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PERSPECTIVE

FAR-sighted conservation

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Abstract

1. Conservation targets that reference historical expectations, such as maintaining specified areas of intact ecosystems, restoring degraded ones or maintaining the historic distributions of species, may not be realistic in the context of ongoing environmental change, whereas targets that aspire to accommodate the complex realities of the human-altered and changing world tend to be too vague to implement.
2. Using the first three recently proposed Convention on Biological Diversity post-2020 global biodiversity Action Targets as context, we suggest a policy framework that evaluates how we might shift from an emphasis on resisting sometimes inevitable change to the development of positive directions of change for people and biodiversity. Our Anthropocene approach builds on the fact that all ecosystems have already been shaped by interactions with people and that ongoing change is inevitable.
3. We outline a Facilitate–Accept–Resist (FAR) framework for all levels of conservation decision-making and actions, ranging from overall conservation strategies (planning, setting targets, monitoring change, selecting indicators) to the conservation of places (sites, ecosystems, landscapes) and species, and to the provision of ecosystem services and human well-being. For each potential decision, the approach evaluates whether, for whom and how one might facilitate, accept or resist particular changes. We highlight the value of inclusive engagement in the process to ensure that benefits from biodiversity are equitably shared.
4. The CBD Action targets reflect tensions between maintaining historic states of nature and the Anthropocene reality of integrating people with nature and accepting change. The challenge is to operationalize the inclusivity, integration and change elements of the targets whilst not 'abandoning' locations that many conservationists consider to be key places for wildlife. The FAR framework represents a way to operationalize decision-making in the face of this tension, so that the facilitation and acceptance of positive biodiversity change is adopted at least as frequently as change is resisted.

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KEYWORDS
Anthropocene, biodiversity, CBD, climate change, colonization, conservation, extirpation, inclusiveness, restoration, rewilding

1 | INTRODUCTION

All ecological and evolutionary processes are dynamic and people have transformed ecosystems and the wider environment throughout the world for millennia (Ellis et al., 2021; Mottl et al., 2021). Thus, every wild organism that exists today survives in a human-modified ecosystem and every benefit that humans obtain from biodiversity is, likewise, derived from ecosystems that have already been directly or indirectly modified by people. Even remote ecosystems have changed as a consequence of the human-mediated extinction of the megafauna, the altered chemistry of the atmosphere and oceans and anthropogenic climate change. Thus, ecosystems involve interacting physical, biological and human processes, and all ecosystems have changed and are continuing to change as a consequence of human activity (Thomas, 2017, 2020). The practical challenge is how to accommodate and facilitate positive ecosystem changes rather than set ourselves against the forces of nature as they respond to anthropogenic change.

The United Nations Convention on Biological Diversity (CBD) acknowledges the integration of human and biological processes and places, the benefits that people derive from nature and the ongoing reality of change (CBD, 2010). Nonetheless, the first three CBD Action targets in the draft post-2020 global biodiversity framework (CBD, 2021) retain a desire to protect intact (priority, wilderness, important) ecosystems (*italics*) and restore those that are degraded (***bold italics***), as well as recognizing integration and change (underlined by us). The first three CBD (2021) draft targets are as follows:

> 'Target 1. Ensure that all land and sea areas globally are under integrated biodiversity-inclusive spatial planning addressing land- and sea-use change, *retaining existing intact and wilderness areas.*
>
> Target 2. Ensure that at least 20 per cent of degraded freshwater, marine and terrestrial ecosystems ***are under restoration***, ensuring connectivity among them and *focusing on priority ecosystems.*
>
> Target 3. Ensure that at least 30 per cent globally of land areas and of sea areas, especially areas of particular importance for biodiversity and its contributions to people, are conserved through effectively and equitably managed, *ecologically representative* and well-connected *systems of protected areas* and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.'

Targets 1 and 3 give a mixed message: separation and protection of special places versus integration of people and nature. Words and phrases such as 'integrated', 'spatial planning', 'contributions to people', 'managed' and 'integrated… landscapes' speak of social-ecological systems and that the futures of ecosystems and people are enmeshed. A focus on landscapes and seascapes (implying relatively large areas) almost inevitably includes a degree of direct human disturbance, as well as exposure to multiple indirect drivers of change, such as climate change and nutrient deposition. The word 'change' is only mentioned once, but socio-ecological systems almost always involve a degree of human-caused change. In contrast, 'intact', 'wilderness', 'priority ecosystems' and 'ecologically representative' conjure up images of idealized (and largely) human-free ecosystems as a preferred state. Where they have been 'degraded', the goal should be to ensure that they are 'under restoration'. Taking the targets together, it is unclear whether the focus should be on these 'special places' (part of Target 1, and Targets 2 and 3) or for better integration of people and nature 'everywhere' (Target 1). In reality, this distinction is difficult or impossible. Human-caused climate change has influenced the entire world already. Furthermore, selecting, legislating, identifying priorities in and managing 30% of land and sea as special places (and restoring additional sites) require social and political decision-making, and these locations make multiple 'contributions to people', whose voices deserve to be heard (Schleicher et al., 2019). Integration is inevitable everywhere, although the form and level of integration will vary.

Target 3 can be numerically defined and so the aspiration for 30% area-based conservation by 2030 is gaining traction. Over 100 countries already support it (High Ambition Coalition for Nature and People, 2022), even though new designations may be driven by political convenience rather than their importance for biodiversity (Cunningham et al., 2021; Starnes et al., 2021), and numerical area targets can result in perverse outcomes (Barnes et al., 2018). It is also not clear whether increased levels of area-based conservation, an approach that has hitherto failed to halt declines in certain biodiversity indicators, will deliver the underlying CBD biodiversity goals (Visconti et al., 2019) or maximize the co-benefits of conservation for people in different situations (Oldekop et al., 2016). Attempts to protect nature by its separation from people can also result in elitist decision-making that risks excluding the majority of people, particularly indigenous communities (Mukpo, 2021), from influencing or benefitting from nature conservation, and can often leave the costs of conservation being borne by the poorest and most marginalized people (Büscher et al., 2017).

These targets will only be effective at fulfilling the underlying aspirations of the CBD if they are accompanied by realistic and forward-looking approaches to implement them, as recommended by

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Buchanan et al. (2020) in their review of the difficulties associated with meeting the CBD Aichi targets. The challenge is to incorporate the inclusivity, integration and change elements of the targets (underlined text) whilst supporting the locations that many conservationists consider most important for wildlife (italicized text). We take 'inclusive' in Target 1 to encompass all of those people with an actual or potential social and/or economic interest, extending well beyond those groups (e.g. government departments, researchers, landowners, farming interests and conservation NGOs) who typically engage in conservation consultations. This might include, for example, taxpayers, citizens inhabiting floodplains that are influenced by upstream devegetation and those who could (but currently do not) benefit from natural spaces, were barriers to be reduced or removed (see below), and include inputs ranging from planning to governance and co-management (Raymond et al., 2022). Hence, we propose a more inclusive approach across conservation activities, recognizing that people are a fundamental part of nature in the Anthropocene and that biological responses to the changing environment are dynamic and continuous.

2 | EMBRACING DYNAMISM AND FACILITATING POSITIVE CHANGE

Dynamism is how biodiversity responds to and ultimately survives environmental perturbations, be those repeated Pleistocene climatic shifts or more recent human impacts, continually generating novel distributions, genetic mixes and biological communities (Mottl et al., 2021; Thomas, 2017; Williams & Jackson, 2007). This perspective is not how conservation has typically framed biological responses to Anthropocene change, whereby change is normally interpreted as the loss or deterioration of historical populations, communities, ecosystems, landscape characteristics or nature's contributions to people. Protected-area designation criteria are commonly articulated in terms of a preferred state, such as the condition at the time of designation, a desired baseline condition or particular ecosystem and species restoration targets, aiming to retain the status quo or return to historic baselines, as exemplified by the CBD targets for 'retaining' and 'restoring' ecosystems. If there is biodiversity turnover in response to climate change, for example, but the total number of species and abundance summed across all species in a region remains constant, native species indicators (based on species present at the start of a time series) will invariably decline and indicators of immigrants (based on species that arrive, some of which may be non-native) will increase (Thomas et al., 2022). Despite no net change in overall biodiversity levels, this scenario would be treated as negative, representing departures from a historical state.

Conservation discourses and policies are of course far more complex than this (De Koning et al., 2014), but the popular framing of the biodiversity 'crisis' is nonetheless mostly focussed on stopping changes that are perceived to be undesirable from happening, rather than engaging with positive biodiversity change. For example, climate change adaptation measures have generally focused on maintaining existing ecological patterns and processes through increased interventions (Duffield, Le Bas & Morecroft, 2021; Hagerman & Pelai, 2018) rather than enabling transitions to new states that are better adjusted to the new conditions.

Tensions are evident between the separation versus integration of people in the CBD targets and between attempts to restore biodiversity and maintain the status quo versus accept or encourage change in the context of climate change, land management and other ecological drivers (Jackson, 2021; Millar, Stephenson & Stephens, 2007; Mottl et al., 2021; Thomas, 2017, 2020; Williams & Jackson, 2007; Williams, Ordonez & Svenning, 2021). Such tensions are widely appreciated, but they are rarely made fully explicit during conservation policy formulation, decision-making and management. The British conservation agency Natural England, for example, has embarked on a review of the implications of climate change for protected area effectiveness, to which we were invited to contribute a 'think piece' (Thomas et al., 2022), recognizing that historic conservation designations and management targets may need to be adjusted. This paper was inspired by the 'think piece'. Motivated by the CBD global challenge, as well as our specific experience with Natural England strategic thinking, we here outline a framework to help enable individuals and organizations to articulate and assess alternative policy and practical conservation options in the context of ongoing environmental and biological changes. Environmental change, social settings and perspectives vary (among individuals, social groups and nations) across the world, and hence the scope of our framework is to make options explicit, rather than provide specific guidance to resolve differences of opinion in all possible situations. While we do consider some social processes that are relevant to assessing the pros and cons of different options, these will need to be adjusted to the social and geographic context, and would likely be incorporated into existing frameworks for decision-making.

Reviewing these tensions, we suggest that accepting and facilitating positive biodiversity changes are as legitimate as more conventional conservation that focuses on slowing declines or attempting to restore historical communities. By 'positive biodiversity change', we refer to any change (persistent long-term trend rather than short-term fluctuation) that increases particular metrics of biodiversity 'value', such as species richness, the representation of small-range species, genetic diversity or ecosystem services such as reduced soil erosion and increased carbon sequestration (or any other metric that individuals and particular sectors of society might regard as desirable), even if some previously abundant species and other ecosystem services decline. Working with rather than resisting the underlying processes of ecological and evolutionary change is likely to be a more successful approach.

Increasing numbers of studies emphasize the importance of developing future-oriented and realistic long-term conservation goals that incorporate dynamic change into plans and actions (e.g. Jackson, 2021; Millar, Stephenson & Stephens, 2007; Thomas, 2020; Williams, Ordonez & Svenning, 2021). The challenge is to identify when change is acceptable, beneficial or inevitable, and to identify what actions to take, and when. Several recent frameworks have moved in this direction, each recognizing the tension between trying to prevent or embrace change (Table 1). Most of them are inspired by the challenge of

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TABLE 1 Our Facilitate–Accept–Resist change framework for Anthropocene conservation builds on previous studies emphasizing dynamic change

Facilitate	Accept	Resist	Published scheme
Respond; Facilitate		Resist; Resilience	Millar et al., 2007
Manage for novelty	Tolerate	Manage against novelty	Truitt et al., 2015
Transformation	Adaptation (passive)	Adaptation (active) to maintain current conditions	Hagerman & Pelai, 2018
Low regrets connections; Climate-targeted translocations	Low regrets tolerance	Climate-targeted amelioration; Low regrets amelioration	Prober et al., 2019
Direct	Accept	Resist	Schuurman et al., 2020
Transform (direct, accelerate)	Transform (autonomous)	Resist (active, passive); Resilience	St-Laurent et al., 2021

Note: The text in the cells represents categories of potential conservation responses identified by previous authors. In some instances, we paraphrase the original author wording or adjust categories to map them onto Facilitate–Accept–Resist responses. Resilience is grouped with Resistance because these authors used resilience primarily in the sense of minimizing change, although resilience could relate to all three categories (e.g. Dudney et al., 2018).

FIGURE 1 Conceptual schematic of a dynamic and inclusive Facilitate–Accept–Resist (FAR) framework for conservation, illustrating how FAR is incorporated into all conservation decision-making and actions, through co-production. It can be applied to global, national and local decision-making, with different conservation strategies emerging in different regions (zones), depending on the biodiversity priorities, human needs and environmental drivers operating there.

climate change as a driver of biodiversity change in protected areas as well as in other locations, but they apply equally in the context of any combination of drivers that cause change.

Building on these dynamic approaches (especially Schuurman et al., 2020), we propose a *Facilitate–Accept–Resist* (FAR) change framework for Anthropocene conservation (Figure 1), with 'Facilitate' (Millar, Stephenson & Stephens, 2007) rather than 'Direct' (as in Schuurman et al., 2020), which perhaps implies greater control of species and ecosystems than is realistic. To overcome institutionalized resistance to change, this framework needs to be embedded within every aspect of conservation. It can be applied to overall conservation strategies (planning, setting targets, monitoring change, selecting indicators), to the conservation of places (sites, ecosystems, landscapes) and species and to the provision of ecosystem services and human well-being. If applied widely, this approach will ensure that the facilitation of future biodiversity benefits receives as much attention as the resistance of change in all aspects of conservation decision-making so as to bring positive benefits whilst minimizing potential expenditure on 'lost causes'.

By articulating interventions under these three headings (*Facilitate–Accept–Resist*), it is possible to explore and compare the extent to which each potential Facilitate, Accept and Resist option is feasible, cost-effective and preferred, and to distinguish between cause (driver) and effect (biological response). Society might, for example, collectively resist climate change (by reducing emissions), whilst accepting and facilitating biological responses to climate change. This facilitation could include (i) improving the connectedness and permeability of landscapes to facilitate the movement of genes and species, (ii) the potential for translocations of species and genes that are unable to shift without intervention (Hoegh-Guldberg et al., 2008) and (iii) valuing and encouraging colonizing species and novel communities that arise from range shifts (*trans situ* conservation; Table 2). This facilitation addresses 'connectivity' in CBD Target 2 and 'integrated into the wider landscapes and seascapes' in Target 3, as well as wider CBD aspirations to minimize losses of genetic and species-level components of biodiversity. Conservation measures that facilitate the establishment of novel species communities contrast with 'resist-style' target-setting. The latter are inefficient if focused on maintaining local populations of regionally or nationally rare species whose future is secure elsewhere. Laying out

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TABLE 2 Approaches to accommodate biodiversity change and facilitate positive trajectories, adapted from Thomas (2020)

Conservation strategy	Facilitate	Accept	Resist
Planning: Strategic prioritization, targets, monitoring	Facilitation of dynamic species ranges and abundance changes, novel ecosystems and co-benefits. Priority species lists based on longer term future prospects and global endangerment	Environmentally beneficial policies, accepting dynamic species ranges, abundance changes, novel ecosystems and changing ecosystem services	Focus on priority areas, maintaining status quo, attempts to reverse past changes (restoration). Priority species lists based on historic status
In situ: Protected areas, ecosystem management	Interventions based on regional and global perspectives, focus on future refugia, heterogeneous habitats, engineered ecosystems, habitats for globally endangered colonizing and introduced species	Environmentally beneficial policies, visitor management in protected areas, without goals for particular species and ecosystems	Local focus on protecting current ranges and ecosystems, restoration and reintroductions
Ex situ: Zoos, botanic gardens, gene and seed banks	Providing breeding stock/propagules for trans situ conservation	Accept losses but provide future options via gene/seed banks.	Captive breeding and collections, to support reintroductions
Trans situ: Facilitating movement to new locations	Improving connectivity (stepping stones, corridors), translocations (assisted colonization), facilitating ecosystem transitions	Environmentally beneficial policies without goals for particular species and ecosystems	Landscape-scale conservation and ecological corridors for population persistence within existing ranges, reintroductions to former sites

Note: This approach identifies the value of accepting and encouraging dynamism during the conservation planning process, identifying new priorities for in situ management in the wild, establishing the role of ex situ (in captivity) measures contributing to the movement of species and trans situ approaches encouraging the movement of species.

the FAR options makes the relative pros, cons and trade-offs explicit when setting overall conservation strategies. The decision to resist change should not be the default position for biological responses to environmental drivers.

To illustrate the challenge, approaches to restoration might change. Consider forest restoration, for example in the Atlantic region of Brazil, and suppose that the CBD 20% restoration aspirations are adopted as the initial 'overall strategy'. Having signed up, any country then has considerable flexibility in how restoration might be implemented and reported, given that there is potential ambiguity in the wording as to exactly what counts as 'degraded', 'under restoration', 'connectivity among them' and 'priority ecosystems', interpretations that could be refined by socially inclusive engagement within each region (see below, Table 3). Hence, the FAR 'targets' (Figure 1) would focus on more specific restoration goals, developed in consultation with all interested parties that are appropriate to the environmental governance, social structures and communities of the region. Resist targets might aim to return fragmented forest landscapes to a species composition similar to the pre-clearance forest state, as a baseline (Banks-Leite et al., 2014). Facilitate targets, in contrast, would prioritize the establishment of species and forest (and other) ecosystems that would thrive under future climatic and soil conditions, including some species that were not part of the pre-clearance forest of the local area, which could potentially provide opportunities to establish threatened species from the wider region, especially if these help to maintain important functions (Sobral-Souza et al., 2017). An Accept framing would not aim to influence composition in a specific way, and alternative 'Accept' approaches could encompass a return to forest, or take a broader approach to ecosystem services and human well-being in a pastoral or mixed landscape. Thus, the FAR approach can alter conservation targets significantly. Both the Accept and Facilitate approaches have greater flexibility to maximize nature's contributions to people than Resist approaches, for which restoration to a past condition is to a great extent predefined. Note that the options are not mutually exclusive—components of all three FAR options could apply within a single region, and some actions may achieve multiple outcomes. Increasing connectivity, for example, could increase the metapopulation sizes of already resident species (Crouzeilles et al., 2015; Hatfield et al., 2018) but would also be a Facilitate target to ensure species are able to move in response to changing climatic conditions.

The corresponding FAR 'actions' (Figure 1) will then be co-managed (Table 3) to obtain seed and produce saplings to be planted at densities (Manes et al., 2022; Rodrigues et al., 2009) to achieve Resist and Facilitate species composition targets in agreed locations, which may also differ between strategies. Resist approaches would potentially 'weed out' species that are deemed to be undesirable, while Facilitate might take a more liberal attitude to unexpected species additions. An Accept framing could remove livestock and rely on natural succession, especially in areas where stock raising is economically marginal (admitting to economic realities as well as biological ones), accepting the ecological communities that develop. The 'Evaluation' phase (Figure 1) would consider the costs and effectiveness with respect to each target, with effectiveness measured as: similarity of the developing forest

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TABLE 3 An abridged selection of types of participation (see Hurlbert & Gupta [2015], Reed [2008] and Sterling et al. [2017] for additional types and examples)

Inclusion strategy	Facilitate	Accept	Resist
Volunteering: Voluntary involvement, for example in local management—most success to date engaging with diverse groups	Create new wildlife habitats and gardens, for well-being and biodiversity conservation	Nature appreciation for well-being, avoiding new 'harms' without goals for particular species and habitats	Local actions to assist in management to maintain and restore habitats
Consultation: Dialogue between stakeholder groups, from local to national scales—levels of inclusiveness and participation vary	Wider involvement in strategy development at local and national levels, with expectations established at start	Wider involvement in strategy development at local and national levels, without goals for particular species and habitats	Consultations are often limited to particular sectors that may be predisposed towards Resisting change
Citizen assembly: Representative sample of citizens brought together to learn, discuss and recommend approaches to particular issues (experts providing evidence)	Incorporating a wider range of perspectives within national priority and strategy development, including facilitating change	Incorporating a wider range of perspectives within national priority and strategy development, including accepting change	Potential to communicate costs/complexities as well as benefits of conserving status quo
Citizen science: Voluntary biodiversity data collection—participation can vary from data collection to develop and help answer research questions	Local and national monitoring of species range shifts, with a focus on globally threatened species, novel ecosystems and changing biodiversity	Local and national monitoring of species range shifts, novel ecosystems and changing biodiversity for entire taxonomic groups	Data collection for native species trends and monitoring, or a focus on invasive, rare or indicator species
Co-management: Power, responsibility, decision-making and enforcement of rules are shared among stakeholders	FAR zoning involves co-management, enabling local people to contribute to new (beneficial) priorities and management	Co-management of acceptance, primarily identifying and avoiding new 'harms'	Few opportunities for true co-management (where multiple groups have equal say in decision-making)

Note: Level of participation can vary within each of these categories.

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to the 'baseline' (Resist); overall biodiversity levels, value of mosaics and expected long-term outcomes of ongoing succession (Accept); and importance of the developing forest for globally threatened species (Facilitate). Biodiversity outcomes would be monitored (potentially involving citizen science; Table 3) and contributions to carbon storage (Manes et al., 2022), water quality, soil stability, any other ecosystem service, well-being and equity would also be evaluated, depending on the extent to which these had been included in the original targets. These findings then feed back to assess progress and make changes in the overall strategy if necessary.

3 | EVERYWHERE AND FOR EVERYONE

Enumerating FAR options also makes explicit the human values that underlie conservation decision-making. As area-based conservation targets and other effective measures increase from 17% (Aichi target) to 30% or even more (the 'all land and sea' component of Target 1), the conservation focus will increasingly turn away from 'wilderness' areas towards landscapes shared by people and nature. Different places are important for different people, species, ecosystem processes and aspects of well-being, and people vary in how they value these features. Rather than conservation policy being driven overly by a focus on 'what is the best 30%?', we suggest that it is more equitable to ask 'what and who is each area important for?' and 'how can biodiversity and human well-being be enhanced in *every* location?'

Once information is compiled, inclusively, on who and what *each* area is (currently and potentially in future) most important for, the FAR framework would be applied in an inclusive manner to develop forward-looking conservation strategies. FAR could be applied at different spatial resolutions (local, regional, national), and to different environmental zones within each region (e.g. aided by conservation spatial planning tools to highlight conservation features of greatest importance in different zones, and enumerate trade-offs). This will ensure that options to facilitate positive biodiversity and ecosystem service changes are considered *everywhere*, and from the perspectives of different interest groups, as well as evaluating the consequences, feasibility and costs of resisting change. Because environmental and human contexts will differ among zones, the outcomes of the FAR process will be context dependent. For example, traditional protected areas for endemic species may be adopted in some zones, and cultural landscape management in others, whilst areas for ecosystem services, for rewilding or for urban greenspaces would be implemented in other zones. For Target 3, this approach will provide a framework for deciding biodiversity, service and well-being options and priorities within the 30% target as a whole, and for each protected area, and to define what might be regarded as 'effective area-based conservation measures'. Using the FAR framework will ensure that the selection and subsequent management of both priority areas and integrated landscapes maximize future benefits.

The CBD targets encompass locations that people live in, visit and rely on (including remote locations that provide regulating ecosystem services), so all conservation strategies should be inclusive (O'Grady, 2020; Schleicher et al., 2019), ensuring effective and equitable conservation management (Target 3). Consultations in these matters are typically dominated by environmental professionals, NGOs and landowners, more than by visitors and non-farming interests (who often form the majority of people and income associated with these landscapes). Therefore, we recommend engagement of a much wider range of interests and actual or potential beneficiaries. Because ecological and social change are context specific, and conservation and other priorities vary, there is no silver bullet that applies in all situations. Hence, the FAR approach, like SWOT (strengths, weaknesses, opportunities, threats) assessments within social and business settings, is designed to inform and assist decision-making, not provide a specific blueprint for how decisions should then be made. However, we illustrate several sorts of approaches that might be adopted in wider engagement in Table 3.

Ecological communities and societal perspectives will continue to change, and hence FAR strategies and targets need to be reassessed at regular intervals (Figure 1). Such approaches will not eliminate trade-offs, differences of opinion or the necessity to make difficult decisions, but they enable a wider range of people to participate in decision-making and to discuss how the benefits and costs of any particular decision might be shared. Broader empowerment of society to influence dynamically changing targets and processes reflects the reality that human influence is already ubiquitous and that societal and biological change are continuous. This iterative co-production process (Figure 1) provides a framework to ensure that the inclusivity of Target 1 and benefits to people in Target 3 are genuinely addressed. Approaches to facilitate positive trajectories of change represent an aspiration to increase levels of biodiversity and improve the human condition over the entire globe. They also aim to avoid unnecessary effort and expenditure on fights that are unwinnable in the longer term.

AUTHOR CONTRIBUTIONS

Chris D. Thomas, Jane K. Hill, Caroline Ward and Jack H. Hatfield developed the ideas in this Policy Perspective. Chris D. Thomas wrote the first draft, with substantial contributions from all co-authors.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

The manuscript contains no original data.

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ETHICS STATEMENT

The manuscript contains no content for which ethics approval was necessary.

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