Development pathways for the DRC to 2050

Components of a positive development pathway

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Components of a positive development pathway

Although haltingly and imperfectly, the DR Congo has recently experienced the first real peaceful transfer of power in its post-independence history. Like much of Africa, the road towards greater accountability and better governance will include any number of setbacks and reversals. Yet the government that emerged from the December 2018 presidential election has the opportunity to set the country on the path towards long-term prosperity.

However, the government and partners need to dissuade themselves from grand ambitions about an influential regional role for the DR Congo or the potential of schemes such as the Grand Inga Project to unlock rapid developmental progress. Such opportunities will need to be financially independent of the government. The government of the DR Congo needs to focus on the fundamentals.

The key to progress is a shift in accountability and government-community relations across the DR Congo. The implementation of the 2006 Constitution and its promise of the effective devolution of authority to the DR Congo's 26 provincial authorities could play such a role. Even then, progress will only be possible with 2023 national and provincial elections that are genuinely free and fair and perceived as such by locals and the international community.
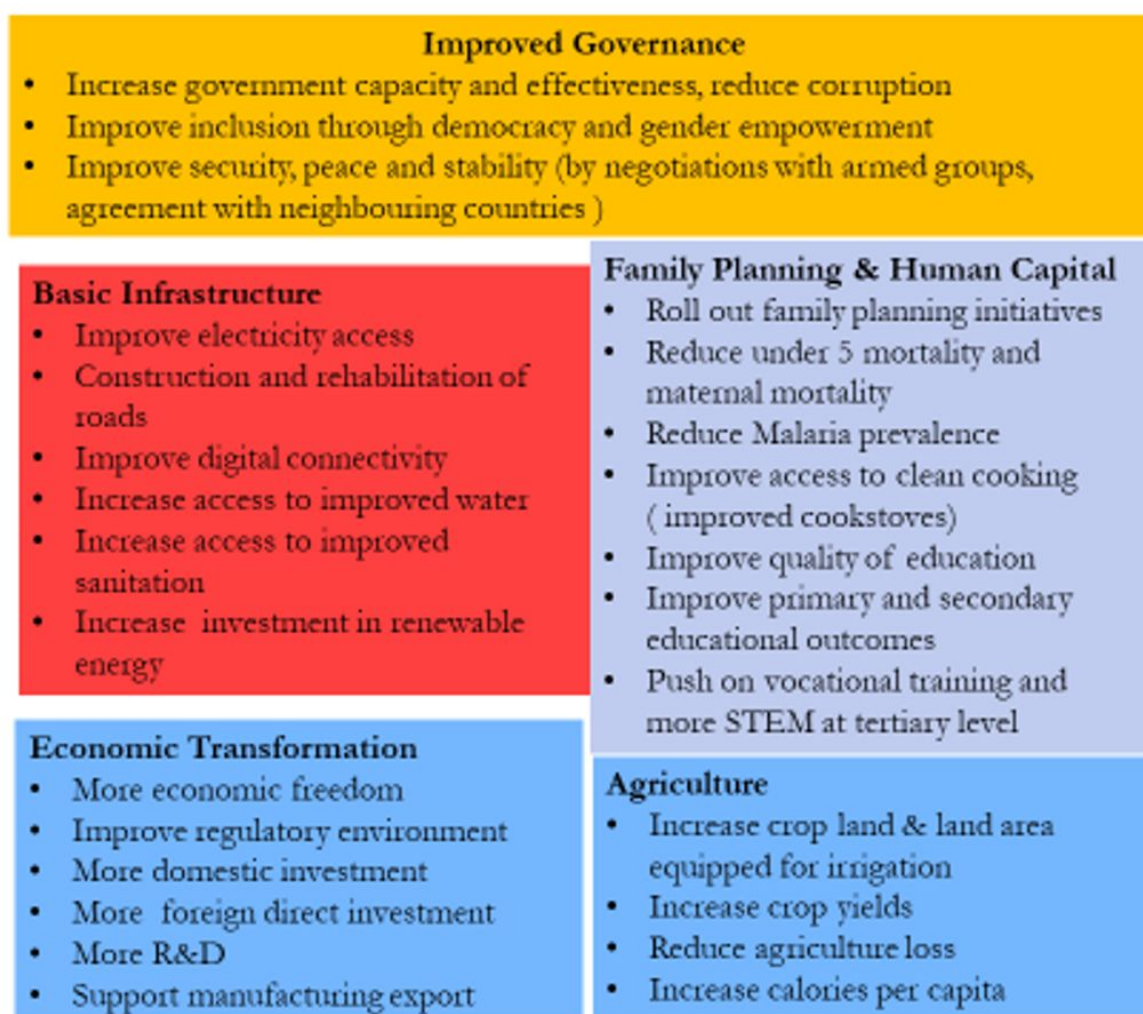
The scenario presented below is based on such a possibility. Consequently, the components of the scenarios that follow commence in 2024 and present a subsequent ten-year push by a developmentally orientated government.

We, therefore, model the impact of a series of intervention clusters that emulate realistic policy interventions to alleviate the binding constraints on inclusive sustainable growth and development revealed by the preceding Current Path analysis. The clusters are presented in Chart 16 and consist of efforts to improve overall governance and a focus on resuscitating agricultural production, extending education and basic health services. Governance will be improved through credible elections and the implementation of decentralisation.

An important component of the associated reform is comprehensive household electrification where the country needs to invest in renewables, using mini- and off-grid electricity solutions to provide electricity to the majority of its citizens. Such an objective would provide significantly more benefits than large capital investments on the government balance sheet such as the pursuit of the Grand Inga Project beyond Inga III.

The clusters of interventions collectively present a viable development pathway that departs from a focus on the exploitation of the DR Congo's vast mineral endowment as the engine for its development. It will, of course, be difficult to resist the allure offered by the aggressive exploitation of oil, gas, diamonds, tantalum and other natural resources. The focus should rather be on the establishment of the systems and institutions that will eventually allow the transparent management of its mineral riches rather than a rush to mine and export.

Chart 18: Intervention clusters

Improved Governance
- Increase government capacity and effectiveness, reduce corruption
- Improve inclusion through democracy and gender empowerment
- Improve security, peace and stability (by negotiations with armed groups, agreement with neighbouring countries)

Basic Infrastructure
- Improve electricity access
- Construction and rehabilitation of roads
- Improve digital connectivity
- Increase access to improved water
- Increase access to improved sanitation
- Increase investment in renewable energy

Family Planning & Human Capital
- Roll out family planning initiatives
- Reduce under 5 mortality and maternal mortality
- Reduce Malaria prevalence
- Improve access to clean cooking (improved cookstoves)
- Improve quality of education
- Improve primary and secondary educational outcomes
- Push on vocational training and more STEM at tertiary level

Economic Transformation
- More economic freedom
- Improve regulatory environment
- More domestic investment
- More foreign direct investment
- More R&D
- Support manufacturing export

Agriculture
- Increase crop land & land area equipped for irrigation
- Increase crop yields
- Reduce agriculture loss
- Increase calories per capita

Source: Authors

The interventions are all benchmarked with aggressive but reasonable targets that have been achieved by countries that are at similar levels of development or had the same challenges as the DR Congo (see annexure).

Improved governance scenario component

Bad leadership and poor governance are the key reasons for the DR Congo's disastrous development history since independence. Its governance performance is among the lowest in the world and below the average for low-income Africa. Tackling governance challenges is crucial to mitigate social tensions if the DR Congo is to contain domestic instability stemming from poor development and from consistently sliding back into conflict. The question is how to change the current political-patronage relationships that dominate.

This scenario component envisages the implementation of the 2006 Constitution and the subsequent acts of parliament that set the terms of the separation of powers and deconcentration of legislative and executive state power to the 26 provinces. Decentralisation is key due to the vast land area, diversity and population size of the country and has repeatedly surfaced as a key requirement of the people of the country.

Thus, we proceed on the premise that the 2023 national and provincial elections are substantially free and fair and

domestically and internationally perceived as such. That itself would be a significant departure from the myriad irregularities that accompanied the presidential elections that took place on 30 December 2018.

The result would translate into a Senate and National Assembly with the former representing the 26 provinces. Whereas two earlier constitutions (in 1960 and 1964) also provided for a semi-federal model, the DR Congo has effectively been governed as a unitary state and limited progress has been made in decentralisation as set out in the 2006 Constitution.[1] The free and fair elections and the implementation of decentralisation would, in this scenario component, improve accountability and help shift towards governance primarily occupied with the urgent needs of the population rather than with its own interests.

Even then these events would require bold steps to improve governance and strengthen institutions such as the judiciary as a potent, assertive third arm of the government and a commitment to the budgetary and spending autonomy of the three levels of government. This would include the constitutional mandates to transfer 40% of national tax revenue to provinces.

The result is more responsible management and consensual sharing of resources, and hence, improvement in public service delivery. In this manner, the acceleration of the decentralisation process could promote local development.

There is also an effort to address gender differences by removing discriminatory provisions in the family code that impede the entrepreneurial and political activities of women.

Finally, peace and stability, especially in the eastern regions of the country, depend on both domestic dynamics and relationships with the neighbouring countries. The DR Congo needs stability, particularly within its eastern provinces that border Rwanda and Uganda. Therefore, leadership in the DR Congo must take a positive, regional approach to address conflicts in the eastern provinces by involving regional and international actors like SADC, MONUSCO and the African Union (AU).

Under this scenario component, the size of the Congolese economy (GDP) increases by about US$88 billion as compared to the Current Path in 2050. The average GDP per capita also increases by US$515 relative to the Current Path in 2050. The scenario component shows that improvement in governance and security has a significant impact on poverty alleviation in the DR Congo. The number of poor people is about 21 million fewer than on the Current Path by 2050. Good governance not only helps to better deliver public services but also provides an investment climate that is conducive to growth and job creation.

Basic infrastructure scenario component

Infrastructure shortage is a binding constraint on sustained inclusive growth in the DR Congo. The infrastructure deficit is particularly severe in road and water transport, electricity supply, and access to improved water and sanitation. Rail, road and water transport are all underdeveloped and make internal mobility of people and goods prohibitively expensive.

The lack of affordable and reliable energy supply and the poor transportation network inhibits the development of the agriculture and mining sectors as well as local industries, and hence, dissuades private investors from investment. Farmers, firms and mining companies need adequate transportation systems to receive supplies and access markets with their products. They also need reliable energy supply and communication technologies to increase productivity and stimulate innovation.

In this scenario component, the government directs its focus on the reinforcement of exchanges between the different areas of the country through the construction and rehabilitation of transport infrastructure. It invests in efforts to reopen

the navigable inland waterways, rebuild railway lines where required, repair roads, and repair and build bridges across the Congo River and its tributaries.

To this end, the DR Congo government levers the successful implementation of its 'infrastructure for mineral deal' with China. Also, the government abandons the Grand Inga hydroelectric scheme to focus on decentralised mini- and off-grid schemes, using renewable energy, to provide reliable power supply and improving the electrification rate in urban and rural areas.

In addition, the government works together with donor organisations and other partners to successfully implement its National Digital Plan to drive the country's digital development. As a result, digital connectivity improves across the entire country not only to assist with education and economic efficiency but also to improve the government's ability to modestly tax and identify ever-larger portions of the informal sector as part of the formal sector of the economy. Finally, this increasing digital connectivity fuels innovative ways, such as pay-as-you-go, to unlock the provision of basic services such as improved water and sanitation.

In sum, this scenario component models an aggressive but realistic improvement in basic infrastructure in the DR Congo.

If the Congolese government carries out reforms along these lines, the GDP of the DR Congo would increase by about US$19.9 billion relative to the Current Path in 2050. The impact on the average GDP per capita is moderate; it increases only by US$120 in 2050 as compared to the Current Path forecast for that year. The number of people surviving on US$1.90 per day (extreme poverty) is about 5.4 million fewer than the Current Path in 2050. Infrastructure development is an essential catalyst for economic growth; it also creates income opportunities and generates jobs.

Family planning and human capital scenario component

The DR Congo has one of the highest fertility rates in the world which undermines progress on human and economic development. As pointed out by the World Bank:[2]

Even if DR Congo manages to keep a greater part of the natural resources wealth in the country and use it for physical and human capital accumulation, the prospects for human development and economic growth would remain constrained by the persistently high fertility rate that leads to a population age structure relatively more concentrated on dependent children.

Thus, in this scenario component, the DR Congo policymakers embrace the view that family planning is necessary to achieve their long-term economic and social development objectives. The national and provincial governments, therefore, undertake public information campaigns and provide leadership aimed at raising awareness of the importance of family planning and promote the use of modern contraceptives. In particular, they undertake extensive education campaigns in rural areas where fertility rates are high, engaging with traditional leadership.

To achieve long-term resilience and sustained economic growth, the country also needs to increase its current stock and quality of human capital. Thus the educational and family-planning efforts are augmented by policies aimed at boosting the outcomes of its health and education systems. The scenario component improves the health system which is captured by the reduction in child and maternal mortality.

The scenario component also reduces the prevalence of malaria and the widespread use of traditional cookstoves among the population. Malaria is currently one of the leading causes of death in the country while the energy used by households, especially in rural areas, comes mainly from traditional cookstoves which are a potential cause of respiratory infections.

The country has made progress in school enrolment, especially primary school enrolment but the completion rate is low regardless of the level of education, and the quality of education is below that of comparable country groupings. In this scenario component, the Congolese government continues to roll out its efforts to improve school enrolment and this is complemented by an improvement in the completion rates from primary education to secondary levels.

In addition, the government works at ensuring the delivery of quality education by regulating the uncontrolled expansion of low-quality schools in private education, renewing obsolete equipment and reforming academic programmes to give priority to programmes that target skills needed in the key growth sectors of the economy. Thus, the government prioritises vocational and technical training and sciences and engineering to provide the country with a skilled labour force.

Should this scenario component materialise, the fertility rate would decline to 2.6 by 2050, a drop of roughly 52% between 2024 and 2050. This is substantially lower than the projected 3.4 births per woman on the Current Path in the same year. The promotion of contraceptive use combined with the improvement in female education has a significant impact on fertility. In this scenario component, the DR Congo achieves a ratio of 1.7 dependents to working-age persons in 2050, a decade earlier than on the Current Path.

The scenario component increases the size of the Congolese economy by about US$14.8 billion in 2050 as compared to the Current Path forecast. The average GDP per capita is US$214 larger in 2050 than the projected value on the Current Path. This scenario component has about 15.4 million fewer Congolese living in extreme poverty (less than US$1.90 per day) relative to the Current Path forecast.

Family-planning measures associated with human capital development have significant potential to promote pro-poor growth in the DR Congo. This finding is in line with the idea that investment in human capital should be at the centre of development priorities. Education is one of the most effective ways for people of poor backgrounds to increase their incomes. Family-planning policies are also important to reduce poverty as households with fewer children tend to invest more in the education and health of each one, which in turn, improves their job and income prospects.[3]

Agricultural development scenario component

As revealed by the Current Path analysis, the DR Congo has significant agricultural potential. It has a favourable climate and immense tracks of arable land. About 70% of people classified as employed in the formal and informal sectors are in the agriculture sector. Yet despite this potential, the country cannot meet its own food needs and a large majority of the population experience moderate to serious food insecurity.

Reviving the agriculture sector could be an effective way to combat poverty and improve human development in the DR Congo as it has a strong job creation capacity compared to other sectors. Studies have shown that a 10% increase in agricultural production could translate into a 7% decrease in the number of people living in extreme poverty in the DR Congo.[4]

In this scenario component, the government works at improving agricultural production by investing in modern practices to boost yields per hectare. Increased production is augmented by efforts to provide adequate harvesting, storage, transportation and marketing mechanisms for crops and animal products with a particular focus on improving subsistence and smallholder farming.

To this end, the DR Congo authorities work hand-in-hand with development partners to generate and disseminate improved technologies such as improved seeds and farming practices for increased productivity and better adaptation to the impact of climate change. It also engages in broad and consensual land reforms to address the recurrent land disputes

and protect the rights of vulnerable farmers. Most of the improvements in agricultural production are therefore achieved by improving crop yield (intensification) and expanding the land under cultivation (extensification).

In addition, the rehabilitation of rural transport infrastructure allows farmers to sell their produce more easily, receive support from agricultural extension services, and, therefore, reduce agricultural losses along the value chain (from producer to consumer). Rather than aiming at exports, the production is mainly intended for domestic consumption. Hence, the government, in collaboration with donor organisations or NGOs, works at improving food access, especially among the poor, through various policies such as cash grants.

The agricultural development intervention cluster increases crop yields by 58.8% between 2024 and 2050. This translates to 91.3 million metric tons of agriculture production by 2050, approximately 36% higher than the Current Path forecast for the same year. Agricultural import dependence (crops), measured as a percentage of total crop demand, declines to 50.3% by 2050 rather than 60% on the Current Path.

As mentioned earlier, malnutrition is a major issue in the DR Congo despite the country's huge potential for food production. In this scenario component, the number of malnourished people in the country declines by 50% between 2024 and 2050. The impact is nearly 6.8 million fewer malnourished people than on the Current Path by 2050.

The size of the Congolese economy is US$18 billion larger than the Current Path forecast in 2050 while the GDP per capita increases marginally by US$115 as compared to the Current Path. The number of people in extreme poverty (less than US$1.90 per day) is 8.3 million fewer than on the Current Path by 2050.

Economic transformation scenario component

The preceding Current Path analysis has revealed that economic growth in the DR Congo is driven mainly by the dynamism of the extractive sector, but that it is subject to the volatility of global commodity markets, creates few direct jobs and is not inclusive. Export concentration on primary commodities has long been conceptually and empirically linked with underdevelopment. It is crucial to diversify the DR Congo's productive and export bases if a structural transformation of its economy is to be achieved together with inclusive and sustainable growth and development. However, such a process requires policy efforts along different dimensions.

In this scenario component, the government works to remove the key obstacles to more diversified and sustainable industrial development. This is on the premise that the new president delivers on a commitment to promote strong and transparent economic institutions to address the poor business environment in the country.

This significantly improves regulatory quality (business regulation), economic freedom and eliminates predatory taxation by reducing bureaucracy and simplifying administrative procedures and formalities. The simplification of the process for registering a business accompanied by a simpler and efficient tax regime serve to stimulate domestic investment and eventually lead to the growth of FDI.

Technology and innovation play a crucial role in economic transformation. They offer not only catch-up potential but also leapfrogging possibilities. Thus, DR Congo authorities enhance the capacity building of local research institutions (particularly in agro-processing) by increasing spending in R&D activities to support the country's move up the agro-processing ladder.

The size of the Congolese economy in this scenario component increases by US$137 billion relative to the Current Path forecast in 2050 while the GDP per capita increases by US$ 783 as compared to the Current Path. Also, the economic transformation scenario component has 24.9 million fewer people in extreme poverty relative to the Current Path in 2050.

The economic transformation scenario component has a huge impact on economic and human development in the DR Congo. This finding is consistent with the general view that economic transformation is crucial for sustained economic growth and poverty alleviation.

Comparing scenario components impacts

All the scenario components make a positive contribution to GDP, GDP per capita and poverty reduction. As shown by Chart 19, the economic transformation scenario component has the largest impact on the size of the Congolese economy and it is followed by the improved governance scenario component.

Chart 19: GDP in each scenario component – variations relative to the Current Path
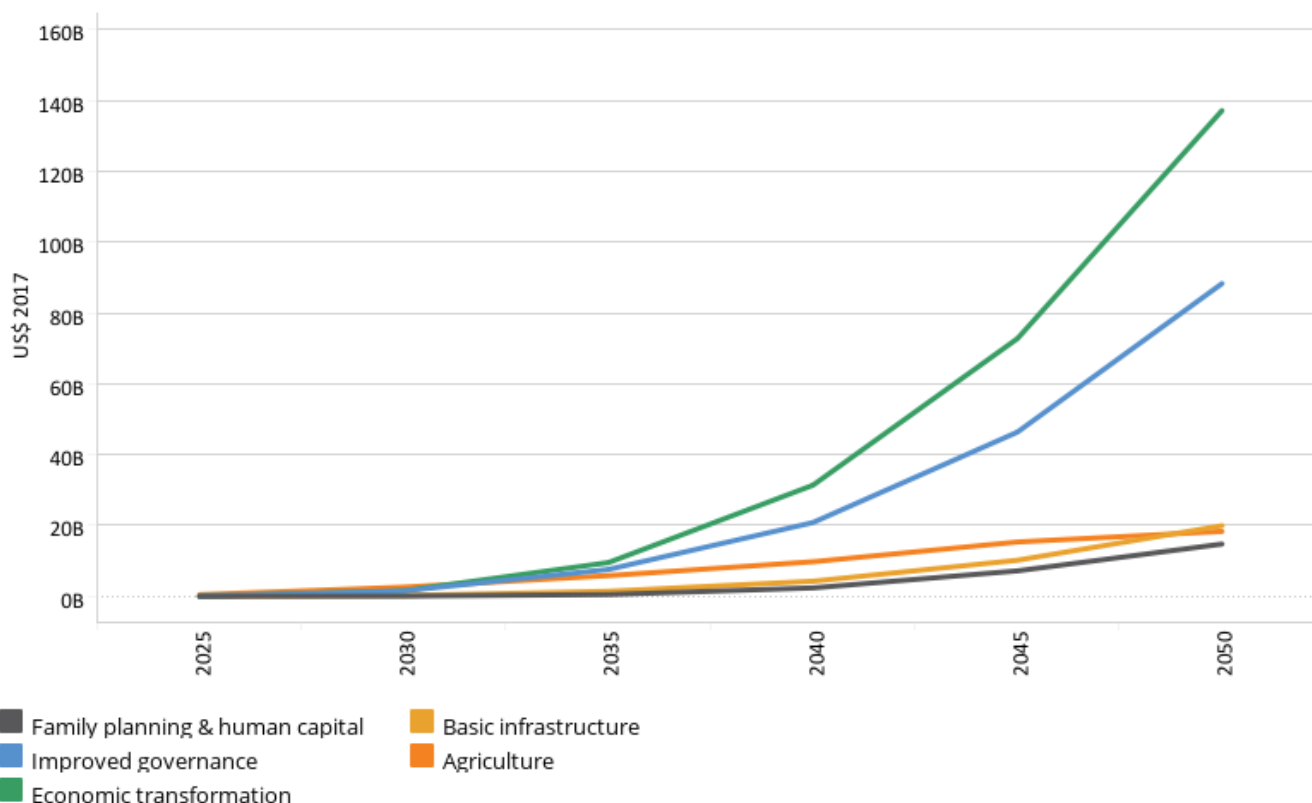
Legend:
- Family planning & human capital
- Improved governance
- Economic transformation
- Basic infrastructure
- Agriculture

Source: Forecast in IFs version 7.54; historical data from International Monetary Fund and World Bank

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The economic transformation component has also the greatest impact on per capita income followed by the improved governance component (Chart 20).

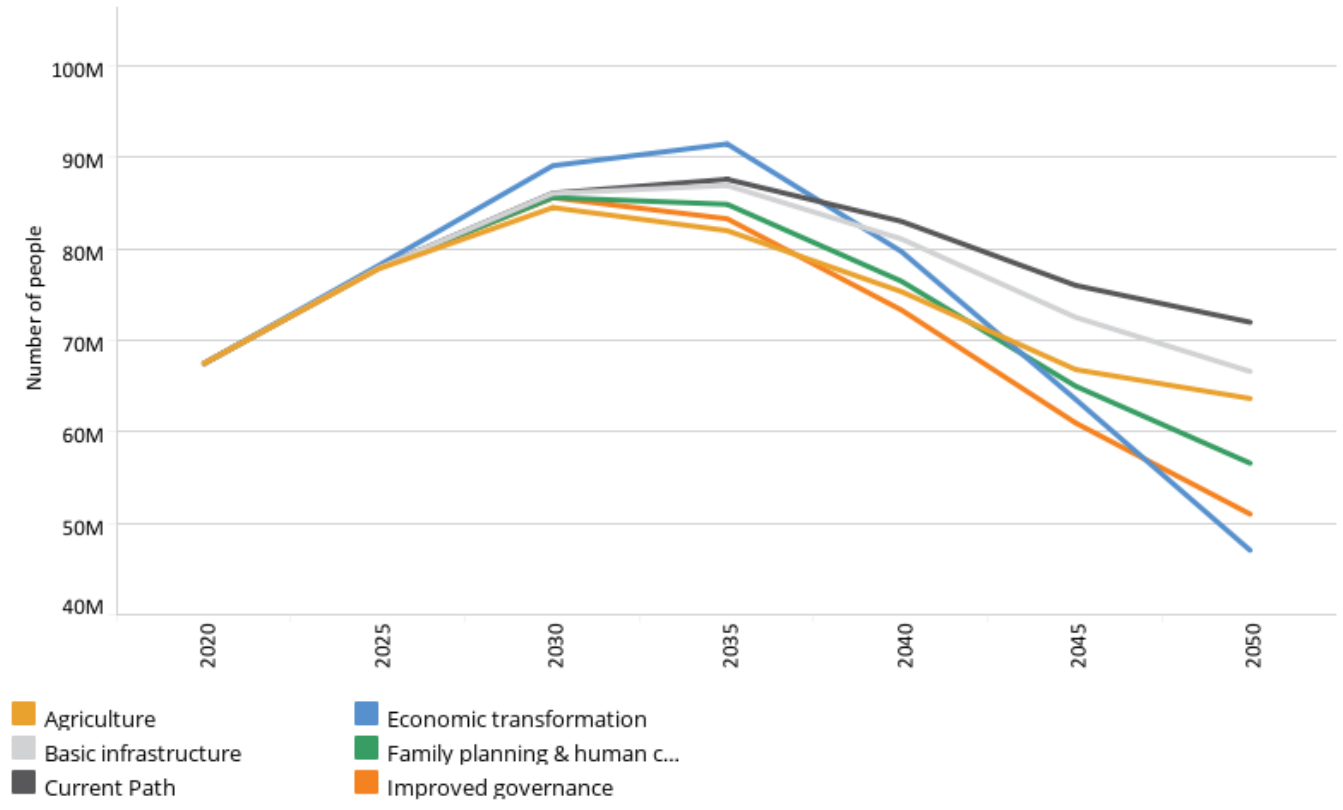## Chart 20: GDP per capita in each scenario component – variations relative to the Current Path

Legend:
- Agriculture (orange)
- Basic infrastructure (yellow/amber)
- Economic transformation (green)
- Family planning & human c... (dark grey)
- Improved governance (blue)
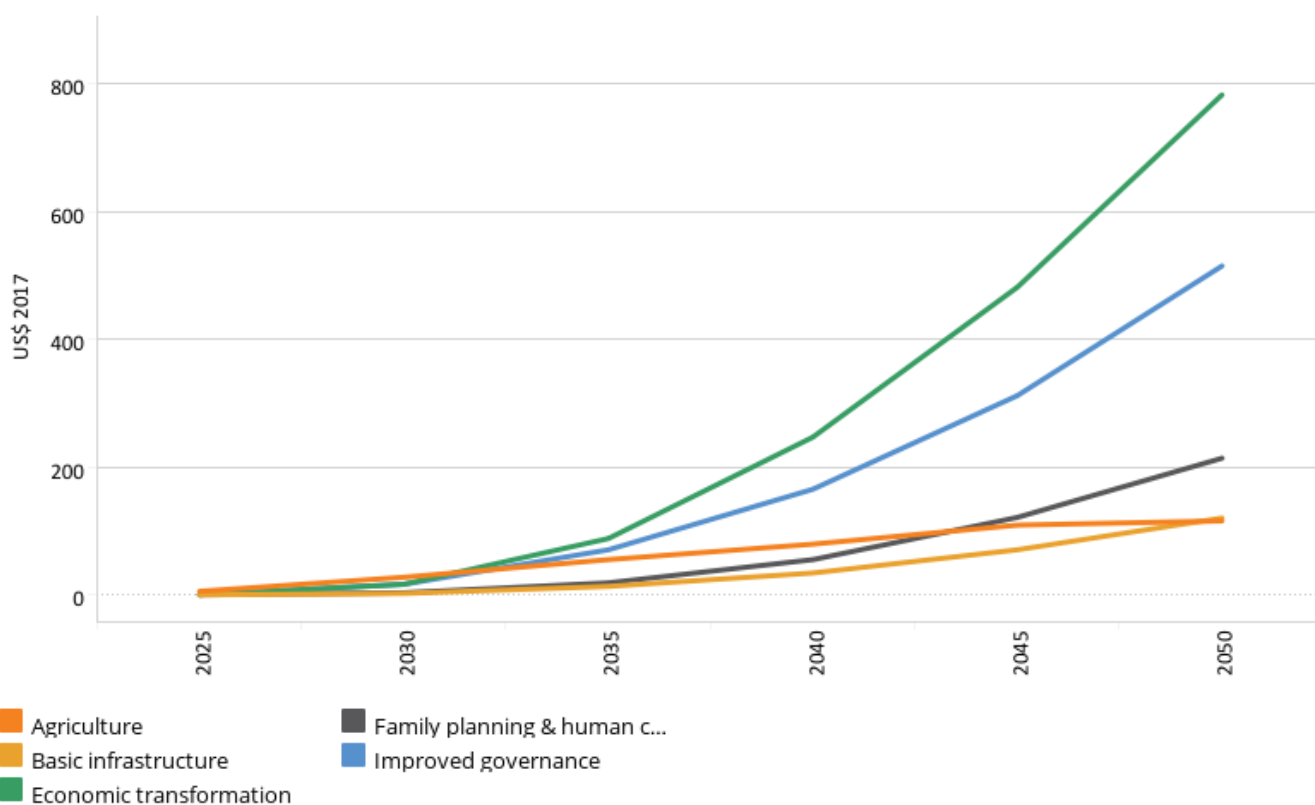
Source: Forecast in IFs version 7.53; historical data from International Monetary Fund and World Bank

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In the short term, the agricultural intervention cluster has the highest impact on the GDP and the GDP per capita. This can be explained by the fact that institutional change, infrastructure development, human capital accumulation and economic transformation (i.e. the transitions inherent in the other scenario components) require time to reach a level that can significantly enhance economic growth while crop yields and agricultural production can be increased in a relatively short period.

Irrespective of reform, the number of people living in extreme poverty in the DR Congo is likely to continue to increase in all the scenario components in the next few years before starting a downward trend (Chart 21).

Chart 21: Extreme poverty at US$ 1.90 in each scenario component

Source: Forecast in IFs version 7.54; historical data from World Bank

Legend:
- Agriculture
- Basic infrastructure
- Current Path
- Economic transformation
- Family planning & human c...
- Improved governance

This increase in the number of people living in extreme poverty is due to the impact of the COVID-19 pandemic and also to the fact that the beneficial effects of these policies on population welfare require time to materialise. Specifically, in the initial ten years of intervention, the economic transformation scenario component has the highest number of poor people as resources and investments are diverted to more capital and knowledge-intensive sectors.

The economic transformation is funded by an initial crunch in consumption which increases poverty in the first few years. However, in the long run, these efforts stimulate inclusive growth with a greater impact on poverty alleviation.

The economic transformation scenario component has the lowest number of poor people (47 million) by 2050. This is equivalent to a poverty rate of 22.7% compared to 34.5% on the Current Path in 2050. The economic transformation scenario component is followed by the improved governance scenario component with 51 million poor people or 24.5% of the poverty rate by 2050. However, in the short term, the agriculture development scenario component has the greatest impact on poverty reduction.

Overall, these scenario components show that economic transformation through industrialisation will be key to achieving economy-wide productivity improvements, job creation and sustained progress in growth and poverty reduction in the DR Congo. However, as this process requires time, agriculture seems to be the low hanging fruit for the country to improve the population's well-being in the short term.

The impact of the combined comprehensive scenario

The comprehensive scenario combines all the intervention clusters mentioned above. It is a concerted intervention to overcome the binding constraints on inclusive growth and development in the DR Congo. In other words, it is a scenario that puts the country on the path of sustained and inclusive growth that is more resilient to the recurrent commodity prices 'boom-burst'.

## Chart 22: GDP and GDP per capita – the comprehensive scenario vs the Current Path
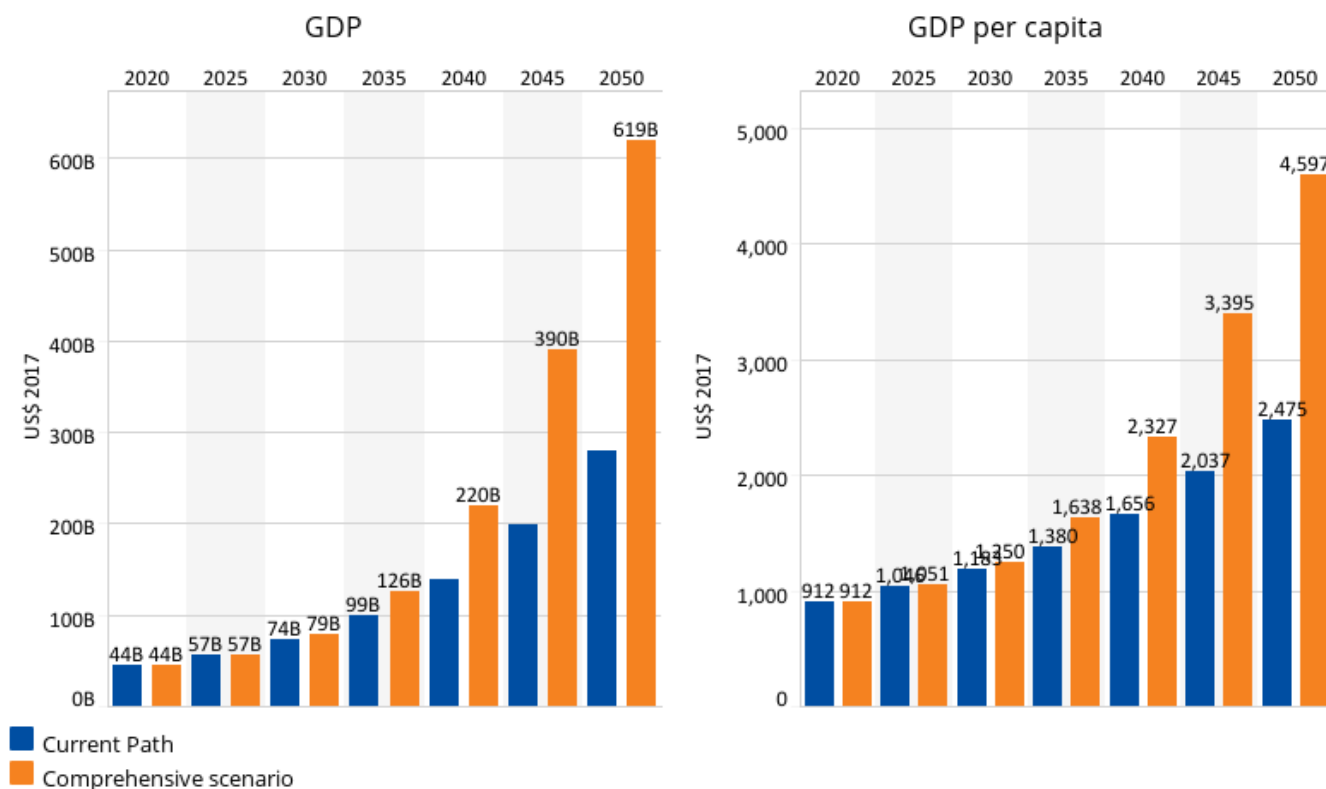
Source: Forecast in IFs version 7.54; historical data from International Monetary Fund and World Bank

The size of the economy and the GDP per capita in the comprehensive (combined) scenario are respectively US$339 billion and about US$2 110 larger than the projected values on the Current Path in 2050 (Chart 20). Also, the number of people surviving on US$1.90 is 18.2 million in 2050 while it is projected to be about 72 million people on the Current Path in the same year (Chart 23). This translates to a poverty rate of 9.6% by 2050 against 34.5 % on the Current Path.

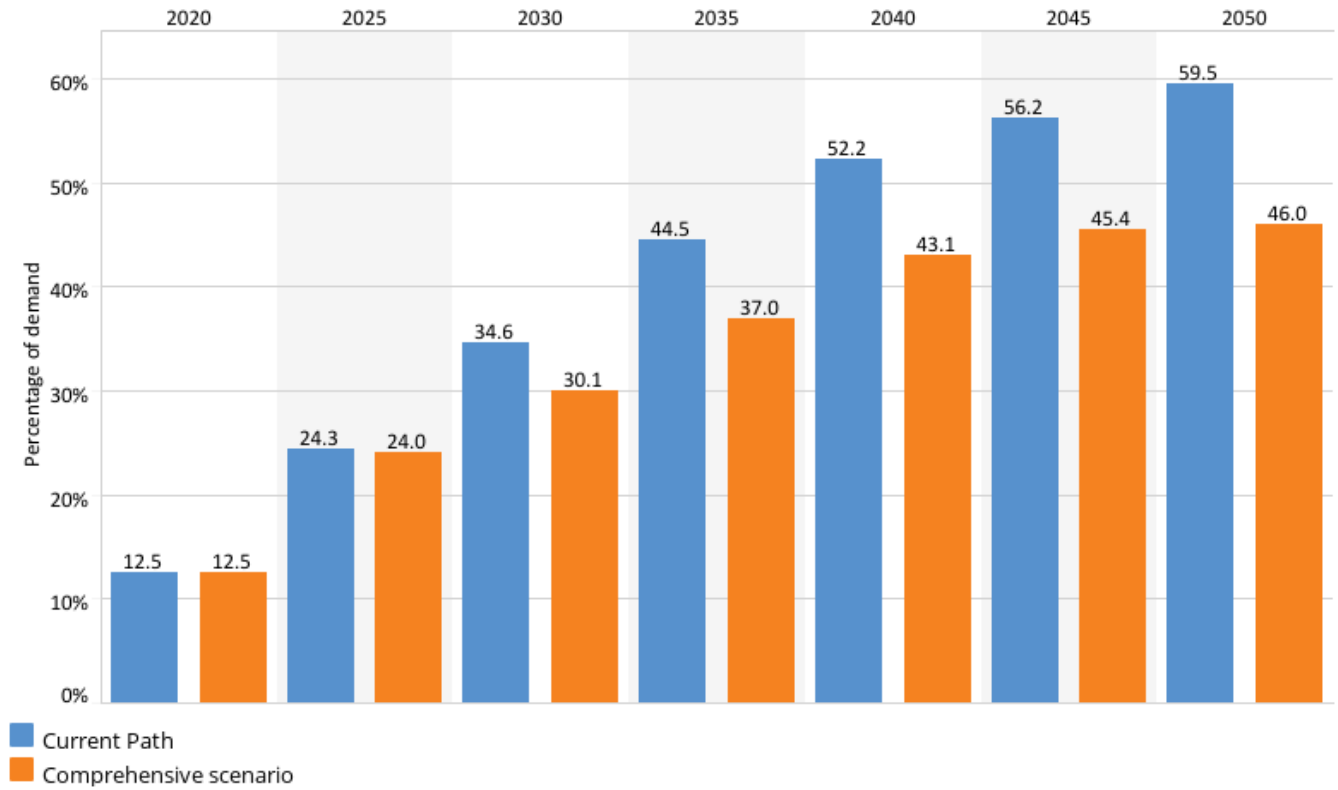## Chart 23: Extreme poverty at US$ 1.90 in the comprehensive scenario and the Current Path

Legend:
- Current Path (green)
- Comprehensive scenario (blue)
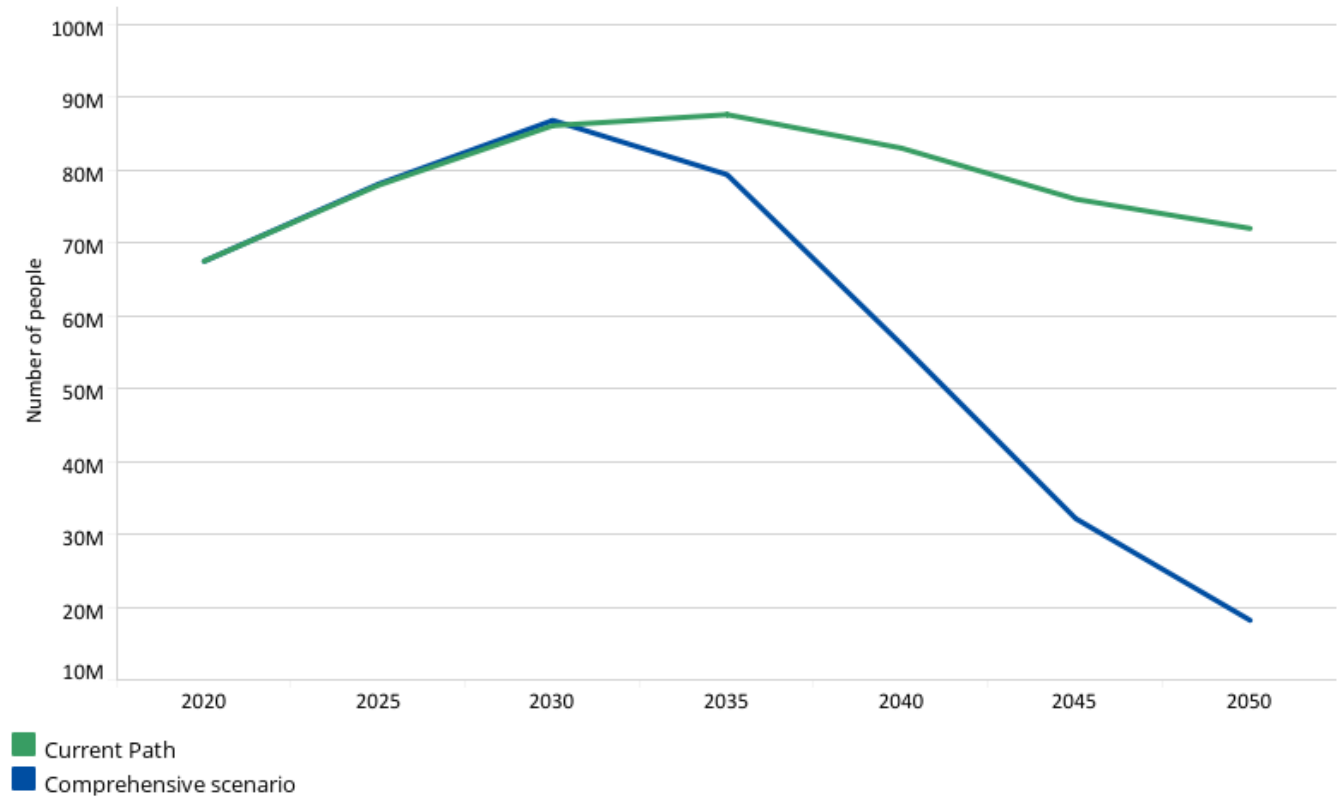
Source: Forecast in IFs version 7.54; historical data from World Bank

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The scenario improves food security: food import dependence measured as a percentage of total food demand is 13.5 percentage points lower than the 60% projected on the Current Path in 2050. The DR Congo would continue to import food, but at much lower levels than in the Current Path. The scenario, therefore, reduces the country's vulnerability to external food price shocks.

Chart 24: Food import dependence by 2050 in the comprehensive scenario and the Current Path

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| | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 |

Percentage of demand

- 12.5 / 12.5 (2020)
- 24.3 / 24.0 (2025)
- 34.6 / 30.1 (2030)
- 44.5 / 37.0 (2035)
- 52.2 / 43.1 (2040)
- 56.2 / 45.4 (2045)
- 59.5 / 46.0 (2050)

■ Current Path
■ Comprehensive scenario

Source: Forecast in IFs version 7.54; historical data from Food and Agriculture Organization

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Following improvements in food production, access to safe water and improved sanitation, the widespread malnutrition which is reported to be one of the key factors of stunting among children under five in the DR Congo has significantly dropped. In the comprehensive scenario, the number of malnourished children is 1.6 million fewer than the projected 2.2 million on the Current Path in 2050. This is equivalent to a nearly 70% decrease relative to the Current Path.

Chart 25: Malnourished children by 2050 in the comprehensive scenario and the Current Path
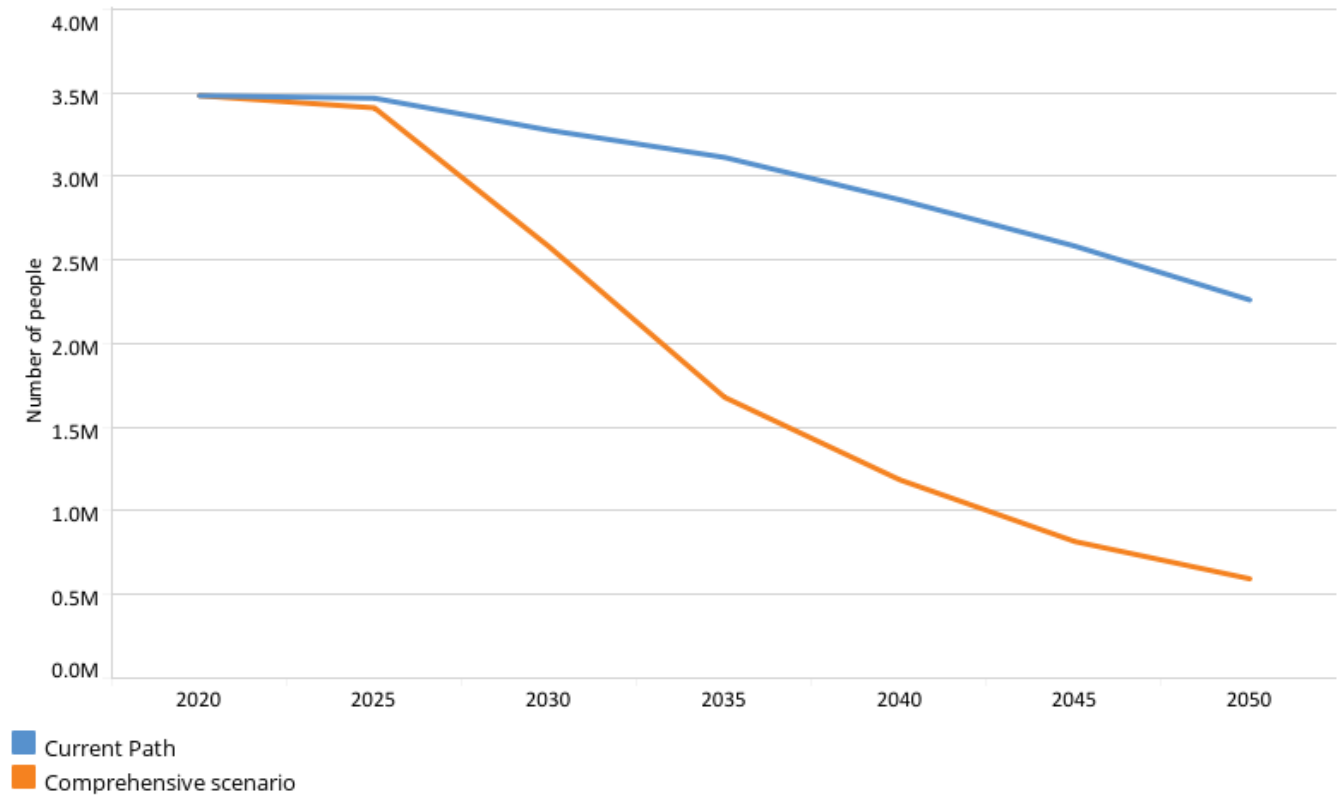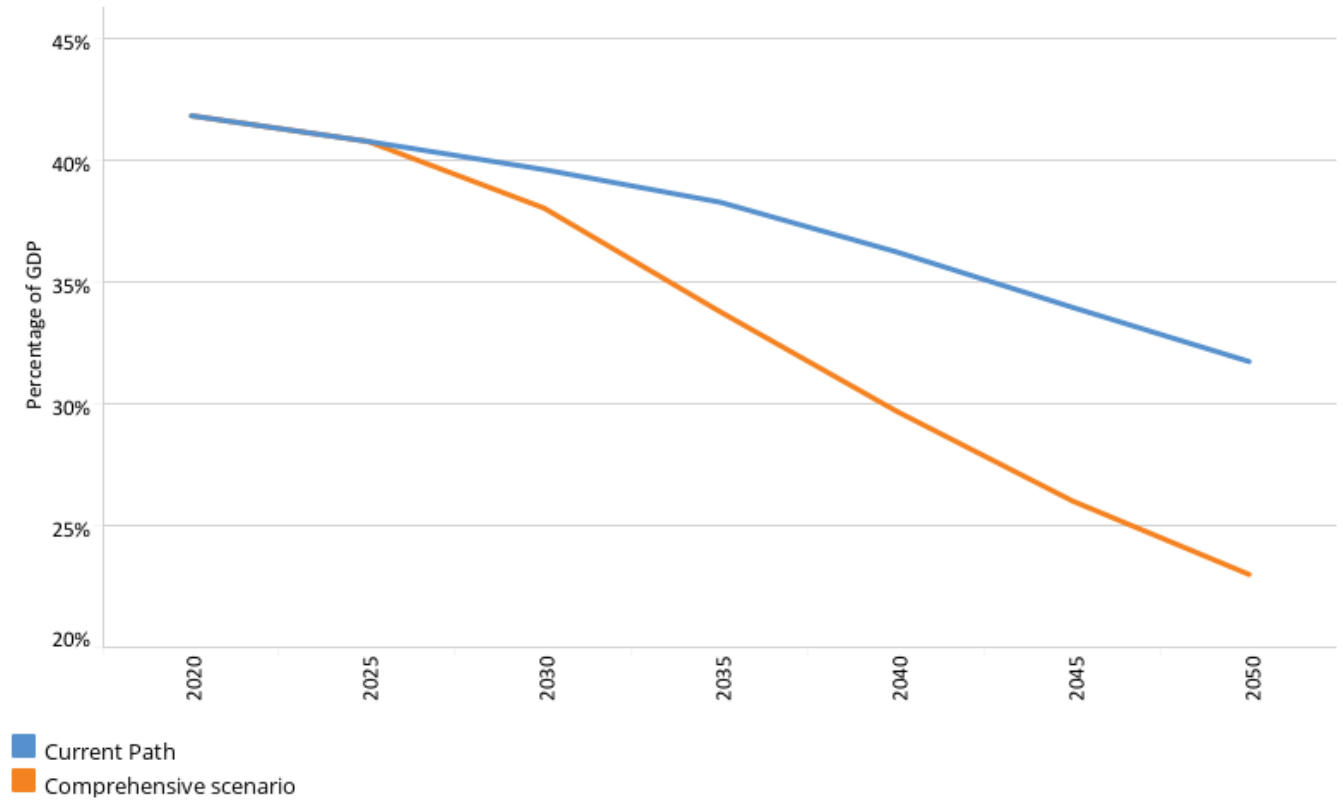

Source: Forecast in IFs version 7.54; historical data from FAO

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Finally, the size of the informal economy in the comprehensive scenario is 23% of GDP against 31.7% on the Current Path in 2050. This is equivalent to an 8.7 percentage points decline with reference to the Current Path. The scenario improves factors, such as business regulation and reduces corruption, that are among the drivers of informality in a country.

Chart 26: The size of the informal economy by 2050 in the comprehensive scenario and the Current Path

Legend:
- Current Path
- Comprehensive scenario

Source: Forecast in IFs version 7.54

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The dramatic impact of the comprehensive scenario on the economy and human development is clear evidence of the benefits of a concerted intervention to remove the key binding constraints on inclusive growth and development in the DR Congo. The impacts are significantly larger than the mere sum of the outcomes of each intervention cluster because of the dynamic interactions between these clusters that lead to the cumulative growth process and shared prosperity.

For instance, good governance is necessary to increase domestic revenue. Increased domestic revenue along with good governance increase the capacity of the government to make a productive investment in infrastructure, education and health. Human capital, infrastructure development, and quality of government and institutions, in turn, foster economic transformation, increase the productive base of the economy and boost sustained and inclusive growth. In sum, the removal of one constraint on growth and development facilitates the elimination of another constraint (positive spillover effects).

Endnotes

1. DP Zongwe, Decentralization in the Democratic Republic of the Congo, March 2019, 7, DOI: 10.13140/RG.2.2.20028.08321.

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3. GS Becke, Human Capital and Poverty Alleviation, Human Resources Development and Operations Policy, Working Papers, World Bank, 1995.

4. Programme national d'investissement agricole (PNIA), Ministère de l'Agriculture et du Développement Rural, Septembre 2012.

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About the authors

Dr Kouassi Yeboua is a senior researcher in African Futures and Innovation programme in Pretoria. He recently served as lead author on ISS studies on the long-term development prospects of the DR Congo, the Horn of Africa, Nigeria and Malawi. Kouassi has published on various issues relating to foreign direct investment in Africa and is interested in development economics, macroeconomics, international economics, and economic modelling. He has a PhD in Economics.

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