COVID-19: IMPLICATIONS FOR NATURE AND TOURISM

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ABSTRACT

Covid-19 has impacted tourism globally in many ways, with the relationship between nature and tourism exhibiting benefits and drawbacks from the pandemic's reach. Tourism worldwide needs nature, and this need may increase post-Covid. As such it is critical to develop a holistic valuation of "nature-dependent tourism", comprising all tourism that has some link to, and dependency on, nature and natural ecosystems. This research note reflects on nature's true contribution to tourism, its economic and non-economic value, and on the potential role for nature in tourism recovery, post-Covid as advocated by the UNWTO.

KEYWORDS

Covid-19, nature, tourism, crises, disaster, recovery

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INTRODUCTION

With the first known case of Covid-19 reported in China on December 31, 2019, 2020 has witnessed the single-biggest disruption to the global tourism industry since records began in the 1950s (Gössling et al., 2020; UNWTO, 2020b). In one of the first academic papers published on the topic, Gössling et al. (2020, p.5) confirm that travel and tourism 'is both a contributor to disease spread and its economic consequences and is dramatically affected by it'. The economic impacts of Covid-19 are certainly devastating with losses anticipated between US\$910 billion and US\$1.2 trillion and consequent job losses of between 100 to 120 million globally (UNWTO, 2020b).

An unexpected outcome of the pandemic, however, have been a range of benefits for the natural environment. For example, the canals of Venice have begun to run clear and the fishstocks of the Mediterranean are making tentative steps towards recovery with reductions in both recreational and smaller commercial fishing (Euronews, 2020; Korten, 2020). More extraordinary still, the world has reduced CO2 emissions to where they were a decade ago (International Energy Agency, 2020). An impossibly small virus has achieved what decades of science, diplomacy and public activism have failed to do.

At the same time, there are negative environmental impacts from the collapse of tourism. Greenfield and Muiruri (2020) argue that the economic challenges to destinations dependent upon nature for tourism have given rise to illegal poaching, fishing and deforestation. In many places, tourism provides the value that in turn provides critical protection for fragile places and species ((Salinas et al., 2015). Covid-19 thus offers an opportunity to reflect on nature's true contribution to tourism, its economic and non-economic value, and on the potential role for nature in tourism recovery, post-Covid as advocated by the UNWTO (UNWTO, 2020a).

NATURE AND TOURISM

The importance of nature to the tourism industry is often under-estimated, due to an overly narrow view of its role. Balmford et al. (2015) calculated the global value of visits to landbased protected areas at 8 billion visits per year and US \$600 billion/y in direct in-country expenditure. In coastal and marine settings, targeted studies have shown, for example, that niche activities such as shark watching attract 590,000 shark watchers, spending US \$314 million per year (Cisneros-Montemayor et al., 2013); while recreational fishing, often linked to tourism, generated about \$67.9 billion in sales impacts in the USA alone in 2016 (National Marine Fisheries Service, 2018).

In reality, such calculations only touch a part of the value of nature. Many tourists are drawn by the presence or the benefits of nature, without choosing to make specific visits to parks or to catch fish. This is well illustrated in the utilisation of nature in marketing across all media (Hunter, 2008; Tsaur et al., 2020): nature is a key element of selling the scene and generating a narrative and an image about a location even where it may not consciously figure in consumer choice.

Spalding et al. (2017) estimated that over US \$19 billion of expenditure could be linked to the direct use of coral reefs for diving and snorkelling each year, but that in addition a further \$16 billion was linked to – "reef adjacent tourism" – including 'the role of reefs in generating clear calm waters and beach sand, outstanding views, fresh seafood and even their widespread use in advertising' (Spalding et al., 2017, p.106). Overall almost one third of all the world's coral reefs are generating value in this way, but of course coral reefs are just one ecosystem. Healthy seafood, clean bathing water, recreational boating, superlative views and many other benefits are derived from marine and coastal ecosystems world-wide.

Short excursions are another component which may be "hidden" in accounts of destinations but may make a critical contribution to traveller experiences. Even a habitat as overlooked as a mangrove forest can generate considerable interest. In a global review using TripAdvisor, Spalding and Parrett (2019) found nearly 4,000 attractions in 93 countries and estimated that these habitats, often overlooked by governments and planners, may be generating "tens to hundreds of millions of visits" and "multiple-billion" dollars annually.

This research note argues that tourism world-wide needs nature, and that it is critical to develop a holistic valuation of "nature-dependent tourism", comprising all tourism that has some link to, and dependency on, nature and natural ecosystems at the destination. This encompasses everything from birdwatching holidays to "foodie" retreats where local seafood

is on the menu, to "sun, sea and sand" destinations where nature, perhaps overlooked, provides the critical elements of the beach experience (Perry et al., 2015).

Of course, tourism can have many negative impacts on nature. The building of runways, highways and coastal hotels has destroyed precious mangrove forests, marshes, dune ecosystems and coral reefs, their effluents have polluted nearshore waters, lights and crowds have wiped out populations of nesting turtles (Lutcavage et al., 2017), boatloads have disturbed migrating whales (New et al., 2015), single-use plastics have drifted to every corner, and divers have loved coral reefs to death (Lamb et al., 2014). Most damaging, long-distance travel generates very high levels of greenhouse gases, warming and acidifying our oceans and driving sea level rise (Higham et al., 2016; Lenzen et al., 2018).

As environmental scientists who have engaged in mapping, modelling and quantifying the value of nature in coastal tourism for many years (Burke et al., 2008; Mark D Spalding et al., 2017; Mark D. Spalding & Parrett, 2019; Waite et al., 2014), we are acutely aware of these impacts. But we are also aware that that the many benefits that tourists derive from nature, both through sought experiences and a host of hidden benefits have given nature a clear, calculable value. If this is accounted for by governments, industry members and coastal communities it can lead to far greater investment in the protection of nature. A balance needs to be found, for the sake of nature and the industry, where tourism and travel can continue to rely on nature, without causing irreparable damage.

CONCLUSION

Post-Covid, market forces and tourist demand are likely both to heighten awareness of the value and dependency of tourism on nature and indeed to increase these values and this dependency. It seems likely that traveller numbers, post-Covid, may remain low, while social distancing measures and the avoidance of crowds will be either mandated or demanded (Adolph et al., 2020). Many travellers will seek out places with spaces: less-developed coastal and countryside locations, national parks and nature reserves. Destinations should consider the opportunities this may present to reshape tourism to adapt and to maximise benefits with lower visitor numbers (Seraphin & Ivanov, 2020; van Beukering et al., 2015), with nature playing a central role in the recovery of the industry.

Beyond reducing tourist density, low visitor numbers will also reduce the impacts of the travel itself. For long-haul destinations, greenhouse gas emissions from the journey are among the largest single impacts that many travellers make each year (Higham et al., 2016). Post-Covid, arrivals will likely remain depressed for some time, but pressures to mitigate climate change may also lead to longer-term societal changes to reduce long-distance mass-transit (Becken, & Carmignani, 2020). The travel sector would do well to embrace this much-needed change, but this will of course further heighten the need to increase profits per capita rather than overall visitor volume. In some countries, such as the Maldives, this path to low-volume, high-cost, tourism has already proved highly beneficial, to nature, culture and the local economy (Salinas et al., 2015).

If travel and tourism is to move from mass transit to niche markets it will be more important than ever to ensure greater local benefits. In part this will come from the reduction of leakage (Hampton & Jeyacheya, 2020), an approach that was already recommended for enhancing recovery post-storm impacts in 2017 (WTTC, 2018), as critical for keeping tourism earnings within the host countries. The slow-food movement, for example, provides a more "niche"

example which has spread from food to many other aspects of the travel sector (Fusté-Forné & Jamal, 2020). Post-pandemic it may come to have a far greater relevance.

To conclude, in a post-Covid world, changes to travel and tourism are inevitable and will likely be driven by a combination of consumer choice, destination availability and regulatory change. While traveller numbers are likely to remain low for some time, natural values are likely to exert a stronger pull than before, with travellers and tourists seeking to avoid crowds and polluted cities. Tourism expansion and growth has inflicted considerable damage on many parts of the natural world. However, the growing realisation of the importance of nature to many aspects of tourism has begun to alter this narrative with there now being an even greater need to develop a truly holistic valuation of "nature-dependent tourism", comprising all tourism that has some link to, and dependency on, nature and natural ecosystems.

The advantages to tourism, post-Covid, will fall to those both in the industry and in society, who seize the opportunity and seek to secure such benefits in a reformed, slow, and truly sustainable form of tourism.

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