While Africa’s recent history has been troubled and it still faces many dire challenges in the twenty-first century, from a Big History perspective, Africa has a tremendous opportunity in the next few centuries to play a huge role in global collective learning and the next rise of complexity.
For the majority of human history, sub-Saharan Africa has been at the forefront of rising complexity. Africa was the cradle of *Homo sapiens*, who evolved there an estimated 200,000 years ago, and began their most crucial mass migration to the rest of the world approximately 64,000 years ago. From there, Africa remained well suited for small, closely knit foraging communities for many thousands of years. Then, around 3000 BCE, West Africa gave rise to agriculture. In the past 2,000 years, sub-Saharan Africa has been host to some of the mightiest states and empires of the ancient world. In comparison, the past 500 years have been a painful time in Africa’s history, with the slave trade and colonization, as the world zones came crashing together. In the nineteenth and twentieth centuries, sub-Saharan Africa fell behind other parts of the world in industrial complexity and economic prosperity. However, the Anthropocene offers an opportunity for Africa to play a central role in the many breakthroughs in complexity to come.

**POPULATION & COLLECTIVE LEARNING**

Sub-Saharan Africa has always possessed a lot of potential for collective learning. The two main drivers of collective learning are population numbers and connectivity. You need a pool of potential innovators to dream up ideas and increase the chances of a breakthrough, and you need connectivity to share (and combine) good ideas across a society or a region.

With the Bantu spread of agriculture across sub-Saharan Africa, population numbers grew immensely, nearly tripling from 7 million in 500 BCE to 20 million people in 500 CE. A larger population of potential innovators was certainly good news for collective learning, as agrarian villages transitioned to cities and states, and needed engineers, scribes, rulers, and other specialists. While the independent states of East and West Africa were at their height in the first millennium, larger settlements, confederations of villages and regions, and alliances of tribal kings began forming on the central and southern part of the continent as well.

During the next thousand years, states had begun forming in every region of Africa, while agriculture became further and further entrenched. The African population continued to grow more dramatically than ever before. Lands previously devoted to supporting small numbers of wide-ranging forager groups were given over to farms. Populations continued to grow, reaching an estimated 100 million in 1600. This was the high point of the sub-Saharan African populations until the twentieth century.

Although Africa’s population and web of collective learning was greater than ever before, the various environments of the region could not support much more than the 100 million with traditional agriculture. Mass famines became more common, as did warfare between emerging states. And the predations of the slave trade by European traders to the Americas, and by Islamic traders to Southwest Asia, continued to sap the population. As a result, the population of sub-Saharan Africa hovered between 90 million and 95 million between 1700 and 1900.

It was only after the Green Revolution of the mid-twentieth century, where genetically modified crops were introduced into Africa to combat hunger, that the population grew far beyond 100 million. Famines in Africa were still common, most notably in Ethiopia in the final decades of the twentieth century, and the standard of living for most Africans remained low. However, by the year 2000, the population of sub-Saharan Africa had grown to 659 million, a jaw-dropping increase of population in the space of a century, which completely outstripped any population growth ever seen on the African continent.

Only 15 years later and that population is closer to 800 million. By 2050, it has been estimated that sub-Saharan Africa will have a population of 1.5 billion. Past 2100, the most recent U.N. estimates predict that the population of Africa alone could approach
3 billion people.

**POPULATION SLOWDOWN**

The reason for this explosive growth is that Africa’s birth rates remain quite high, whereas population growth is gradually slowing down elsewhere in the world. In the 1970s and 1980s, there were many fears that the population would continue to grow until some sort of catastrophe hit the globe. Then, in the 1990s and 2000s, it became apparent in developed regions like North America and Europe that populations were slowing down or even shrinking. Even in developing nations like India or China, population growth is slowing down and appears to be headed toward stable levels in the later twenty-first century. While there are still many dangers concerning overpopulation, this slowdown is welcome news about humanity’s future.

This is not just because of the availability of birth control. The added reasons for this demographic slowdown are that when countries begin to develop industrial economies, there are many more opportunities for careers and diverse lifestyles, children are more expensive to raise and take longer to educate to high school or even university age, and so more people opt to have one or two children, or no children at all. At a stroke, industrial prosperity has become the most successful and reliable form of population control in human history.

Compare this to an agricultural society, where children are less expensive to educate, can begin helping out on the farm when they are in their early teens, and who are instrumental in looking after their families when their parents and grandparents grow old. In an agricultural society, it is in your economic and social interests to have many children. The problem is that in Africa, many regions continue to be dependent on agricultural lifestyles, which sustain huge population growth rates – in impoverished regions that are already the least equipped to cope with overpopulation. It is therefore extremely important that African countries encourage the development of their economies, particularly in the industrial sector, to prompt this slowdown of population growth that appears to have taken hold elsewhere in the world.

**WHAT LIES AHEAD FOR ANTHROPOCENE AFRICA**

Talking about Africa’s prospects in the twenty-first century and beyond can tend to focus pessimistically on the dire challenges and many problems that Africa currently faces. However, a Big History perspective allows some observations that would be rare in the future projections of many economists and demographers. On the timescale of several centuries, an Africa with a large population of potential innovators is the furthest from a negative thing. A large continent with a diverse population of a few billion people is a great thing for collective learning and rising human complexity as we continue to unlock more technological and scientific advancements at an accelerating pace.

The immediate challenge is to raise the standard of living of most Africans, create more widespread access to education and career opportunities, and to stave off population disasters by leveling off growth rates. The best way to do all those things is to help African states develop their economies. As the recent history of Europe, America, and East Asia shows: if you develop your economy, the standard of living increases, the birth rate decreases. If we do that, then a century or two from now, it is distinctly possible that a large and populous Africa will not only offer a decent quality of life to its people, but play a central role in the human web of collective learning and the global economy. In that sense, sub-Saharan Africa has the chance to revive the roles played in the first millennium by the wealthy and powerful civilizations of Ghana and Aksum.

The question is how to get there. The primary goals for sub-Saharan Africa in the Anthropocene are to 1) industrialize in an environmentally sustainable way and 2) lower
birth rates while continuing to raise standards of living. In the development of Euro-
pean economies in the nineteenth century, and in Asian economies in the twentieth
century, a pivotal role is played by industrialization. Indeed, those African economies
that have embraced industry in recent decades have done the best. Countries like
South Africa have made major strides in recent decades. Conversely, those African
economies that still have a dependence on agriculture have the lowest growth rates
and some of the lowest standards of living. Countries like Sierra Leone, Zimbabwe,
and the Democratic Republic of Congo have learned this to their cost in recent years. It
certainly does not hurt to have mineral resources or fossil fuels to sell, but not all Af-
rican countries have that option either. This has benefited the peoples of Nigeria and
also smaller countries like Equatorial Guinea, Gabon, and Angola. However, on the
scale of decades and centuries, when these resources dry up (or when the world
turns to more renewable resources) there needs to be a more permanent economy on
which a country can fall back. The best hope for African economies is to continue de-
veloping their industrial and technology sectors.

When it comes to population, having a large sprawling population is no longer the ma-
jor benefit that it used to be in the agrarian era. While the most populous countries in
sub-Saharan Africa are Nigeria (by a long lead), Ethiopia, the Democratic Republic of
Congo, and South Africa, two of those countries – Ethiopia and the Democratic Repub-
lic of Congo – are not punching their economic weight and score quite low in human
development. It is no coincidence that both countries have a huge dependence on non-
industrial forms of commerce, like agriculture. Meanwhile, Nigeria holds nearly 25
percent of sub-Saharan Africa’s population but gains a lot of its GDP from its many
natural resources, rather than manufacturing. Also, considering the immense amount
of wealth that flows through the country, it rarely trickles down to make the average
income of a Nigerian equal that of the average income in the top 10 African countries.
And the human development of Nigeria leaves a lot to be desired. Meanwhile, smaller
countries like Gabon and Botswana have high average incomes and human develop-
ment scores, and must continue to invest in manufacturing to ensure prosperity in the
future. To become a prosperous economic powerhouse in the Anthropocene, you need
to have both a sizable population and have them engaged in manufacturing and tech-
nology. In previous decades, East Asian countries like Japan, China, and Korea have
learned this lesson to their profit. Africa holds the potential to follow in their footsteps
in the next century.

If sub-Saharan African economies develop and remain stable and prosperous, the
greater number of opportunities in education and careers, a rising standard of living,
and an incentive to have fewer children would slow down population growth and stave
off catastrophe. The key to delivering Africa to a foremost role in the global network of
collective learning in the twenty-first century is to develop their economies. From a
Big History perspective, this will be a major issue in the next few centuries of the An-
thropocene. Today, sub-Saharan Africa makes up 12 to 15 percent of the total global
population. Current estimates are that by 2100, they may constitute 30 percent or
higher. This is a lot of people – a lot of potential innovators – who can contribute to
human collective learning in the next few centuries, bringing on whatever amazing
transformations still await us. Conversely, if sub-Saharan Africa should sink into pop-
ulation crisis or economic disaster, the shock waves of such a catastrophe in such a
large share of the world’s population would be felt around the globe.

Observing the story of 13.8 billion years of rising complexity, we must not take that
trend for granted. It is easy to overlook all those human societies that collapsed into
ruins, those millions of species that went extinct, and those areas of the vast cosmos
that remain cold and lifeless. The rise of complexity is never guaranteed. The fate of
human complexity in the next few centuries may very well turn on the fate of Africa.
Sources


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Image of combine harvester working field, Western Cape, South Africa. © Richard Du Toit/Minden Pictures/Corbis.

Image of graduation of teachers from rural communities in the Northern Province of Sierra Leone. They trained at a local college for three months to become certified and eligible to be paid by the state. There are 110 people who trained in this program. Chiefdom of WW. Yagala. © Karen Kasmauski/Corbis.

Image of automated automobile assembly line in Durban, South Africa. © Charles O’Rear/Corbis.

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