educational average of Africa's low-middle-income countries and comparable to Kenya and Eswatini but the situation with its younger cohort improving rapidly (see Chart 17).

In North Africa, total adult education years in Libya are higher than in any other country (followed by Tunisia). In this region, only Mauritania has lower mean education years than Morocco.

Chart 17: Mean years of education in Current Path and Education scenario, 2019-2043

15 to 24 year age group



Source: IFs 7.84 initialising from Barro-Lee data

Chart 17 presents mean years of education in the Current Path forecast and the Education scenario for the 15 to 24-year age group.

The educational attainment in Morocco for the 15 to 24 age group was 9 years in 2019, increasing to 9.7 years in 2043 on the Current Path forecast and 9.9 years in the Education scenario. In the Education scenario, Morocco improves its mean years of education in the 15 to 24 age group to surpass neighbouring Algeria by 2043. The rapid improvements in Morocco's younger population cohorts point to imminent improvements in workforce productivity.

In 2019, females in this age group had 8.9 years of education vs 9 years for men, but average female educational attainment in Morocco will shortly surpass that of men. It is already better than that of males at lower-secondary, upper-secondary and tertiary levels. In the Current Path, female education attainment for the 15 to 24-year age cohort would improve to 9.9 years compared to 9.6 years for men in 2043. In the Education scenario, the mean years of female education is 10.1 years in 2043 compared to 9.9 years for men.

In 2019, 190 000 fewer girls enrolled in primary education than boys. The gap is forecast to remain largely constant until 2043 even as primary enrollments decline in line with Morocco's more mature population and is also evident, although smaller, at lower-secondary and upper-secondary levels.

In 2021, around 1.3 million students were enrolled in tertiary education in Morocco. This was a significant increase from only 295 634 students in 2000 and reflected the benefits of investment in this sector.[8]

Looking at the quality of education, Morocco's primary test score in 2019 was 29.1 and, therefore, lower than the average for Africa's low-middle-income countries, which was 33.1, but improving rapidly. On the Current Path, Morocco will perform above average, reaching a score of 38.1 by 2043 compared to the average score of 35.2 for its peer group. In the Education scenario, Morocco surpasses the average primary test score of low-middle income African countries in 2025.

The average test score for secondary learners in Morocco is already higher than that for low-middle-income African countries and will be significantly better, even in the Current Path forecast by 2043. Instead of 19% above the average for low-middle-income Africa in 2043, it will be 35%.

The Education scenario improves GDP per capita by US$225 above the 2043 Current Path forecast.

Manufacturing scenario

Chart 18: Manufacturing scenario

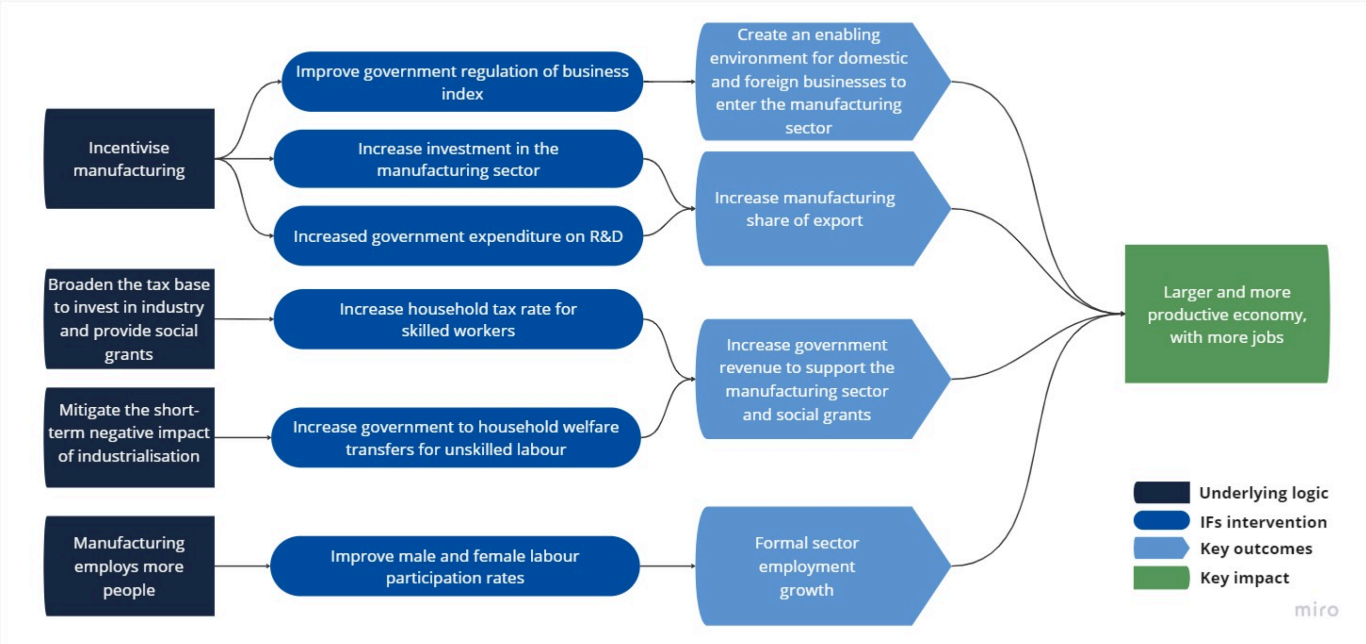


Chart 18 presents the structure of the Manufacturing scenario as modelled in IFs.

The Manufacturing scenario represents reasonable but ambitious manufacturing growth through greater investment in the manufacturing sector, in research and development (R&D), as well as improvement in government regulation of businesses. It increases total labour participation rates with a larger increase in female participation rates. It is accompanied by increased welfare transfers (social grants) to unskilled workers) to moderate the initial increases in inequality typically associated with a manufacturing transition.

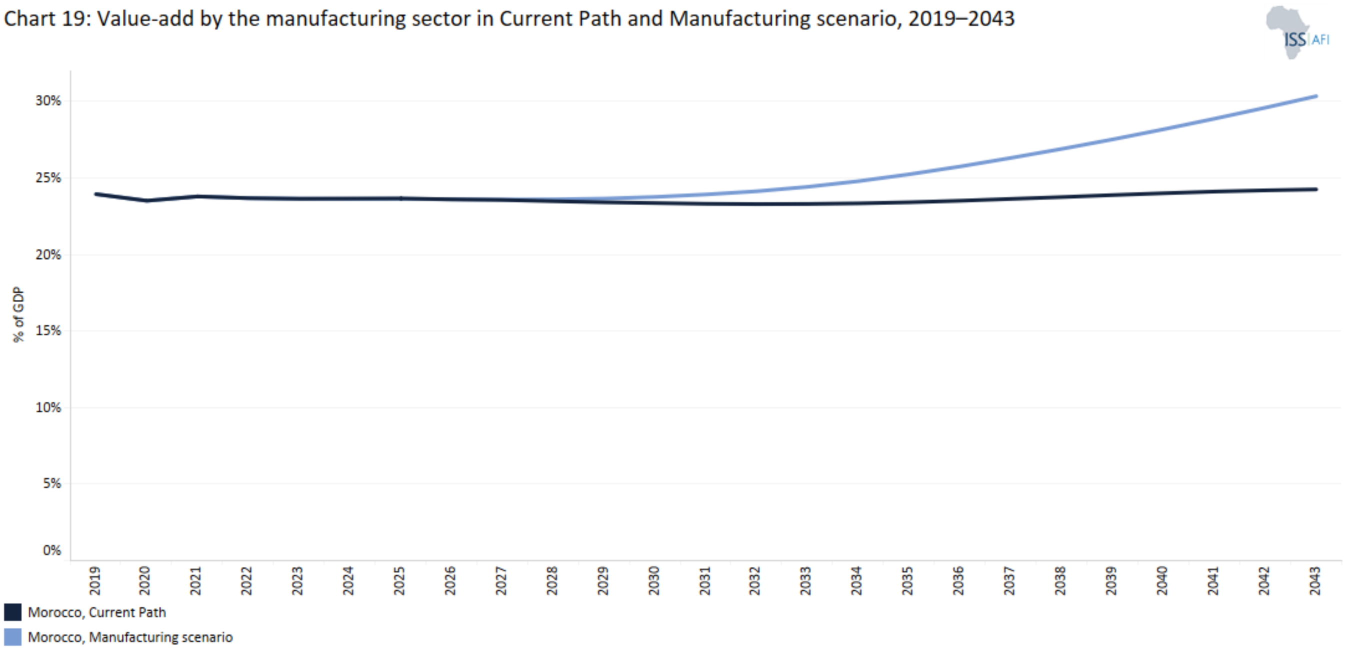
Visit the theme on Manufacturing for our conceptualisation and details on the scenario structure and interventions. Chart 18 presents a summary chart that sets out the composition of the scenario.

Morocco's expected trajectory roughly mirrors that of its low-middle-income peer group, with the service sector representing both the current and future lion's share of contribution to GDP. Regarding its per cent contribution to GDP, Morocco's manufacturing sector is the fourth largest in North Africa and the fifth largest among its low-middle-income peers.

In 2020 the Ministry of Industry, Trade, Green and Digital Economy launched the Plan for Industrial Recovery, 2021-2023[9] in the wake of the COVID-19 pandemic, built around 3 pillars: to support market expansion; increase competitiveness; and to decarbonise. The plan is a follow-on to the Industrial Acceleration Plan, 2014-2020.[10]

The Manufacturing scenario increases the size of Morocco's economy by 6.8% in 2043 (to US$270.6 billion instead of US$253.4 billion). In addition to a larger economy, the scenario also reduces extreme poverty. Instead of 582 000 persons living below US$3.20 in 2043, only 354 000 will live below the low-middle-income poverty threshold, the result of the inclusion of social transfers to unskilled workers and more rapid economic growth.

Chart 19: Value-add by the manufacturing sector in Current Path and Manufacturing scenario, 2019–2043



Source: Ifs 7.84 initialising from IMF World Economic Outlook data

Chart 19 presents the contribution of the manufacturing sector to GDP in the Current Path and the Manufacturing scenario. 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.

In 2019, Morocco's service sector accounted for more than half of the country's GDP (US$74.05 billion), followed by the manufacturing sector, which represented 23.9% (US$34.08 billion). Agriculture constitutes the third largest sector at 15.2% (US$21.57 billion). The energy, ICT and materials sectors account for the remainder.

The service sector will remain the largest contributor to Morocco's GDP by 2043. Still, instead of contributing 55% of GDP on the Current Path forecast, its share will decline to 50.5% in the Manfucturing scenario while the manufacturing sector increases its contribution to GDP to 30.3% (US$82.1 billion) instead of 24.3% (US$61.45 billion) by 2043.

A manufacturing transition generally results in an initial increase in inequality before more rapid economic growth compensates. Therefore the scenario includes additional welfare transfers to unskilled workers to offset the potential negative impact. In the Manufacturing scenario, government-to-household welfare transfers will more than double over the coming two decades from US$6.811 billion in 2019 to US$15.1 billion in 2043. On the Current Path, government-to-household transfers grow at a slower rate reaching US$11.9 billion in 2043.

AfCFTA scenario

Chart 20: AfCFTA scenario

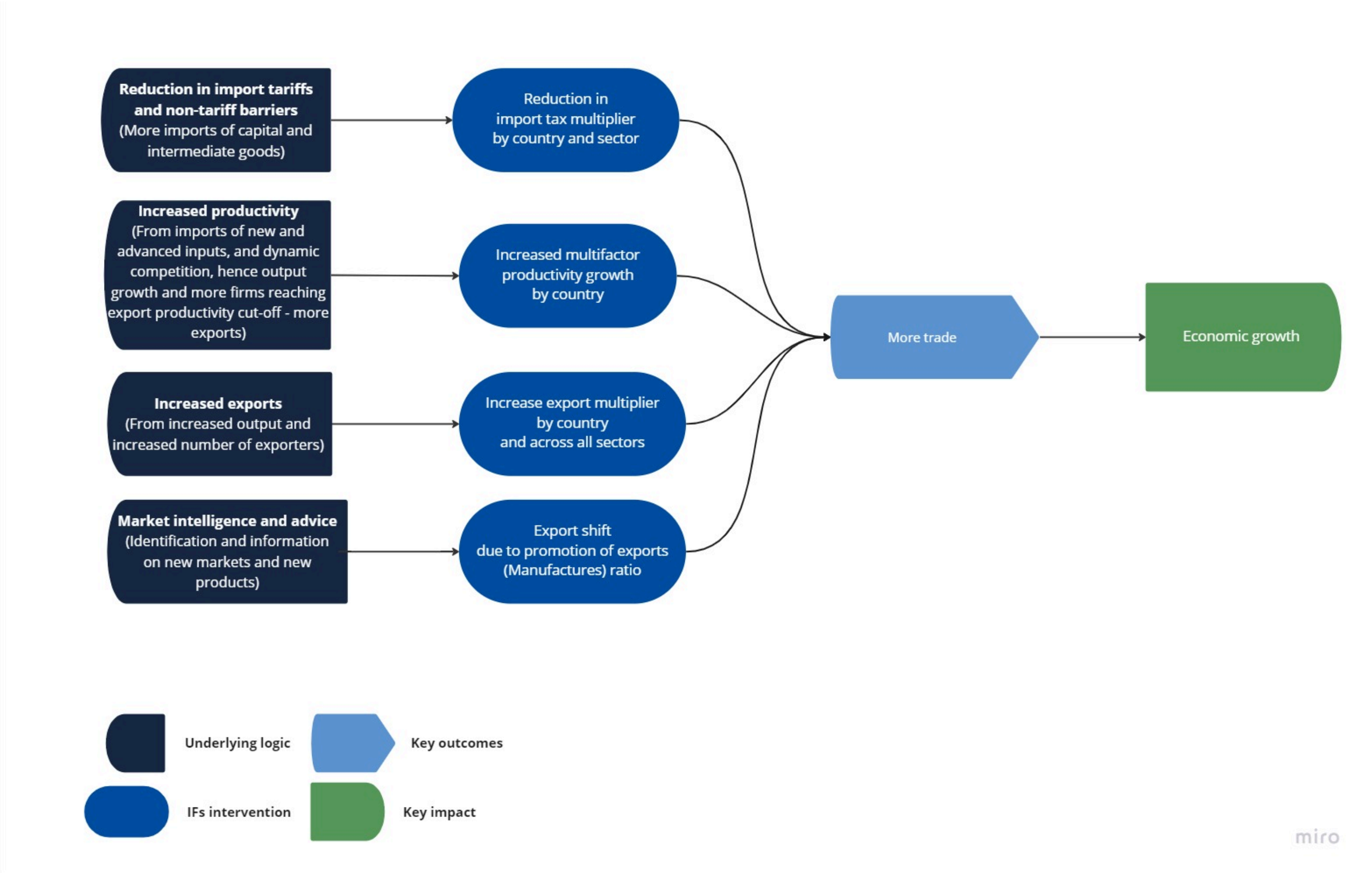


Chart 20 presents the structure of the AfCFTA scenario as modelled in IFs. The AfCFTA scenario represents the impact of fully implementing the continental free trade agreement by 2034. The scenario increases exports in manufacturing, agriculture, services, ICT, materials and energy. It also includes 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.

According to the Observatory of Economic Complexity (OEC) the top exports[11] of Morocco in 2021 were Cars (US$5.19 billion), Mixed Mineral or Chemical Fertilizers (US$5.18 billion), Insulated Wire (US$3.58 billion), Phosphoric Acid (US$2.25 billion), and Non-Knit Women's Suits (US$1.81 billion), exporting mostly to Spain (US$8.53 billion), France (US$7.9 billion), India (US$2.1 billion), Brazil (US$2.06 billion), and Italy (US$2.01 billion). In 2021, Morocco was the world's biggest exporter of Phosphoric Acid (US$2.25 billion), Calcium Phosphates (US$1.62 billion), and Legumes (US$272M).

In 2021, according to OECD[12], Morocco's exports amounted to US$41.9 billion, making it the number 61 exporter globally, and imported US$57 billion, the number 54 trade destination globally. None of Morocco’s fastest-growing export or import markets is in Africa, however, pointing to the future opportunities with the AfCFTA.

The top imports[13] of Morocco in 2021 were Refined Petroleum (US$5.02 billion), Cars (US$2.12 billion), Motor vehicles; parts and accessories (US$1.92 billion), Petroleum Gas (US$1.68 billion), and Wheat (US$1.36 billion), importing mostly from Spain (US$11.1 billion), China (US$6.43 billion), France (US$5.42 billion), Turkey (US$3.14 billion), and United States

(US$3.01 billion). We examine Morocco's energy import dependence in Chart 37.

Morocco has a number of free trade agreements.

The United States (US) and Morocco signed a Free Trade Agreement (FTA) on June 15, 2004, that entered into force on January 1, 2006. The agreement is comprehensive and supports the significant economic and political reforms that are underway in Morocco and provides for improved commercial opportunities for US exports to Morocco by reducing and eliminating trade barriers.

The EU[14] and Morocco established an FTA as part of the EU-Morocco Association Agreement in 1996, which entered into force on 1 March 2000. The EU and Morocco also signed an agreement on additional liberalisation of trade in agricultural products, processed agricultural products, and fish and fisheries products, which entered into force in October 2012. Trade in industrial products is entirely liberalised, while market opening for agricultural products is also substantial. A protocol establishing a Dispute Settlement Mechanism entered into force in 2012. Negotiations for a Deep and Comprehensive Free Trade Area (DCFTA) started in 2013 but were put on hold the year thereafter at Morocco's request. An Amendment of the protocols of the EU-Morocco Association Agreement, which extended the tariff preferences laid down in the Association Agreement to products originating in Western Sahara, entered into force on 19 July 2019.

The EU established its privileged partnership with the Eastern and Southern shores of the Mediterranean in 1995 with the launch of the Euro-Mediterranean Partnership at the Barcelona Conference, aiming to establish an area of peace, stability and economic prosperity that upholds democratic values and human rights.

In November 2020 a Joint Communication by the European Commission and the High Representative of the Union for Foreign Affairs and Security Policy referred to 'A renewed partnership with the Southern Neighbourhood – A new Agenda for the Mediterranean' and the annexed 'Economic and Investment Plan for the Southern Neighbours' in February 2021.

In addition to the Euro-Mediterranean Partnership, Morocco signed the Agadir Agreement with Jordan, Egypt and Tunisia in 2004. The agreement committed all parties to remove all trade tariffs and harmonise their legislation concerning standards and customs procedures. The Agreement entered into force in July 2006, and an Agadir Technical Unit in Amman ensures its implementation. Lebanon and Palestine joined the agreement in 2020 but tangible effects appear to be limited.[15]

The pan-Euro-Mediterranean cumulation system of origin was created in 2005. It brings together the EU, Morocco, and other partners in Europe and the Mediterranean to support regional integration by creating a common system of rules of origin. Rules of origin are technical criteria determining whether a specific product qualifies for duty-free or other preferential access under a given trade agreement.

These individual origin protocols are being progressively replaced by the Regional Convention on pan-Euro-Mediterranean preferential rules of origin (PEM Convention), which was established in 2011 to provide a more unified framework for origin protocols. Morocco acceded to the Regional Convention on 18 April 2012.[16]

Morocco is the EU's 21st biggest trade partner, representing 1% of the EU's total trade in goods with the world in 2022.

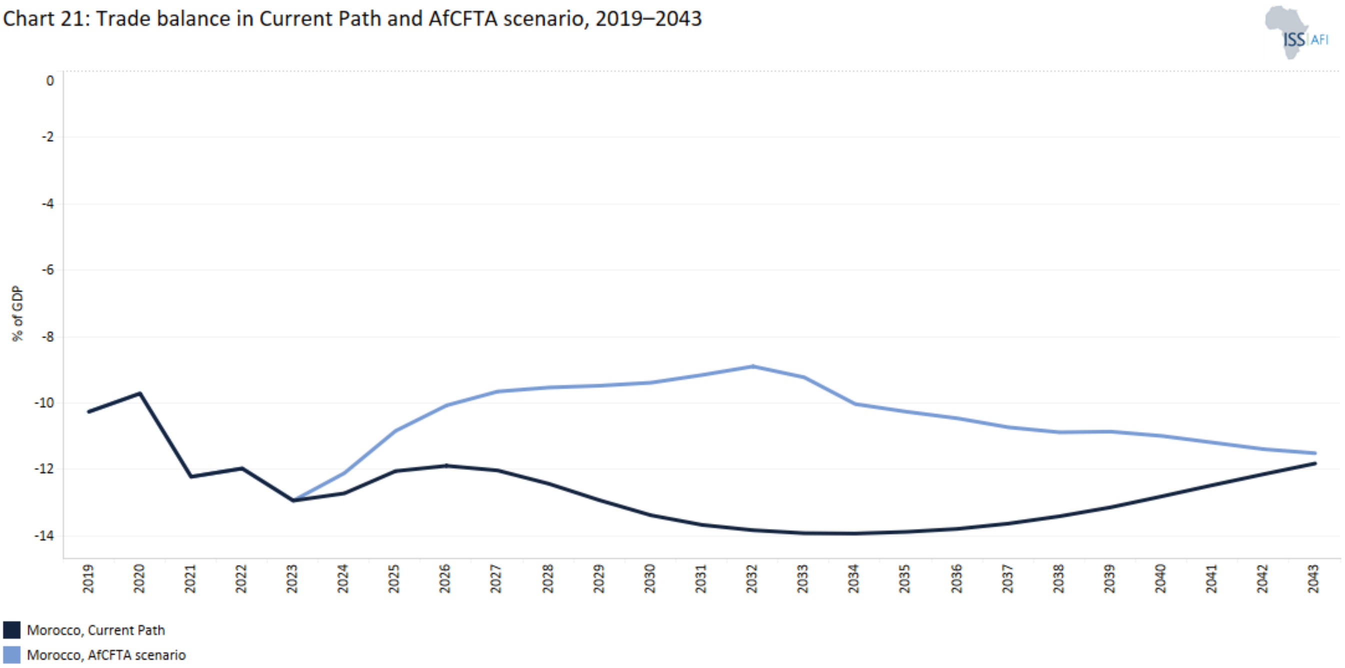
The EU is Morocco's largest trade partner, accounting for 49% of its goods trade in 2022. 56% of Morocco's exports went to the EU, and 45% of Morocco's imports came from the EU. Total trade in goods between the EU and Morocco in 2022 amounted to €53.3 billion. The EU's imports from Morocco amounted to €21.7 billion, and were led by transport equipment (€5.1 billion, 23.5%), machinery and appliances (€4.6 billion, 21.2%), and textiles (€3.1 billion, 14.3%). The EU's exports to Morocco amounted to €31.6 billion. Exports were led by machinery and appliances (€6.7 billion, 21.2%), followed by mineral products (€4.9 billion, 15.5%), and transport equipment (€3.5 billion, 11.1%).

Two-way trade in services amounted to €7.7 billion in 2021. EU imports of services represented €4.4 billion and exports amounted to €3.3 billion.

Morocco's trade relations with the EU have not translated into economic growth diversification to the degree anticipated. Recent years have, as a result, seen a determined effort to turn more towards trade and investment in Africa which offers large opportunities.

During a meeting with his Cabinet of Ministers, Russian President Vladimir Putin announced his intention to sign free trade agreements with several North African countries, namely Algeria, Morocco, Tunisia and Egypt. Trade between Morocco and Russia is limited. It peaked in 2021 at US$1.6 billion but is heavily skewed in favour of the latter.[17]

Chart 21: Trade balance in Current Path and AfCFTA scenario, 2019–2043



Source: IFs 7.84 initialising from WDI data

Chart 21 compares the trade balance in the Current Path forecast with the AfCFTA scenario.

In the AfCFTA scenario, Morocco's exports will increase by 70% in value by 2043 (US$163.1 billion instead of US$95.26 billion) and imports by 57% (US$197 billion instead of US$125.8 billion). Morocco's 2019 trade deficit stood at 10.3% of GDP. In the AfCFTA scenario, that deficit will peak at 13.9% in 2034 before declining to -11.8% in 2043. Even in the AfCFTA scenario Morocco would require ongoing capital inflows to fill the gap.

Morocco has steadily opened its economy up to trade and foreign investment. However, trade with the rest of Africa remains low, and regional trade integration in North Africa (within the moribund Arab Maghreb Union) is absent, largely due to the dispute with Algeria over Western Sahara representing a huge lost opportunity.

Trade openness is generally measured as exports plus imports as a per cent of GDP. Within IFs, Morocco was the 78th most open economy in 2019 (out of 186 within the IFs system) and will modestly regress to 84th on the Current Path by

2043. In the AfCFTA scenario, Morocco would improve its position significantly to 33rd by 2043. These findings are confirmed by the economic freedom score (Heritage Foundation) for Morocco at 58.4 (2023), which approximates the global average.[18] The Fraser Index of Economic Freedom gives Morocco a similar global ranking at 99th (for 2020), which also indicates steady and consistent progress since 1980.[19]

Large Infrastructure and Leapfrogging scenario

Chart 22: Infrastructure and Leapfrogging scenario

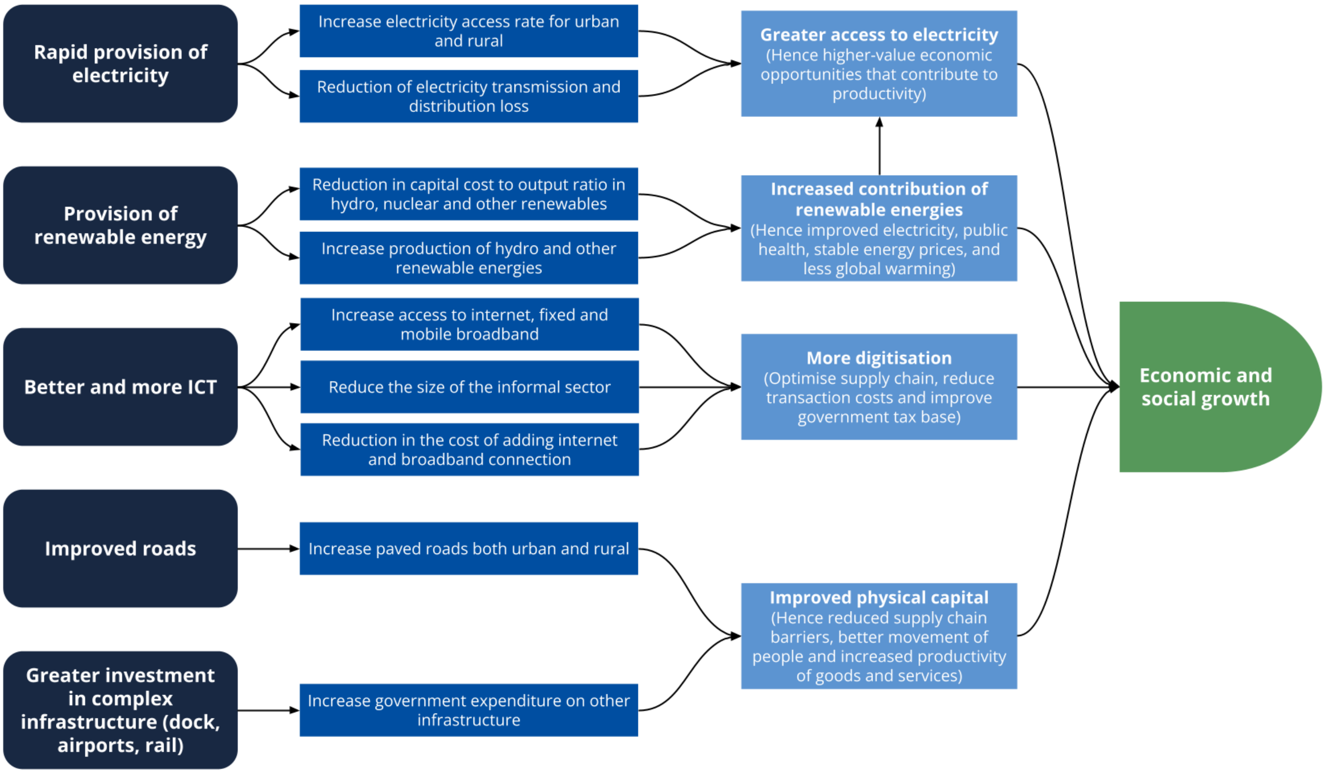


Chart 22 presents the structure of the Large Infrastructure and Leapfrogging scenario as modelled in IFs.

The Large Infrastructure and Leapfrogging scenario represents a reasonable but ambitious investment in road infrastructure, renewable energy technologies and improved access to electricity in urban and rural areas. The scenario includes accelerated access to mobile and fixed broadband and the adoption of modern technology that improves government efficiency and allows for the more rapid formalisation of the informal sector. A final intervention emulates investments in large infrastructure such as rail, port and airports.

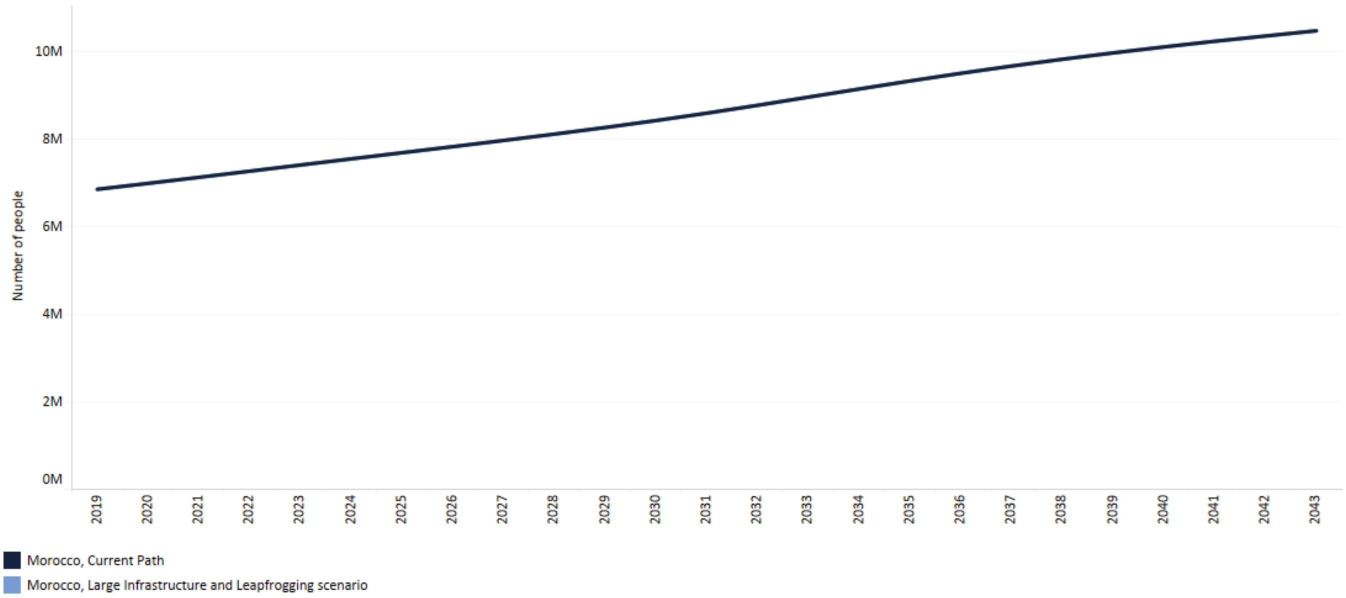
Visit the themes on Large Infrastructure and Leapfrogging for our conceptualisation and details on the scenario structure and interventions. Chart 22 presents the composition of the scenario.

Morocco already does well in many of the traditional and ICT infrastructures used in this scenario. For example, Morocco has achieved universal electricity access and has high mobile broadband rates. Fixed broadband is also forecast to increase rapidly. The impact of the scenario is that Morocco reaches a penetration saturation rate of 50 subscriptions per 100 persons in 2040, seven years earlier than on the Current Path forecast.

Road infrastructure is associated with positive socio-economic impacts, such as increased rural incomes and poverty reduction, improved maternal health as well as paediatric health and increased agricultural productivity. In 2019 Morocco had 42 905 km of paved roads, set to increase to 77 630 km by 2043. The Large Infrastructure and Leapfrogging scenario increases paved roads to 86 659 km (i.e. by 11.6%).

In the Large Infrastructure and Leapfrogging scenario, energy demand in Morocco increases by 6 million barrels of oil equivalent to 299 million barrels by 2043, i.e. by 2%. Domestic production increases by 42.2% to 18 million barrels of oil equivalent by 2043, implying ongoing heavy reliance on imported energy. Morocco's efforts to respond to its heavy reliance on energy imports are discussed with Chart 37.

Chart 23: Cookstove usage in Current Path and Infra/Leapfrogging scenario, 2019–2043

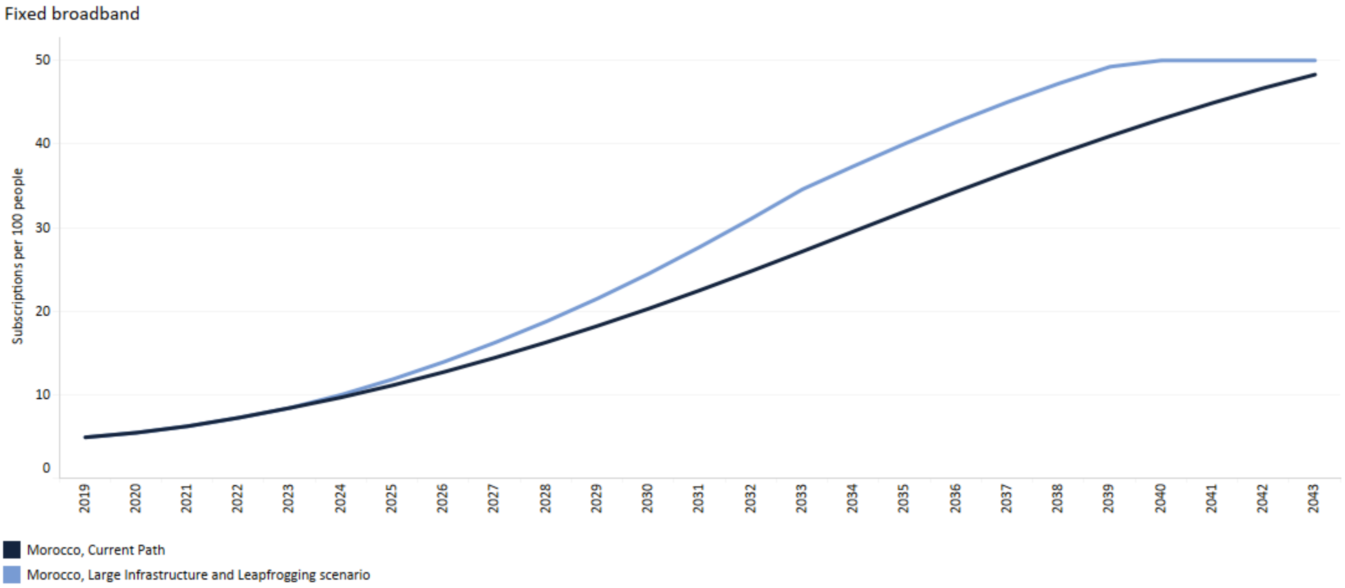


Source: IFs 7.84 initialising from IEA data

Chart 23 presents cook stove usage in the Current Path and the Large Infrastructure and Leapfrogging scenario.

Because of universal electricity access, most households in Morocco use modern fuel and not cook stoves.

Chart 24: Access to mobile and fixed broadband in Current Path and Infra/Leapfrogging scenario, 2019–2043



Source: IFs 7.84 initialising from ITU data

Chart 24 presents access to mobile and fixed broadband in the Current Path and the Large Infrastructure and Leapfrogging scenario.

Morocco had a very low fixed broadband rate of less than 5 subscriptions per 100 people in 2019, although above the low-middle-income average in Africa. On the Current Path, the subscription rate will increase to 48 by 2043, much more rapidly than its peer African group. In the Leapfrogging scenario, fixed broadband is set to increase tenfold to a saturation rate of 50 subscriptions per 100 people by 2040. Significantly above the average of low-middle-income countries in Africa, that would only be half of that.

In 2019, Morocco had a mobile broadband subscription rate of 77.4 subscriptions per 100 people. This rate was significantly higher than the average of 49.5 subscriptions per 100 people for Africa's low-middle-income economies. Mobile broadband in Morocco will increase rapidly and reach 138 subscriptions per 100 people by 2025, both in the Current Path forecast and the Large Infrastructure and Leapfrogging scenario. Thereafter, subscriptions increase more slowly as the saturation effect sets in, reaching 150 subscriptions per 100 people by 2033.

Financial Flows scenario

Chart 25: Financial Flows scenario

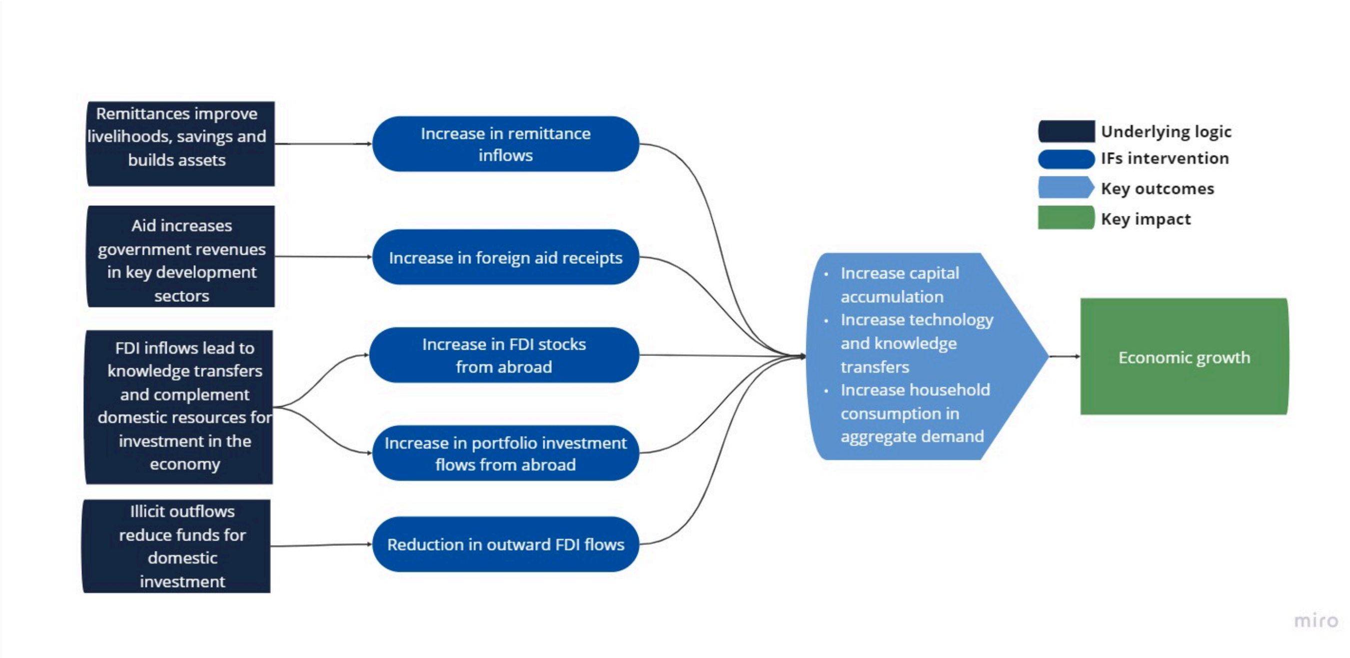


Chart 25 presents the structure of the Financial Flows scenario as modelled in IFs.

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 also 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.

Compared to the average for Africa's lower middle-income countries of 1.6% of GDP, foreign aid accounts for a slightly higher share of GDP in Morocco at 1.9% in 2019 (US$2.664 billion). Morocco is one of the largest recipients of EU funds under the European Neighbourhood Policy. Aid from the EU to Morocco is part of the Neighbourhood, Development and International Cooperation Instrument (NDICI). Morocco gets a cumulative increase of US$2 billion more aid in the period 2024 to 2043 in the Financial Flows scenario compared to the Current Path forecast. By 2032 aid is at 0.6% of GDP in both the Current Path forecast and the Financial Flows scenario although the economy is 3% larger in the latter.

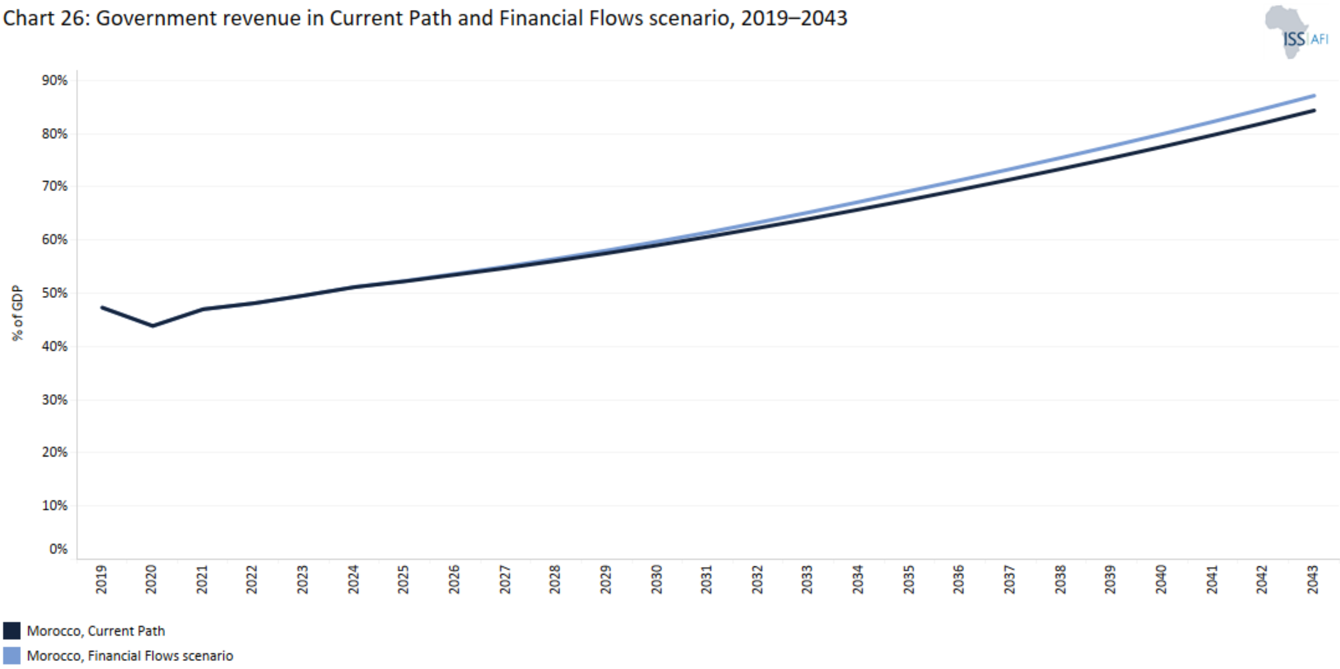
Attracting foreign investment is, of course, much more important than aid. FDI flows to Morocco accounted for 3.2% of GDP in 2019, 0.6 percentage points above the average for Africa's low-middle-income economies. The impact of the COVID-19 pandemic on FDI flows manifests in the sharp drop to 1.6% of GDP in 2020 before recovering. By 2043 FDI inflows are expected at 3.1% of GDP on the Current Path forecast and 4.4% in the Financial Flows scenario, a cumulative difference of US$28.9 billion from 2024 to 2043. Whereas the total stock of FDI in 2019 was US$62.1 billion, set to increase to US$118.6 billion on the Current Path forecast, in the Financial Flows scenario, it gets to US$161 billion.

Measured as a per cent of GDP, remittance inflows to low-middle-income countries, including Morocco, have steadily increased over time, as have ways to capture these flows. In 2019, remittance inflows to Morocco accounted for 6.3% of GDP (US$9.01 billion). By 2043, remittance as a percentage of GDP will increase to 7.8% (US$19.8 billion) in the Current

Path forecast and 8.5% (US$22.31 billion) in the Financial Flows scenario. The forecast for ongoing increases in remittance inflows for Morocco diverts from the IFs forecast for low-middle-income countries, where it moderates and slowly declines. The reason could be linked to the IFs forecast on future migration flows. Still, since migrant outflows from Morocco are forecast to be lower than the average for low-middle-income countries, further exploration is required.

Without data on illicit financial outflows, we reduce FDI outflows, using that as a proxy. The difference, for Morocco, would be US$336 million less outflows in 2043.

Chart 26: Government revenue in Current Path and Financial Flows scenario, 2019–2043



Source: IFs 7.84 initialsing from IMF data

Chart 26 presents government revenues in the Current Path and Financial Flows scenario.

Wagner's law, or the law of increasing state activity, is that public expenditure increases as national income rises. It is, therefore, reasonable to expect that government revenues will increase as a per cent of GDP in the Financial Flows scenario compared to the Current Path forecast.

Measured as a per cent of GDP, government revenues in Morocco stood at 33.3% in 2019 (US$47.3 billion). On the Current Path forecast, revenues will remain constant as a per cent of GDP but increase in size to US$84.4 billion in 2043. In the Financial Flows scenario, government revenues increase by 0.053 percentage points to US$87.1 billion, much of that due to foreign aid and the effect of more inward investment on growth.

Governance scenario

Chart 27: Governance scenario

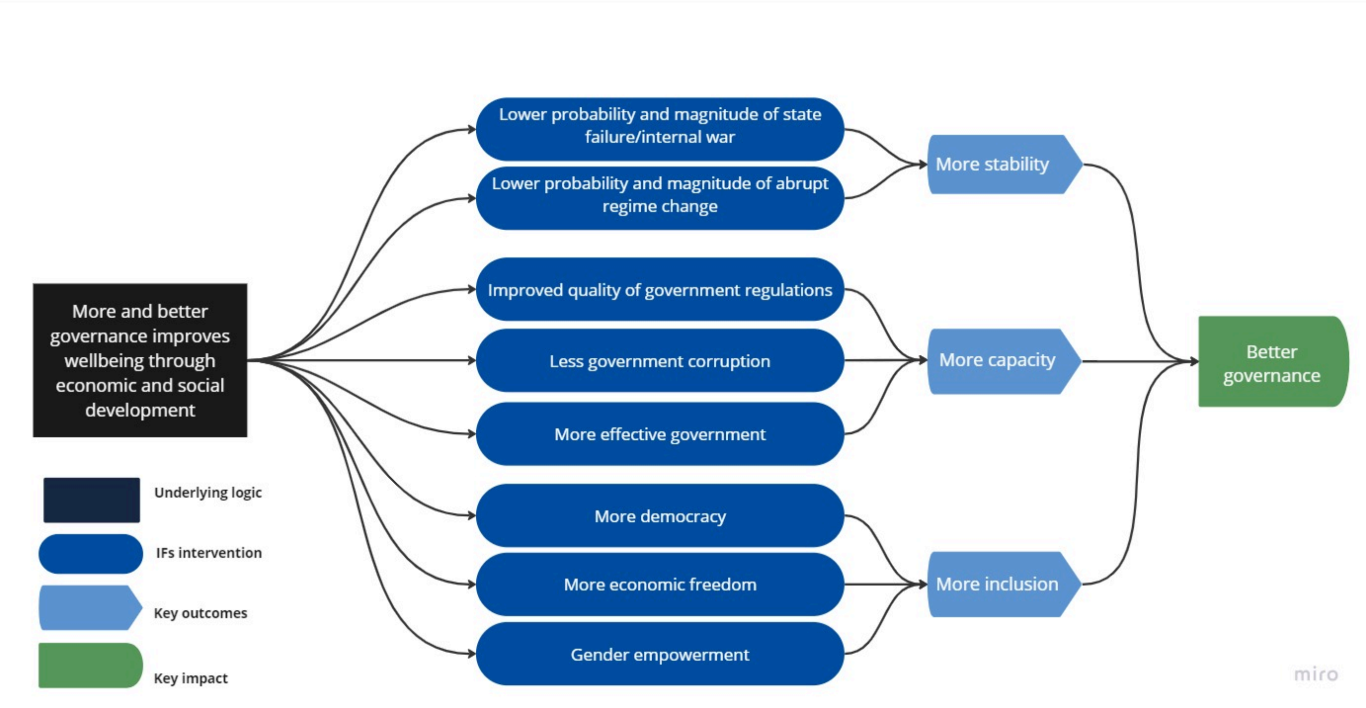


Chart 27 presents a summary chart that sets out the composition of the Governance scenario as modelled in IFs. Thinking of governance in terms of security, capacity, and inclusion provides a useful lens to compare how countries progressed over time, as well as the state of governance between countries and groups of countries.

Visit the theme on Governance for a full conceptualisation and details on the scenario structure and interventions.

In brief, the stability dimension uses data from the Political Instability Task Force on:

- the probability and magnitude of state failure/internal war,
- the probability and magnitude of abrupt regime change, and
- social violence consisting of reductions in conflict and terror and police conflict.

Capacity is enhanced by improving the quality of government regulation, government effectiveness (both from the Worldwide Governance Indicators) and reductions in corruption using data from Transparency International.

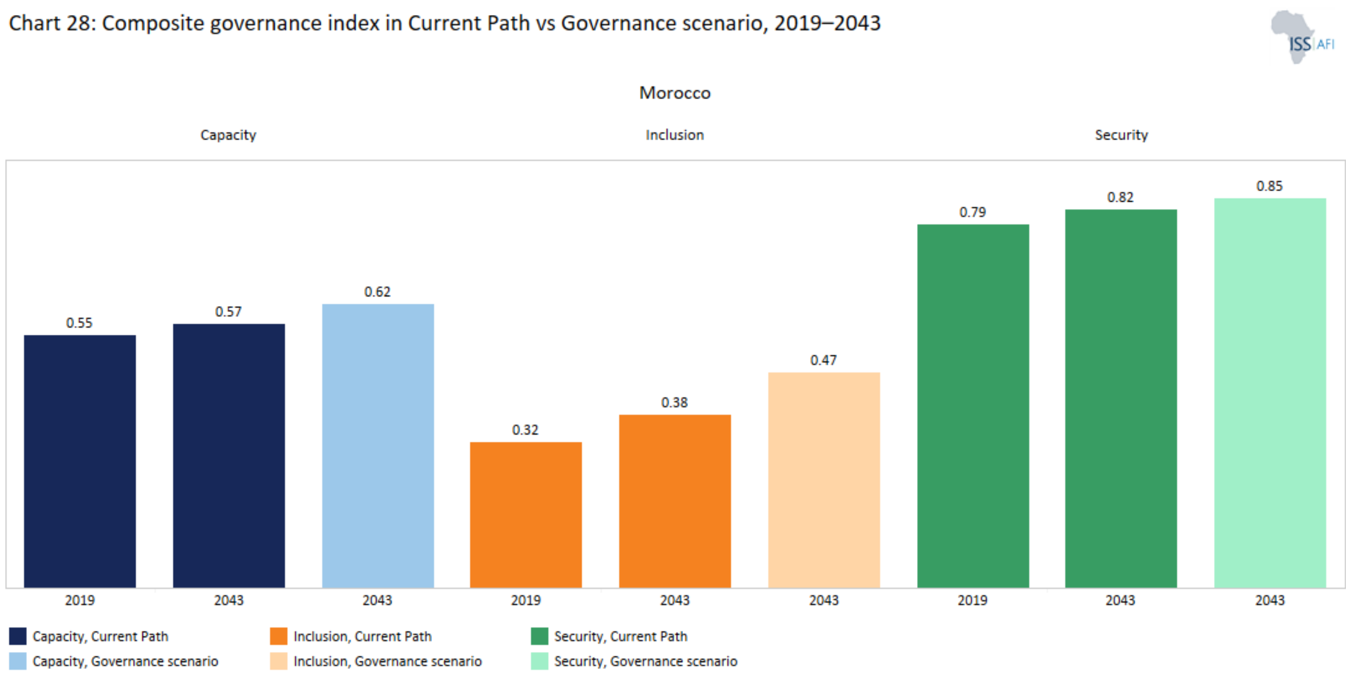
Inclusion improves as a result of:

- an improvement in levels of democracy using the Polity IV index applied to those countries that evidence a democratic deficit,
- an improvement in gender empowerment using the gender empowerment measure (GEM) from the United Nations Development Programme (UNDP), and

- more economic freedom (using the associated index from the Fraser Institute).

Morocco is a relatively stable country and has steadily improved on all three indices.

Chart 28: Composite governance index in Current Path vs Governance scenario, 2019–2043



Source: IFs 7.84 initialising from WGI and TI data

Chart 28 presents progress with the three governance dimensions by 2043 in the Current Path and Governance scenario compared to 2019.

In the wake of the Arab Spring that started in Tunisia in December 2010, Morocco also witnessed street protests demanding, among other things, the removal of the executive powers from the King. Morocco was eventually less affected by the widespread popular revolt and dissatisfaction than other countries in the region, likely because it had experienced several years of solid economic growth. King Mohammed VI, who ascended to the throne in 1999 upon the death of his father, King Hassan II, also adopted a number of reforms early in his reign that served to soften the harsh authoritarianism evident previously.[20]

Adopted by referendum on 1 July 2011, the Moroccan Constitution was prepared through a consultative commission and reflected some of the demands for political reform.[21] The Constitution specifically outlaws single-party rule. It requires that political parties not be founded on a religious, ethnic or regional basis and provides for various rights granted to the political opposition, 'free, honest and transparent' elections, equality between men and women and various personal and political rights including the right to strike.

The constitution also encourages local democracy and notes, in Article 1 that “the territorial organization of the Kingdom is decentralized”. It was followed, in 2015, by three laws at the municipal, regional, and prefectural levels.[22] Progress in this area, the government believes, is the key to addressing international and domestic concerns about ruling Western Sahara from Rabat.

The security index within IFs indicates that Morocco was 10% more secure than the average for low-middle-income Africa in 2019. On the Current Path forecast, Morocco will be 8% more stable than its peers in 2043 and 11% more stable in the Governance scenario. However, it faces a range of security threats which are related to its political system, economic challenges and corruption, radical Islam, organised crime, as well as the ongoing dispute over the status of Western Sahara. Youth unemployment is a significant concern. Further, the country faces threats of terrorism from Islamist extremism. Al-Qaeda in the Islamic Maghreb (AQIM) have repeatedly called Moroccans to carry out terrorist attacks. Domestic Salafiya-Jihadiya cells also pose a threat.[23]

The capacity index within IFs indicates that Morocco had almost 60% more government capacity in 2019 than the average for low-middle-income Africa. On the Current Path forecast, Morocco will have 40% more capacity in 2043 than its African peers and 50% more in the Governance scenario.

The inclusion index within IFs indicates that Morocco has 34% less inclusion in 2019 than the average for low-middle-income Africa. On the Current Path forecast, Morocco will have 26% less inclusion in 2043 than its peers and 9% less in the Governance scenario. Various measures of democracy confirm the deficit as well as steady progress. The country holds regular multiparty elections for Parliament, and constitutional reforms in 2011 shifted some authority over government from the king to the elected legislature. Nevertheless, the king retains significant formal and informal power. Freedom House[24], in its 2023 report, considers Morocco partly free. V-Dem[25] scores Morocco 0.25 (out of 1) on liberal democracy and 0.26 on electoral democracy. The Polity V project (used within IFs) classifies Morocco as an anocracy (mixed regime type) with a score of -4 out of a range of -10 (full autocracy) to +10 (liberal multiparty democracy), implying that the country has a democratic deficit of around 9 points on its 20-point scale, meaning that the country is significantly less democratic than expected given its levels of education and income.[26]

The composite IFs governance index is an average of the scores for stability, capacity and inclusion. In 2019 Morocco was 7% above the average for low-middle-income countries in Africa, indicating that Morocco generally is better governed than most other low–middle-income countries. On the Current Path forecast, that number is still positive but reduces to +5% by 2043. The 2043 score for Morocco improves to +15% above the average for low-middle-income countries in the Governance scenario.

These IFs indices compare well with the results from other organisations that measure various aspects of governances, although IFs adopts a more structural/long-term approach. For example, the Worldwide Governance Indicators published by the World Bank measure six governance dimensions: voice and accountability; political stability and absence of violence/terrorism; government effectiveness; regulatory quality; rule of law; and control of corruption. According to the Bank, governance in Morocco was considered 26% more effective in 2019 than the average for low-middle-income African countries, and regulatory quality was 23% better. Both decline on the Current Path forecast (they are included in IFs) but improve in the Governance scenario.

Endnotes

1. World Population Review, Casablanca population 2022
2. IFAD, Morocco
3. US International Trade Administration, Morocco – Country commercial guide, 29 December 2022
4. Kingdom of Morocco, Generation Green 2020-2030
5. US International Trade Administration, Morocco – Country commercial guide, 29 December 2022
6. S Galal, Main agricultural products in Morocco 2021, 26 April 2023, Statista
7. S Galal, Education in Morocco - statistics & facts, Statista, 29 June 2023
8. S Gala, Number of students enrolled in tertiary education in Morocco from 2000 to 2021, Statista, 26 April 2023
9. Royaume du Maroc, Plan de relance industrielle 2021-2023: M. Elalamy annonce 3 chantiers, 24 September 2020
10. Ministry of Industry, Trade, Green and Digital Economy, Industrial Acceleration Plan, 2014-2020
11. Morocco, Note that US$ numbers from OEC are in January 2020 US$ values
12. Morocco, Note that US$ numbers from OEC are in January 2020 US$ values
13. Morocco, Note that US$ numbers from OEC are in January 2020 US$ values.
14. European Union, Morocco EU trade relations with Morocco. Facts, figures and latest developments
15. C Kourtelis, Why Has the Agadir Agreement Failed? EADI Blog, 2 March 2021
16. EU, The pan-Euro-Mediterranean cumulation and the PEM Convention, no date
17. E Pacot, Russia includes Morocco in a North African free trade zone project, 8 August 2023, Atalayar
18. Heritage Foundation, 2023 Index of Economic Freedom
19. Fraser Institute, Economic Freedom
20. E Cody, Morocco's King Hassan ll Dead at 70, Washington Post, 24 July 1999. Also N Pelham, The mystery of Morocco's missing king, The Economist, 1843 magazine, 14 April 2023
21. L Zaki, Decentralization in Morocco: Promising Legal Reforms with Uncertain Impact, Arab Reform Initiative, 31 July 2019
22. L Zaki, Decentralization in Morocco: Promising Legal Reforms with Uncertain Impact, Arab Reform Initiative, 31 July 2019
23. AL Strachan, Conflict analysis of Morocco, GSDRC, January 2014
24. Freedom in the World - Morocco Country Report, Freedom House, 2023
25. Varieties of Democracy
26. See, also see International IDEA on Morocco

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Jakkie Cilliers (2024) Morocco. Published online at futures.issafrica.org. Retrieved from https://futures.issafrica.org/geographic/countries/morocco/ [Online Resource] Updated 07 November 2023.

About the authors

Dr Jakkie Cilliers is the ISS's founder and former executive director of the ISS. He currently serves as chair of the ISS Board of Trustees and head of the African Futures and Innovation (AFI) programme at the Pretoria oce of the ISS. His 2017 best-seller Fate of the Nation addresses South Africa's futures from political, economic and social perspectives. His three most recent books, Africa First! Igniting a Growth Revolution (March 2020), The Future of Africa: Challenges and Opportunities (April 2021), and Africa Tomorrow: Pathways to Prosperity (June 2022) take a rigorous look at the continent as a whole.

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