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## Beyond banning wildlife trade: COVID-19, conservation and development

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## ABSTRACT

One of the immediate responses to COVID-19 has been a call to ban wildlife trade given the suspected origin of the pandemic in a Chinese market selling and butchering wild animals. There is clearly an urgent need to tackle wildlife trade that is illegal, unsustainable or carries major risks to human health, biodiversity conservation or meeting acceptable animal welfare standards. However, some of the suggested actions in these calls go far beyond tackling these risks and have the potential to undermine human rights, damage conservation incentives and harm sustainable development. There are a number of reasons for this concerns. First calls for bans on wildlife markets often include calls for bans on wet markets, but the two are not the same thing, and wet markets can be a critical underpinning of informal food systems. Second, wildlife trade generates essential resources for the world's most vulnerable people, contributing to food security for millions of people, particularly in developing countries. Third, wildlife trade bans have conservation risks including driving trade underground, making it even harder to regulate, and encouraging further livestock production. Fourth, in many cases, sustainable wildlife trade can provide key incentives for local people to actively protect species and the habitat they depend on, leading to population recoveries. Most importantly, a singular focus on wildlife trade overlooks the key driver of the emergence of infectious diseases: habitat destruction, largely driven by agricultural expansion and deforestation, and industrial livestock production. We suggest that the COVID-19 crisis provides a unique opportunity for a paradigm shift both in our global food system and also in our approach to conservation. We make specific suggestions as to what this entails, but the overriding principle is that local people must be at the heart of such policy shifts.

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## 1. Introduction

The COVID-19 outbreak represents a major challenge to the environmental, social and economic dimensions of sustainable development. The pandemic is clearly directly relevant to Sustainable Development Goal (SDG) 3 on health and wellbeing, one target of which is to reduce global infectious disease risk. However, it also affects, and is affected by, multiple other SDGs including SDG1 on poverty; 2 on food security; 8 on employment and

economic growth; 12 on responsible consumption and production; 15 on life on land and 16 on peace, justice and strong institutions.

The pandemic is inflicting unprecedented global social and economic damage. It is estimated that the global economy will take a US\$1 trillion hit, with developing countries least able to withstand the shock (UNCTAD, 2020). Within those countries, it will be the poor and vulnerable who are hardest hit, severely compromising achievement of SDG1 (Sumner, Hoy, & Ortiz-Juarez, 2020). Poorer countries are often more biodiverse (Palmer & Di Falco, 2012), and many are reliant upon that biodiversity to support economic development, especially through nature-based tourism (UNWTO, 2014). Tourism is a key engine for job creation – and recognised as such in one of the targets of SDG8. It is also critically important for supporting conservation and the achievement of SDG15. For example, it is the largest financial contributor to protected areas

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in many countries (Spenceley, Snyman, & Eagles, 2017). The overnight collapse of the international tourism industry thus represents a major threat to both conservation and development in many countries (Lindsey et al., 2020).

Tourism aside, wildlife has been central to much of the discourse around the pandemic. A key focus has been on wildlife trade. However, many emerging infectious diseases are caused by land use change – particularly deforestation and expansion of agricultural land – and industrialised livestock production (Allen et al., 2016; Jones et al., 2008). Addressing these broader drivers is key not just to reducing the risk of future pandemics but also to achieving Goal 15, which includes targets to reduce deforestation and habitat degradation, and Goal 12, which highlights the need for lifestyles “in harmony with nature”.

## 2. Potential unintended sustainable development consequences of a singular focus on wildlife trade

Some attention to live animal markets and wildlife trade is clearly justified, given their potential contribution to the emergence and/or spread of zoonotic diseases (Di Marco et al., 2020). The calls to ban wildlife trade, however, are wide-ranging. The most extreme calls demand a total ban on all wild animal trade and on all uses of all wild animal products (World Animal Protection, 2020). Slightly more nuanced calls focus specifically on banning the trade of mammals and birds for consumption (e.g. Coalition to End The Trade, 2020), while others call for a physical closure of live animal markets (Change.org, 2020). There is clearly an urgent need to tackle wildlife trade that is illegal or unsustainable, or that carries major risks to human health or animal welfare. However, some of the suggested actions in these calls go far beyond tackling these risks. In fact, in many cases they risk exacerbating poverty, undermining human rights, damaging conservation incentives and harming sustainable development, for the key reasons outlined below.

### 2.1. Wet markets are not the same as wildlife markets

Calls for bans on wildlife markets often include calls for bans on wet markets (e.g. Congress of the United States, 2020). It is vital to understand, however, that wet markets are simply food markets which sell a range of fresh produce: fruit and vegetables, fish, livestock and, sometimes, wildlife. The range of produce varies from market to market, and day to day. Such markets underpin the informal food systems on which millions of urban and rural people depend. Implementing indiscriminate wet market bans would further amplify the impacts of this pandemic on the world’s poorest and most vulnerable communities, without delivering commensurate benefits in terms of reducing zoonotic disease risks (FAO, 2020).

### 2.2. Bans can affect billions of livelihoods

Although some of the calls to ban wildlife trade include caveats as to which species are of concern, and others say that hunting for home consumption by local communities and indigenous groups would be allowed, the large-print message is simply “end wildlife trade”. But wildlife trade is a vast and complex business that involves a bewildering array of plants, animals and fungi, delivers multiple products, and may be legal or illegal, sustainable or unsustainable, local or international, good or bad for conservation and development, and every combination thereof (‘t Sas-Rolfes, Challenger, Hinsley, Veríssimo, & Milner-Gulland, 2019).

Critically, wildlife trade not only provides luxury products for the world’s elites, but also essential resources for the world’s most

vulnerable people, contributing to food security for millions of people, particularly in developing countries (Cawthorn & Hoffman, 2015; Coad et al., 2019). Many rural people, including Indigenous Peoples and local communities (IPLCs), rely on trading wild resources, by selling and consuming wild meat, fish, insects and plants, extracting timber and forest products, and many other activities (TEEB, 2009). This reliance is likely to increase as COVID-19 pushes people out of jobs and back into the informal economy including hunting of wild animals for meat (McNamara et al., in press). Importantly, the distinction between hunting for home use and for trade is not meaningful in most of sub-Saharan Africa; people usually do both, with sales of wild meat acting as one of the few sources of cash outside of the crop harvesting season (e.g. Schulte-Herbrüggen, Cowlshaw, Homewood, & Rowcliffe, 2013).

The rights of people to own, manage and use their traditional lands and natural resources, and to participate in political and policy processes that affect their rights, are upheld in international and national laws, as well as in UN Declarations and Resolutions including the 2018 UN Declaration on the Rights of Peasants and Other People Living in Rural Areas (Human Rights Council Resolution, 2018). Unless the people most affected by restricting wildlife trade are meaningfully included in decisions on whether and what to ban, external calls to restrict trade and use of wild resources undermine these rights, thereby contravening SDG target 16.7, which aims to ensure responsive, representative, participatory and inclusive decision-making.

### 2.3. Bans can exacerbate conservation risks

Even where the calls for bans are specifically focused on wildlife markets, there is a risk that, rather than preventing risky trade, they will simply drive it underground and enmesh it with other organised criminal activity, as occurred after the 2013–2016 Ebola outbreak (Bonwitt et al., 2018). When a legal source of wild meat is suddenly removed (especially if captive breeding is also banned, as some recommend) and consumer demand persists, black market prices are most likely to rise, providing increased incentives for poaching (Conrad, 2012). In clandestine wildlife markets, regulations governing standards of hygiene and animal welfare would also become harder to enforce, leading to greater risk of zoonotic disease outbreaks. Furthermore, simplistic suggestions of replacing wild animal protein with livestock also risk serious unintended consequences, as habitat destruction and industrial agriculture play key roles in increasing zoonotic disease transmission as people and their livestock come into ever closer proximity to wild species and pathogens (Kock, 2014; Petrovan et al., 2020).

### 2.4. Wildlife trade can be positive for both conservation and development

While some forms of wildlife use and trade, such as uncontrolled commercial wild meat harvesting, can pose a major threat to biodiversity (Gray et al., 2018), in many cases, sustainable wildlife trade can provide key incentives for local people to actively protect species and the habitat they depend on, leading to population recoveries. This has been seen for a wide diversity of species, such as the harvesting of saltwater crocodiles in Australia for leather (Fukuda et al., 2011), the Amazonian pirarucu – the world’s largest freshwater fish – for meat and leather (Campos-Silva & Peres, 2016), and the Yellow-Spotted River Turtle in Peru for the pet trade (CITES, 2019). In Southern Africa, the emergence of game ranching has led to large-scale reclamation of livestock areas into wildlife habitat (Carruthers, 2008). In these situations, banning wildlife trade and consumption (particularly without viable alter-

natives to secure that wildlife and its habitat) is likely to have negative consequences for wildlife.

### 3. Suggestions for a more effective and equitable approach to reducing pandemic risk

Better regulated wildlife trade, and particularly better controls on illegal activity, are a necessary part of an effective response to future pandemic risk and would also support conservation and sustainable development. But action should be targeted towards tackling those specific areas of trade which carry major risks for conservation or human health. Some high-risk markets where animals from diverse taxa live and die in close proximity to each other, often under poor welfare conditions, may justify targeted bans. Certain wild species are particularly risky in terms of zoonotic disease transmission (e.g. bats, rodents, and primates; Olival et al., 2017) so their use should be discouraged. And for all species, in both domestic and wild food supply chains, captive conditions and practices should meet appropriate standards of welfare and hygiene.

Better regulated wildlife trade is, however, only part of the solution. And a singular focus on this partial solution risks diverting attention from a much bigger threat to both zoonotic disease emergence and biodiversity loss – land use change for industrialised agricultural expansion; in short, our global food system. Addressing this implies an end to subsidies which incentivise the expansion of large agribusinesses, with associated loss of land and biodiversity, and a shift of support to smallholders and to the mainstreaming of agroecological practices that maintain biodiversity and natural habitat. This would require a transformational policy shift, but the international response to COVID-19 has demonstrated that transformational action is possible if governments and citizens are convinced that the risks of inaction outweigh the costs.

Responding to the COVID-19 pandemic also provides an opportunity for a paradigm shift to more sustainable, equitable and inclusive conservation. If we are to move to a more sustainable, less risky, relationship with nature following COVID-19, the following actions are required:

- Increased, democratic space for meaningful engagement of local people in national and international decision-making about nature conservation. While lip service is paid to the need to respect local knowledge and local livelihoods, local people's voices remain largely absent from international and national policy forums and from Western NGO campaigns.
- More devolution of rights, proprietorship and authority to manage natural resources at the local level. Many governments have progressive policy documents but lack political will to genuinely hand over power (Cooney, Roe, Dublin, & Booker, 2018).
- More finance delivered to the local level. Much funding for nature conservation and climate change is captured by international agencies and national governments. Mechanisms are needed for ensuring these funds reach the local level and can be utilized to support local action and local priorities. This could start with more equitable distribution of COVID-19 recovery funds.
- More investment in diversified and resilient local nature-based economies that reflect local priorities – for example, those that promote multi-functional landscapes that support healthy wildlife and livestock, with sustainable agriculture.
- Collaborative partnerships between communities, government and the private sector to develop and deliver solutions that address common concerns. There are examples that have emerged to address immediate conservation challenges associated with COVID-19 but which also have the potential to deliver sustainable and equitable landscape-scale conservation into the future (e.g. Kaelo, Sopia, Bell, Diggle, & Nelson, 2020).

Calls for many of these actions are nothing new. For example, a recent review of the conditions for effective community-based natural resources management highlighted that the need for devolution of rights and decision-making authority has been noted for three decades but rarely acted upon (Cooney et al., 2018). Perhaps the greatest difference COVID-19 could make is that the tragedy that has unfurled will at last act as the tipping point to turn words into action for positive change.

### Declarations of interest

None.

### Author contributions

All authors jointly contributed to the drafting and review of the manuscript.

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