

## BUILDING SUSTAINABLE FINANCE FOR RESILIENT PROTECTED AND CONSERVED AREAS: LESSONS FROM COVID-19

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### ABSTRACT

There is widespread concern that funding for protected and conserved areas (PCAs) will decline substantially due to the COVID-19 pandemic and related economic outcomes. This paper makes the case that the impacts of the global crisis do not in themselves introduce novel financial threats to PCAs; rather, they serve to magnify, intensify and exacerbate existing structural and systemic financial constraints and weaknesses. To respond appropriately, it is therefore important to understand the status of PCA finance before COVID-19, and to address the underlying barriers and constraints to PCA financial sustainability. Based on known PCA finance challenges, and predicted effects from COVID-19, the authors present nine overarching recommendations for building a sustainable finance base for PCAs: diversify the funding base; improve spending effectiveness and efficiency; ensure domestic budgets continue to support PCAs; increase international development finance and philanthropy; strengthen revenue generation from tourism; support PCAs governed by Indigenous peoples, local communities and private actors; include local communities in PCA governance and benefits; engage the finance sector and attract private capital; and raise public support and interest in nature conservation and PCAs. Specific activities and tools are provided to support each of these recommendations, whilst respecting the current global context.

**Key words:** conservation finance, protected area finance, economic crisis, finance mechanisms, BIOFIN

### THE STATE OF PCA FINANCE PRE-COVID-19

Estimates of the costs of maintaining an effective and globally representative system of protected and conserved areas (PCAs) have varied over the years, the most recent being US\$ 67 billion p.a. (Waldron et al., 2020). Whatever the exact figure, it is clear that PCAs faced substantial funding challenges even before the COVID-19 pandemic struck. The current global protected area network receives only approximately one-third of the funding needed for effective management (Waldron et al., 2020), and less than a quarter of terrestrial PCAs have adequate staff and budgets to achieve effective conservation (Coad et al., 2019). Data from 26 countries participating in the UNDP Biodiversity Finance Initiative (BIOFIN) indicate that every billion dollars of investment in biodiversity

conservation will lead to an annual reduction in the proportion of threatened species to total species of about 0.57 per cent (Seidl et al., 2020a).

These shortfalls are most pronounced in the Global South. For example, a survey of more than 400 PCAs in South East Asia found funding gaps between 25 and 300 per cent (Castillo et al., 2015). Even PCA managers in North America report that a fifth of their budget requirements remain unmet, with the US National Park Service reporting US\$ 12 billion in deferred maintenance against an annual budget of approximately US\$ 4 billion (NPS, 2020).

Global calls to expand the area of land and sea under protection means funding needs will be increased

further. While Waldron et al. (2020) make a strong economic case for the expansion of PCAs to 30 per cent of the Earth's surface by 2030, the annual cost of achieving this is estimated to be US\$ 103-178 billion (including the US\$ 68 billion required to manage the existing system effectively). This is approximately equal to the current national public sector investment in biodiversity conservation, restoration and sustainable use globally (Seidl et al., 2020b), and some four to seven times more than the estimated US\$ 24.3 billion that is currently being spent on PCAs (Waldron et al., 2020).

Not only was the amount of funding of concern in the pre-COVID-19 world, but also its composition and stability. The vast majority of PCAs rely on a narrow financing base. International development assistance accounts for almost a third of PCA funding in Africa, and up to 70-90 per cent in some cases. Nearly 80 per cent of the annual budget of conservation authorities in Eastern and Southern African countries comes from tourism revenues (Lindsey et al., 2020). Should one or more of these funding streams decline or fail, the entire PCA budget is placed in jeopardy.

A wide range of structural factors limit the effectiveness of conservation spending, place pressure on PCAs and their budgets, undermine investment flows and even increase conservation costs (Emerton et al., 2006). These include shortcomings in the systems and capacities to plan, manage and spend limited funds, and a lack of economic incentives for the groups that bear the costs of conservation (GIZ, 2019). A more nuanced understanding of 'financial sustainability' has replaced the simple concept of 'funding' that traditionally dominated conservation planning: "the ability to secure sufficient, stable and long-term financial resources, and

to allocate them promptly and in an appropriate form, to cover the full costs of conservation and to ensure that they are managed effectively and efficiently" (Emerton et al., 2006). Conservation finance is now understood as "mechanisms and strategies that generate, manage, and deploy financial resources and align incentives to achieve nature conservation outcomes" (Meyers et al., 2020). Financial stability now means a broader range of enabling conditions than just funding availability.

It is into this landscape of PCA finance that the COVID-19 crisis emerged, and it is against these broader conditions and needs that COVID-19-related impacts on PCA finance, and proposed responses, must now be designed.

## THE IMPACT OF COVID-19 AND GLOBAL ECONOMIC SHOCKS ON PCA FINANCE

Emerging literature makes dire predictions about the impacts of the COVID-19 global economic crisis on conservation funding (such as Corlett et al., 2020; Lindsey et al., 2020; Helm, 2020). Although some of these claims are as yet unsubstantiated, there are reasons to fear an imminent collapse – or at least a steep decline – in funding. Although we do not know the magnitude of this, how long it will last, or whether it will cause permanent shifts in PCA finance, lessons from recent economic crises point to some likely risks and outcomes.

### Reduction in tourism revenue for PCAs

Travel restrictions have had a dramatic impact on global tourism (UNWTO, 2020).<sup>1</sup> The World Travel and Tourism Council estimates a probable global loss of 197 million jobs and US\$ 5.5 trillion in revenue (WTTC, 2020b).<sup>2</sup> The repercussions for tourism in protected areas include declines in revenues used for conservation finance, reduced salaries of tourism employees, and drastically less income for entrepreneurs and small businesses providing products and services (Spenceley, 2020a; Lindsey et al., 2020; Spenceley, 2021).

If, or when, a COVID-19 vaccine is developed and widely distributed, we can assume that international tourism will rebound to some extent. It was exposed to several crises over the last two decades, including four global pandemics (SARS in 2002, 'Bird flu' in 2009, MERS in 2012 and Ebola which peaked in 2013-14) and the economic recession of 2007-2009. However, only SARS and the economic crisis resulted in a sustained reduction in international arrivals (Gössling et al., 2020), and none led to a long-term decline in global tourism. Evidence does, however, suggest that it can take time for visitor confidence to return. The average



Los Glaciers National Park, Patagonia, Argentina © A.Seidl

time for tourist numbers to recover following previous major viral outbreaks was 19 months, although well-planned interventions can cut this to 10 months or less (WTTC, 2020a).<sup>3</sup> There can also be significant knock-on effects, even in countries that remain relatively unaffected by the disease. For example, The Gambia recorded no Ebola cases, but tourism receipts more than halved during the 2014/15 season (Novelli et al., 2018). Other extreme events, such as terrorism, political unrest or natural disasters, typically give rise to strong local substitution effects, with tourist demand largely sustained but shifting to other nearby sites or countries (Seabra et al., 2020). However, the global nature of the current crisis will probably cause systemic shifts in substitution – including from international to domestic tourist source markets – at least in the short and medium term (Bremmer, 2020).<sup>4</sup> Most international wildlife and nature tourists spend more than domestic tourists, so the potentially negative effects on PCA revenues or losses due to the current pandemic may be substantial, unless managers are able to adjust their strategies, facilities and promotion strategies.

### **Reduction in domestic public budgets**

Responding to the COVID-19 crisis and resultant economic crisis places an added demand on already overstretched public budgets. The impact of reduced tax revenue for governments will exacerbate this problem in the years to come. There is a real risk that pressure on public sector budgets will result in a reallocation away from PCAs, as has happened in the past. In the USA, for example, while the global economic recession of 2007-2009 led to public funding cuts across the board, parks and recreation were among the hardest hit, suffering both in terms of the absolute amount of funding received and in the share relative to other local government services (Barrett et al., 2017).

### **Reduction in official development aid and philanthropy**

Official development aid and philanthropic donations targeted at PCAs are also at risk as priorities shift and the total amount of funds shrinks. The 2007-2009 economic recession saw a decline in bilateral and multilateral aid flows due to fiscal constraints in donor countries.<sup>5</sup> Historical data show that the effects of economic recession on development funding usually come with a time-lag of one or two years; however, aid commitments respond faster than aid disbursements (Hallet, 2009), so they tend to persist for three years or more (Dabla-Norris et al., 2010). A sharp drop was also registered in charitable giving by individuals, foundations and corporations. In the US, donations fell by 10.9 per cent between 2007 and 2010, and were still

well below 2007 levels in 2012 (Reich & Wimmer, 2012). The UK registered an almost identical decline of 11 per cent, although donations picked up again relatively quickly (NCVO, 2009). However, not all causes were affected equally: in the US, there was a shift towards domestic targets and poverty-related causes (Reich & Wimmer, 2012), while organisations implementing international development activities were among the worst affected in the UK (Charity Commission, 2010).

### **Increase in local opportunity cost for PCA-adjacent communities**

COVID-19 may, arguably, increase the local opportunity costs of PCAs, placing an added burden on the local economy and livelihoods. Many PCA-adjacent communities and institutions, including local authorities, business and enterprises, face economic collapse, thus endangering livelihoods where jobs are strongly reliant on international tourism (World Bank Group, 2020). The result can be increased pressure on PCAs from unsustainable land and resource uses (Lindsey et al., 2020). Brazil<sup>6</sup>, Kenya<sup>7</sup> and Uganda are among those reporting increased poaching and illegal wildlife trafficking.<sup>8</sup>

### **Impact of economic recovery responses on PCAs**

By September 2020, about 30 per cent of economic stimulus funds of G20 nations (US\$ 3.7 trillion of US\$ 12.1 trillion) were directed toward sectors and activities that affect nature (Vivid Economics, 2020). While most green recovery initiatives have focused on renewable energy, green infrastructure and transport, some target or affect PCAs. At least ten governments have earmarked funds that do this, including increasing areas under conservation, supporting management, bolstering tourism infrastructure and creating jobs in restoration (Golden Kroner et al., 2021). New Zealand<sup>9</sup> is investing in a jobs programme to manage public lands. Pakistan<sup>10</sup> has committed to expand PCAs and launch the country's first National Parks Service while creating jobs. The EU's<sup>11</sup> recovery package is the most extensive green recovery plan to-date, redoubling the commitment to scale up PCAs in line with the EU Biodiversity Strategy. At least eight other countries have earmarked additional green support in their stimulus packages that may indirectly support PCAs, through the funding of nature-based solutions, forest management and other activities. In addition, at least 13 countries have begun implementation of pre-COVID-19 commitments to scale up and further support PCAs, despite the pandemic.

In contrast, at least 24 governments have proposed or enacted more than 60 rollbacks to regulations or cuts to PCA agency budgets. These will affect PCAs and other



environmental protections, affecting the rights of Indigenous Peoples and Local Communities (IPLC) (Conservation International, 2020).<sup>12</sup> New regulatory rollbacks authorise mining, oil and gas, extensive infrastructure (dams, airports, housing complexes) and other environmentally damaging activities (Golden Kroner et al., 2021). Although rollbacks to PCAs are not new (Golden Kroner et al., 2019<sup>13</sup>), recent decisions have been advanced under cover of a public health crisis when public engagement is limited. Ironically, they could exacerbate the risk of future pandemics by further damaging ecosystems.<sup>14</sup> On balance, economic recovery stimulus efforts of the largest economies have to-date favoured investing in business-as-usual practices rather than in carbon-neutral and nature-positive actions, as signalled by a negative ‘green stimulus index’ score for 16 of the 20 G20 countries (Vivid Economics, 2020).

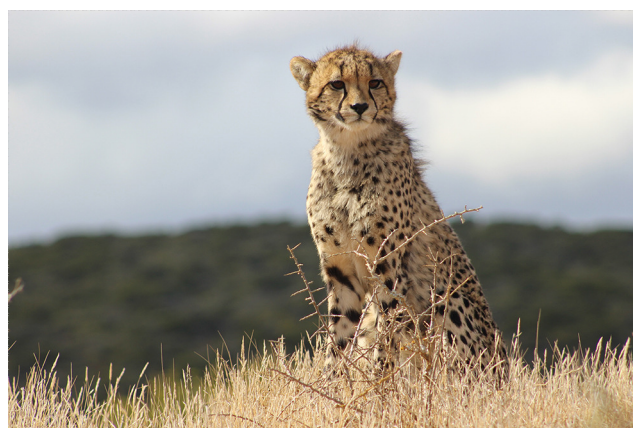
However, there is increasing political momentum for nature conservation, leading up to this year’s CBD COP; for instance, a recent pledge signed by dozens of governments (the Leaders’ Pledge for Nature) calls for a green recovery and commits to scale up the extent of, and support for, PCAs.<sup>15</sup>

## RESPONDING TO THE CRISIS: REBUILDING SUSTAINABLE FINANCING FOR RESILIENT PCAS

There are therefore opportunities as well as risks in the post-pandemic situation, which calls for a renewed strategic approach to PCA finance. Drawing on lessons from past economic crises as well as emerging evidence from the current one, we present nine recommendations for creating more resilient PCA finance. These are:

1. diversifying the funding base;
2. improving spending effectiveness and efficiency;
3. ensuring domestic budgets continue to support PCAs;
4. increasing international development finance and philanthropy;
5. strengthening revenue generation from tourism;
6. supporting PCAs governed by Indigenous peoples, local communities and private actors;
7. including local communities in PCA governance and benefits;
8. engaging the finance sector and attracting private capital; and
9. raising public support and interest in nature conservation and PCAs.

While many of these recommendations can be taken up immediately, this paper does not specifically focus on the short-term COVID-19 recovery response, as this is addressed in Golden Kroner et al. (2021).



Young cheetah at Kwandwe, a privately protected area in South Africa. Kwandwe, typically reliant on overseas visitors to help fund their conservation efforts, is now seeking to attract more local visitors. © T.Cumming

## Diversifying the funding base

Even before the COVID-19 crisis, there was a realisation that over-dependence on any single funding source for PCAs was risky, often unsustainable, and frequently insufficient to meet needs (Deutz et al., 2020). The current PCA funding crisis reinforces the importance of diversifying funding and reducing risk. A diverse funding base would embrace complementary combinations of funding, for example: long-term, dependable funding for ongoing management and salaries; short-term funding efforts for specific projects; and cyclical funding, such as from seasonal tourism, to supplement budgets. Diversification also allows for mutually reinforcing funding mechanisms. For example, long-term PCA funding commitments from governments may encourage the private sector to invest in income-generating enterprises, such as private lodges, which in turn provide revenue from concessions and add value through expenditure in the local economy.

Short-term fund-raising by PCAs is not an ideal primary funding source to meet national and global PCA targets. However, they still add to the funds raised, and help increase public awareness of the PCA conservation mission. Crowdfunding is one such mechanism where increased funds go hand-in-hand with increased public awareness. Examples of COVID-19 motivated crowdfunding campaigns supporting PCAs include Belize (Hol Chan MP), Brazil (Pantanal), Ecuador (Galapagos), Thailand (Koh Tao MR) and the Philippines (Mounts IglitBaco NP).<sup>16</sup> Similar efforts include: the Wildlife Ranger Challenge<sup>17</sup>, where members of the public and wildlife rangers across Africa run ‘together’ – virtually – to raise funds; the Yankari

Game Reserve where rangers ran a marathon to raise funds for themselves; the Frankfurt Zoological Society Mission Possible: Corona relief fund for PCAs in need<sup>18</sup>; and BIOPAMA Rapid Response Grants 2020.<sup>19</sup>

There are many effective finance mechanisms that can be used to supplement or even entirely meet a PCA's funding need (see, for example, the BIOFIN Catalogue of Finance Solutions<sup>20</sup>, and Meyers et al., 2020). Many of these are suitable for a subset of PCAs, depending on context. Revenue from tourism is one such example, as is funding from carbon markets. Carbon emissions offsetting through habitat conservation and restoration can bring about benefits in PCA buffer areas and within PCAs, provided additionality can be shown. Zambia's Luangwa Community Forests Project, the largest REDD+ project in Africa, will eventually protect 944,000 ha of wildlife-rich forest in an area with high levels of deforestation, and benefit approximately 37,000 local households.<sup>21</sup> As PCAs are often sources of essential ecosystem services, investment in 'ecological infrastructure' or 'green infrastructure' can be important in financing PCAs (Deutz et al., 2020). However, there is no one 'silver bullet' finance mechanism for PCA funding, and contexts may shift, as COVID-19 has demonstrated. The UNDP BIOFIN methodology (UNDP, 2018) includes a process for determining the most suitable 'finance solutions' for biodiversity finance at a country level, the principles of which can be applied specifically for PCAs.

### **Improving spending effectiveness and efficiency**

The current crisis looks set to result in significant pressure on PCA budgets. So, as well as retaining and increasing budgets wherever possible, it is essential to use existing PCA resources effectively and efficiently. The revitalisation of PCA operations and budgeting in a post-COVID-19 context offers the opportunity to do this, by improving the systems and capacities for PCA planning and management. In Kazakhstan, for example, training programmes for PCA managers are being created to help improve the development and costing of PCA management plans (M. Sarsembayeva, pers. comm. 2020). In Kyrgyzstan, results-based budgeting templates are being piloted in two protected areas and 20 state-managed forest areas.<sup>22</sup>

More effective use of resources can also be achieved through collaboration between the public sector, civil society, communities and the private sector. For example, the Rhino Action Group Effort<sup>23</sup> assembles ecologists, game reserve owners, government, media professionals and economists to channel and account for the contributions of money, material and time that

they make to prevent rhino poaching in PCAs. Public Private Partnerships<sup>24</sup> are another way of effectively utilising available resources: such long-term arrangements can allow commercial concessions in PCAs, or contract skilled private entities to assist with PCA management (Meyers et al., 2020). Channelling funding through trust funds can improve PCA management and help to ensure sustainable funding (Bonham et al., 2014). Trust funds can be a useful institutional structure to manage COVID-19-related funding efforts, and a tool to facilitate debt-for-nature swaps.

### **Ensuring domestic budgets support PCAs**

There is currently massive pressure on public sector budgets. Hence the importance of recognising the value of the natural capital in PCAs and the role PCAs can play in job creation and rural livelihoods, water provisioning services, disaster risk reduction, domestic and international tourism, etc., alongside securing the intrinsic value of biodiversity (ten Brink et al., 2012). Public sector allocations for PCAs should be maintained or increased through the budgets of the ministry primarily responsible for PCAs, as well as by integrating biodiversity-positive actions into the plans and budgets of other ministries and programmes which benefit from intact and conserved ecosystems (CBD, 2020). This is needed both near term, within domestic recovery packages (Golden Kroner et al., 2021), and in the longer term.

Job creation public sector programmes – more important now than ever – should be designed to bring about biodiversity benefits that support labour-intensive ecosystem restoration (such as South Africa's 'Working for Water' programme<sup>25</sup>), and focused where possible on PCAs. India has recently allocated US\$ 780 million towards a programme designed to stimulate the rural and semi-urban economy, create biodiversity benefits, including wildlife protection and forest management, and support local communities (Vivid Economics, 2020).

There is growing evidence that supports the use of nature-based solutions (NbS), provided there are real biodiversity benefits, to achieve climate change mitigation and adaptation, as a complement, or an alternative to, grey infrastructure (Sneddon et al., 2020). There is a strong argument for Nationally Determined Contributions (NDCs) under the Paris Agreement to be used to expand the role of PCAs in support of local, national and global climate change adaptation and mitigation efforts, and for much more climate change funding to be allocated towards these

efforts (WWF, 2019a; Deutz et al., 2020). The difficulty of measuring and predicting the effectiveness of NbS has held back investment in these systems; however, “highly sectoralized forms of governance” (Sneddon et al., 2020) may be a bigger barrier to integrating biodiversity and ecosystem services into sector and development planning. While NDCs are determined by governments, some commitments are conditional upon international funding, making this a cross-cutting issue which also has relevance to increasing international development finance and philanthropy (see below).

The cost of managing pressures on PCAs can also be reduced through improved and integrated planning at the national level. As countries seek to rebuild, many PCAs would benefit from more cohesive national development strategies, which recognise the full importance of biodiversity and ecosystem services. Plans should be used to avoid conflicts between natural systems and unsustainable development, and to reduce pressure on PCAs; for example, by avoiding incompatible land use around PCA boundaries. In the near term, it is important that stimulus packages exclude any relaxation of regulations that would increase pressures on PCAs (Golden Kroner et al., 2021). There are specific instruments that can help secure and channel public sector funds for PCAs. Fiscal earmarking can help to ensure funding security (Deutz et al., 2020). For example, in Estonia and Ireland fishing fees are directly used to protect fish habitats through conservation funds (Ezzine de Blas et al., 2017).

COVID-19 is having substantial economic impact on sub-national governments, so improving the long-term financial resilience of sub-national governments is crucial (OECD, 2020). Subnational governments managing PCAs may need specific support from national government. Ecological fiscal transfers, a mechanism used to channel financial support and incentives from national government to subnational governments based on biodiversity health and PCA metrics, aim to counter the high real and opportunity costs sometimes borne by sub-national governments with a high proportion of land under protection.<sup>26</sup> This mechanism has been used successfully in Brazil and Portugal (Droste et al., 2018).

### **Increasing international development finance and philanthropy**

International development finance and philanthropy will continue to be important sources of funding for PCAs that conserve globally significant biodiversity and secure ecosystem services (Lindsey et al., 2020; Deutz et al., 2020). But more could be done to make these funding flows more effective and durable. The impact of

donor funds can be enhanced through better access to information on funding opportunities and support for potential recipients in applying for funding (CBD, 2020). Improving donor coordination can ensure that funding is targeted more strategically, from both public and private sources (CBD, 2020). The Legacy Landscapes Fund (LLF)<sup>27</sup>, for example, is a joint initiative that includes the German and French international development agencies, IUCN and WWF, and which combines public and private resources. The LLF and the project finance for permanence approach<sup>28</sup> can help focus on the long-term management needs of PCAs of global significance.

Funding primarily allocated for achieving sustainable development and climate change adaptation and mitigation objectives can have a substantial positive impact on PCA funding (Deutz et al. 2020). The French Development Agency, for example, aims to fully integrate nature-based solutions<sup>29</sup>, bringing biodiversity benefits to all of their investment portfolios, including agriculture and urban development.

The economic impact of COVID-19 will make sovereign debt a growing challenge over the next few years. Efforts are underway to develop a new asset class for ‘Nature Performance Bonds’, which could provide substantial funding flows to countries in return for specific, measurable commitments to biodiversity protection and restoration.<sup>30</sup> Linking sovereign debt to PCAs is not new. The Seychelles ‘blue bond’ was the first debt-for-nature swap focusing on expanding marine conservation and sustainable fisheries (World Bank Group, 2020). A variety of conservation bonds, including the Rhino Impact Bond, have been proposed as ways to finance PCA systems. Environmental impact bonds allow for ‘pay for performance’ conditions to be put in place, and can combine public funds with private funds (World Bank Group, 2020).

### **Strengthening revenue generation from tourism**

In many cases, tourism revenues provide the major, or only, source of self-generated PCA revenues, as well as making an important contribution to local livelihoods and the national economy. While many PCAs are not in a position to self-fund through tourism, there is a subset of PCAs that can rely on tourism-related revenue as a substantial funding flow. In their analysis of the impact of tourism in PCAs amid the pandemic, Spenceley et al. (2021) describe a diversity of responses to the current crisis which allow PCAs to make the visiting experience safer. These are often provided for the growing numbers of visitors who find in nature an antidote to the stresses of lockdowns.



Government relief packages for the tourism sector in countries that rely heavily on tourism will help keep the industry alive during the crisis, allowing it to emerge strong when restrictions are eased. Such packages should, as far as possible, incorporate sustainability criteria for biodiversity, climate change and local community benefits (Spenceley, 2020b). Kenya, for example, has announced a tourism stimulus package<sup>31</sup> of over US\$ 58 million, with additional funds set aside for upgrading facilities. Local efforts to support local value chains that no longer have tourism income are also critically important to sustain local economies adjacent to PCAs (Spenceley, 2020a).

Some nature-based tourism operators and natural attractions are becoming more resilient through new and diversified income streams, including virtual tours and promoting their services to domestic markets (Spenceley, 2020a & b). Examples of virtual tours include: the Grand Canyon, Yosemite and Zion national parks in the US; Sagarmartha (Mount Everest) in Nepal; Phong Nha-Ke Bang National Park in Viet Nam; the Perito Moreno glacier in Argentina; and Giant's Causeway in Northern Ireland.<sup>32</sup> Examples of expanding markets include Mbazi Safaris, which is encouraging the South African diaspora to sponsor game drives in the Kruger National Park for neighbouring communities (Spenceley, 2020a).

As countries emerge from strict lockdowns, a review of PCA entrance and other fees could be highly beneficial, preferably guided by clear criteria. An appropriate pricing policy, where prices are updated regularly, can make a substantial difference to PCA finance flows. For example, South African National Parks now update their fees annually, whereas in neighbouring Botswana and Namibia they have remained unchanged for 20 and 15 years respectively – though both are now updating theirs. Foregone revenues are substantial in these cases, as fees will need to more than double to keep up with inflation (Van Zyl, 2019). Re-thinking the structure of tourism fees will have to balance the capacity and willingness of operators and different types of visitors to pay (Spenceley et al., 2017), while taking into account structural changes in international and domestic source markets.

Systems should be put in place that allow for the retention of fees for reinvestment in PCAs. In the Philippines, the management board of each PCA retains 75 per cent of income generated from entry charges and user fees, leases, concessions and other revenues derived from the operation of the PCA. This arrangement has generally functioned well as a way to improve PCA funding autonomy and cost recovery, and

ensure that those self-sourced revenues are not mingled with core annual budget allocations (Anda & Atienza, 2013). However, it is important to retain cross-subsidisation arrangements to support PCAs with limited revenue earning potential.

### **Supporting PCAs governed by Indigenous peoples, local communities and private actors**

PCAs that are governed by private actors, Indigenous peoples and local communities<sup>33</sup> remove a substantial financial burden from the public sector while helping to meet PCA targets and maintaining biodiversity and ecosystem services (Ivanova & Cook, 2020). These non-state PCA governance types require the right conditions to succeed and thrive, such as: mutually beneficial partnership agreements; management, scientific and technical support; recognition of efforts; and a supportive community of practice, economic incentives and enabling policy and legislation (Mitchell et al., 2018). Governments and NGOs have a role to play in supporting these initiatives. Non-state PCAs themselves need to create financial strategies that are different from many state PCAs – without domestic public budgets, they are more reliant on self-generated revenue and philanthropy. Private and community-managed PCAs are often particularly reliant on tourism revenues to finance conservation and support local communities (Lindsey et al., 2020); many will need more support now than ever.

### **Including local communities in PCA governance and benefits**

This is the time to redouble efforts to ensure that local communities benefit from PCAs. Well-designed projects and strategies can link conservation with local economic



Kwandwe, a privately protected area in South Africa, applying COVID-19 safety measures, including hand sanitiser, on game drives © T.Cumming

and social development. In Namibia the concept of wildlife credits is being tested, which will allow tourism businesses, tourists and others to make performance-related payments to communities for actively conserving wildlife and habitats.<sup>34</sup> Local enterprises and job creation for local communities need not be limited to the tourism sector. Gorongosa Coffee<sup>35</sup> in Mozambique works with local coffee farmers around Mount Gorongosa; coffee sales support the community and Gorongosa National Park.

Shared-governance arrangements for PCAs can provide similar financial as well as socio-economic benefits for local communities. Blue Finance<sup>36</sup> (see also Phua et al., 2021) is pioneering an approach to collaborative management of marine protected areas, facilitating agreements between government, NGOs, for-profit organisations and community groups.

### **Engaging the finance sector and attracting private capital**

The 2020 World Economic Forum Global Risks Report rates biodiversity loss as the third most important global risk in terms of impact and the fourth in terms of likelihood (WEF, 2020). So, it is hardly surprising that the finance sector is taking an increased interest in the subject in two ways: as a potential source of revenue and as a means to reduce risk (UNDP, 2020): in doing so, its actions can greatly benefit PCA finance.

Decisions taken in the financial sector can support PCA finance through biodiversity-compatible investments. Investment managers are struggling to keep up with the public demand for green investment and environmental, social and governance (ESG) investment options. In the UK, net inflows into ESG mutual funds were 37 times higher<sup>37</sup> in the three-year period up to June 2020 compared to the previous three-year period. However, it is still challenging to bring biodiversity investment opportunities to market (UNDP, 2020).

More business opportunities that benefit PCAs can be created by improving the business acumen of project developers, reducing transaction costs, providing blended finance and reducing risk for private sector investors (UNDP, 2020). The Coalition for Private Investment in Conservation (CPIC) has developed a number of 'blueprints' to guide the development of conservation projects for investment, seeking to connect project providers with support and investors.<sup>38</sup> The Millennium BIM Bank, the largest bank in Mozambique, has established a US\$ 50 million line of credit for investors in nature-based tourism, focused on

PCAs (World Bank Group, 2020), and the European Investment Bank has created the Natural Capital Financing Facility for projects delivering biodiversity benefits and climate adaptation.<sup>39</sup>

Reducing harmful impacts from private-sector investments in and around PCAs can substantially reduce the costs associated with managing these pressures. Trillions of dollars are invested annually in infrastructure, energy, transportation and extractive industries (Deutz et al., 2020), while the negative impact of these activities on PCAs is often unregulated or unmanaged (Sloan et al., 2016; Sonter et al., 2017). Such projects frequently require support from financial institutions, such as loans from development and commercial banks. To reduce the financial burden placed on PCAs in managing pressures, all lending institutions should apply social and environmental safeguards (such as the IFC's Performance Standard 6<sup>40</sup>), and monitor adherence to these. The finance sector should maintain and strengthen its support for reducing illegal wildlife crime, including through the Financial Action Task Force<sup>41</sup>, thereby reducing the need for costly anti-poaching efforts.

The recent establishment of the Informal Working Group to set up a Taskforce for Nature-related Financial Disclosures in the finance sector is an indication that, even in the midst of a global crisis, the finance sector recognises the importance of shifting finance from destructive activities to biodiversity-positive activities.<sup>42</sup>

The corporate sector also has an important role. It can help reduce illegal and unsustainable practices in food and fibre supply chains, thus controlling the excesses of intensive agriculture and fisheries. Unilever has recently committed to a deforestation-free supply chain by 2023 and to engaging more broadly on reducing large-scale deforestation.<sup>43</sup> Walmart is working towards greening supply chains, and, together with the Walmart Foundation, is committing to help protect, manage or restore at least 50 million acres of land and one million square miles of ocean by 2030. Governments have a crucial role to play in creating the enabling policy and legislative conditions for positive change in the finance sector and businesses (CBD, 2020; Deutz et al., 2020; World Bank Group, 2020).

### **Raising public support and interest in nature conservation and PCAs**

Public awareness of the importance of environmental issues, including biodiversity conservation, is growing and should continue to provide opportunities for increasing PCA support and finance.<sup>44</sup> In the United



States, WWF has grown its income from US\$ 221 million to US\$ 308 million (40 per cent of which came from individual donors) over the last 10 years (WWF, 2019b). The pandemic may have further increased public awareness of, and support for, initiatives that deliver positive social and environmental outcomes.<sup>45</sup>

Increased public support should be positive news for all forms of PCA funding. Individuals should be more willing to make donations, politicians should respond with increased budget allocations when voters place a higher value on conservation, and corporate social responsibility (CSR) spending will attempt to reflect the preferences of customers. There should therefore be opportunities for PCAs to capitalise on this, for example through crowdfunding and payments for ecosystem services.

PCA governance authorities may want to put more effort into building broader and stronger support bases that can come to their aid, particularly in times of crisis. Friends associations, honorary ranger programmes and supportive foundations, potentially with links to CSR donors, can provide direct assistance in kind and cash. The US National Park Service works closely with the National Park Foundation, which has raised US\$ 550 million for the parks system over the last five years. Subaru Motors are among the Foundation's prominent partners and have contributed more than US\$ 20 million since 2013, giving them defined rights to use the NPS brand and logo.<sup>46</sup> In Singapore, the Garden City Fund is used to finance outreach, education, research and infrastructure programmes, which go beyond the basic core mandate of the National Parks.<sup>47</sup> As public awareness of the importance of securing biodiversity and ecosystems increases, these and other tools should be used more widely to diversify the funding base of PCAs and increase their financial resilience.

## CONCLUSION

The recommended actions put forward in this paper are grounded in the understanding that PCAs are fundamental to the health of natural, social and economic landscapes, a fact laid bare by the current global pandemic. As we work towards rebuilding and regenerating natural, social and economic landscapes, investing in PCAs should be deeply integrated into sustainable and green recovery responses. And, as we move from short-term responses to longer-term planning, putting biodiversity at the heart of resilient societies should be a top priority. COVID-19 and the related economic crisis have exacerbated, magnified and brought into sharp relief pre-existing challenges with PCA funding. The conservation community and its

supporters need to scale up efforts to address the underlying structural and systemic financial constraints that undermine PCAs. A strategic and integrated approach to improving PCA funding is needed to: address the complexities of national and subnational development strategies, policies and budgets; build partnerships between the public, private and finance sectors, and with local communities; strengthen institutions; and invest in building capacity. This will take time, but it has never been more important.

## ENDNOTES

See Supplementary Online Material - Endnotes

## SUPPLEMENTARY ONLINE MATERIAL

### Endnotes

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## RESUMEN

Existe una preocupación generalizada de que la financiación para las áreas protegidas y conservadas (APC) se vea reducida sustancialmente debido a la pandemia del COVID-19 y a los resultados económicos relacionados. En el presente artículo se argumenta que los efectos de la crisis mundial no suponen necesariamente nuevas amenazas financieras para las APC, sino que sirven para ampliar, intensificar y exacerbar las limitaciones y debilidades financieras estructurales y sistémicas existentes. Por lo tanto, para responder adecuadamente, es importante comprender la situación con respecto a la financiación de las APC antes del COVID-19, y abordar las barreras y limitaciones subyacentes a la sostenibilidad financiera de las APC. Con base en los desafíos conocidos en materia de financiación de las APC y los efectos previstos del COVID-19, presentamos nueve recomendaciones generales para crear una base de financiación sostenible para las APC: diversificar la base de financiación; mejorar la eficacia y la eficiencia del gasto; asegurar que los presupuestos nacionales sigan apoyando a las APC; aumentar la financiación internacional para el desarrollo y la filantropía; fortalecer la generación de ingresos procedentes del turismo; apoyar a las APC administradas por pueblos indígenas, comunidades locales y actores privados; incluir a las comunidades locales en la gobernanza y los beneficios de las APC; involucrar al sector financiero y atraer capital privado; y aumentar el apoyo e interés público en la conservación de la naturaleza y las APC. Se incluyen actividades y herramientas específicas para apoyar cada una de estas recomendaciones, respetando el contexto mundial actual.

## RÉSUMÉ

Il existe une inquiétude largement répandue sur la diminution considérable du financement des aires protégées et conservées (APC) en raison de la pandémie du COVID-19 et des résultats économiques connexes. Cet article montre que les impacts de la crise mondiale n'induisent pas en eux-mêmes de nouvelles menaces financières pour les APC; ils servent plutôt à amplifier, intensifier et exacerber les contraintes et faiblesses financières structurelles et systémiques existantes. Afin d'y répondre au mieux, il est donc important de comprendre l'état du financement des APC avant COVID-19, et de s'attaquer aux obstacles et aux contraintes sous-jacents à la viabilité financière des APC. En nous basant sur les défis financiers connus des APC et les effets prévus du COVID-19, nous présentons neuf recommandations globales pour l'établissement d'une infrastructure financière durable pour les APC: diversifier la base de financement; améliorer l'efficacité et l'efficience des dépenses; veiller à ce que les budgets nationaux continuent de soutenir les APC; accroître le financement du développement international et la philanthropie; renforcer la génération de revenus du tourisme; soutenir les APC gouvernés par les peuples autochtones, les communautés locales et les acteurs privés; inclure les communautés locales dans la gouvernance et les bénéfices des APC; engager le secteur financier et attirer des capitaux privés; et susciter l'appui et l'intérêt du public pour la conservation de la nature et les APC. Des activités et des outils spécifiques sont fournis pour soutenir chacune de ces recommandations, tout en respectant le contexte mondial actuel.