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New models to fund conservation are needed

With climate change impacts already upon us, the conservation of our protected areas is no longer a nice to have, it is a priority. One important supporter of global conservation efforts is ecotourism. However, the COVID-19 pandemic has exposed the vulnerability of this conservation approach. Therefore, we must urgently find new and innovative ways to value our natural capital, our author maintains. A look at the conservation crisis in Africa and a plea for global commitment.

By Annie Sugrue

Africa has 1,967 key biodiversity sites with 7,800 terrestrial protected areas that support the most abundant and diverse large mammal species in the world. Africa is also the custodian of the world's second largest rainforest, the Central African Congo Basin, which harbours a major proportion of global terrestrial natural assets, including significant biodiversity and critical ecosystem services that provide, amongst others, high levels of carbon sequestration and storage. Our natural capital is our greatest wealth, and it is largely upheld by ecotourism. But this is a fragile economic model that can be easily disrupted, as the past two years have shown.

Wildlife-based tourism and conservation efforts heavily affected

The COVID-19 pandemic has had a serious impact on conservation efforts in Africa, for the economic downturn has been catastrophic across the world. Some of the fallout was tragic. For instance, twelve rangers who protect mountain gorillas in the Virunga national park, Democratic Republic of the Congo (DRC), were murdered. Millions of jobs all over Africa have been lost as a result of lodges and nature reserves closing, along with national borders, and recovery will take time. While the travel restrictions have seriously curtailed illegal trade, the lay-off of rangers is exposing conservation areas to an increased risk of poaching and as soon as borders reopen, illegal trade is likely to flourish again.

Wildlife-based tourism in Africa employed 3.6 million people and generated an estimated 29 billion US dollars (USD) per annum before March 2019, with these funds largely used for conservation. By April 2020, 99 per cent of the tourists had cancelled, and most have not yet returned, taking with them both park fees and the billions of dollars they spend on hospitality, services, retail, etc. The reserves were left high and dry, unable to pay their staff, who carry out essential conservation services. Most protected areas are state-owned and managed, but there are an increasing number of private lodges and ranches as well as NGOs and private sector entities forming collaborative management partnerships with the state and others. Via Community-Based Natural Resource Management (CBNRM) – an approach that integrates conservation of our natural assets while supporting rural livelihoods of the communities that live inside or adjacent to protected areas – community-owned and run conservancies are supported. The approach focuses on diversifying local value chains while many continue to rely on income from wildlife and ecotourism. Zimbabwe's Communal Area Management Programme for Indigenous Resources (CAMPFIRE) was a champion for this approach in the 1980's across the Southern African Development Community (SADC), and it spread to Mozambique, Botswana and Namibia in the 1990s. There are more recent examples in Malawi and South Africa, the latter being supported by the African Safari Foundation (ASF), which works across sub-Saharan Africa to empower communities to take control of their own natural resources. These are critical interventions, since many of these reserves form a part of iconic wildlife reserves, including the Kruger National Park in South Africa.

Funding for conservation also comes from a range of global and regional sources, but even when there is no pandemic, the sector is chronically underfunded, and African states are unable to provide the resources to adequately fund conservation as they struggle to uplift their people from poverty. South Africa, for instance, needed to reallocate resources within the national government department responsible for the environment and nature reserves to plug the nearly 700,000 USD gap caused by a

> What happens if we suffer another economic shock?

lack of visitor fees to support the state-owned SanParks responsible for the reserves. It has become patently obvious that new models to fund conservation are needed.

Africa's natural capital assets: extensive, but under threat

The Central African Congo Basin stretches mainly across six Central African countries, covers over 310 million hectares of primary rainforest and is the second largest rainforest in the world. The countries include Cameroon, the Central African Republic (CAR), the Republic of the Congo, the DRC, Equatorial Guinea and Gabon. Apart from its forest cover, this rainforest is the world's largest tropical peatland, estimated to store more than 33 billion tonnes of carbon; some put the figure at 80 billion tonnes. Additionally, its trees sequester up to 1.2 billion tonnes of CO_2 each year. The rainforest's cumulative carbon store is equivalent to at least three years of global fossil fuels emissions, and its atmospheric release would seriously undermine attempts to minimise climate change. The DRC has the largest forest cover area, with 107 million hectares, which is 60 per cent of Central Africa's lowland forest cover on 44 per cent of the land, but Gabon has 87 per cent of its land under forest, the highest percentage of the six countries. The Congo Basin is also a uniquely biodiverse area and has the world's largest population of forest mammals, with a total of 400 species, over 10,000 species of tropical plants and more than 1,000 bird species, 38 per cent of which are endemic. The forests produce over 75–95 per cent of the region's rainfall through evaporation and evapotranspiration. In addition, over 75 million people live in the area in 150 distinct ethnic groups, some of them in abject poverty.

Satellite imagery carried out by the University of Maryland, USA in 2018 showed that 165,000 km^2 of forest were lost from the Congo Basin between 2000 and 2014, mostly because of small-scale agriculture. The study concluded that at the current rate of deforestation the Congo Basin's forests would not survive past the end of the century. Conserving even one per cent of the basin's forested land would mean preventing the release of 230 million tons of CO_2 into the atmosphere. However, inhabitants of the forest are poor and rely on its natural resources to survive and this will be exacerbated by the economic impacts of the COVID-19 pandemic. With a lack of alternatives, poverty in the region is putting pressure on its natural resources, driving approvals for large-scale industrial agriculture, illegal logging, mining and other prospecting as well as livelihood support. Notwithstanding the need to deal with the growing humanitarian and health crisis, we cannot ignore the conservation crisis which is also in the making. If we carry on regardless, more economic shocks will come.

How new models for sustainable conservation could look like

Building resilience must encompass the social development needs of developing nations which house an estimated 689 million people living in extreme poverty, i.e. on 1.9 USD per day. Two out of three of these people live in rural settings and are dependent on the natural environment to provide a livelihood. In the Congo Basin, 72 per cent of DRCs population live in extreme poverty, and under these conditions, it is easy to understand why poaching holds an allure and slash and burn small-scale agriculture is a main source of income. New approaches are needed to enable these people to earn a living while conserving natural capital. What could they look like?

Government and private-sector led initiatives

One relatively new concept is the Natural Capital Approach (NCA). It broadly defines natural capital as the physical assets within an ecosystem that deliver economic value through ecosystem services. It can be cashed in, as when a tree is chopped down, or it can be retained to continue providing ecosystem services of value for longer. NCA has been adopted by the business and investment sector as a solution to fight climate change. The World Forum on Natural Capital took place in Edin-

Owing to the COVID-19 pandemic, income from wildlife-based tourism in Africa has almost entirely collapsed.

Photo: Silvia Richter

burgh, Scotland, in 2017. A growing number of organisations (among them the International Union for Conservation of Nature – IUCN, the UN Environment Programme and the World Business Council) are supporting this approach and form part of the Capitals Coalition whose ambition is that by 2030 the majority of businesses, financial institutions and governments will include natural, social and human capital in their decision-making. The World Economic Forum predicts that nature positive plans as put forward by the Natural Capital movement could unleash ten trillion USD and create 395 million jobs by 2030. This effort could be bolstered if Article 6 of the Paris Agreement were activated at the next UNFCCC COP26 in China this year and opened up international carbon markets. However, critics of this approach believe it to be more of the same, framing nature as capital and services where putting a price on it assumes that its entire value is captured. They say that if this value is embedded in a market-based economy, it links it only to monetary investments, unlike an ethical approach, which centres on social justice and equity with nature (also see article on pages 10–13).

More ambitious programmes include the Race to Zero Global Campaign that mobilises 708 cities, 23 regions, 2,162 businesses, 127 of the biggest investors and 571 higher education institutions committed to achieving net zero carbon emissions by 2050. With 120 countries, this is the largest ever alliance, covering almost 25 per cent of the global CO_2 emissions and over 50 per cent of global GDP.

Community-based approaches

People lie at the centre of solutions to protect our biodiversity and preserve peatlands and forests. Community-Based Natural Resource Management (CBNRM) is a people-centred approach to conserving our natural capital assets such as water, soil, forests, peatlands and diversity. When we invest in supporting local people who live in and around areas that are rich in natural assets, they will become the custodians of these resources. CBNRM gives rights over land and natural resources to local communities and builds skills and capacity so that these resources can be sustainably utilised for generating income. However, if the main income model is ecotourism, without diversifying into other economic areas, these communities will suffer economic hardship when economic downturns strike, as in the case of the COVID-19 impacts. CBNRM areas need to be linked to local and regional markets so that sources of income from sustainable fishing and the sustainable beneficiation of forests resources are enhanced and supply chains are not broken, even in times of economic stress. Ecotourism can provide a cherry on the top, but it should not be the main source of income. Resilience is critically important to conservation areas so that they remain intact for the prosperity of our planet and its people.

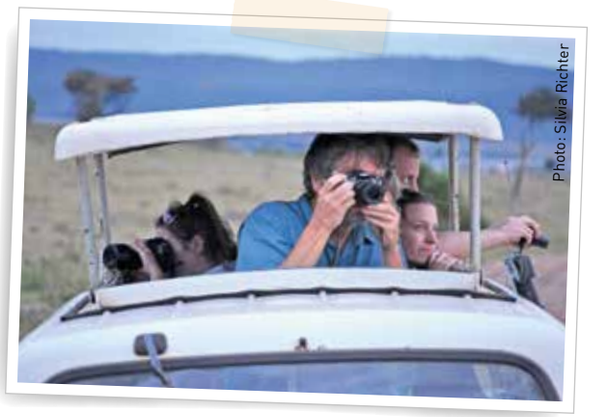

Photo: Silvia Richter

Forests provide a wide variety of resources that can be used in value addition, such as wood and charcoal fuel, furniture making, building materials, products, clothing, wood pulp for paper, flooring, cellulose fibres, packaging and so on. However, forestry materials need to be sustainably harvested or their use could contribute to the reduction in forest cover. Gabon and Republic of the Congo have chosen to invest in sustainable forestry value chains where beneficiation adds value to forestry and natural resource products creating jobs for local people rather than exporting raw logs. Lee White, a former conservationist and Gabon Minister for Forests, Water, Environment and Climate Change, has been reported as saying that "unless we make timber into a precious resource we won't be able to maintain the trees". He aims to create 200,000 forest-related jobs over the next ten years and increase forestry's contribution to national income by 40 per cent, up from 4 per cent. White says that if you sell raw timber you get 200 USD per cubic metre, but if you turn the same timber into a resource you can get up to 2,000 USD, and with very precious woods, the payment increases. Gabon signed a ten-year deal in 2019 for 150 million USD with Norway so that it could earn income from keeping its forests intact as part of the Central African Forest Initiative (CAFI).

Support for community ownership

Community forestry management practices are taking root in Africa. The SADC Protocol on Forestry promotes "the rights of communities and facilitating their participation in forest policy development, planning and management". A SADC-wide training programme has resulted in the rolling out of participatory forest management in many of its member states. Zambia, for instance, has devolved the control of 27,846 hectares of land to 16 communities, 13 of which have legal control. This process is also happening in the DRC, where two million hectares of the country's community rainforest concessions have already been, or are about to be, handed over to communities with the potential for up to 75 million hectares to be made available for the scheme. Early evidence from the DRC confirms research from Latin America by the World Resources Institute which showed that communities "maintain or improve their forest carbon storage" when they have ownership. It requires training and capacity building so that communities can meet the sustainable management requirements of their concessions, which they own in perpetuity. However, these efforts require financing, and as the communities do not have the ability to navigate the process alone, nor to pay for training, these schemes need support.

Long-term commitments are needed

There have been calls to recognise our global interconnectedness and understand how losing natural resources, particularly in areas rich with carbon stocks, is detrimental for every citizen in the world. The UN Environment Programme (UNEP) has made an urgent call to the international community to establish emergency funds to offset the losses of revenue from ecotourism during the pandemic. But what happens if the pandemic continues despite vaccines, or if we suffer another economic shock? We must be bold and recognise that in some areas of the world, natural capital assets must remain protected, or our world will forever be transformed. These resources are a global good, and it is starkly inequitable that some of the poorest nations in the world are insufficiently supported to conserve these resources. A global commitment is needed that guarantees long-term support which cannot be retracted. A global climate tax would go a long way to spreading the responsibility for conservation of natural assets to those who are better able to afford the cost of conserving these precious resources and preventing catastrophic climate change.

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