

# Strategic Analysis Paper

22 May 2018

## The African Demographic Dividend: Can it be harnessed to Avoid Rising Food Insecurity?

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### Key Points

- The African population is projected to increase five-fold between 2000 and 2100. By mid-century, the population is expected have more than doubled to 2.5 billion, mainly because of persistently high fertility rates.
- While parts of Africa suffer from physical shortages of food, most of its food insecurity is attributable to socio-economic factors that limit access to those resources.
- If African countries can successfully harness their demography to drive economic growth, the continent will rapidly develop, leading to greater reductions in food insecurity.
- Successfully harnessing the opportunities presented by demography, however, will require robust institutions and a commitment to the rule of law.

### Summary

In the period between 1950 and 2050, demographic growth is expected to be most pronounced in Asia. Over the course of the 21<sup>st</sup> century, however, demographic projections suggest that most of the world's population growth will occur in Africa. In the century between 1950 and 2050, the Asian population will have grown by a factor of 3.7. By 2050, the population of Asia is expected to have begun to decline. Over the course of the 21<sup>st</sup> century, however, the African population is projected to grow by a factor of 5.18 – a significantly faster rate than Asia.

A youthful population, if it is harnessed effectively, could see Africa make a larger impact on the global economy than Asia did in the latter part of the 20<sup>th</sup> century and the early 21<sup>st</sup> century. Favourable demographics alone will not ensure that Africa reaps the rewards of its enormous economic potential, however. Implementing strong urban and agricultural policies in an environment that encourages robust, transparent and effective governance, will also be vital.

## Analysis

### Demographic Trends

The population of Africa is expected to rise faster than any other part of the world in the 21<sup>st</sup> century. By mid-century, the African population is projected to have more than doubled to almost 2.5 billion people. Most of that growth will occur in the sub-Saharan region, the population of the culturally-distinct North African region will not grow as rapidly.



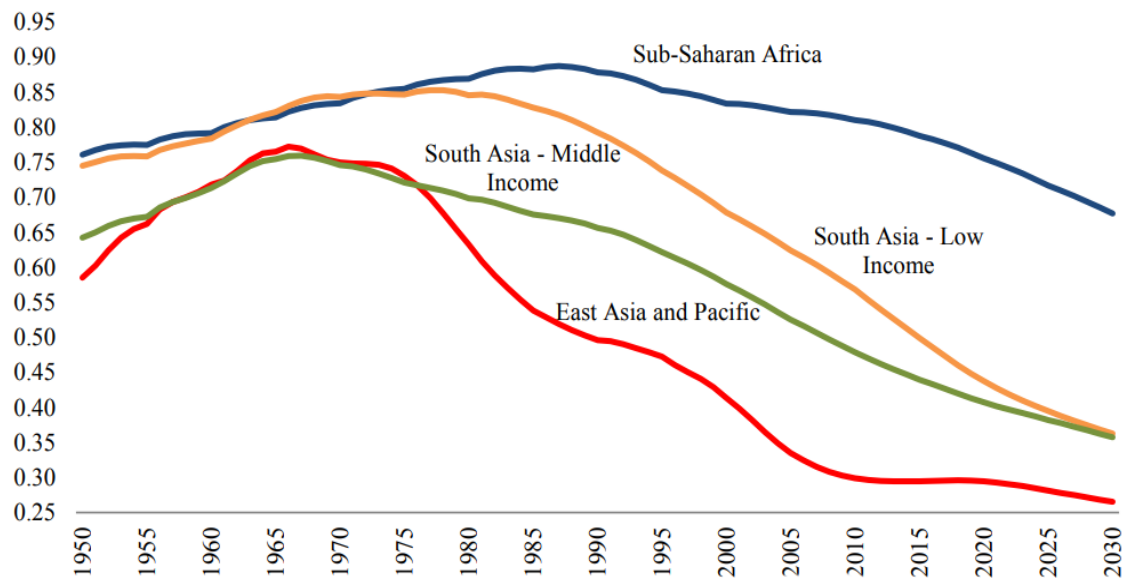
### **Most population growth will occur in sub-Saharan Africa**

The main reason for the rapid population growth is a sharp decline in infant and child mortality, with a limited reduction in birth rates. At present, African women have five children on average, compared to 6.7 in 1970. Developing new employment opportunities for women is part of the solution to achieving more sustainable population levels in Africa. Increasing access to family planning and contraception is also important. To achieve a rapid and significant decline in the fertility rate, [75 per cent of African couples](#) need to utilise modern contraceptives; currently only a quarter use them. Empowering women by increasing their access to education and employment will also result in lower fertility rates.

Because of the high fertility rate, the continent is home to the youngest population in the world, with most Africans less than 20 years old. Due to the large portion of young people in Africa, the dependency ratio (the ratio of the youth and elderly population to the working

age population) is high. The higher that ratio is, the greater the burden on the rest of society to support those either too young or too old to work.

### Total Dependency Ratio, 1950-2030



Source: World Bank

By the 2030s, however, Africa is projected to have a larger working-age population than East Asia did at the beginning of its economic miracle. If there are enough jobs for those workers, then African economic development will be on a strong footing. The bulk of the demographic dividend will come in the 2050s, as there will be a proportionally low number of children and seniors, a high proportion of working age adults and, assuming fertility rates continue to decline, smaller family sizes. This situation will make education costs more manageable for both the state and families.

Future demographic trends are based on projections, however, and could change significantly due to unforeseen circumstances. Despite this, failure to plan for the kind of long-term demographic change set out in the projections will surely doom the continent to a continuation of the low levels of development that have set it apart from the rest of the world. The policies that Africa puts in place now will determine the liveability of its cities, the sustainability of its agricultural systems and the availability of water in the decades ahead.

#### African Economic Development

Most Africans are employed in agricultural production and agriculture is the continent's largest economic sector, representing [15 per cent](#) of its economy. Oil, gas and minerals make up a significant portion of the economy, particularly in Nigeria and Angola where the economies mainly depend on oil.

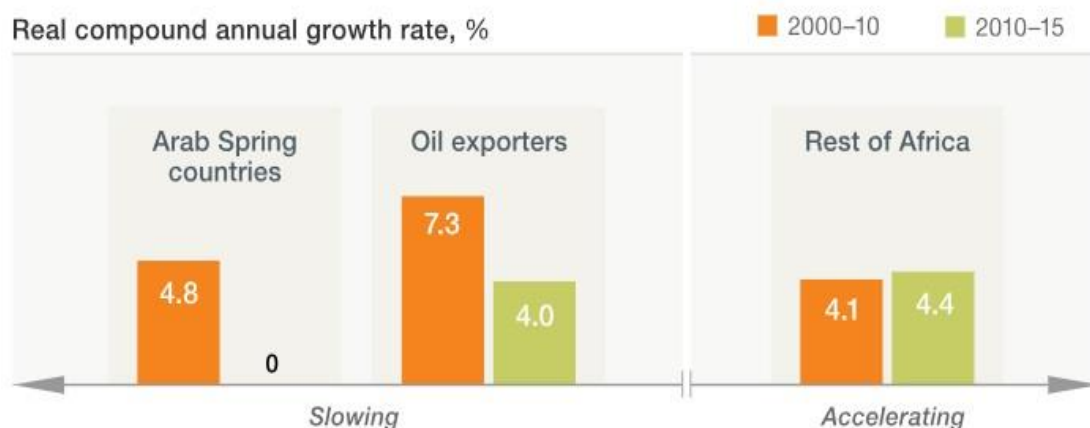
In the first decade of the 21<sup>st</sup> century, Africa was the [world's fastest-growing region](#). The economies of Angola, Nigeria, Ethiopia, Chad, Mozambique and Rwanda all grew by an average rate of more than seven per cent per year. That rapid pace of growth contributed to

an “Africa rising” narrative, that suggested that the continent was on the path to rapid development. Much of the economic growth of the 2000s was built on rising global demand for oil, however. Oil is the predominant source of revenue for three of those countries (Angola, Nigeria and Chad). [Between 2002 and 2012 GDP](#) in Angola rose from US\$11 billion to US\$114 billion, while Nigeria’s GDP rose from US\$59 billion to US\$243 billion.

A reliance on a small number of commodities leaves Africa at the mercy of international commodity prices and the boom-bust cycles that accompany them. In 2016, for instance, economic growth was limited to 1.4% - the slowest rate in two decades – due to persistently low prices for oil and minerals. Reducing poverty in Africa will largely depend on the development of a robust agricultural sector and further economic diversification.

Africa is a diverse continent and while some of its economies rely on the export of one or two commodities, most of the continent has experienced sustained economic growth. Between 2000 and 2008 overall GDP growth in Africa averaged 4.9% a year. In 2010-15 it declined to 3.3%, but when the oil exporting countries and those affected by the political turmoil of the Arab Spring are removed, growth in the other countries increased from 4.1% in 2000-10 to 4.4% in 2010-15.

## Africa’s growth path is diverging.



McKinsey&Company | Source: McKinsey Global Institute analysis

The African economy has continued to underperform. According to the [2018 UN World Economic Situation](#), Africa will experience growth of less than four per cent per year until 2020. There are some parts of the continent that are growing rapidly, such as [West Africa](#), where most economies are growing by more than five per cent per year. Most of Africa, however, will need to significantly increase its economic growth rate if it is to stimulate the employment growth necessary to reap the rewards associated with its demography.

### Urbanisation in Africa

The world is urbanising; the trend originated in 19<sup>th</sup> century Europe and America, spread into parts of Asia in the 20<sup>th</sup> century and is expected to continue into Africa through the latter part of the 21<sup>st</sup> century. Urbanisation is a force for societal change as basic services,

such as food and water, are generally provided more efficiently in urban settings. That outcome is more evident in cities with strong governance. Consequently, if Africa is to benefit from urbanisation, it will need to implement policies that foster sustainable urban development.

Cities, if they are well governed, are social levellers. Employment, economic advancement and better living conditions are among the main factors that encourage people to migrate into urban areas. The population of the Nigerian city of Lagos has grown 100-fold in the span of 60 years. It is one of the ten largest cities in the world and the level of economic inequality among its inhabitants is considerable. While most residents live in slum conditions, with limited access to piped water or sanitation systems, parts of the city are highly developed. At the same time, as [Edward Glaeser](#) argues, the urban slums are preferable to those of rural Nigeria. At least in the urban variety three-quarters of the population have access to safe drinking water, even if it is not directly piped to their homes, compared to less than one-third of the rural Nigerian population. That disparity is [common throughout the continent](#); across Africa 90 per cent of the urban population has access to a safe water supply, compared to 67 per cent of rural Africans.

If urban populations continue to grow at the current rate, by the end of the century the three largest urban areas in the world are likely to be in Africa. [Economic growth in cities is not keeping pace with population growth](#), however, and for that reason there is a strong possibility that population forecasts are exaggerated. Rural people are less likely to migrate to urban centres if they believe that economic opportunities are likely to be more difficult to obtain.

<b>World's Largest Cities by Population (millions)</b>		
<b>Largest cities in 2006</b>	<b>Largest cities in 2050</b>	<b>Largest cities in 2100</b>
Tokyo (35.5)	Mumbai (42.4)	Lagos (88.3)
Mexico City (19.2)	Delhi (36.2)	Kinshasa (83.5)
Mumbai (18.8)	Dhaka (35.2)	Dar es Salaam (73.7)
New York (18.7)	Kinshasa (35)	Mumbai (67.2)
São Paulo (18.6)	Kolkata (33)	Delhi (57.3)
Delhi (16)	Lagos (32.6)	Khartoum (56.6)
Kolkata (14.6)	Tokyo (32.6)	Niamey (56.1)
Jakarta (13.7)	Karachi (31.7)	Dhaka (54.2)
Buenos Aires (13.5)	New York (24.8)	Kolkata (52.4)
Dhaka (13.1)	Mexico City (24.3)	Kabul (50.2)

*Source: Daniel Hoornweg and Kevin Pope, 'Population Predictions for the World's Largest Cities in the 21st Century', *Environment and Urbanization* 29 (1) (2016), pp. 195-216*

Urbanisation provides Africa with an opportunity to lift the living standards of a large number of people. If African governments implement sustainable and progressive urban policies that improve infrastructure, increase access to water and sanitation services and

reduce inequality, then the growth of its cities will be a positive outcome for it and the wider world.

### **Food Security in Africa**

Food and water security are determined by both physical and socio-economic factors. Food or water insecurity occurs when there is a physical shortage of the resource, such as when demand exceeds supply. Socio-economic scarcity occurs when there is enough food or water to meet demand, but political, social or economic factors impede access to those resources.

In 2017, for the first time in more than a decade, food insecurity rose globally, according to the [United Nations Global Report on World Hunger](#). Africa was at the forefront of that increase, due to conflicts, climate-related shocks and slower economic growth across the continent. Globally, there is enough food to feed everyone, as food production has increased at a faster rate than the global population. There is enough food produced each year to feed [ten billion people](#), but, due to inequalities, wastage and inefficiencies in global trade, that food is not evenly distributed throughout the world.

The rapid population increase is contributing to social problems and possibly physical food insecurity in some parts of Africa. In [Burundi](#), for instance, the population has increased by 40 per cent in a decade and continues to grow at 2.5% a year – more than twice the global average. The rapid population growth has contributed to increased competition for land. Most Burundians are subsistence farmers, but the average farm is now just over an acre in size, compared to nine to 12 acres in the 1970s.

Competition for land is not just caused by population pressures, however. A limited centralised record of land ownership and decades of unrest and population displacement, have made it difficult to determine who rightfully owns land. Latent discord between the majority Hutu population, which is well represented politically, and the minority Tutsi population, further complicates land ownership matters. Competition for land could increase in some African countries, particularly those with: weak land ownership regimes; political systems that are, or are perceived to be, organised along ethnic lines; rapidly growing populations; and limited unutilised arable land. That competition could quickly turn to violence.

African populations are exposed to both physical and economic food and water insecurity. Food insecurity in Africa is often caused, not by physical shortages, but by political factors that restrict access to food. For example, in South Sudan - parts of which experienced famine conditions in 2017 - food shortages were caused by conflict and a [100-fold increase in the cost of work permits](#) that aid agencies pay to the South Sudanese Government.

While parts of Africa could suffer from physical food shortages, most of its food insecurity is attributable to socio-economic factors, such as: weak land ownership regimes, conflict, restrictive trade practices or weak governance.

## Food Production Requirements in Africa

Africa remains the region most at risk of a food crisis. As the population increases, food demand will rise and as the population becomes more urban and wealthy, there is likely to be an associated rise in demand for a greater variety of food. The [World Bank](#) estimates that demand will have doubled by 2020, compared to 2010. Africa has so far met rising demand for food by increasing the amount of food imported from the global market. In the long-term, however, that will be unsustainable, as food import bills will eventually overwhelm African economies. There is tremendous scope for an increase in the level of intra-Africa trade, as currently only [five per cent](#) of cereal imports in African countries come from other African countries. Trade outside of Africa is even more limited; Thailand currently [exports more agricultural products than all sub-Saharan countries combined](#).

Furthermore, if African farmers increased their yields to those achieved by farmers in other developing countries, then the food supply would double or treble. Crop yields in developed countries are even more impressive, but they could also be achieved in Africa with the right agricultural development policies. In Europe, the United States and China, it is common to produce three tonnes of grain per acre, in sub-Saharan Africa farmers average only half a tonne. The Guinea Savannah Zone stretches over 25 countries and 600 million hectares, which includes 400 million hectares of farmable land. It is a largely untapped resource as, according to the World Bank, less than [ten per cent](#) of that land is used for food production. The zone accounts for about one-third of the land in sub-Saharan Africa and supports the livelihoods of more than one-quarter of all African farmers.

While almost two-thirds of the African population lives in rural areas, the continent's agricultural sector is underdeveloped. Water is one of the main constraints in the further development of African agriculture. Most of the continent relies on rain-fed agricultural production which, in turn, depends on consistent levels of rainfall from one season to another. Increasing the capacity of water storage systems that capture rainfall during the rainy season for use in the dry season, would help the development of African agriculture significantly.

The large amounts of available land have drawn international companies from the US, Europe, South America and China to parts of Africa. They believe that the Guinea Savannah Zone can be developed along similar lines to the *cerrado* grasslands of Brazil, which were developed with the help of Japanese investors in the 1980s and 1990s. The *cerrado* is now one of the world's main soy-exporting regions, with most of its yield going to feed livestock in Europe and China.

That type of investment, if done in an equitable way, could benefit Africa. Responsible investment will create employment, diversify economies, improve infrastructure and raise living standards. On the other hand, if it displaces the Africans who already farm the land without proper compensation and then sends the crops overseas, it will only further weaken African food security and create animosity.





### Improving Governance: The Key to Harnessing the Demographic Dividend and Reducing Food Insecurity

Africa has the potential to overcome its low level of economic development and ensure that the bulk of its population has access to food and water. The main factor holding it back, is a lack of well-governed institutions that uphold land laws, give Africans faith in their political



processes and rationally regulate agricultural production. Responsible political leadership and a strong rule of law will help to ensure that Africa reaps the rewards offered by its demographic opportunity.

Outdated regulations limit access to seeds, increase the cost of fertilisers and prevent agricultural specialists from crossing borders to share knowledge. Insufficient infrastructure increases transport costs, while export bans and unnecessary permits and licences act as barriers to agricultural development and international trade.

Infrastructure development has improved in Africa, but at a slower pace than in other regions of the world. Foreign investment, which is vital to quicken the pace of infrastructure development, is limited due to poor governance on the continent. The East Asian tigers modernised through state-led development that generally-speaking improved the living conditions of most of their populations. If African countries can emulate that model by diversifying their economies to generate strong economic growth and employment, they will be able to use the wealth that accompanies that growth to invest in education, health and family planning.

While the international community can assist in a small way to help Africa make the most of its demographic potential, most of the effort will need to come from within Africa itself. Only Africa can create the social and political environment that attracts high quality investment to improve its cities, develop its economies and drive agricultural expansion to avoid rising food insecurity.

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Published by Future Directions International Pty Ltd.  
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