

# Uganda

Current Path Forecast and Sectoral Scenarios

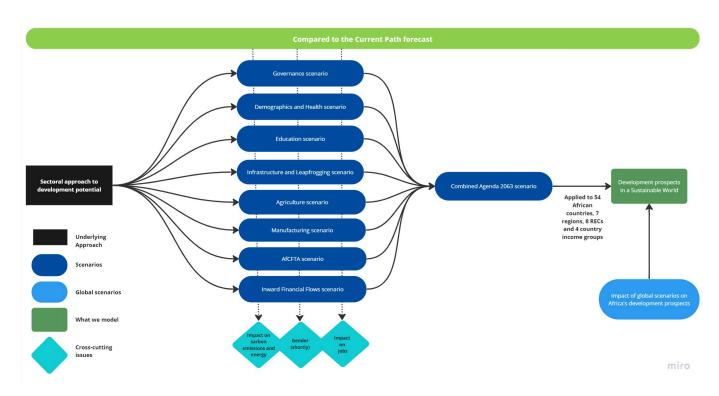
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#### Brief

Chart 3: Diagram of Current Path and sectoral scenarios



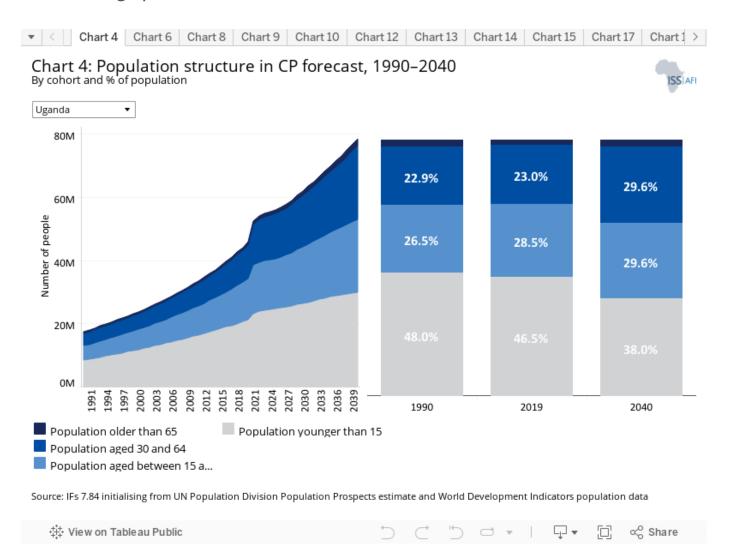
This section provides an overview of the key characteristics of Uganda along its likely (or Current Path) development trajectory and the impact of a single positive scenario in eight separate sectors.

The Current Path forecast from the International Futures forecasting (IFs) platform is a dynamic scenario that imitates the continuation of current policies and environmental conditions. The Current Path is, therefore in congruence with historical patterns and produces a series of dynamic forecasts endogenised in relationships across crucial global systems.

The eight sectoral scenarios are on: Governance and Stability, Demographics and Health, Education, Infrastructure/Leapfrogging (consisting of the impact of renewables, ICT and the more rapid formalisation of the informal

sector), Agriculture, Manufacturing, Free Trade (the implementation of the African Continental Free Trade Area), and External Financial Flows (consisting of aid, foreign direct investment, remittances and a proxy on illicit financial flows). The interventions in each scenario are benchmarked to present an ambitious but reasonable aspiration for countries at similar levels of development.

# Demographics and Health: Current Path vs scenario



This section presents the Current Path forecast in demographics and health for Uganda and the impact of a scenario that aims to improve health and hasten and increase the size of the demographic dividend.

Uganda's population has grown significantly from 17.35 million people in 1990 to 47.22 million in 2019 — the third highest among low-income Africa countries after Ethiopia and the DR Congo. Kampala is the only city with a population of over a million people, followed by Gulu and Lira which in 2016 measured populations of a little over 100 000 people.[1] Between 1990 and 2019, the population grew at an average rate of 3.5% annually. The population density increased to 2.4 people per hectare in 2019, up from 0.87 in 1990, second only to Rwanda and Burundi among low-income African countries.

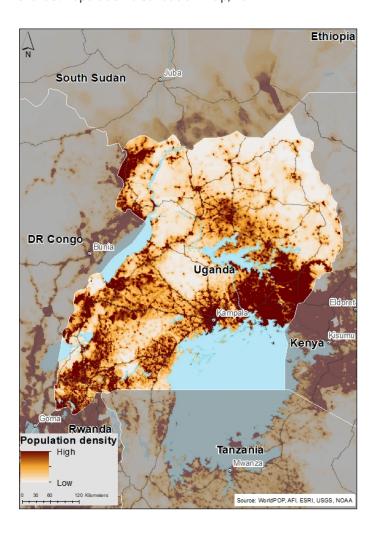
The demographic dividend refers to a situation where a country has a ratio of 1.7 income-generating adults to one dependant (defined as children and elderly people) or more. It leads to accelerated economic growth as the age structure of a country transitions from high birth and death rates to low birth and death rates.[2] Robust investment in human capital, a good health delivery system, and sustained political commitment to leveraging the opportunity are necessary to realise a demographic dividend.[3]

On the Current Path, Uganda's population is forecast to grow to 61.9 million people by 2030 and to 78.3 million by 2040. By then it will have the third largest population among its income peers under the Current Path assumption of the other

countries. In contrast, the population growth rate is projected to decline from 6.1% in 2019 to only 2.3% by 2040, on par with the average for the low-income Africa by 2040. Declining growth rates follow from the projected increase in the uptake of modern contraceptives and declining birth rates. The use of modern contraceptives is projected to increase from 39% in 2019 to 56.8 % among women of child-bearing age by 2040. Fertility rates have also declined from seven live births per woman in 1990 to 4.8 in 2019, and in the Current Path it is forecast to further decline to 3.5 by 2040. In the meantime, as total fertility rates (TFR) decline over time in Uganda, the under-15 age group portion of the population declines and the working-age share of the population increases, pushing Uganda towards a demographic dividend. Between 1990 and 2019, the share of elderly people of the population increased, the under-15 share declined, and the share of working-age people increased from 49% in 1990 to 52% in 2019 and will reach 59% in 2040, on par with the average for low-income African countries. However, without significant intervention, Uganda will only enter a potential demographic dividend from 2052 when the ratio of working-age persons to dependants reaches 1.7 to 1. Measures to reduce TFR can advance the point at which Uganda achieves a potential dividend with positive impacts on incomes and reductions in poverty.

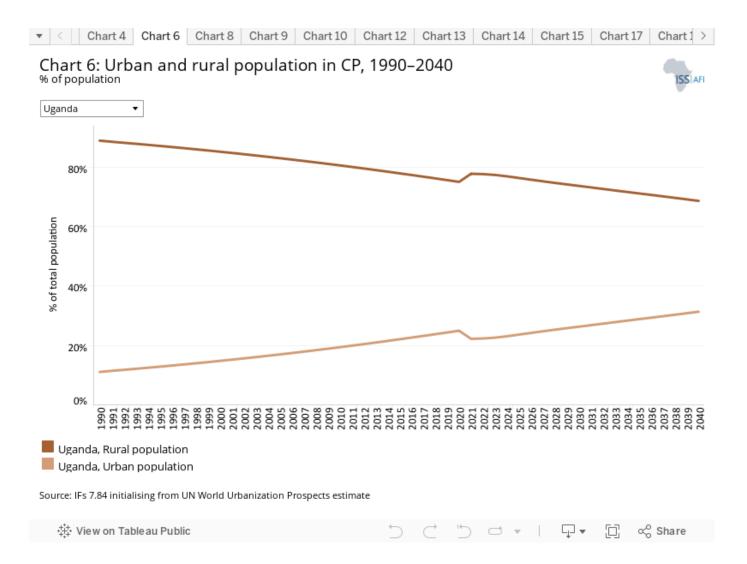
The median age in Uganda at 15.9 years in 1990 slightly increased to 16.9 in 2019, and in the Current Path, the median age of the population is forecast to increase to 20.3 by 2040. Uganda has a large youthful population concentration as measured by a youth bulge, which is the ratio of people in the 15–29 years old age group to the total adult population. In 1990, the youth bulge was 50%, meaning that one in two adult Ugandans was considered a youth. This ratio increased marginally to 53% in 2019, a little above the average for the low-income African countries at 50%. On the Current Path, the youth bulge will decline to 48%, reflecting the reduced TFR discussed above. The NDPIII recognises the challenges that the country faces as a result of the large youth bulge, which can be harnessed to achieve a demographic dividend and to avoid social unrest.[4] This is particularly concerning given the mismatch between the skills required by the labour market and the knowledge produced by training institutions. Hence, both Vision 2040 and the NDPIII have emphasised human capital development as a key factor of the realisation of Uganda's development aspirations.

Chart 5: Population distribution map, 2022



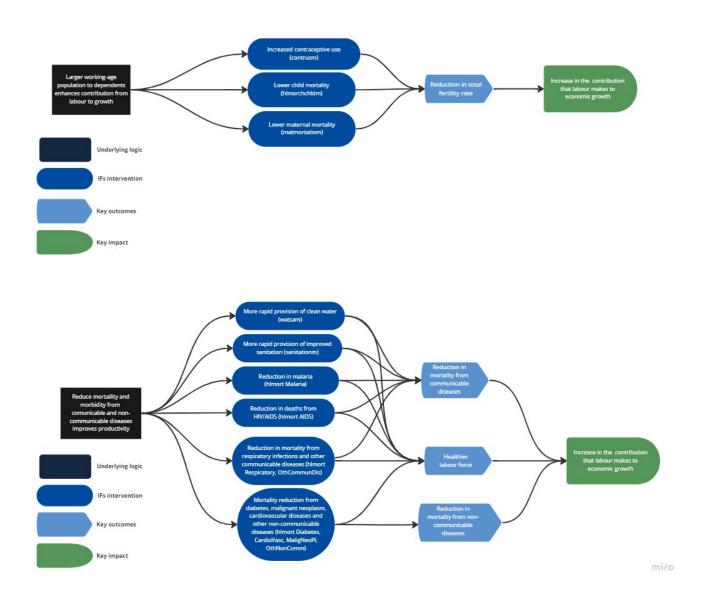
Urbanisation can boost development according to modernisation theorists as it provides a better environment to promote positive social and economic change compared to rural communities. [5] Specifically, urbanisation attracts industrialisation with the large pool of cheap labour associated with it. Cities encourage the emergence of a new entrepreneurial middle class with modern lifestyles and make it easier for the government to provide social services, such as healthcare and education, than in sparsely populated, rural areas.[6] Rapid urbanisation comes with challenges, however, as it puts pressure on limited urban infrastructure and may create urban slums and unhealthy congestion.[7]

Vision 2040 recognises urbanisation as a fundamental pillar of the vision that needs to be strengthened to harness the opportunities that industrialisation, ICT business, an abundant labour force, geographical location and trade provide.[8] Chapter 15 of the NDPIII addresses planning for sustainable urbanisation and housing in Uganda. It recognises the potential of urbanisation for economic transformation towards middle-income status for Uganda if certain obstacles are overcome. These obstacles include inadequate urban planning, complex land tenure systems, overcrowding, poor infrastructure and insufficient social services especially in the Greater Kampala Metropolitan Area.[9] The NDPIII therefore commits the government to: 1) increasing economic opportunities in cities and urban areas; 2) promoting the urban housing market and providing decent housing for all; 3) promoting green and inclusive cities and urban areas; 4) enabling balanced and productive national urban systems; and 5) strengthening urban policies, planning and finance.[10]



Of Uganda's 17.35 million people in 1990 only 1.9 million people lived in urban areas, equivalently to 11% of the population. By 2019, the urban population had increased to 24 % of the total population as more people migrated from rural areas to urban centres on top of natural urban population growth. Uganda is predominantly a rural country with 75.6% of its population living rural areas in 2019, compared to 69% of an average low-income African country. Kampala is the capital city and the largest in Uganda with a population of over 1.5 million people by 2021 estimates. On the Current Path forecast, Uganda is expected to increase the portion of urban population to 31.4% by 2040, below the 39.8% for low-income African countries.

Chart 7: Demographic and Health scenario diagram



Good health and longevity are fundamental goals of every human being. Healthy people are more active, vibrant and have a more positive outlook on life, translating into positive influence on social infrastructure and economic development[11]. Health promotes economic growth directly through its labour productivity effects where better health leads to increases in output per unit of labour[12]. Health indirectly affects economic growth through its positive effect on education. A healthy educated workforce live longer to reap the benefits of education in terms of higher skilled wages[13].

Globally, the Sustainable Development Goal (SDG) 3 aims for ensuring good health and well-being for citizens by 2030, targeting reduction in maternal mortality, neonatal and under-5 (child) mortality among others[14].In 2019, maternal mortality in Uganda was 349 per 100 000 live births, below the average for Africa and low-income African countries at 442.5 and 449.5 per 100 000 live births respectively. At the same time, it has reduced its infant mortality rate from 98 per 1000 live births in 1990 to 42.6 in 2019, lower than the average for peers at 47.4 per1 000 live births. Neonatal mortality stood at 18.5 per 1 000 live births in 2019, which is lower than the average for low-income African countries at 26.5. Uganda provides free antenatal services in most of the health facilities, which boosted antenatal care (ANC) visits from 44% in 2011 to 60% in 2016 and at the same time increased hospital deliveries from 57% in 2011 to 73% in 2016.[15]

IFs uses the International Classification of Disease (ICD) to differentiate between three broad categories of diseases:

communicable, non-communicable and injuries as well as fifteen sub-categories of mortality and morbidity. In 1990, death from non-communicable diseases (NCDs) was 50 000 people and by 2019 it has climbed to 120 000 people, representing a more than 100% increase over the 20-year horizon. The rate of death from NCDs is projected to increase from 2.5 per 1000 in 2019 to 2.6 by 2030and 2.8 by 2040

Uganda has reduced death from communicable diseases. In 2019, communicable diseases caused about 181 000 deaths or 3.8 deaths per 1 000 people, compared to 232 000 in 1990. On the Current Path forecast, death rates from communicable disease will further decline to 2.7 deaths per 1 000 by 2030 and 1.8 by 2040. Despite the declining trend in death from communicable diseases in Uganda, it will continue to be the main cause of death until 2030 – the end of the second 10-year implementation of the Vision 2040. Other communicable diseases, such as Ebola and dengue fever, constituted the highest cause of death in Uganda in 2019 at 87 000 people, while non-communicable diseases such as malignant neoplasms at 31 000 and then cardio vascular diseases at 30 000 people constituted the next two highest causes of death. Cauuse of death resulting from injuries is forecast to increase over the years from 0.54 per 1000 people in 019 to 0.64 deaths per 1 000 by 2040.

Poor water and sanitation infrastructure are major causes for the spread of communicable diseases. In 2019, 36.4 million Ugandans, representing 82% of the population, had access to improved water. Of these, 26.5 million people had access to piped water and only 9.8 million had access to other improved water connections. However, access to improved sanitation is low in Uganda at 19.6% in 2019, with 17% and 63% using shared and other unimproved sanitation respectively.

The decline in mortality rates since 1990 and improvements in water and sanitation access has improved life expectancy over the years. In 2019, life expectancy in Uganda was 62.8 years, up from 49 years in 1990. This is however below the average for Africa at 65.8 and that of low- income Africa at 63.6 in 2019. On average, in 2019, women lived 5.1 years longer than their male counterparts in Uganda in 2019. This gender-gap in life expectancy will persist. In 2040, it will have widened to 5.6 years.

Despite the progress made, Uganda's health sector suffers from headwinds such as focus on a facility-based health service delivery as opposed to a household-based health service delivery system, leading to the slow improvement in health outcomes. The Vision 2040 therefore seeks to make a paradigm shift to a household-based service delivery system, improve nutrition status of the population (especially for the young and women in reproductive age), encourage private-public partnership in health, and the creation of specialised treatment centres for non-communicable diseases at sub-district level[16].

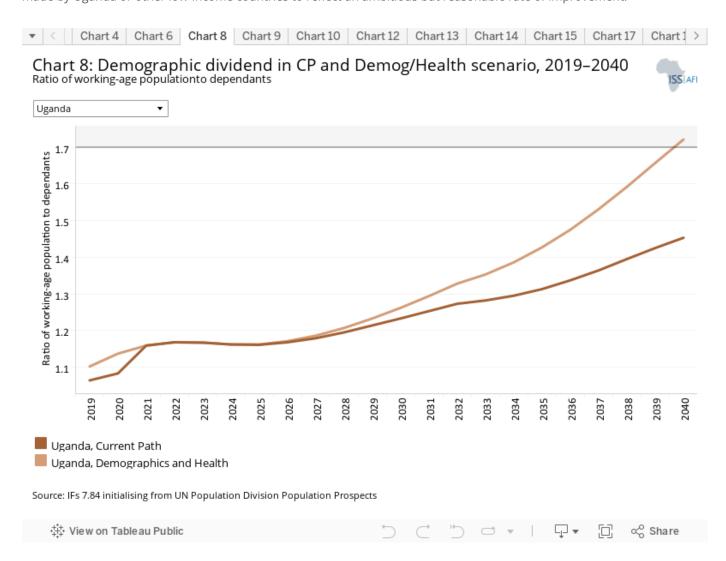
Over the course of the NDP III implementation, Uganda aims to reduce the prevalence of under 5 stunting from 28.9% in 2019 to 24% by 2025, (ii) reduce under 5 mortality from 64/100 000 live births to 52/1 000, (iii) reduce the maternal mortality rate (MMR) from 336/100 000 to 299/100 000, (iv) increase life expectancy of the population from 63 to 70 years, (v) increase access to safe water supply from 70% to 85% in rural areas and 74% to 100% in urban areas, (vi) increase access to basic sanitation from 19% to 40%, and (vii) increase the proportion of the population accessing universal health care from 44% in 2018 to 60% in 2025[17].

In the Current Path forecast, Uganda is projected to further reduce mortality rates and increase life expectancy but will miss the 2025 NDP III targets. Life expectancy is projected to increase to 64.2 and 68 years by 2025 and 2040 when NDPIII and Vision 2040 expire respectively. This will be below the average for Africa at 71 years by 2040 and for low-income African countries at 69.6 years. Hence, without further intervention Uganda is not on track to realise the NDP III target for life expectancy, even by 2040.

Infant mortality is projected to further decline to 25.6 deaths per 1 000 live births in 2040, maternal mortality will reduce to 139 deaths per 100 000 live births, neonatal mortality will decline to 10.4 deaths per 1 000 live births, and deaths from

communicable diseases will decline to 226 000 people. By 2040, other communicable diseases will be the leading cause of death, followed by cancer related diseases. The portion of the population with access to improved water connection is projected to increase to 84.9% - 66.5 million people – by 2040, of which 32% represent access to piped water connection. Access to improved sanitation will also increase to 42% by 2040, representing 43.6 million people. Improved access to water and sanitation could help to reduce the burden of communicable diseases.

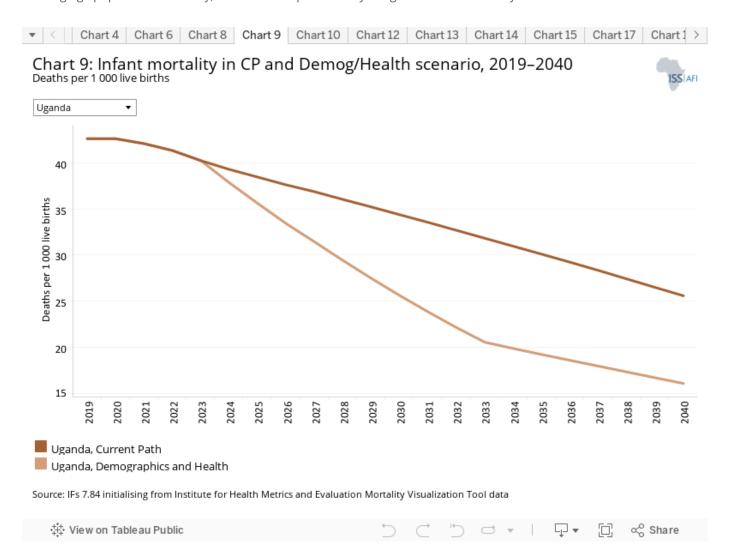
Uganda has made progress in demographic and health as pointed to by the above analysis. However, the country needs to accelerate its demographic transition, reduce reverse the increasing trend in death from non-communicable diseases, improve access to sanitation, and boost health outcomes for Ugandans. The Health and Demographic scenario include reasonable, but ambitious reductions in communicable and non-communicable diseases mortality, the under-five mortality rate, the maternal mortality ratio, provides for increased access to modern contraception, as well as improvements in access to safe water and better sanitation. The scenario is benchmarked against historical progress made by Uganda or other low-income countries to reflect an ambitious but reasonable rate of improvement.



Demographers typically differentiate between a first, second and even third demographic dividend. We focus here on the first dividend, namely the contribution of the size and quality of the labour force to incomes. It refers to a window of opportunity when the ratio of the working-age population (between 15 and 64 years of age) to dependants (children and the elderly) reaches 1.7.

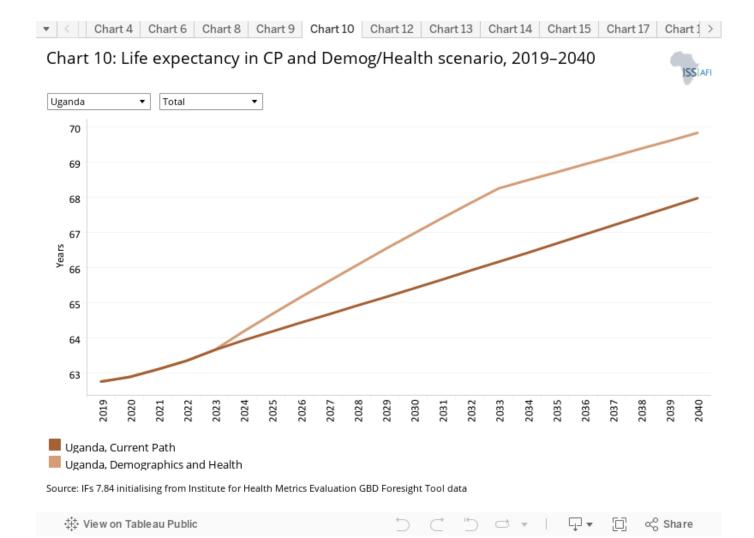
In the Demographics and Health scenario, Uganda is set to achieve the demographic dividend ratio of 1.7 to 1 by 2040 compared to 1.45 to 1 in the Current Path in the same period. This represents an 18% increase over the Current Path

forecast for the same year. In the scenario, Uganda's ratio will be 17.9% higher than the average for low-income countries in Africa by 2040. This has the potential to usher Uganda into a period of higher economic growth, provided the growing working-age population is healthy, educated and productively integrated in the economy.



The infant mortality rate is 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.

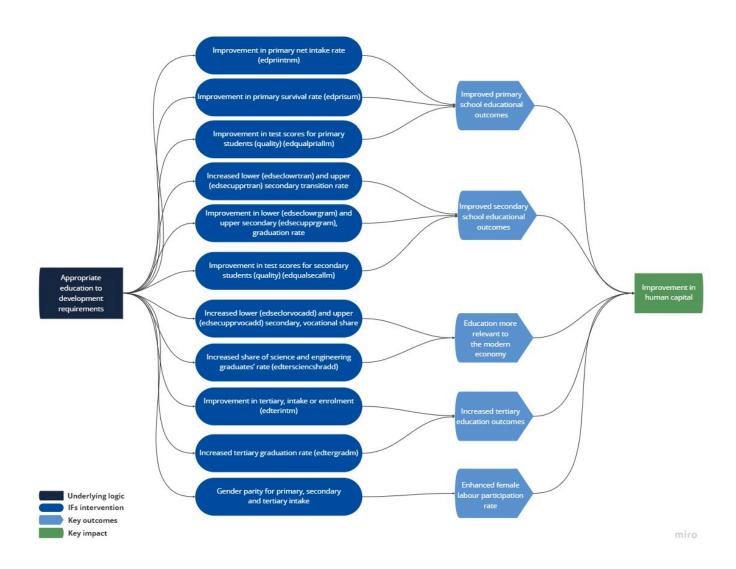
In the Demographics and Health scenario, Uganda will further reduce the infant mortality rate to 16.1 deaths per 1 000 live births by 2040, 9.5 deaths fewer than the Current Path forecast. Compared to the Current Path figure of 14.6 deaths, in the Demographics and Health scenario, Uganda will record a neonatal mortality rate of 9.8 by 2030, below the SDG 3.2 target of reducing neonatal mortality to as low as 12 deaths per 1 000 live births. In the scenario, the under-5 mortality rate is set to reduce from 59.2 deaths per 1 000 live births in 2019 to 34.1 in 2030, slightly above the SDG target of 25 per 1 000 live births by that time. By 2040, the under-5 mortality rate will reduce to 22.3 deaths per 1 000 live births, 12.8 deaths lower than in the Current Path forecast.



The average life expectancy at birth in Uganda was 62.7 years in 2019, slightly below the average of 63.5 years for low-income African countries. Women in Uganda generally live five years longer than men. In both the Current Path forecast and the Demographics and Health scenario, women will continue to have approximately five years higher life expectancy than men by 2040. By 2040, total life expectancy in the Demographics and Health scenario will be 1.7 years larger than in the Current Path forecast.

#### Education: Current Path vs scenario

Chart 11: Education scenario diagram



Education is indispensable for long-term economic growth and development. World Bank research shows that an additional year of schooling is associated with a 10% increase in earnings a year, higher than returns to investment in treasury bills, bonds, housing and physical assets.[18] Returns on tertiary education are even higher.[19] Gary Becker, in his human capital theory, shows that investment in education has a higher payoff in terms of higher wages and returns.[20]

Since the 1960s, the education system in Uganda has been based on a 7-6-3 structure, where learners have seven years of primary education, six years of secondary education (divided into four years of lower secondary leading to the O-levels certificate and two years of upper secondary leading the A-level certificate) and three years of post-secondary education. Ten years after having instituted universal primary education (UPE), in 2007 Uganda became the first sub-Saharan African country to introduce universal secondary education (USE). This has boosted enrolment rates at primary and secondary level, although the USE has had a modest impact on enrolment at lower secondary level, a positive trend further reinforced by increased government expenditure on education by building more schools and employing more teachers.[21] The number of secondary schools increased to 3 000 in 2017 from 2 373 in 2007, with most of the growth coming from private schools during the same period.[22] Furthermore, the number of public technical and vocational education and

training (TVET) schools has increased from 126 in 2012 to 152 in 2018, while the number of degree-awarding institutions and universities increased from 34 in 2011 to 60 in 2017, with university enrolment rising to 162 299 from 139 683 over the same period.

#### Box 1: Definitions in Education

*Gross enrolment rate*: The number of learners enrolled at a given level of education, regardless of age, expressed as a percentage of the official school-age population corresponding to the same level of education. Rates can therefore be above 100%.

**Net enrolment rate:** The number of students of the official age group for a given level of education who are enrolled in any level of education, expressed as a percentage of the corresponding population.

*Transition rate to secondary education:* New entrants to the first grade of secondary education in a given year, expressed as a percentage of the number of pupils enrolled in the final grade of primary education in the previous year.

*Completion rate*: The number of people in the relevant age group who have completed the last grade of the given level of education, as a percentage of the population at the theoretical graduation age for the given level of education.

Source: UNESCO

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

# Chart 12: Gross enrolment in CP, 2019 and 2040 % of of-age children



Uganda	,	,
-8-11-0-		

	Primary	Lower secondary	Tertiary	
	Uganda	Uganda	Uganda	Uganda
2019	105.7%	36.7%	11.9%	5.2%
2040	115.2%	66.5%	32.0%	15.7%

Source: IFs 7.84 UNESCO Institute for Statistics

‡‡ View on Tableau Public	$\supset$	$\subset$	$\Box$	♂ ▼		<b>□</b> •		∝ Share	
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By 2019, the gross primary enrolment rates had jumped from 70.6% in 1996 to 105.7%, on par with the average for low-income Africa and higher than the average for Africa at 102.4%. Gross secondary enrolment rates for Uganda increased from 11% in 1990 to 29% in 2019, 12 years after the USE was introduced. Gross tertiary enrolment rates have modestly increased from 1.1% in 1990 to 5.2% in 2019. In 2019, the ratio of female to male primary net enrolment was 1.03 to 1, while the ratio of female to male gross enrolment stood at 0.93 for lower secondary and 0.69 for upper secondary.

Gross enrolment and completion rates at all three levels of education are projected to increase appreciably between 2019 and 2040. In the Current Path forecast, the primary gross enrolment rate for of-age children is set to increase to 117.9% by 2030 and to 115.2% by 2040, while the tertiary enrolment rate is forecast to increase to 9.9% and to 15.7% during the same period. The secondary enrolment rate will be pushed to 44.4% by 2030 and to 56.4% by 2040.

The transition rate from primary to lower secondary increased from 54% in 2000 to 63.8% in 2019, while transition rates from lower secondary to upper secondary declined from 66% in 2000 to 43% in 2019. The decline in transition rates from lower secondary to upper secondary indicates the failure of the USE programme at upper secondary level.

# Chart 13: Gross completion rates in CP, 2019 and 2040 % of adults (+ 15 years)

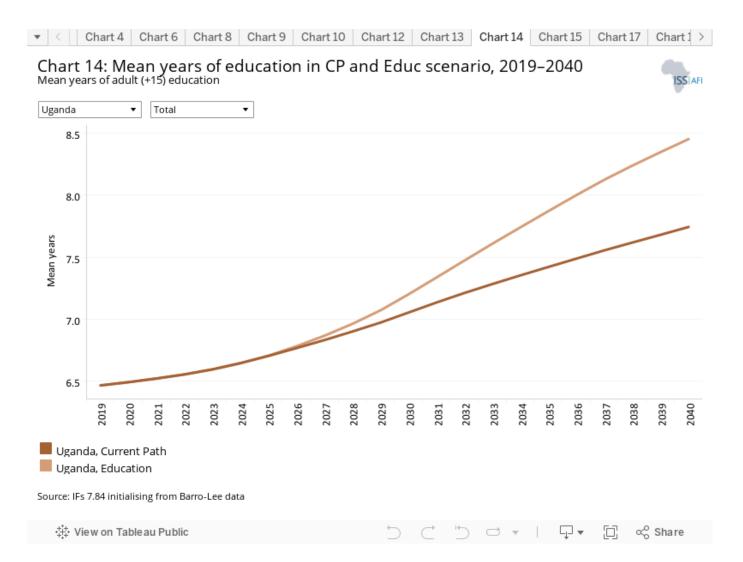


	Primary	Secondary	Tertiary
	Uganda	Uganda	Uganda
	Total	Total	Total
2019	46.6%	2.8%	1.7%
2040	64.9%	10.1%	4.1%

Source: IFs 7.84 UNESCO Institute for Statistics

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Between 1990 and 2019, primary education completion rates for adults in Uganda increased from 30% to 46.6%, ranking Uganda 14th highest among the 23 low-income African countries in 2019. However, this is lower than the average for the group at 53% in 2019. Tertiary completion rates were very low in 1990 at 0.19%, which only increased to 1.23% in 2010 and to 1.7% by 2019. In the Current Path forecast, primary completion rates will increase to 55.3% by 2030 and to 65.1% by 2040, while secondary completion rates will be pushed to 5.9% and to 10.2% over the same period. Tertiary completion rates are low compared to primary and secondary completion rates, and are projected to increase to 2.6% and to 4.3% by 2030 and 2040, respectively, in the Current Path.

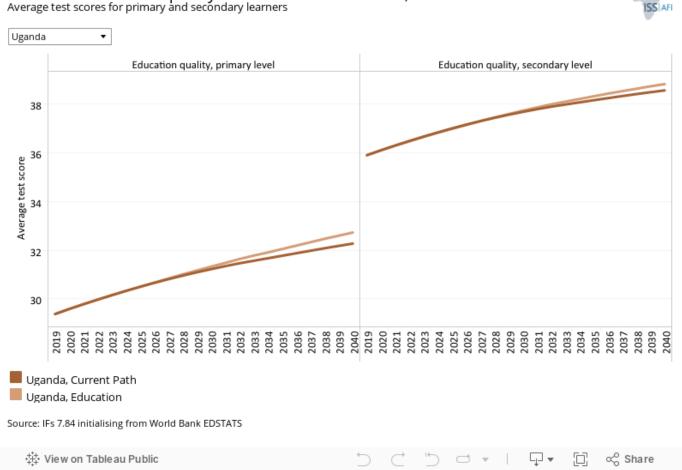


Mean years of education depict the average number of completed years of education by a country's adult population aged 15 years and older. In 2019, Uganda's mean years of adult education stood at 6.5 years, above the average of 4.6 years for low-income countries on the continent. In terms of gender, the mean years of education for males (6.8 years) was 0.7 years more than females' average of 6.1 years. This gap in favour of men for mean years of adult education in Uganda is below the average of 1.2 years for low-income countries in Africa.

By 2040, in the Education scenario, it is expected that the mean years of adult education will rise to 8.5 years, which will be 0.8 years more than the Current Path estimate and 2.6 years more than the average for low-income countries in Africa. Also, based on the Education scenario, the gender gap regarding mean years of adult education will close to 0.5 years by 2040.

Chart 15: Education quality in CP and Educ scenario, 2019–2040





While the mean years of education gives an indication of the level of educational attainment in a country, it does not reflect the quality of education. A standard measure used to assess the quality of education is the average test performance of students. Progress on education quality, the focus of SDG 4, seems to be modest due to continued challenges in teaching space and materials, the number of teachers and the disbursement of government funds.[23]

The adult primary test score stood at 29.4% in 2019, higher than the average for Africa at 25.6% and low-income African countries at 22.2%. In the Current Path forecast, adult primary test scores will reach 32.2% by 2040. Uganda's secondary adult test score of 35.9% in 2019 is above the 33.9% average for Africa and 33.1% for low-income African countries. The science and engineering share of tertiary graduates in Uganda stood at 16.6% in 1999 but fell to 10% by 2004, and in the Current Path forecast, it is set to rise to 14.8% by 2040, which is below the average for low-income African countries of 16.8%.

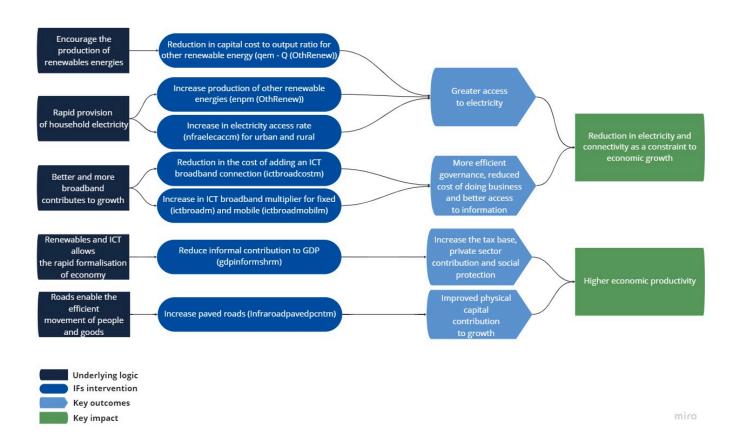
The Education scenario will marginally increase the average test scores for primary learners to 35.8 in 2040, compared to the Current Path forecast estimate of 34.4. Also, the average test score in the Education scenario for 2040 will be 6.3 points more than the continental average for low-income countries. By 2040, the average test score for secondary learners in the Education scenario is projected to rise to 40.9, which is above the Current Path estimate of 40.3% and the average of 37.4% for low-income countries in Africa. This suggests that Uganda performs relatively better than its income group peers, both at primary and secondary levels.

UPE in Uganda has had a significant impact on enrolment rates at primary level. However, the USE did not translate into the same at secondary level, and on the contrary, transition rates from lower secondary to upper secondary has declined.

Consequently, completion rates at tertiary level are significantly low in Uganda, while education quality as well as the science and engineering share of tertiary graduates are modest.							

# Infrastructure/Leapfrogging: Current Path vs scenario

Chart 16: Infrastructure and Leapfrogging scenario diagram



Sound infrastructure can improve productivity, augment quality of life and boost educational outcomes by facilitating access and government effectiveness.[24] Physical infrastructure, such as roads and railways, is a critical driver of economic growth and an important component of development. It facilitates the movement of people, goods and services and promotes intra-country trade, serving also to connect outlying rural areas with urban centres and the higher quality services they provide. Infrastructure generally serves as an enabler of the provision of social services such as education and health.

The role of infrastructure development is recognised in the long-term development of countries and regions as evident by its inclusion in Agenda 2063 as goal 10 and the EAC Vision 2050 as its first pillar. Uganda's Vision 2040 seeks to provide world-class infrastructure and modern technology to enhance productivity and growth. As Uganda is a landlocked county, the quality of its physical infrastructure will determine its regional and international competitiveness. Virtually every sector of the economy will benefit from good transportation, water, power, and ICT infrastructure. The NDPIII recognises the importance of basic physical infrastructure through special programmes on integrated transport and services and digital transformation during the 2020/21 to 2024/25 period, with the goal of developing a seamless, safe, inclusive and sustainable multimodal transport system.[25] Currently, the country uses four modes of transport – road, rail, air and water – with road transport accounting for more than 90% of freight and passenger traffic during the financial year 2018/19.[26]

Of the total road network in 2018, 20 854 km were national roads, 38 603 km were district roads, 19 959 km of roads were urban and 79 947 km were community access roads. Paved roads accounted for a mere 4 971 km (23.83%) of national roads, 145 km (0.38%) of district roads and 1 188 km (5.95%) of urban roads. Despite the improvements in paved roads

over the years, the country did not meet the NDPII target of 6 000 km of paved roads at national level. The portion of the national road network in fair to good condition is 93% and 75% for paved and unpaved roads, respectively.

In 2019, Uganda had 74 291 km of total road network, 24% of which is paved, meaning 76% of all roads are unpaved. By 2040, the Current Path forecast is that total road network in Uganda will be 102 382 km of which 56.8% is projected to be paved and the remaining 43.2% unpaved. Indicator 9.1.1 in the SDGs refers to the proportion of the rural population who live within 2 km of an all-season road and is captured in the Rural Access Index. Access to rural areas is essential for improving the integration of and interaction between rural and urban economies, which is important for spurring local economic development. In 2019, 33.9% of the rural population in Uganda had access to all-season roads, which is set to rise to 43.6% by 2040 but still below the average for its income group peers of 50.6%.

In 2019, 41.3% of Ugandans had access to electricity, of which 70% resided in urban areas. This is above the average for low-income Africa at 33% but below the average for Africa at 54%. In the Current Path forecast, total electricity access in Uganda is projected to be 60.9% by 2040. Only 31.8% of the rural population had access to electricity. The urban-rural electricity access gap has increased from 31 percentage points in 1990 to 39 percentage points in 2019. On the Current Path, access to electricity is projected to reach 61% of the population by 2040. The disparity in electricity access in favour of urban residents will continue largely unchanged as 80.5% of urban dwellers will have access to electricity compared to the 52% for rural dwellers by 2040.

Electricity is generated mainly from hydropower, supplemented by heavy fuel oil and biomass cogeneration power plants. [27] The 250 MW-Bujagali hydroelectric power plant is the largest since it was commissioned in 2012. It is operated by the government of Uganda and three private partners — investment firm Blackstone, Sithe Global Power, and the Aga Khan Fund for Economic Development. [28] Since 2001, Uganda has liberalised its energy market, separating electricity generation and transmission. The Uganda Electricity Transmission Company Limited (UETCL) and the Uganda Electricity Generation Company Limited (UEGCL) are separate enterprises responsible for the transmission and generation of electricity, respectively. The primary transmission network consists of 132 kV lines to various load centres. Although power is available in Uganda — and it exports electricity to neighbouring Tanzania, Kenya and Rwanda — many communities, homes, and businesses do not have access to electricity due to expensive grid connection fees and high house wiring costs. [29]

To remedy these challenges and increase rural electrification, the government, through the Rural Electrification Agency (REA), instituted the Electricity Connection Policy (ECP), operationalised in 2018. However, to implement this the REA requires financial support to buy the many poles and connection wires required.[30]

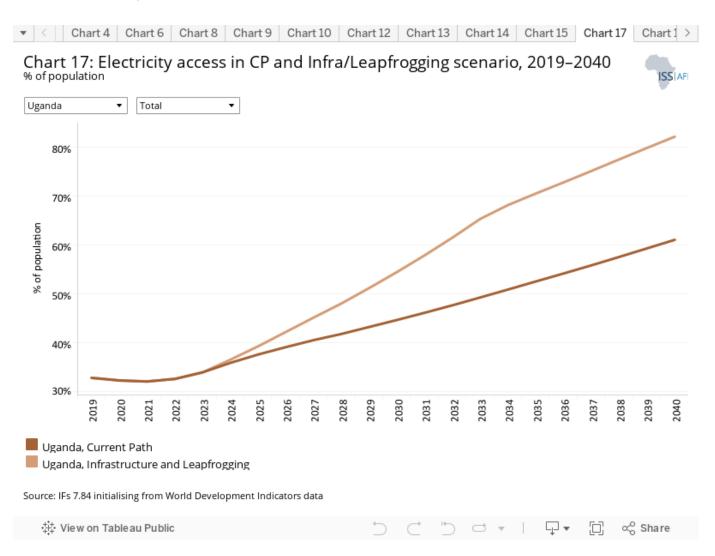
Like electricity access, as the economy grows and access to modern energy increases, more households are switching from traditional cooking stoves, such as wood-burning stoves and coal stoves, to improved and modern fuel stoves, such as electric and gas cookers. In 2019, an overwhelming majority of households (91%) used traditional cooking stoves[31] while only 5.1% used improved cooking stoves. An insignificant proportion of households in Uganda (3.1%) uses modern fuel for cooking. The proportion of households using traditional cooking stoves reflects the predominantly rural nature of the country. Traditional cooking stoves pose a risk to the environment due to the acceleration of deforestation associated with them. They can also cause respiratory infections, and limit study hours for students because the daily collection of firewood, which is sometimes the job of young girls, may deprive them of time that could be devoted to education. In the Current Path forecast, by 2040 the proportion of households projected to use traditional cooking stoves will decline to 62%, while only 3.4% will be using improved cooking stoves. Consequently, the proportion of households using modern fuel stoves will rise to 34.5% (from just 3.1% in 2019).

In addition to physical infrastructure, improvement in ICT infrastructure is indispensable for economic growth and development. Advancement in ICT reduces average cost of production, facilitates the formation of increasing returns to scale industries, and enhances productivity. The NDPIII that runs from 2020/21 to 2024/25 seeks to usher in a digital

transformation by increasing ICT penetration and the use of ICT services for social and economic development. ICT penetration comes either through fixed broadband or mobile broadband connectivity.[32] Unlike fixed broadband connection, mobile broadband penetration rates are much more impressive. In 2019, mobile broadband subscription in Uganda stood at 29.8 subscriptions per 100 people, above the 18.6 rate for its low-income peers in Africa. In the Current Path forecast, this is expected to rise to 132.1 by 2040, which is above the 119.6 forecast for an average low-income African country.

While Uganda has made progress in road connectivity and improved broadband connectivity, the country still faces challenges in the infrastructure sector. More paved roads, more and better rural roads to connect markets with the rural areas, and a push on rural electrification, while building the infrastructure for fixed broadband connectivity, are key challenges to the sector.

The Infrastructure and Leapfrogging scenario represents reasonable but ambitious investment in renewable energy technologies, resulting in better access to electricity in urban and rural areas. The scenario also 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.

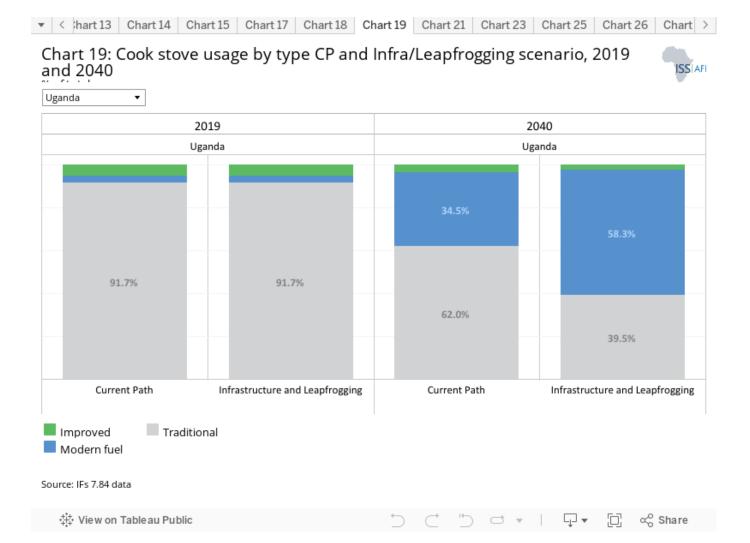


The Infrastructure and Leapfrogging scenario is set to improve electricity access to 82% of the population, above the Current Path forecast of 60.9% by 2040. Regarding the urban–rural divide in electricity access, the Infrastructure and Leapfrogging scenario will push urban electricity access to 98.9% and rural electricity access to 74.6%, compared to 80.4% and 52.3%, respectively, in the Current Path forecast.

Source: IFs 7.84 initialising from International Telecommunication Union data

In 2019, fixed broadband subscription in Uganda was 1.4 subscriptions per 100 people, which is lower than the average for low-income Africa at 1.5 subscriptions per 100 people. On the Current Path, fixed broadband subscription is projected to rise to 16.1 by 2040. In the Infrastructure and Leapfrogging scenario, fixed broadband subscription increases to 21.7 by 2040, slightly above the average for Uganda's low-income peers in Africa.

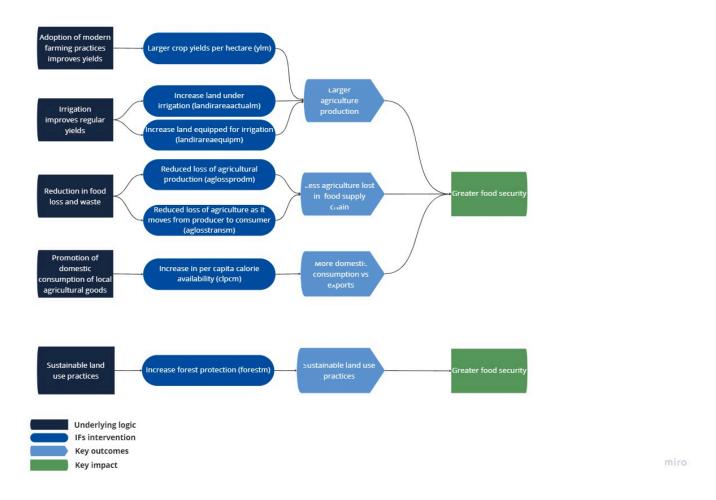
Because of the already aggressive Current Path forecast of improved rates of mobile broadband subscription, the Infrastructure and Leapfrogging scenario is projected to increase subscriptions marginally above the Current Path forecast by 2040.



By 2040, the Infrastructure and Leapfrogging scenario is expected to further improve the situation by reducing traditional and improved stove usage by 22.5 and 1.2 percentage points compared to the Current Path forecast. It will then increase the use of modern fuel stoves by 23.8 percentage points to 58.3% compared to the Current Path forecast. In the Infrastructure and Leapfrogging scenario, the proportion of people using improved cooking stoves is projected to rise marginally above the Current Path forecast to 43.8% by 2040.

# Agriculture: Current Path vs scenario

Chart 20: Agriculture scenario diagram

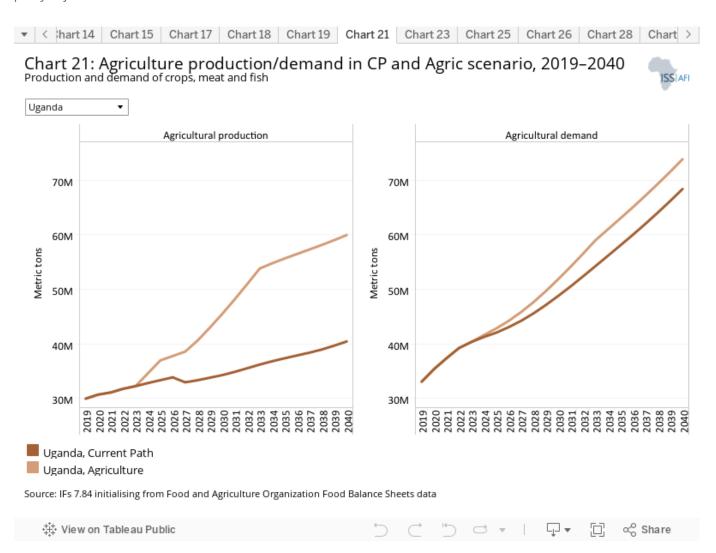


Agriculture is an integral part of the Ugandan economy: it contributed 21% of GDP and 46% of export earnings, and employed 55% of the labour force in 2019. The NDPIII recognises agriculture as a priority area that will be harnessed to intensify resource-led industrialisation, given that most of the export earnings are from unprocessed raw material. Agricultural land as a percentage of total land in Uganda accounted 80% in 2022; however, only 35% of land is cultivated. Most of the arable land is under permanent crops and pastures.

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 contains data on numerous types of agriculture, but aggregates its forecast into crops, meat and fish, presented in million metric tons. Total agriculture production in 2019 stood at 33.1 million metric tons. Out of this, 29.8 million metric tons were crops, 2.7 million metric tons were meat production, and the remainder constituted fish production. Total agricultural production in 2019 fell short of domestic demand by 3.1 million metric tons, meaning that Uganda is not food self-sufficient. According to the Current Path forecast, the country will suffer from food insecurity as agricultural production falls short of domestic demand by 27.9 million metric tons by 2040. Hence, there is a need to revamp the agriculture sector and increase domestic production to avoid the risk of future food shortages. Some of the agricultural commodities produced in Uganda include cotton, coffee, tea, coffee, sugar, tobacco and groundnuts. Smallholder agriculture constitutes the bulk of the food production and mainly operates at subsistence level. The government's efforts at modernising smallholder farming include providing extension services and making efforts to change mindsets by providing agricultural education, value addition, and seeds and fertilisers.[33]

Data on yield per hectare (in metric tons) is for crops but does not distinguish between different categories of crops. In 1990, the average crop yield per hectare in Uganda was 3.25 tons — significantly higher than the average for low-income African countries at 1.2 tons. Between 1990 and 2019, crop yield increased by 27% to 4.14 tons per hectare as a result of efforts to mechanise agriculture through the policy on small-scale agricultural farmers. Climate change and other supply side shocks that affect agricultural production are becoming more frequent, however. In the Current Path forecast, crop yields in Uganda are projected to decline to 3.6 tons per hectare by 2040, below the average for its income peers of 3.7 tons.

The Agriculture scenario represents reasonable but ambitious increases in yields per hectare (reflecting better management and seed and fertiliser technology), increased land under irrigation, and reduced loss and waste. It includes an increase in calorie consumption, reflecting the prioritisation of food self-sufficiency above food exports as a desirable policy objective.

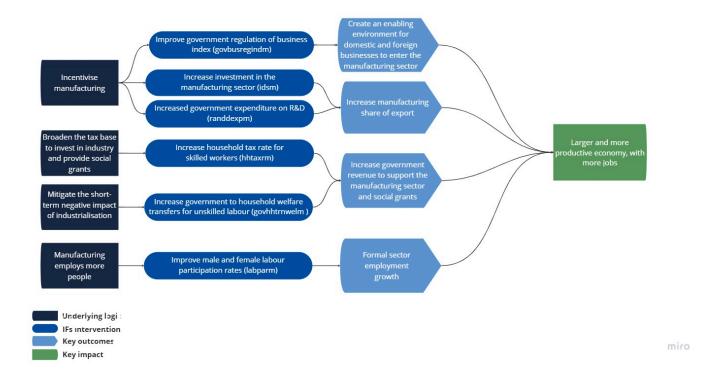


In the Agriculture scenario, crop yield is projected to rise by 51.9% above the Current Path forecast to 5.7 tons per hectare by 2040. Alongside the improvement in crop yield, crop production in Uganda increased from 20.2 million metric tons in 1990 to 34.2 million metric ton in 2019. In the Current Path forecast, crop production is projected to slightly decline to 32.4 million metric tons by 2040. The Agriculture scenario is set to increase crop production to 51.9 million metric tons by 2040, 60% above the Current Path forecast of 32.4 million metric tons. In the same vein, meat production jumped from 0.68 million metric tons in 1990 to 2.3 million metric tons in 2019. By 2040, the forecast for meat production in the Agriculture scenario is 100 000 tons above the Current Path forecast of 6.9 million metric tons.

By 2040, the effect of the Agriculture scenario is to reduce Uganda's dependency on importing crops by 64.4% and meat by 2% below the Current Path forecast. Import dependence for fish in the Agriculture scenario is set to increase by 1.6% above the Current Path forecast by 2040. While in the Current Path forecast, agricultural yields and production are projected to decline by 2040, the effect of the Agriculture scenario is to reverse this trend and increase yields and production above the 2019 values, and also to reduce significantly import dependence for crops and meat.

# Manufacturing: Current Path vs scenario

Chart 22: Manufacturing scenario diagram

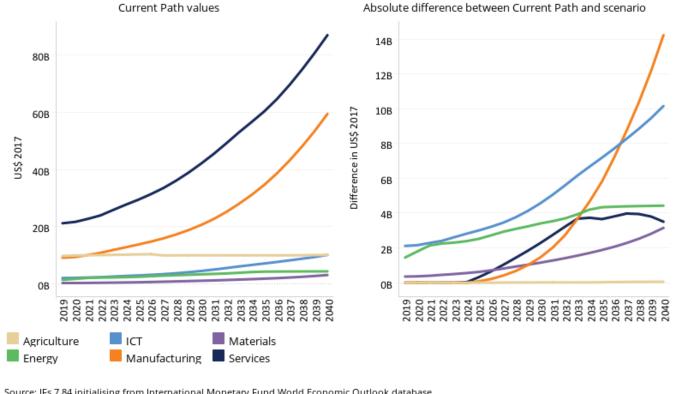


The manufacturing sector is historically a key job creator, output and export promotion sector and allows for the structural transformation of economies towards higher productivity, with spillover effects on other sectors. The sector is key in achieving economic development due to its backward and forward linkages with other sectors such as the agriculture and service sectors. In 2019, manufacturing contributed 15.5% of GDP and employed 14.5% of the labour force in Uganda. Manufacturing activities in Uganda consist mainly of end-product assembly and material processing from imported intermediate and capital goods. There is little addition to raw materials such as petroleum goods, iron and steel, and sugar and sugar preparations.[34] The impact of the sector is generally small and runs on basic technology, hence its low contribution to jobs and value addition.

The NDPIII recognises the bottleneck that the manufacturing sector faces including the lack of appropriate infrastructure, weak small- to medium-sized enterprise (SMEs), limited access to finance, the poor linkages between trade and industrial development, low labour productivity, and high costs of doing business. The Manufacturing/Transfers scenario represents reasonable but ambitious manufacturing growth through greater investment in the manufacturing sector, investments in research and development (R&D), and promotion of the export of manufactured goods. It is accompanied by an increase in welfare transfers (social grants) to mitigate the potential tension between inequality and structural transformation (the Kuznetsian tension). To fund investment in the manufacturing sector and welfare transfers, the scenario broadens the tax base and increases government revenues.

Chart 23: Value added by sector in CP and Manufac scenario, 2019–2040 Current Path values and absolute difference





Source: IFs 7.84 initialising from International Monetary Fund World Economic Outlook database



Unlike the conventional three-sector classification of economic activity, IFs draws on GTAP data to classify economic activity into services, agriculture, manufacturing, materials, energy and ICT. In 2019, services, manufacturing and agriculture were the greatest contributors to the GDP, while materials, ICT and energy were the least. Nearly half of the GDP (48.1%) came from services, followed by agriculture at 22.2% and manufacturing at 20.8%. Energy and ICT contributed 3.2% and 4.7%, respectively, while materials' share of GDP was negligible at 0.79%. In the Current Path forecast, services, manufacturing and ICT are projected to increase to 53.6%, 29% and 6.1%, respectively. On the other hand, the share of agriculture and energy of GDP are projected to decline to 6.4 and 2.8%, respectively.

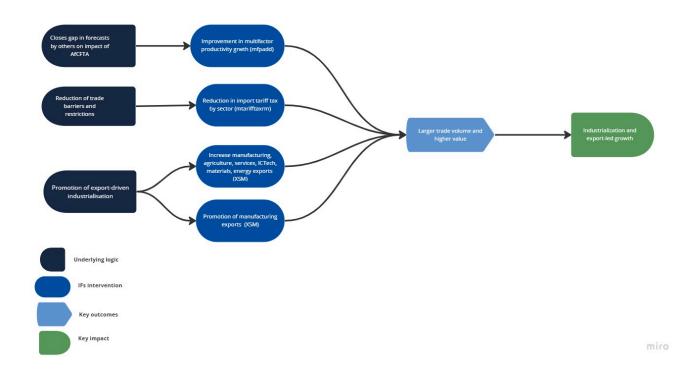
In the Manufacturing/Transfers scenario, the contribution of manufacturing to GDP will increase by an additional US\$12.6 billion by 2040. In addition, the value of the contribution of all other sectors is projected to increase above the Current Path forecast, except for energy. Compared to the Current Path forecast, the value of the contribution of services will increase by US\$2.2 billion in the Manufacturing/Transfers scenario and energy will decline by US\$31 million by 2040.

In 2019, welfare transfers to households in Uganda amounted to US\$3 billion. In the Manufacturing/Transfers scenario, welfare transfers increase to US\$18.6 billion by 2040, representing an increase of US\$3 billion above the Current Path forecast. As the Manufacturing/Transfer improves economic activity in the manufacturing sector, more manufacturing jobs will be created leading to more jobs in this sector. In 2019, the number of people employed in the manufacturing sector was 2.5 million people. The Manufacturing/Transfers scenario is expected to increase this figure to 7.5 million by 2040; this constitutes 1.8 million additional jobs compared to the Current Path forecast for the same year. It means that the Manufacturing/Transfers scenario can increase employment in the manufacturing sector by about 31% compared to the Current Path.

The contribution of manufacturing to GDP will increase by five percentage points above the Current Path forecast by 2040. Consequently, the percentage point difference in the contribution of all other sectors to GDP will fall below the Current Path forecast in 2040. Services will decline by almost 4 percentage points while all other sectors each will decline by a half-percentage point or less compared to the Current Path forecast.

#### Free Trade: Current Path vs scenario

Chart 24: Free Trade scenario diagram



The benefit of trade is to enable countries to specialise in the production of commodities that they have a comparative advantage in and export them, while importing those that are relatively costly to produce in their home countries. Trade also opens up factors of production to be distributed in a more efficient manner and increases the total factor productivity of firms through competition. Trade openness measures the extent to which a country is a participant in the global trading system. This is calculated using the sum of total exports and total import over total GDP. A higher ratio depicts higher influence of trade on domestic activities while a lower ratio represents a country that trades less in the global system. Uganda has steadily opened up to international markets, increasing its openness from 26.6% in 1990 to 39.3% in 2019, but this is still below the average for low-income African countries at 47.1%. Despite being a member of many bilateral and multilateral regional trading blocs, such as the EAC, the African Continental Free Trade Area (AfCFTA), the Forum on China–Africa Cooperation (FOCAC) and the EU's Everything but Arms scheme (EBA), trade has not increased significantly.

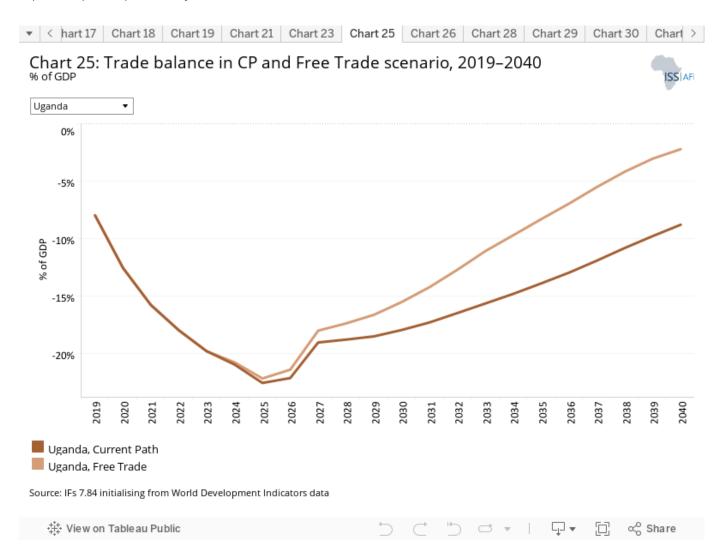
In 2019, Uganda's total exports comprised 15% of GDP, which was below the average of 20% for low-income countries in Africa. Most of the country's exports come from the agriculture and service sectors, with total export values from these sectors equivalent to 5% and 5.7% of GDP, respectively. Export from the manufacturing sector was valued at 3.8% of GDP in 2019. Exports from Uganda include gold, cocoa beans, raw sugar, coffee and tea to Kenya, the United Arab Emirates, the DR Congo, South Sudan and Italy, among other countries.

Uganda, like many African economies, is basically a net importer of goods and services. In 2019, the country's trade deficit represented about 5.1% of GDP, which was below the average of 10.3% for its income peers on the continent. This deficit is mainly due to the large imports of refined petroleum, gold, palm oil, pharmaceutical products and capital goods from China, Kenya, India, the United Arab Emirates and Tanzania.

Trade in Uganda is hindered by a multitude of factors including access to ports, given its landlocked nature, low agricultural productivity and negligible manufacturing activity to support export and reduce imports. Uganda is a

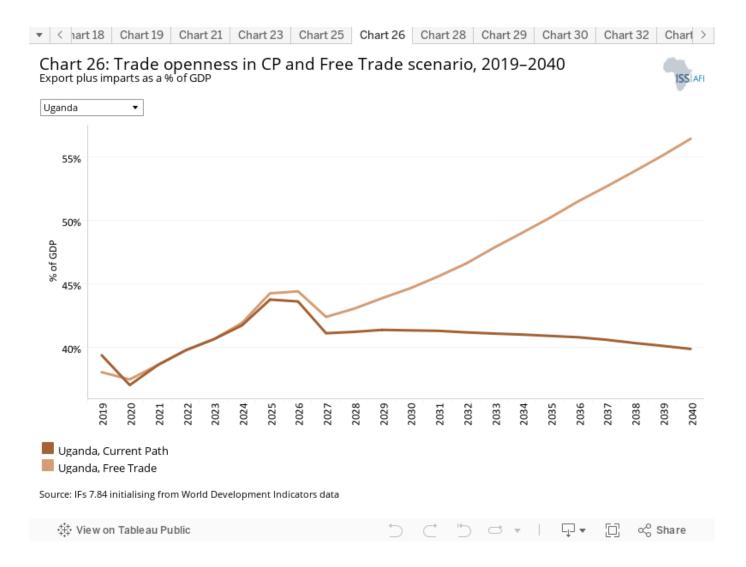
non-coastal country that imports and exports its goods mainly through the Mombasa port in Kenya. As a result, in the Current Path forecast, Uganda will see its trade deficit increasing to 8.8% of GDP and openness stagnating at 39% of GDP by 2040.

The Free Trade scenario represents the impact of the full implementation of the AfCFTA by 2040 through increases in exports, improved productivity, increased trade and reduced tariffs.



By 2040, the Free Trade scenario will improve the export value of Uganda to 27% of GDP compared to the Current Path forecast of 15.5%. Uganda's total import value in 2019 was equivalent to 23% of GDP, which was below the value of 31.6% for its income peers in Africa. By 2040, Uganda's imports will increase to 29.3% of GDP in the Free Trade scenario compared to 24.3% of GDP on the Current Path and the average of 35.9% of GDP projected for low-income countries in Africa. In the Free Trade scenario, imports of manufactures will increase by almost 4 percentage points above the Current Path, whereas the import share of GDP of services, materials and ICT increases marginally above the Current Path forecast by 2040. However, imports of energy and agriculture are projected to decline compared to the Current Path forecast by the same time.

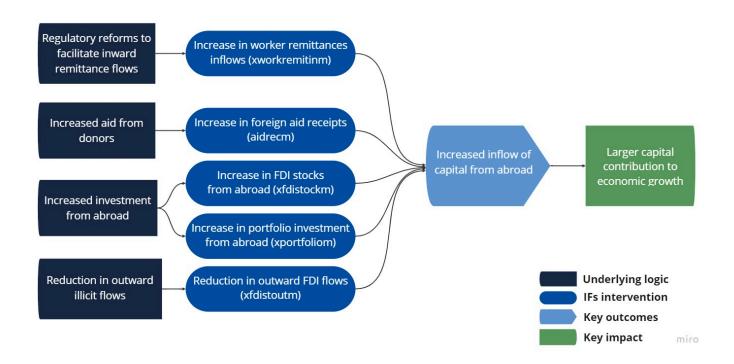
In the short term, the trade balance of Uganda will worsen, peaking at a deficit of 22.6% and 22.2% of GDP in the Current Path and the Free Trade scenario, respectively, by 2025. Thereafter, Uganda will witness an improvement in its trade balance in both the Current Path forecast and the Free Trade scenario, although the improvement is much quicker in the latter. By 2040, the projected trade deficit will be 8.8% of GDP on the Current Path. In the Free Trade scenario, the trade deficit declines further to 2.2% of GDP by 2040.



In the Current Path forecast, trade openness will marginally increase to 40% by 2040. However, the Free Trade scenario will boost openness to 56.4% by 2040, 16.5 percentage points above the Current Path forecast. The full implementation of the AfCFTA will benefit Uganda and dramatically improve its trade balance over the period. Also, Uganda's trade balance in both the Current Path and this scenario will be far above the trade deficit of 10.8% of GDP for its income peers on the continent by 2040.

#### External Financial Flows: Current Path vs Scenario

Chart 27: External financial flows scenario diagram

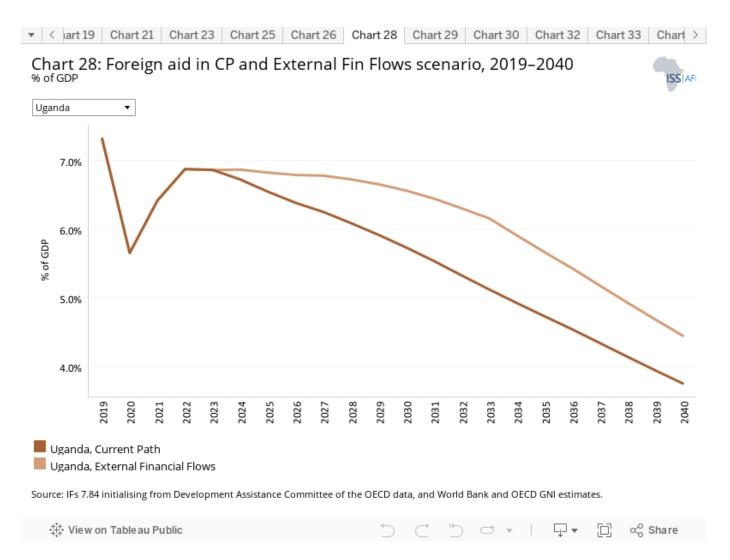


External capital to a country enters either as aid from donors, remittance from nationals outside, or as short-term portfolio investments or long-term foreign direct investment (FDI) seeking business opportunities and profit. As a low-income country, Uganda receives more aid as a per cent of GDP than FDI inflows or remittance from abroad. In 2019, while aid accounted for 7.3% of GDP, FDI inflows and remittances accounted for 3.6% and 2.4%, respectively. Historically, aid receipt has been declining since 1982 when it stood at 10%. In 1990, Uganda received US\$1 billion in foreign aid, equivalent to 15.6% of GDP. Between 1990 and 2019, foreign aid to Uganda increased to nearly US\$3 billion although its share of GDP declined to 7.3% — more than two percentage points below the 9% average for low-income African countries. Foreign aid to Uganda goes to humanitarian assistance, and the agriculture and health sectors.

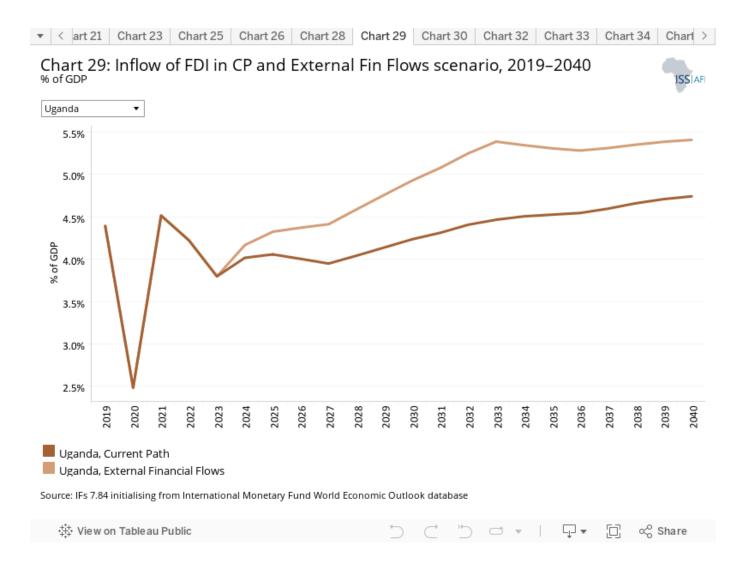
FDI in Uganda mainly goes to the mining and coffee sectors where Kenya, Germany and Belgium are the main investors. [35] The EACOP that seeks to build 1 400 km pipeline from Uganda to Tanzania's Tanga seaport will provide a great boost to FDI stock in Uganda. In the 2020 Doing Business report, Uganda ranked 116th out of 190 countries, indicating that it needs to improve its business environment to attract more FDI. The total amount of FDI received by Uganda in 2019 amounted to 3.6% of GDP, almost at par with the average for low-income countries. While the inflow of FDI to Uganda is very low, the stock in 2019 amounted to 45.3% of GDP, and in the Current Path forecast it is projected to grow to marginally decline to 43.4% by 2040. This reflects the already low FDI inflows which will only get to 4.7% by 2040.

Uganda moved from being a net remittance sender to the rest of the world of US\$125.4 million in 2000 (0.99% of GDP) to a significant net receiver of remittance of US\$1.1 billion (2.4% of GDP) in 2019. Due to the effect of the COVID-19 pandemic on job security, remittance to Uganda declined in absolute values in 2020, but it ranked sixth among its income peers in receipt of remittance in 2019. The country leverages its integrated mobile money to boost remittance receipt. The system allows for wallet-to-wallet transfers to six countries in sub-Saharan Africa and at the same time receives from four countries. Another challenge to remittance inflow to Uganda is the high cost of sending remittance at 8.7%, which is higher than the SDGs target of 3.7%. In the Current Path forecast, remittance receipts are forecast to increase to US\$7.3 billion (or 4.6% of GDP) by 2040.

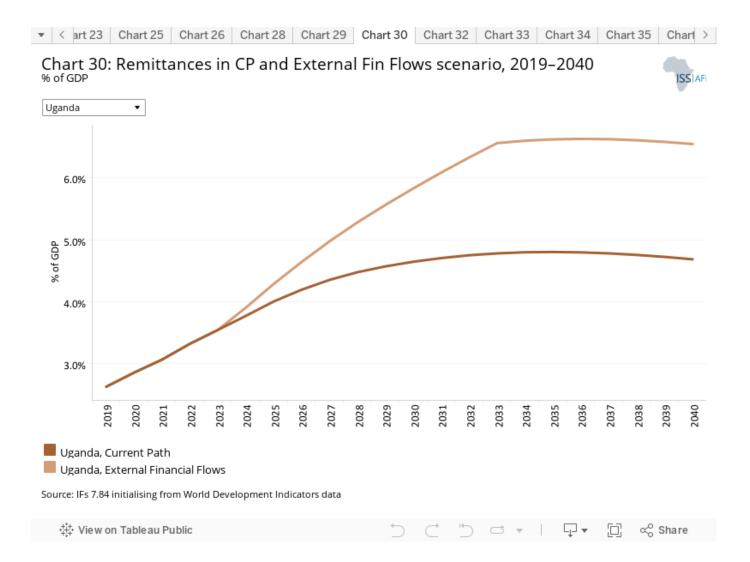
The External Financial Flows scenario represents a reasonable but ambitious increase in worker remittances and aid flows to poor countries, an increase in the stock of FDI and additional portfolio investment inflows as well as a decline in outward investment to emulate a reduction in illicit financial outflows.



In the External Financial Flows scenario, Uganda is projected to increase its foreign aid receipt to US\$7.2 billion – above the US\$5.9 billion in the Current Path forecast in 2040. This represents 4.4% of GDP of Uganda and is 0.8 percentage points below the 2040 average for low-income African countries.



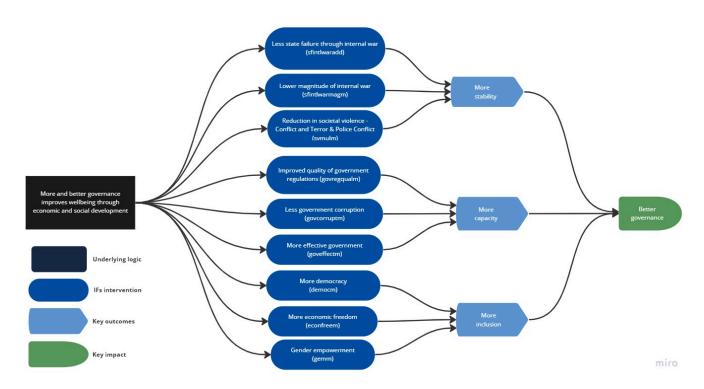
In the Current Path forecast, Uganda is expected to increase FDI inflows to 4.7% of GDP which further increases to 5.4% in the External Financial Flows scenario by 2040. This will represent an extra 0.2 percentage points of FDI inflows compared to the Current Path forecast for low-income peers by the same year.



The External Financial Flows scenario will result in an extra US\$3.3 billion receipt compared to the Current Path forecast, equivalent to an extra 1.8 percentage points. By 2040, Uganda will rank as the second highest receiver of remittances in its peer income group in Africa, second only to The Gambia.

#### Governance: Current Path vs scenario

Chart 31: Governance scenario



Stability and better governance are important for a host of reasons including the fact that they enable the development of stronger institutions, enhance inclusion, improve accountability and, over time, allow for a reduction in defence expenditure. Good governance therefore leads to more effective delivery of all aspects of public and private sector services, lower corruption, greater democratisation and inclusion, and reduced risk of conflict. It could also attract secondary benefits like larger FDI inflows.

In the IFs system, governance is conceptualised along three dimensions — security, capacity and inclusion — that reflect the three core characteristics of governments globally. The security dimension measures the probability of intra-state conflict and the general level of risk. Capacity, the second dimension, is related to government revenue, corruption, regulatory quality, economic freedom and government effectiveness. Inclusiveness, the third dimension, measures the level of democracy and includes gender. The three dimensions reflect the sequential evolution of the Westphalian state. Africa's history reflects the deleterious impact of imposed statehood, but African states need to improve their scores on all three, although in a compressed time period and simultaneously.

Uganda's post-independence history is characterised by instability, frequent coups and civil war. On independence, the country inherited a multiparty system of governance but was soon turned into a one-party state in 1966 by President Milton Obote. General Idi Amin deposed Obote in 1971 establishing one of Africa's most brutal dictatorships, characterised by high levels of corruption and the forced emigration of the Indian business community. As a result, the economy suffered. However, it was not long before Amin was removed by a Tanzania-backed rebel army in 1979 leading to the return of Obote.[36] President Obote's return led to more armed resistance and he was again deposed in a coup in 1985, which was later defeated by the National Resistance Army in 1986 under the leadership of Yoweri Museveni.[37] Since then, Uganda has been relatively stable, although armed conflict continues in Northern Uganda.

Shortly after its ascension to power in 1986, the National Resistance Movement (NRM) introduced the movement system,

otherwise called the no-party system, where a candidate stands as an individual to be elected on personal merits and not as a member of a political party.[38] In 2005, NRM re-introduced a multiparty system.[39]

Although widely touted as an authoritarian state where the quality of democracy is poor, the NRM government originally instituted a number of reforms aimed at consolidating democracy. In May 1986, the NRM government established a commission of inquiry into violations of human rights since independence.[40] The 700-page report of the commission proposed how to build a permanent human rights culture in Uganda, include human rights in educational curricula, and punish preparators.[41] It recommended the establishment of a permanent human rights commission, which was amplified by the Odoki Constitutional Commission. The proposals were adopted in the 1995 constitutional amendment, leading to its operationalisation in November 1996 and the Human Rights Commission Act of 1997.[42] In 2019, Uganda scored 0.68 on the governance security index, slightly above the average for low-income African countries at 0.64. In the Current Path forecast, Uganda's score is projected to increase to 0.76 by 2040, which is above the Current Path average for low-income African countries of 0.70.

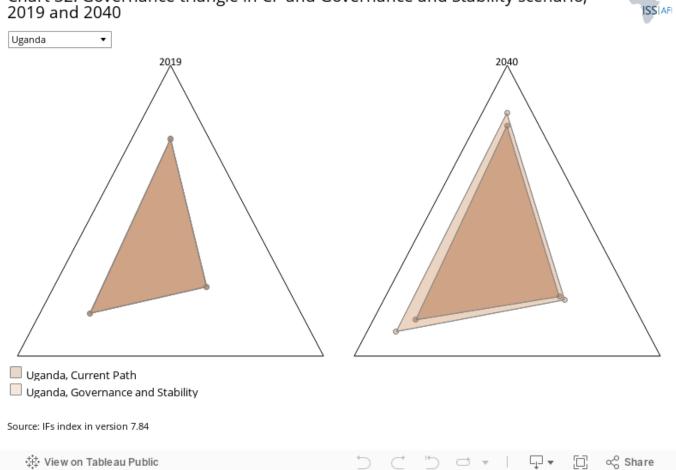
The Ugandan government's capacity in mobilising government revenue, reducing corruption, improving the regulatory quality and economic freedom, and enhancing government effectiveness is marred with challenges. In 2019, government's revenue as per cent of GDP of 16.3% fell short of the average for its peer income group in Africa of 17%. Similarly, the transparency level in Uganda was very low at 2.7 out of 10 in 2019; however, it was on par with the average for low-income Africa. Consequently, Uganda scored lower than the average for low-income African countries in governance capacity in 2019. Its score of 0.23 is below the 0.24 score for low-income African countries.

Government inclusion measures the level of democracy and reflects gender parity in governance issues. Because of the nature of Uganda's military government, Ugandan democracy has much to improve on. The terms system does not exist in Uganda and the current president has been in office for more than 30 years, since 1986. Certainly, with regime changes and more female participation in leadership positions, the country stands to benefit from its current level of government inclusion.

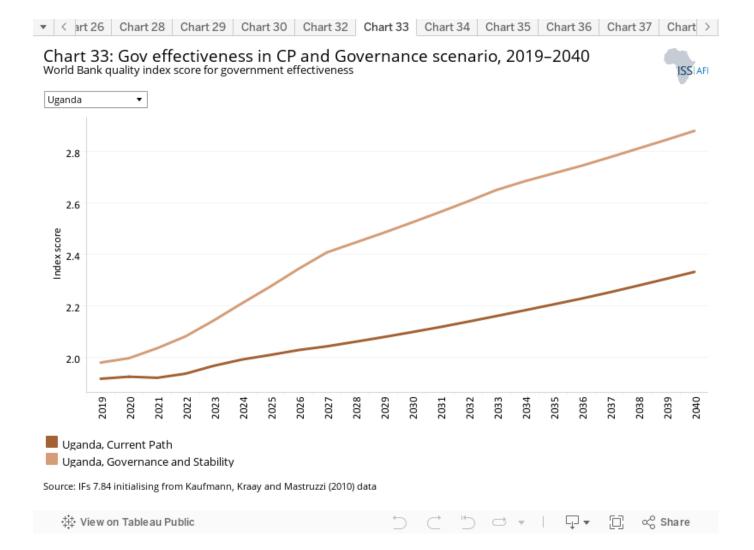
To model this, the Governance and Stability scenario uses a multiplier on the Polity IV democracy index that reflects higher levels of democracy, improves gender empowerment using the gender-empowerment measure, reduces corruption (using the index from Transparency International), reduces the risk of interstate conflict and levels of internal conflict from the Political Instability Task Force, and increases investment in the economy including from foreign sources. These factors impact positively on capital contributions to growth, meaning that more government revenue can be allocated to the provision of healthcare, education and other services, even as levels of economic growth accelerate.

Chart 32: Governance triangle in CP and Governance and Stability scenario,





In the Governance and Stability scenario, the governance security index will increase above the Current Path forecast by 9.6% by 2040. By that time, the score will be 0.83 in the scenario. Uganda will improve its governance capacity score to 0.38 in the Governance and Stability scenario, which is above the Current Path forecast of 0.34 in 2040. This represents an 11.7% improvement on the Current Path forecast by 2040. Regarding governance inclusion, Uganda is projected to improve its score from 0.52 to 0.59 between 2019 and 2040; and in the Governance and Stability scenario, the country will further improve its score by 22% to 0.73 by the same year. Uganda ranked seventh out of the 23 low-income African countries on governance inclusion in 2019.



Government effectiveness, as defined by the World Bank, 'captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.' In the Current Path forecast, Uganda is projected to improve its effectiveness score to 2.3 by 2030 and further to 2.8 by 2040 in the Governance and Stability scenario, reflecting the impact that better security, capacity and inclusion will have.

#### **Endnotes**

- 1. World Population Review, Population of cities in Uganda 2022
- 2. JN Gribble and J Bremmer, Achieving a Demographic Dividend, The Population Bulletin, 67:2, 2012, 1-13
- 3. JN Gribble and J Bremmer, Achieving a Demographic Dividend, The Population Bulletin, 67:2, 2012, 1-13
- 4. National Planning Authority, Third National Development Plan III (2020/21-2024/25), January 2020
- 5. ReviseSociology, Urbanisation and development, 10 February 2021
- 6. ReviseSociology, Urbanisation and development, 10 February 2021
- 7. ReviseSociology, Urbanisation and development, 10 February 2021
- 8. World Bank, Uganda Vision 2040
- 9. National Planning Authority, Third National Development Plan III (2020/21–2024/25), January 2020
- 10. ibic
- 11. J Finlay, The Role of Health in Economic Development, Harvard Initiative for Global Health, PGDA Working Paper No. 21, 2007
- 12. D Acemoglu and S Johnson, Disease and Development: The Effect of Life Expectancy on Economic Growth, Journal of Political Economy, 115:6, 2007, 925–985.
- 13. J Finlay, The Role of Health in Economic Development, Harvard Initiative for Global Health, PGDA Working Paper No. 21, 2007
- 14. United Nations, Sustainable Development Goals 3 Good health and well-being
- 15. National Planning Authority, Third National Development Plan III (2020/21-2024/25), January 2020
- 16. VISION-2040
- 17. National Planning Authority, Third National Development Plan III (2020/21–2024/25), January 2020
- 18. HA Patrinos, Why education matters for economic development, World Bank, 17 May 2016,
- 19. C Monetenegro and H Patrinos, Comparable Estimates of Return to Schooling Around The World, Policy Research Working Paper 7020, September 2014
- 20. HA Patrinos, Why education matters for economic development, World Bank, 17 May 2016
- 21. NUHA Foundation, Education in Uganda
- 22. National Planning Authority, Third National Development Plan III (2020/21–2024/25), January 2020
- 23. NUHA Foundation, Education in Uganda
- 24. D Rothman et al, Patterns of Potential Human Progress Volume 4: Building Global Infrastructure, Frederick S Pardee Center For International Futures, 2014
- 25. National Planning Authority, Third National Development Plan III (2020/21–2024/25), January 2020
- 26. ibid
- 27. Uganda Ministry of Foreign Affairs, Final Energy Report, 30 July 2018
- 28. Uganda Ministry of Foreign Affairs, Final Energy Report, 30 July 2018
- 29. USAID, Uganda electricity supply accelerator increases energy access in Uganda
- 30. USAID, Uganda electricity supply accelerator increases energy access in Uganda
- 31. The IFs model distinguishes between three types of cooking stoves: traditional, improved and modern stoves.
- 32. 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.). Mobile broadband on the other hand refers to wireless Internet access delivered through cellular towers to computers and other digital devices.
- 33. Policy Paper On Transforming Smallholder Farming to Modern Agriculture in Uganda | Semantic Scholar
- 34. National Planning Authority, Third National Development Plan III (2020/21-2024/25), January 2020

- 35. Lloyds Bank, Foreign direct investment (FDI) in Uganda,
- 36. S Makara, L Rakner and L Svåsand, Turnaround: The National Resistance Movement and the Re-introduction of Multiparty System in Uganda, International Political Science Review, 30:2, 2009, 185–204
- 37. S Makara, L Rakner and L Svåsand, Turnaround: The National Resistance Movement and the Re-introduction of Multiparty System in Uganda, International Political Science Review, 30:2, 2009, 185–204
- 38. Nexus Commonwealth Network, Uganda
- 39. S Makara, L Rakner and L Svåsand, Turnaround: The National Resistance Movement and the Re-introduction of Multiparty System in Uganda, International Political Science Review, 30:2, 2009, 185–204
- 40. Human Rights Watch, VI. The movement system and political freedoms in Uganda
- 41. Human Rights Watch, VI. The movement system and political freedoms in Uganda
- 42. Human Rights Watch, VI. The movement system and political freedoms in Uganda

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