FEATURE: Nature for recovery and resilience

kappa strain and the state of t

30 November, 2020

[Translate]



Alex McNamara, Water Lead of National Business Initiative (NBI), South Africa says that valuing the natural environment and its contribution to economies and societies is a sure way to improve climate resilience – and our ability to adapt to climate change. This is one of a series of blogs on 'Accelerating adaptation action in Africa' published by CDKN to frame the Africa segment of the <u>Climate Adaptation Summit</u>, January 2021.

One thing Africa needs to adapt to climate change is nature.

This may seem obvious, but it deserves emphasis. Functioning natural systems underpin climate adaptation. Why? Because functioning ecosystems, rivers and landscapes are Africa's drought, flood and fire prevention. When it comes to climate change, nature *is* disaster risk reduction.

Certainly, where I come from, South Africa, this context is increasingly understood. As a society we have begun to see how a strong natural system will support our climate resilience. What has possibly been more interesting, however, is the recognition that nature can also play a meaningful role in economic recovery, in the aftermath of the COVID-19 pandemic.

Amplifying existing vulnerabilities

As it stands, climate change poses severe risks to South Africa's socio-economic development. Heightened temperatures and increased evaporation threaten our agricultural and water sectors, in particular. The spread of invasive alien trees, which are non-indigenous to the country, is also being accelerated by climate change. Unfortunately, in South Africa <u>invasive trees spread easily, are thirsty for water and tend to displace natural biodiversity</u>. The result is drying rivers, biodiversity loss and increased fire risk, in a vicious cycle of warming, invasive vegetation growth and greater vulnerability.

The question is thus rightly asked, what do we do about it? How do we address this simultaneous loss of nature, freshwater availability and climate resilience?

Understanding our natural capital dependencies

The first part of the answer, I would argue, is to recognise our economic and social reliance on nature, especially in the face of a warming planet. For business and policymakers, this is about understanding the natural capital *dependencies* of cities, companies and economies, rather than just their natural capital *impacts*. This moves the discussion from being reactive and project specific, to being proactive and strategic.

It is thus unsurprising to see organisations such as We Mean Business, a climate change coalition, also supporting the new <u>Business for Nature</u> initiative. The work of the Task Force on Climate Related Financial Disclosures (TCFD) has begun the critical process of ensuring organisations assess and quantify their physical risk from climate change. Little surprise then that the <u>Task Force on Nature Related Financial Disclosures</u> (<u>TNFD</u>) is under development, to bring the thinking full circle. Nature is essential for risk reduction and economic resilience not only under a warming climate, but right now.

Thus, the first part of the answer is to extend our thinking on risk, and to see how natural capital is essential for economies to survive and thrive, especially in times of uncertainty.

Harnessing economic opportunity

The second part of the answer, I think, lies in harnessing key opportunities. South Africa has a long-standing public employment programme focused on maintaining and restoring ecosystems, through initiatives such as <u>Working for Water</u> and <u>Working on</u> <u>Wetlands</u>. But what is interesting is our increasing focus not only on public employment schemes, but on commercially driven decision making by both the public and private sector, to unlock the opportunities inherent in adaptation.

I'll offer a few examples. eThekwini Municipality, the municipality that includes one of South Africa's biggest coastal towns, Durban, has recognised that there is a better way to address its significant flood risk than simply relying on built infrastructure. Rather, they are now using a <u>portion of the City's Water Department budget to fund ongoing</u> <u>river clearing work</u> on public land. Why does this make financial sense? Because it reduces damage to the City's stormwater systems brought about by a combination of poor waste disposal and intense rainfall events, which wreak havoc downstream. The result is reduced costs from flood events, the creation of sustainable river rehabilitation teams and greater climate resilience. This is adaptation paying for itself.

Another important opportunity is the clearing and productive use of those thirsty invasive trees. Excellent work is underway, assisted by South Africa's Department of Environment, Forestry and Fisheries (DEFF), to support the development of small businesses that clear invasive trees and sell Forest Stewardship Council (FSC) certified artisanal charcoal to both local and export markets.

The result of these efforts is FSC certified clearing and maintenance of areas that allows natural vegetation to re-establish, wetlands to return and water availability to heighten in a semi-arid country. And of course, sustainable job creation and the flow of vital incomes into rural economies. There are also other commercial opportunities being implemented, including the development of <u>high quality furniture that is handcrafted from alien trees</u>, in what is a growing domestic market. These are real businesses that exist now and that can be profitable.

Recent hydrological modelling undertaken in South Africa further suggests something interesting: that the clearing of non-indigenous trees will not only release good volumes of water for ecosystems and human consumption, but will also often do this during drier periods. In other words, more water should be available when it is most needed. Handy for a country facing significant droughts from both climate variability and climate change. It turns out that harnessing the commercial opportunities in combating invasive trees may be more useful than we thought.

Finally, the third piece of the opportunity puzzle is arguably eco-tourism. Eco-tourism thrives where nature is in balance and biodiversity is sustainably protected. In our current global malaise we may struggle with this idea, but there will come a time again in the world when tourism, and in particular eco-tourism, flourishes. And as we know, tourism is an industry that is so vital for employment and livelihoods in much of Africa.

Nature for adaptation in Africa

So, if we ask ourselves 'what will it take for Africa to adapt sufficiently to climate change?' An important part of the answer must be: protecting and harnessing nature. For disaster risk reduction, water security and economic development, all critical aspects that the Continent needs.

Restoring nature is already helping cities to cope better with disasters, practically and financially. Preserving nature is as an opportunity for small business development and sustainable rural economies, while being integral to eco-tourism.

Nature is needed for economic recovery and climate resilience.

Image: Sabie River, South Africa, courtesy Charles Peterson.