Work/Jobs
Labour in Africa compared with China and India

Jakkie Cilliers
Labour in Africa compared with China and India

Africa’s portion of the total population considered able to work – which constitutes its labour force – is large and rapidly increasing, as shown in Chart 3. In 2019, it was estimated at 503 million, very close to India’s 515 million and which it surpassed in 2021. By 2035, Africa’s labour force is set to be larger than China’s (808 million) and by 2043 it will have increased to more than 1 billion.

Chart 3: Size of the labour force in Africa, India and China, 1990–2043

As labour contributes significantly to growth at low levels of development, Africa has substantial potential. But based on size alone, that potential is misleading without drastic improvements in education and health, and considering that technology is steadily reducing the traditional contribution of labour to economic growth.

Two key indicators of the ability of a workforce to be productive – education level and general health – are presented in Charts 4, 5 and 6, which compare the current and 2043 situations in China, India and Africa in the Current Path forecast. Note that while the x-scale for China and India is the same, 60 million on either side, that for Africa in Chart 6 is 120 million, reflecting Africa’s large labour force in 2043.
Chart 4: Education by age, sex and level for China, 2019 vs 2043

Source: IFs 7.63 (initialising from UN Population Division medium term forecast and UNESCO and Barro-Lee educational data)

View on Tableau Public
Chart 5: Education by age, sex and level for India, 2019 vs 2043

Source: IFS 7.63 utilising UN Population Division medium term forecast and UNESCO and Barro-Lee educational data

View on Tableau Public
The following differences emerge:

- Africa’s population pyramid retains its broad base to 2043, reflecting its youthful population structure and its large cohort of child dependants, whereas that of India increasingly takes on the image of the Taj Mahal, a fat, rounded belly of working-age persons who are increasingly well educated. China, in contrast, has a large elderly population, who need to be supported by a shrinking working class, but is on track to provide a secondary education to the majority of its younger population by the end of the forecast horizon, a target that India is likely to achieve only several decades later.

- Africa lags significantly behind both India and China in providing education at primary, secondary and tertiary levels.[1] Whereas the mean years of education in Africa for adults (15 years and older) was 6.2 years in 2019 and is expected to increase to 7.6 years by 2043, it was 8.3 years in China in 2019 and is forecast to increase to 10.1 years by 2043. Mean years of adult education in India will increase from 7.2 years to 9.1 years in this time. Although the amount of education adults receive in Africa is improving, the continent will slowly fall further behind China and India over the next two decades.

- Men typically are better educated than women. In 2019, Chinese men had about 0.8 years more education than women. The difference in India is 2 years and in Africa the difference is 1.2 years. In all instances, the IFs Current Path forecast is for the male-female gap to decline by 2043.
important measure, the IFs forecast presents poor progress compared to China and India.

Chart 7: Education quality in China, India and Africa, 2015–2043

A second key indicator of the ability of a workforce to be productive is its general health. To compare countries and regions, we turn to a combined indicator of premature mortality and the years lived with a disability owing to prevalent cases of the disease or health condition. The two are combined in the measure termed disability-adjusted life years (DALYs). One DALY represents the loss of the equivalent of one year of full health and is a combined indicator of premature mortality and the years lived with a disability owing to prevalent cases of the disease or health condition.

Chart 8 presents the DALYs per capita for China, India and Africa and shows positive convergence over time. In 2019, DALYs in Africa were 0.47 million per million of its population, compared with 0.33 in India and 0.24 in China. In other words, the burden of ill health in Africa is almost double that of China. Coming from such a high level, rapid progress is possible, but it will take time.
The combined effect of poor education and poor health is that labour productivity in Africa is, on average, significantly below that of China and India, as shown in Chart 9.
In 2019, average labour productivity in Africa was about one third of that in China and about US$400 below that of India. By 2043, the gap will have widened significantly, with labour productivity in Africa being less than half of that in India and only 17% of that in China. Again, the IFs forecast is for slow improvements in Africa.
Endnotes

1. India is a lower middle-income country (there are 23 in Africa) and China is now an upper middle-income country (there are only seven in Africa). According to the World Bank, China is on track to be classified as a high-income country around 2023.

Donors and sponsors

Reuse our work

- All visualizations, data, and text produced by African Futures are completely open access under the Creative Commons BY license. You have the permission to use, distribute, and reproduce these in any medium, provided the source and authors are credited.

- The data produced by third parties and made available by African Futures is subject to the license terms from the original third-party authors. We will always indicate the original source of the data in our documentation, so you should always check the license of any such third-party data before use and redistribution.

- All of our charts can be embedded in any site.

Cite this research

About the authors

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

About African Futures & Innovation

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