

POLICY BRIEF

No. 21, 2020

Landscape Approaches for the Post-2020 Biodiversity Agenda: Perspectives from Socio-Ecological Production Landscapes and Seascapes

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Highlights

Landscape approaches render a scheme to contextualise adaptive co-management and effectively integrate policy and practice through iterative learning to balance multiple objectives in a given spatial area. Being inclusive of various modalities, these approaches have great potential to facilitate policy making and implementation for the 2050 vision for biodiversity aiming at “living in harmony with nature”.

Recommendations:

- Adopt landscape approaches for the development and implementation of National Biodiversity Strategies and Action Plans (NBSAPs).
- Apply experience-based and action-oriented processes to develop the capacity of policy administrators and other stakeholders.
- Assess socio-ecological production landscapes and seascapes (SEPLS) against the criteria of protected areas (PAs) and other effective area-based conservation measures (OECMs) for measurable and continuous biodiversity conservation.

The 2050 Vision for Biodiversity

The Post-2020 Global Biodiversity Framework (GBF) is expected to set out a path for realising the 2050 vision for biodiversity: a world of “living in harmony with nature” (CBD/COP/14/9). As the decline of biodiversity is accelerating, the failures to meet the global biodiversity targets will be repeated without groundbreaking change (IPBES 2019). The new framework will be critical for reversing the current trajectories.

As an alternative to conventional practices, landscape approaches have gained currency over the past few decades to tackle real-world challenges in an integrated manner (Arts et al. 2017). Recognising the inability of sectoral approaches to handle multiple and often competing priorities of stakeholders, the cross-sectoral thinking that grounds landscape approaches has been increasingly promoted as a way to transition sustainably (IPBES 2019). Growing interest in landscape approaches has resulted in a jumble of similar terms and initiatives, and even identical concepts under different brandings. Such confusion may impede political commitments, donor investments, and practical uptake (Reed et al. 2016).

This policy brief identifies distinctive features of landscape approaches and draws out their relevance to the Strategic Plan for Biodiversity 2011–2020, as well as

potential contributions to the Post-2020 GBF. It also offers recommendations for policymakers and other stakeholders concerned with sustainability and nature conservation to take advantage of landscape approaches in achieving the 2050 vision for biodiversity.

Landscape Approaches

A landscape approach is broadly defined as a long-term process where diverse stakeholders collaborate to achieve a balance between multiple objectives on a landscape or seascape scale (Sayer et al. 2013, 2017). A wide variety of landscape approaches have been applied due to their highly context-dependent nature, allowing for neither universally accepted definition nor a single model in effect. Nevertheless, they are distinctive as space-based strategies for sustainability building on iterative learning processes to pragmatically reconcile competing demands. In particular, landscape approaches offer a framework to assimilate policy and practice for multiple land uses within a given area, and thus have great potential to facilitate the implementation of the Convention on Biological Diversity (CBD) in the post-2020 era (Reed, Deakin, and Sunderland 2015).

Reconciliation of Competing Demands

Similar to other approaches seeking to optimise conservation and development outcomes, landscape approaches aim to balance competing demands on land and sea (Reed et al. 2016). The Ecosystem Approach of the CBD epitomises this attempt by promoting integrated management of land, water and living resources for conservation and sustainable use of biodiversity. Acknowledging that optimal solutions for one person could be sub-optimal for another, however, landscape approaches distinctively take a more realistic view to minimise trade-offs and maximise synergies to the greatest extent possible, rather than promising the perfect solutions sought by other similar approaches (Reed et al. 2016). This prioritises making progress on equitable and sustainable use of natural resources, while explicitly recognising that the complete satisfaction of all stakeholders may be unattainable.

Iterative Learning Processes

Like other multi-stakeholder approaches, landscape approaches bring together a broad range of stakeholders to negotiate for decision-making on management plans (Reed et al. 2016). Yet, landscape approaches devote particular attention to uncertainty, temporal dynamics, and landscape complexity (Sayer et al. 2013). These features are less attended, for instance, by nature-based solutions (NbS),

although they share many features in principle (Cohen-Shacham et al. 2019). Recognising that the complex and dynamic landscape processes allow for neither predictable solutions nor clear-cut formula, landscape approaches take a “muddling through” process whereby stakeholders experimentally learn from each other in the absence of full-blooded knowledge (Sayer et al. 2013). Through learning, adaptation and long-term stakeholder commitment, landscape approaches thus help to enhance capacity development, local empowerment and governance with accountability (Sayer et al. 2017).

Space-Based Strategies

Rooted in spatial planning, landscape approaches provide a framework to put theory into practice through place-based reconciliation of competing demands in a way to best achieve human well-being and environmental conservation (Arts et al. 2017). “Space-based” approaches give more careful consideration than “commodity-based” ones to regionally-adapted policy implementation, whereas landscape scales are considered as broad enough to embed multiple land uses within a comprehensive strategy (Langston et al. 2019). Landscape approaches as such help to develop integrated “space-based” strategies to address sustainability challenges, leveraging place-based knowledge production and engaged stakeholder collaboration.

Landscapes & Seascapes

Confusion over the concept of “landscape approaches” partly results from various definitions of “landscapes” (Reed, Deakin, and Sunderland 2015). A common denominator of these definitions, however, is the human-environment interactions. A landscape generally refers to an area delineated by actors for specific objectives or with certain perceptions, constituting an arena where human and non-human entities interact on the earth surface (Sayer et al. 2013). The interactions on the coast, sea and adjacent waters constitute a seascape, which is often linked to landscapes at the fringe of coast (Pungetti 2012).

The conception of landscapes or seascapes thus varies depending on the objectives or perceptions of actors who arbitrarily define the boundaries. Some are named after designation systems seeking to achieve specific objectives (e.g., World Heritage sites), while others are based on their characters that often hinge on normative perceptions (e.g., cultural landscapes, vulnerable seascapes). The following two concepts are of particular relevance to the plausible Post-2020 GBF.

In-Situ Biodiversity Conservation Measures

The CBD Strategic Plan for Biodiversity 2011–2020 introduced "other effective area-based conservation measures" (OECMs), being areas of *in-situ* conservation of biodiversity outside of Protected Areas (PAs) as the mainstay of *in-situ* biodiversity conservation.

In particular, OECMs provide an opportunity to promote equitable and effective governance of biodiversity conservation occurring across landscapes and seascapes and in such ways complement PA networks (IUCN-WCPA Task Force on OECMs 2019). It is likely that there will be a growing interest in identifying, recognising, supporting and reporting OECMs for implementation of the Post-2020 GBF (2021–2030).

A Strategic Vision for Sustainable Management

In contrast to conception based on the current management status, socio-ecological production landscapes and seascapes (SEPLS) emphasise the normative dimension as a strategic vision for sustainability. This concept has evolved under the Satoyama Initiative, a global effort to realise societies in harmony with nature. The International Partnership for the Satoyama Initiative (IPSI) was launched in 2010 as a platform to share knowledge and create synergies among various stakeholders offering real-world examples of SEPLS management.

SEPLS are defined as "dynamic mosaics of habitats and land and sea uses" where the harmonious human-nature interaction maintains both biodiversity and human well-being (IPSI Charter). They thus manifest a sustainable model of management practices. SEPLS do not have to be recognised as PAs or OECMs (in whole or in part) but can include either or both (UNU-IAS and IGES 2018). Having demonstrated in action, SEPLS management may be further strengthened and supported if they are formally recognised as PAs or OECMs.

Policy Recommendations

Grounded in adaptive co-management, landscape approaches help identify workable pathways leading to ethical and legitimate outcomes for sustainable natural resource management.

To take advantage of a strategic vision of SEPLS, the following recommendations are made for policymakers and other stakeholders to facilitate sustainable transitions in meeting the 2050 vision for biodiversity.

Recommendation #1: Adopt Landscape Approaches for the Development & Implementation of NBSAPs

Cross-sectoral efforts such as public–private partnerships and inter-ministerial consultations support landscape approaches in delivering the best possible sustainable outcomes by catering to multiple objectives. Inevitable trade-offs between conservation and development are minimised through negotiation, coordination and planning. These efforts facilitate mainstreaming biodiversity across all sectors of the national economy and integrating biodiversity consideration into national decision-making frameworks.

This is exactly the role of National Biodiversity Strategies and Action Plans (NBSAPs), the main implementation tool of the CBD. Landscape approaches provide a practical framework to be used in both policymaking and implementation for multiple land and sea uses at not only national but also subnational and local levels, helping to strengthen implementation of NBSAPs. Building on the lessons and experiences gained through the IPSI's network, a technical manual is being developed by UNU-IAS and some IPSI partners for the use by the CBD Parties to apply landscape approaches to revise and implement NBSAPs under the Post-2020 GBF.

Recommendation #2: Apply Experience-Based & Action-Oriented Processes for Capacity Development

Landscape approaches in either policymaking or implementation follow iterative processes whereby stakeholders learn from each other and adapt within these relationships as well as those between humans and the environment. These processes allow stakeholders to improve their capacities to resist and respond to changes and absorb and recover from perturbation through learning by doing and augmenting practical and experiential knowledge even without predictable solutions or absolute knowledge. Moreover, landscape approaches encourage policy administrators or managers to repeatedly assess short-term management outcomes, continuously learn lessons, and flexibly respond to changes. This also helps them to identify and address capacity-development needs.

Recommendation #3: Assess SEPLS against the Criteria of PAs and OECMs as Appropriate for Measurable and Continuous Biodiversity Conservation

Given their strategic vision for sustainability, SEPLS are conceptualised as well-managed landscapes and seascapes capable of actualising "living in harmony with nature".

Many IPSI cases even without specific territorial boundaries provide practical models for implementing landscape approaches to deliver sound socio-economic and environmental outcomes (UNU-IAS and IGES 2018). Regardless of their current status, these cases demonstrate good practices and strategies for identifying sustainable solutions, and thus have the potential to be recognised as either PAs or OECMs. In particular, SEPLS share a conceptual similarity with OECMs besides PA categories V and VI that may allow for sustainable human activity to ensure human rights and social safeguards. Facilitating the recognition of SEPLS as PAs or OECMs would help contribute to measurable and continuous biodiversity conservation under the Post-2020 GBF where the *in-situ* conservation schemes might be continuously applied in achieving the 2050 vision for biodiversity.

Acknowledgements

This policy brief is based on research conducted as part of the UNU-IAS project International Satoyama Initiative, which is supported by the Ministry of the Environment, Japan. The project engages many CBD Parties, IPSI members and experts from different regions. The authors are grateful to the participants for their contributions to the project.

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UNU-IAS Policy Brief — No. 21, 2020

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ISSN: 2409-3017

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Publisher

United Nations University Institute for the Advanced Study of Sustainability (UNU-IAS)
Tokyo, Japan



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