

# Africa is the perfect testing ground for adapting to the Anthropocene epoch

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Credit: Mostafa El Shershaby from Pexels

There's a growing belief that asserts that our civilisation is embarked on a new epoch, the [Anthropocene](#). This new epoch will be defined by human domination of earth's physical and natural environment. It's more

popular slogan is climate change.

It replaces the [Holocene epoch](#), a period stretching back 11 700 years during which conditions were uniquely conducive to the global spread and flourishing of Africa's original Homo sapiens.

When did the Anthropocene epoch start? This is the big issue [still being debated](#) by an authoritative international and multidisciplinary working group of earth scientists. They are considering what date and geological marking – the so-called "golden spike" – specifies the epoch's commencement.

How long the Anthropocene will last, and what will be its most enduring attributes, will not be driven and decided scientifically. It will be driven politically, at all levels of human society. And Africa, which cradled humanity, is likely to be one of our epoch's earliest and most-important testing grounds.

## **More about politics than science**

Political issues are implicit in the scientific debates about dating and marking. Some in the Anthropocene working group advocate it began in [1750](#). This marked the start of the industrial revolution.

But a majority favour a more recent starting date – 1950. This marks the point at which compounding effects of several key environmental indicators of global stress began to accelerate.

The more recent starting point should add pressure on those most responsible for causing these trends to resolve to mitigate them. These same actors are also among the most wealthy and capable of doing so.

The period since 1950 also coincides with a period of unprecedented

global peace, prosperity, power diffusion and [citizen empowerment](#). Although Africa benefited least from these advances, a 1950s commencement of the era also coincides with the continent's wave of national liberation and [construction](#).

And Africa's views on how to deal with the damage done and current threats will matter greatly if our civilisation is to adapt and flourish.

## Great extinctions

The leading geological candidate for marking the start of the human age is also the growing evidence of radiation caused by the proliferation of 1950s testing of nuclear weapons.

Although the first uranium enriched for US weapons was extracted from Africa, South Africa is the only African power believed to have actually tested a [nuclear weapon](#).

Had politics failed to control their sudden massive use in October 1962 during the US-Soviet Cuban missile crisis, innocent people all over the world would have perished. A marker of that scale would have rivalled the last great extinction of life on our planet more than 50 million years ago. That marked the start of earth's sixth and continuing overarching [Cenozoic Era](#).

Should the Anthropocene end with another mass extinction, it almost certainly will not be the result of decisions of just two men with the power to end our civilisation in an instant. But neither can this be as easily prevented. It now appears we are all in varying ways part of the problem and efforts to deal with its many aspects.

## Reasons for hope

There are reasons for hope. I offer just three, all bearing on Africa's future.

The US and China, the two nations responsible for emitting 40% of the chemicals considered detrimental to a liveable climate, have announced a joint effort to fulfil their respective [global commitments](#) on emissions. This is part of the historic framework agreement [adopted in Paris](#) last December by all members of the United Nations.

Their commitment should help accelerate national decisions to meet globally agreed targets. Progress will be particularly important for Africa where global warming across large areas is already rising at [twice the global mean](#).

Another step in the right direction is the decision by African countries to develop and apply scientific evidence more systematically across several relevant disciplines and in ways that will be more useful. This is important because Africa's leaders and peoples will be better informed about how to adapt to the effects of [climate change](#).

Issues include better land use and food production, water resource development and management, public health and energy.

Concrete steps have been taken to make this happen. A coalition of South African universities, in partnership with the International Institute of Applied [Systems Analysis](#), have created the [Southern Africa Systems Analysis Centre](#) to train more than 150 PhDs over the next nine years. There is also a commitment to provide short re-training stints for those further along in their careers. The importance of this is twofold:

- governments will be able to adopt more evidence-based analysis in deciding on more cost-effective strategies of national and regional adaptation; and

- they will have more capacity to do so.

A third source of hope is the African Union's (AU) commitment to peaceful integration and wider and deeper democracy. Africa's spreading national democratic experiments of the 1990s appear to have stalled. This is despite the fact that in 2007 all states unanimously adopted the African Charter on Democracy, Elections and Governance. So far 35 of the AU's 54 members have ratified the charter.

There are [too many bad examples](#) of countries amending or ignoring constitutionally mandated presidential term limits, electoral abuses, and authoritarian tendencies.

But environmental realities will require ever more robust, resilient and inclusive democratic experiments across Africa and everywhere else. As Jedediah Purdy concludes in his book [After Nature](#):

*Either the Anthropocene will be democratic or it will be horrible.*

Purdy starts from Amartya Sen's [famous observation](#) that:

*No famine has ever taken place in the history of the world in a functioning democracy.*

He argues that environmental catastrophes are the joint products of natural and human systems.

Africa could provide valuable lessons to others on how to adapt to the new realities of the Anthropocene, particularly in how to strengthen democracy. This is because it has fragile states and history of surviving and overcoming natural and man-made deprivations.

These may generate new democratic ingredients, innovatively mixed to

suit its highly diverse regional population, that prove vital for sustaining democracy.

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