RESPONSE COMMENTARY

Holistic and Leadership Approaches to International Regulation: Confronting Nature Conservation and Developmental Challenges. A Reply to Farnese

Stuart Harrop*

Abstract

International nature protection law has developed without a coherent plan, with disparate governance instruments each largely evolving within their own separate sphere. Yet, many other issues are closely linked to the challenges of nature degradation, such as developmental challenges, climate change, food security and food safety, disease prevention, and rural poverty. These interconnections have partly been recognized in Agenda 21 and more recently in the Aichi Biodiversity Targets. This response commentary draws on and extrapolates further the conclusions of Patricia Farnese in 'The Prevention Imperative', published in this issue of *Transnational Environmental Law*, and argues for a more coherent approach and effective leadership in this area of global regulation, along with a more flexible and holistic approach to governance responses.

Keywords: Nature Protection, Development, Health and Disease Prevention, Climate Change, Global Integration and Leadership, Convention on Biological Diversity (CBD)

1. INTRODUCTION

The article entitled 'The Prevention Imperative: International Health and Environmental Governance Responses to Emerging Zoonotic Diseases', written by Patricia Farnese and published in this issue of *Transnational Environmental Law*, focuses on the links between zoonotic disease vectors and wildlife conservation. It argues in favour of the need to coordinate wildlife protection and zoosanitary regimes in international law and proposes to link them into a coordinated portfolio of international instruments. This is a welcome proposition. While, understandably, Farnese's scope was deliberately

^{*} University of Sussex, School of Law, Politics and Sociology, Brighton, Sussex (United Kingdom) (UK). Email: S.Harrop@sussex.ac.uk.

P.L. Farnese, 'The Prevention Imperative: International Health and Environmental Governance Responses to Emerging Zoonotic Diseases' (2014) 3(2) Transnational Environmental Law, pp. 285–309.

constrained, I propose, without in the least criticizing the author, that the general principles set out be taken much further. The main argument of 'The Prevention Imperative' can be summarized as follows: 'there can be no doubt that human alteration of the natural world is the primary cause of disease emergence'2; '... states are not required to evaluate the health impact of land-use decisions',³ and 'global efforts to protect wild spaces are rarely identified as a health imperative'.⁴ On this basis, we may contend that 'health' embraces issues that are wider than those that may normally be considered as health issues *per se*, such as food and water security, food safety, poverty and lack of access to fundamental natural resources. As a result, land use, agricultural strategies, nature conservation, human well-being, along with the health of human communities are all so inextricably connected that any international strategy to deal with them must be a combined and highly prioritized effort.

Unfortunately, this suggestion has not generated any serious traction within the international community. Global coordination over international issues can sometimes be achieved, for instance, over the arguably less essential issue of liberalization of global trade. Indeed, politicians, naturally preoccupied with economic growth, welcomed the creation of a World Trade Organization (WTO) and states were particularly eager to join the newly established regime. On the other hand, the fundamental issue of 'environmental health' creates considerably less enthusiasm, and ratification of international texts on the matter is often met with resistance. Moreover, significant global players often prove reluctant to approve even the most permissive and watered down versions of legal documents that concern global health issues.

Farnese iterates a number of key points on the connections between health and conservation that mirror other dialogues linking conservation practices with wider issues such as food security or climate change mitigation. She indicates that good conservation practices contribute to disease prevention. I would add that these practices also function as climate change controls and contribute to building sustainable agricultural strategies by facilitating low pesticide use while preventing crop diseases. Farnese also refers to the dangers of habitat fragmentation which can disrupt 'natural predator and prey relationships that are important in keeping infectious diseases under control'. It is important to note that habitat fragmentation can also disrupt coherent ecosystems on a wider scale: it can remove the buffers that moderate the impact of climate change and ensure that biodiverse ecosystems remain intact when

² Ibid., at p. 287.

³ Ibid., at p. 285.

⁴ Ibid., at p. 286.

⁵ P. Lamy, 'The Place of the WTO and Its Law in the International Legal Order' (2006) 17(5) European Journal of International Law, pp. 969–84.

⁶ See generally S.R. Harrop, "Living In Harmony with Nature"? Outcomes of the 2010 Nagoya Conference of the Convention on Biological Diversity" (2011) 23(1) Journal of Environmental Law, pp. 117–28.

J. Lu & X. Li, 'Review of Rice-Fish-Farming Systems in China: One of the Globally Important Ingenious Agricultural Heritage Systems (GIAHS)' (2006) 260(1–4) Aquaculture, pp. 106–13.

⁸ Farnese, n. 1 above, at p. 287.

faced with dramatic, rapid and damaging change. I therefore suggest that the arguments put forward by Farnese could be applied more broadly to nature conservation law and related areas of regulation.

International law dealing with natural resource protection has grown incrementally and somewhat chaotically, often across international agencies with substantially differing agendas, without any attempt at coordination except in hindsight. Thus, there is no body yet established which is unequivocally responsible for their development and implementation of this fragmented and disjointed body of law. The fact that nature conservation is a global concern and is probably only effectively achievable through coordinated international action makes the current situation all the more problematic. In addition, natural resource conservation is not only inextricably linked to human health with regard to disease prevention (as already mentioned), but it also relates directly to agricultural strategies, food security and food safety. Natural resource conservation should therefore find a place at the top of the agenda of the lawmaking processes of the international community. Arguably, such anthropocentric considerations should not be needed to justify the protection of the biosphere, but in reality few politicians are concerned with deep ecological ideals that may only bear fruit long after their terms of office have expired. 10 Indeed, action taken now to reverse the relentless trend of biodiversity destruction may seem abstract today and may only manifest demonstrable and beneficial results in the long term. However, immediate food security, food safety and animal health issues must surely be more attractive issues for politicians to tackle. Thus, should advocates of wildlife and nature protection embrace this wider perspective, they might see useful results in their attempts to strengthen international nature protection law.

2. UNCONNECTED REGIMES OF INTERNATIONAL LAW

The regime of international instruments dealing with environmental protection has evolved without structure, strategy or overall coordination. Indeed, international environmental instruments rarely cross-reference each other, hardly ever use consistent terminology or otherwise relate to each other. For example, the Convention on the Conservation of Migratory Species of Wild Animals (CMS Convention) and the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) concern overlapping subjects. Because of their focus on protecting endangered and threatened species and habitats, they could have deployed parallel and similar legal approaches. However, they use different legal language and regulatory

⁹ J.M.J. Travis, 'Climate Change and Habitat Destruction: A Deadly Anthropogenic Cocktail' (2003) 270 (1514) Proceedings of the Royal Society, pp. 467–73.

See S.R. Harrop & D.J. Pritchard, 'A Hard Instrument Goes Soft: The Implications of the Convention on Biological Diversity's Current Trajectory' (2011) 21 Global Environmental Change, pp. 474–80.

¹¹ Ibid

Bonn (Germany), 23 June 1979, in force 1 Nov. 1983, available at: http://www.cms.int/en/node/3916.

Bern (Switzerland), 19 Sept. 1979, in force 1 June 1982, available at: http://www.coe.int/t/dg4/cultureheritage/nature/bern/default_en.asp.

approaches; they do not seek to mirror each other even when dealing with relatively straightforward issues, such as exceptions to prohibitions on killing or taking wild animals.

On a wider scale, nature conservation issues did not receive priority in pre-1992 instruments and have evolved haphazardly for a variety of reasons. The International Whaling Commission (IWC)¹⁴ deals exclusively with cetacean species. ¹⁵ There are no parallel institutional frameworks to govern the protection of other, arguably more important marine species. This is not surprising since the IWC was not established to deal with what now would be understood as 'ecological challenges', but instead to maintain the *orderly development* of the whaling industry. Consequently, the IWC was not originally designed to function from a conservation perspective, as would be commonly understood today, but has rather adapted to current perspectives. ¹⁶

The fundamental approach to regulation within international nature conservation instruments is also widely inconsistent. The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)¹⁷ contains technical and detailed legal provisions that are capable of being transmuted into national law by state parties with relative ease and consistency despite the inherent differences in national contexts. However, other instruments such as the Convention on Biological Diversity (CBD)¹⁸ are drafted in such a vague manner that states can justify their inaction by interpreting the terms of the instrument in a way that suits them.¹⁹ In contrast with CITES, the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar)²⁰ comprises simple, broad and often weak terms with generally drafted provisions and limited obligations. For example, Ramsar only requires states to substantially protect one wetland (Article 2(4)) and Member States are permitted to delete that site from the list and substitute another (Article 4(2)), a principle which surely contradicts the principle of wise use enunciated in Article 3(1) of the Convention.

The subject-matter of many instruments also overlap and may even appear to compete. For instance, some protected areas around the world are simultaneously covered by the UNESCO Convention concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention or WHC),²¹ the Ramsar, Bern, and

Established by the International Convention for the Regulation of Whaling (ICRW), Washington, DC (US), 2 Dec. 1946, in force 10 Nov. 1948, available at: http://iwc.int/convention.

S. Stephenson, A. Mooers & A. Attaran, 'Does Size Matter? The ICRW and the Inclusion of Small Cetaceans' (2014) 3(2) Transnational Environmental Law, pp. 241–63.

S.R. Harrop, 'From Cartel to Conservation and on to Compassion: Animal Welfare and the International Whaling Commission' (2003) 6 Journal of International Wildlife Law and Policy, pp. 79–104.

Washington, DC (US), 3 Mar. 1973, in force 1 July 1975, available at: http://www.cites.org/eng/disc/text.php.

Rio de Janeiro (Brazil), 22 May 1992, in force 29 Dec. 1993, available at: http://www.cbd.int/convention/text/default.shtml.

¹⁹ For an analysis of the CBD in this context, see Harrop & Pritchard, n. 10 above.

²⁰ Ramsar (Iran), 2 Feb. 1971, in force 21 Dec. 1975, available at: http://www.ramsar.org.

²¹ Paris (France), 16 Nov. 1972, in force 17 Dec. 1975, available at: http://whc.unesco.org/en/conventiontext.

Bonn Conventions, and the UNESCO Man and Biosphere Programme.²² The varied list of colourful logos brings to mind non-governmental organizations (NGOs) vying for business rather than international legal instruments fulfilling their obligations.

In 1992, the Rio Earth Summit²³ began a process that had the potential to provide solutions for the limitations highlighted above. Indeed, the principal soft law instrument to derive from that summit, Agenda 21, emphasized the need to deal with many of the disparate issues that face the international community, Even today, the document could provide a reasonable blueprint to begin a process to build a unified global approach to tackle the immense and pressing environmental and developmental challenges that we face and that question our current life choices. The chapters of Agenda 21 deal with a variety of issues, including poverty, human health, protection of the biosphere from different perspectives (climate change, pollution, habitat and nature protection) and the social consequences of environmental degradation. However, the hard obligations that were anticipated to mirror and build upon the exhortations in Agenda 21 did not necessarily follow. There are very few protocols building on the CBD's framework provisions, for instance.²⁴ In particular, issues such as the protection of forests are politically too sensitive for states to reach a much needed agreement that would be legally binding.²⁵ Instead, proposed terms were embedded in a soft law instrument which, in its title - 'Non-Legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests' – emphasizes the neurotic fear of nations to assume responsibility in this area of concern.²⁶

Moreover, the instruments deriving from the Rio Earth Summit lack the support of a meta-governance structure with a coordinating function similar to that of the WTO in the context of the multilateral trade regime.

The Rio Earth Summit generated two legally binding instruments by the CBD and the United Nations Framework Convention on Climate Change (UNFCCC).²⁷ Both instruments cover very broadly framed environmental challenges. Yet, at their inception, it was contemplated that they would be complemented by subsidiary instruments (protocols) creating comprehensive bespoke subsets of obligations.²⁸ From the perspective of biodiversity conservation, this process has not taken place in a comprehensive manner. The scope of the CBD remains extensive (its objects as described

²² Available at: http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/man-and-biosphere-programme/about-mab.

²³ Officially called the United Nations Conference on Environment and Development (UNCED), Rio de Janeiro (Brazil), 3–14 June 1992.

²⁴ See Harrop & Pritchard, n. 10, above.

See, e.g., the Non-Legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests, United Nations General Assembly (UNGA) Resolution 62/98 (17 Dec. 2007). See, in particular, F. McConnell, *The Biodiversity Convention: A Negotiating History* (Kluwer Law International, 1996).

²⁶ See Harrop & Pritchard, n. 10 above.

New York, NY (US), 9 May 1992, in force 24 Mar. 1994, available at: http://unfccc.int.

²⁸ S. Bragdon, 'The Convention on Biological Diversity' (1999) 6(2) Global Environmental Change, pp. 177–9.

in Article 1 comprise 'the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources') but the Convention is not supported by appropriate protocols. ²⁹ Furthermore, the text of the CBD, despite its attempt at umbrella coverage of conservation issues, does not expressly link to any other contemporary conservation treaties. Even when the opportunity arose, the CBD 2010 targets made no attempt to expressly make a reference to or parallels with CITES. This was despite the fact that international trade in endangered species was specifically referred to in those non-binding targets.

Given the links between species, ecosystems, and wider global life-support systems expressly acknowledged in the text of the soft and hard instruments that were adopted at the 1992 Rio Earth Summit, an opportunity has been lost at the foundational stage to create leadership in the diverse strands of law and policy that had evolved erratically and independently to deal with limited aspects of an overall complex challenge. Firstly, without that endowment of express power from the creation of the CBD, it will be more difficult politically, in a world where short-term national government agendas can so easily frustrate essential long-term global sustainability strategies, to give the CBD a position of leadership in the field of conservation law. Secondly, in legal terms any attempt to have other instruments fulfil the CBD's overall strategy may be susceptible to arguments that such assumption of control would be *ultra vires* the Convention. Therefore, if the CBD is not amended, these obstacles may permanently block any leadership and coordination role of the CBD. In any event, attempts at granting leadership to the CBD can only be informal and aspirational. This is evidenced in the CBD's strategic target programme.

In recent years the CBD has concentrated its regulatory efforts on creating non-binding targets. The first set of these targets³⁰ was designed to be achieved in 2010. They failed in their aspirations,³¹ and have also been heavily criticized for their technically ill-conceived approach and for their lack of indicators.³² The CBD's Strategic Plan was drastically revised in Nagoya (Japan) at the end of 2010,³³ in response to the disappointing performance of the previous strategy. New, more sophisticated targets (known as the 'Aichi Biodiversity Targets') were set out in the Annex to cover the various issues that can be included within the

Though note the Cartagena Protocol on Biosafety to the Convention on Biological Diversity, Montreal (Canada), 29 Jan. 2000, in force 11 Sept. 2003, available at: http://bch.cbd.int/protocol; and the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity, Nagoya (Japan), 29 Oct. 2010, in force 12 Oct. 2014, available at: http://www.cbd.int/abs.

OBD COP Decision VI/26 of 2002, 'Strategic Plan for the Convention on Biological Diversity: 2010 Targets', available at: http://www.cbd.int/2010-target/about.shtml.

³¹ Harrop, n. 6 above.

³² Among others, see J. Carwardine et al., 'Hitting the Target and Missing the Point: Target-based Conservation Planning in Context' (2009) 2 Conservation Letters, pp. 3–10; and for a general assessment and synthesis of the criticisms see Harrop & Pritchard, n. 10 above.

³³ CBD COP Decision X/2X/2 of 2011, 'Strategic Plan for Biodiversity for the Period 2011–2020', annexed to CBD COP10 Agenda Item 4.2, 'Updating and Revision of the Strategic Plan for the Post-2010 Period', available at: http://www.cbd.int/decision/cop/?id=12268.

CBD's wide-ranging objectives. The emphasis is, of course, on biological diversity and its protection and maintenance in all its facets, but other related subjects are also dealt with. For instance, Target 2 seeks to integrate 'biodiversity values' into national and local development and poverty reduction strategies; Target 7 seeks to 'manage sustainably areas under agriculture, aquaculture and forestry, ensuring conservation of biodiversity'; Target 13 seeks to 'maintain and prevent theerosion of the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives', and Target 14 seeks to 'restore and safeguard ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being ... taking into account the needs of women, indigenous and local communities, and the poor and vulnerable'. The CBD thereby creates links with the wider developmental agenda by taking into account developmental issues such as food supply, safety and security, poverty reduction and many other issues.

Moreover, through its administration of such a wide range of subjects, the CBD acts as an overseer of many of the issues which must be dealt with in a holistic approach to the conservation of nature in the context of international development agendas. This role may not amount to formal leadership but the targets implicitly acknowledge that the response to the challenges of our age require a holistic approach. This hints at a glimmer of appreciation among the international community of the need for leadership in the area of conservation.

3. LEADERSHIP IN CONSERVATION

The recent emphasis on non-binding targets has led commentators to argue that the CBD is devolving from a hard law instrument to an instrument with a soft effect.³⁴ Indeed, because of their non-binding approach, the language of the targets is more akin to expressions of aspiration, exhortation, inspiration and vision. Such texture in language is not appropriate in legal instruments since it lacks the precision required to establish legal norms that can be consistently implemented, especially given the variety of languages and legal cultures within the international community. While the language used in the targets may not build consistent and lasting norms, its inspirational tone ironically may make the targets more effective as instruments to exhort and inspire leaders to rally together the disparate functions. Indeed, the new CBD Strategic Plan expressly recognizes a potential leadership role for the CBD among the scattered portfolio of international instruments that deal with nature conservation and among international parties and stakeholders involved with the issue. In its first paragraph, the new Strategic Plan expressly seeks to 'promote effective implementation of the Convention through a strategic approach comprising a shared vision, a mission, strategic goals and targets that will inspire broad-based action by all Parties and stakeholders'³⁵ and section 17 of the Annex to the Plan seeks to promote partnerships

³⁴ Harrop & Pritchard, n. 10 above. See also A. Kotsakis, 'Change and Subjectivity in International Environmental Law: The Micro-Politics of the Transformation of Biodiversity into Genetic Gold' (2014) 3(1) Transnational Environmental Law, pp. 127–47, at 146.

³⁵ CBD COP Decision X/2X/2 of 2011, n. 33 above, Annex, para 1.

with related conventions. This specifically reinforces provisions in the parent text of the Strategic Plan which state that the plan 'represents a useful flexible framework that is relevant to all biodiversity-related conventions'. Further, paragraph 17(c) of the principal text acknowledges the need to create a 'coherent implementation of biodiversity-related conventions and agreements'. ³⁷

Two necessary components of leadership are required in this context: the one already described in principle within the Strategic Plan is the need to corral the diverse instruments and parties involved in the process of nature conservation. The second component is the need to oversee national implementation; this need is implicit in the CBD which establishes a Clearing House Mechanism (Article 18(3)) to coordinate and communicate national actions, plans and strategies.

But are the preliminary trappings of leadership endowed upon the CBD sufficient to provide a strong and sustainable facility to face the present and future environmental and developmental challenges? Further, is the CBD an appropriate body to lead on such a wide range of issues that cut across many entrenched portfolios?

Farnese, in the context of her focus on the need for an effective international response mechanism to deal with emerging zoonotic diseases, points out that no single international organization with an explicit mandate for wildlife health protection exists. Therefore various international agencies with mixed portfolios respond in a scattered, fire-fighting manner and 'states are rarely directed by international governance mechanisms to address meaningfully the root causes'. 38 She goes on to indicate that this state of affairs 'mirrors what is seen in other areas of wildlife management at the international level'. ³⁹ Perhaps the CBD's non-binding and rather flexible targets are an attempt to deal with this type of criticism but, as has been pointed out, the latest targets replicate many shortcomings of the previous failed targets. In addition, they provide outmoded responses and insufficiently flexible answers to deal with the challenges that face us. Farnese, referring to the thinking of Simon, 40 argues in the context of the complexity of emerging zoonotic diseases, that there is a need for a rapid and innovative response and thus the need for a 'rolling regulatory regime characterized by collective and interdisciplinary decision making that balances both formal rules and informal standards' rather than a fixed regime based on relatively inflexible mandates. Such a regime would have the ability to link all the issues that relate to challenges along with the international agencies and conventions that deal with them.

But is this idea just relevant to the emergence of diseases linked to wildlife vectors or can it be extrapolated to the need to embrace a holistic and integrated strategy to deal with complexity in the environmental challenges that face us? The issues of

³⁶ Ibid., Preamble.

³⁷ Ibid

³⁸ Farnese, n. 1 above, at p. 289.

³⁹ Ibid

W. Simon, 'Toyota Jurisprudence: Legal Theory and Rolling Rule Regimes', Columbia Law School, Public Law & Legal Theory Working Paper 04-79, at p. 4. available at: http://ssrn.com/abstract=602626.

⁴¹ Farnese, n. 1 above, at pp. 304–5.

biodiversity degradation, disease prevention and nature protection, food security and food safety are all complex issues that require a coordinated strategy deploying a combination of steady-state and flexible responses that can surmount the politics that arrests the progress of many standard multilateral initiatives in the field of environmental law. The CBD's attempt at exhortation and leadership comprised in its new Strategic Plan aspires to find a way to achieve this. The targets seek to provide planning for the future and milestones that need to be reached. They may be ill-advised in many cases and hampered by the lack of binding commitments but they are relatively holistic in nature. What may be needed is a non-political body to feed into the process, to establish priorities that are robustly constructed and reflect best knowledge and science. It may be that an overarching lead institution can then allocate roles to the existing agencies and conventions (it would be an unrealistic task to design all from scratch again) and monitor and encourage (or preferably require) compliance of state parties.

Farnese suggests using the new Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) whose role is to 'assess the state of the planet's biodiversity, its ecosystems and the essential services they provide to society'. Whereas I can appreciate the importance of the new platform, the IPBES mandate dictates that it must remain an authoritative advisory body free from management constraints and politics. It should be able to report objectively and fearlessly to an overall leadership body whose task might, by example, mirror that of the WTO in respect of the multilateral trade agreements. What is needed is an institution that could take on board the recommendations of the IPBES and oversee the implementation, administration and operation of all soft and hard law instruments regarding natural resources conservation and related issues.

4. CONCLUSION

In sum, it may be that much is already in place except for the pinnacle body which is endowed with power and responsibility to bring together legal instruments and the variety of stakeholders in the field of conservation law. Such a body could take a leaf from the texts that created the WTO and apply the approach used to further the multilateral trade regime to environmental law. If this were to be done we might begin with the creation of an overarching body (a 'World Environment Organization') that would link together the disparate but related issues that stem from the challenges we face as a combined result of environmental degradation and unfettered global, developmental aspirations. ⁴³ Such an organization would have the following prime mandates: ⁴⁴

⁴² See http://www.ipbes.net/about-ipbes.html.

⁴³ In this context see S. Charnovitz, 'A World Environment Organization' (2002) 27 Columbia Journal of Environmental Law, pp. 323–62.

⁴⁴ These suggestions derive from Article III of the Marrakesh Agreement Establishing the World Trade Organization, Marrakesh (Morocco), 15 Apr. 1994, in force 1 Jan. 1995, available at: http://www.wto.org/english/docs_e/legal_e/04-wto_e.htm. See also ibid.

- 1. To facilitate the implementation, administration and operation, and further the objectives, of [list of all current, relevant agreements, soft instruments, hard conventions etc. in an Annex].
- 2. To administer global environment and development policies, taking into account the advice of [IPBES].

The umbrella organization could bring coherence within the field of conservation law and contribute to setting up coordinated responses to conservation and related issues. It would be in a position to apply its helicopter vision, duly counselled by an advisory body, to determine which elements of its wide-ranging toolkit of governance responses are appropriate in each case without being restricted by the fossilized remit of one particular instrument. It would also be in a strong position to advocate for change to expand its range of responses and to act decisively. Beyond this, clear and empowered leadership could direct relevant bodies to prioritize and, thus, make them more cost-effective and efficient. This would leave institutions better equipped to face the challenges of biodiversity decline in the context of development and social pressures. Many scientists already appreciate that perfect solutions to species loss and habitat degradation do not exist. This makes reliance on currently available strategic and pragmatic approaches to prioritization essential.⁴⁵ Such propositions, helped with proper coordination and leadership, could inform and direct the joint efforts of all instruments under a single umbrella and enhance their effectiveness far beyond existing levels. 46 Moreover, leadership that emanates from a body with a wider vision – that takes into account social, developmental, climate, food security and wider global challenges – could ensure that other related issues (including issues under CITES, the IWC or the World Heritage Convention) form part of the international agenda. Such leadership could result in a much stronger and clearly prioritized approach to responding to the extensive and urgent conservation challenges that face us.

⁴⁵ See, e.g., N. Myers, R.A. Mittermeier, C.G. Mittermeier, G. Da Fonseca & J. Kent, 'Biodiversity Hotspots for Conservation Priorities' (2000) 403(6772) Nature, pp. 853–58; N. Robin et al., 'Global Mapping of Ecosystem Services and Conservation Priorities' (2008) 105(28) Proceedings of the National Academy of Sciences, pp. 9495–500; J. Carwardine et al., 'Cost-effective Priorities for Global Mammal Conservation' (2008) 105(32) Proceedings of the National Academy of Sciences, pp. 11446–50.

⁴⁶ See, e.g., the propositions suggested for a better coordination of European marine conservation in K. Metcalfe, T. Roberts, R.J. Smith & S.R. Harrop, 'Marine Conservation Science and Governance in North-West Europe: Conservation Planning and International Law and 'Policy' (2013) 39 Marine Policy, pp. 289–95.