



PBL Netherlands Environmental  
Assessment Agency

# SEIZING THE LANDSCAPE OPPORTUNITY TO CATALYSE TRANSFORMATIVE BIODIVERSITY GOVERNANCE

A contribution to the CBD post-2020 Global  
Biodiversity Framework

## Policy Brief

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## **Seizing the landscape opportunity to catalyse transformative biodiversity governance**

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# SUMMARY

## **Need for transformative change to stop further biodiversity loss and restore nature.**

Nature and biodiversity are being lost worldwide, and the capacity of ecosystems to provide vital contributions to people is deteriorating. Most of the Aichi Biodiversity Targets for 2020 under the Convention on Biological Diversity (CBD) have not been achieved, and, if the trends of the last decades persist, biodiversity will continue to decline. Policies, commitments and actions aimed at halting further loss immediately and restoring biodiversity and ecosystems are needed more than ever, in order to still be able to achieve the agreed 2050 Vision of the CBD of living in harmony with nature.

## **The new CBD post-2020 Global Biodiversity Framework requires a theory of change that supports interventions to realise transformative outcomes.**

The IPBES Global Assessment (GA) and Global Biodiversity Outlook 5 reports made a clear call to move away from business-as-usual practices in order to alleviate biodiversity loss and declines in human wellbeing. They emphasized the need to bring about transformative change to ensure that “nature can still be conserved, restored and used sustainably” along with meeting other global goals. In order to bend the curve for biodiversity in the near future, promoting inclusive and integrated approaches will be essential in order to achieve these high ambitions.

## **A key for unlocking transformative change is provided by landscape approaches.**

As negotiations continue on biodiversity action for the next decade, now is the critical moment to seize the opportunity for embedding a landscape perspective throughout the post-2020 Global Biodiversity Framework (GBF) that is currently being developed under the CBD. With the core principles of being participatory, inclusive and multifunctional, landscape approaches create the opportunity to involve the whole of society in planning processes at sub-national levels. Landscape approaches provide an integrative perspective to facilitate transformative change by promoting conservation, sustainable use and mainstreaming of biodiversity in all sectors of society, including production, consumption and health.

## **Creating co-benefits between SDGs, climate, restoration and biodiversity ambitions.**

The need for more integrated and inclusive management of natural resources in the post-2020 GBF, also resonates within the context the Sustainable Development Goals, the UN Decade on Ecosystem Restoration and ambitions to mitigate and adapt to climate change. Nature is considered part of the solution in order to sustainably manage various interlinked societal challenges and there is an increasing global interest for restoration and nature-based solutions (NBS). This makes a landscape perspective even more crucial to support the effective and equitable realization of much-needed co-benefits. The focus on realizing synergies by doing the right thing in the right place can prevent potential trade-offs that could arise if climate mitigation or restoration policies encourage NBS with low biodiversity value. Providing coherency and equity in NBS implementation and restoration activities is essential in building resilient multi-functional landscapes that embrace living in harmony with nature.

## **Many landscape governance arrangements and initiatives are leading the way.**

The many emerging landscape initiatives and arrangements provide tangible examples of how multiple landscape values can be combined, by creating more spatial synergies and guiding the process of adequately dealing with delicate trade-offs. Their strongly networked and multi-level character allows for a better connection between global commitment and local action, a spatially explicit integration of sectoral policies, and coverage of important urban-rural linkages within landscapes.

### **The way forward for the GBF: embedding a landscape perspective.**

There are several opportunities for embedding a landscape perspective in the post-2020 GBF. In the CBD, spatial planning and landscape governance are so far mainly seen as a means of implementation and part of a “whole of government” approach. This misses out on the potential of bottom-up landscape governance and initiatives to support a “whole of society” approach and to develop pathways to move to more bottom-up and participatory spatial planning and more inclusive ways towards achieving biodiversity goals. Transforming to a more landscape-inclusive approach to spatial planning would allow for better alignment with locally-crafted initiatives and arrangements within landscapes. A new round of NBSAPs should encourage countries to build on these initiatives and arrangements as a step forward, to multiply these initiatives and contribute to the realisation of the ambitions set in the GBF.

### **A GBF that triggers landscape action.**

A key element that is clearly mentioned in the theory of change of the GBF is that the implementation will be done in partnership with many organizations at the global, national and local level and that it will take a rights-based approach and recognize the principle of intergenerational equity. Effective landscape governance does entail the participation and co-operation of stakeholders at the local level of policy implementation. This includes indigenous peoples and local communities and directly speaks to the GBF targets on ensuring equity, protection of associated traditional knowledge and rights over resources as well as to the GBF implementation support mechanisms and enabling conditions. The GBF could contribute to empowering local communities in the management of their common affairs. To make that happen the GBF would need to recognise that also the realisation of many of the other targets will rely largely on landscape-level action and better spatial planning.

### **Building on landscape ambition as part of the Action Agenda for Nature and People.**

Integrating a landscape perspective in the theory of change that underpins the GBF, its goals and targets, means of implementation and review mechanisms, will help to raise the level of ambition of landscape-level action for nature and people. To facilitate the implementation of landscape approaches, identify their challenges, organize stakeholder dialogues, and promote the exchange of knowledge and experiences within and between landscapes, a number of umbrella organizations with global outreach have become important actors in increasing the momentum for landscape thinking and acting. Most of these initiatives have only recently started to engage with the CBD process, but the implementation of the GBF could benefit greatly from their work. The Action Agenda for Nature and People would provide an opportunity for doing so, as it provides a platform for non-state and sub-national actors to make voluntary commitments that contribute to the CBD objectives and the post-2020 GBF. Stronger involvement, recognition and commitments by landscape initiatives and their network organizations would add value to this process and contribute to a feasible and impactful way forward.

# 1 Introduction

The negotiations towards the post-2020 Global Biodiversity Framework (GBF) have resumed and, if circumstances allow, will come to an agreement at CBD COP 15 in Kunming, China by October 2021. The post-2020 GBF will be the new global framework for biodiversity conservation for the coming decade. The negotiations so far were marked by the global COVID-19 pandemic, which urgently brought to the world's attention the interrelations between human health, globalization and the state of the world's biodiversity.

The Global Assessment Report (IPBES, 2019a) of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) and the more recently published Global Biodiversity Outlook 5 (CBD, 2020b) analysed progress on the strategic biodiversity framework 2011-2020 and concluded that none of the 20 Aichi Biodiversity Targets were fully met by the end of 2020. With limited progress on few indicators, this outcome paints a bleak picture of the future of the world's nature, that in turn also threatens the achievement of the Sustainable Development Goals and undermines efforts to address climate change. The related Local Biodiversity Outlooks 2 (FPP, 2020), that focuses on contributions of on-the-ground initiatives to global goals for sustainability and nature, clearly shows that also the ongoing disregard of the vital contributions of indigenous peoples and local communities (IPLCs) to biodiversity conservation and sustainable use constitutes a major missed opportunity for the CBD and the United Nations 2011-2020 Decade on Biodiversity, with fundamental lessons remaining to be learnt about securing the future of nature and cultures.

Commitments, policies and actions aimed at halting further loss and restoring biodiversity and ecosystems are needed more than ever, in order to still be able to achieve the agreed 2050 Vision of the CBD of living in harmony with nature. Recent scenario studies stress that in order to bend the curve for biodiversity in the near future, integrated approaches with high ambitions are essential in order to create the required co-benefits for the sustainable production of sufficient and healthy food, the mitigation of climate change and the conservation of nature (Diaz et al., 2020; Kok et al., in review; Leclère et al., 2020). To put nature back on a path of recovery, IPBES called for transformative change to move away from the business-as-usual ways of doing things today. This means a fundamental, system-wide reorganization across technological, economic and social factors, including paradigms, goals and values (IPBES, 2019a, b). This call from science is now taken up by the CBD and the post-2020 GBF is intended to become a transformative framework for nature and people.

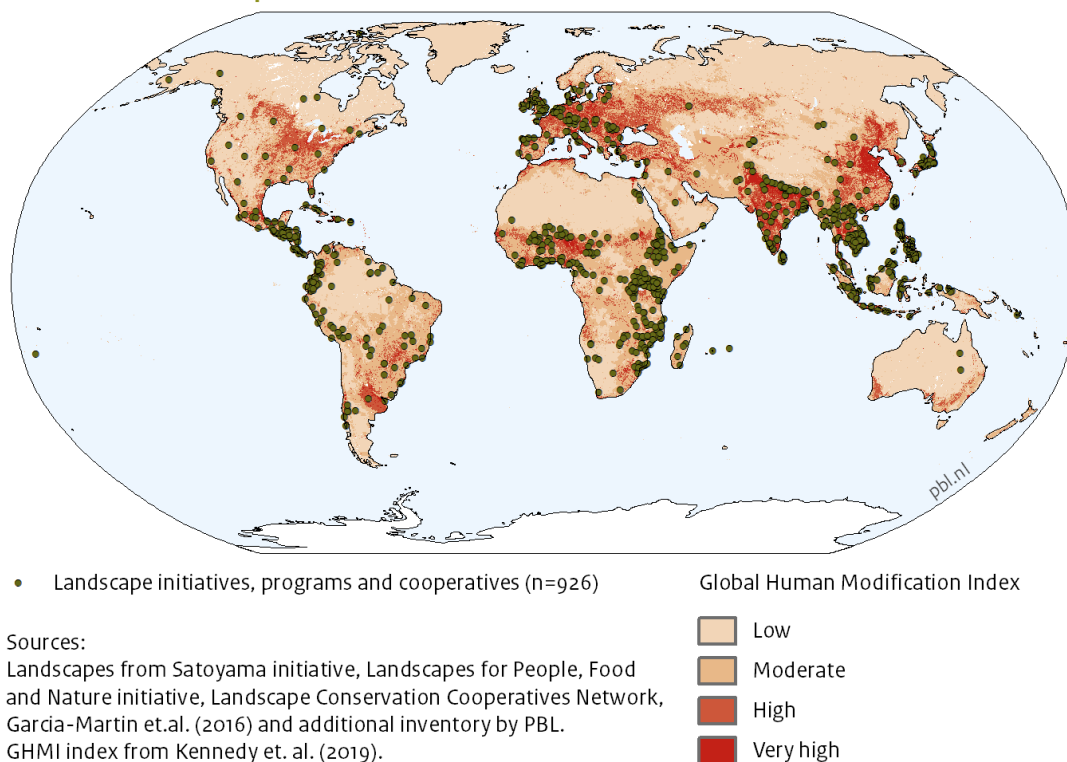
One way to foster transformative change is by fundamentally changing the way in which the governance of spatial development and planning processes around our natural resources is currently organized, especially in mixed landscapes, where people live, production and conservation functions need to be combined, and where urban-rural linkages influence land use change. Instead of continuing conventional top-down and sector-oriented planning, current sustainability challenges require context-sensitive and iterative spatial planning and landscape governance, where multiple objectives are pursued and balanced, and all actors in society are involved and able to participate. This implies a turn to aligning interests, synchronizing actions, improving policy coherence and advancing institutional development in order to support conservation, fair and equitable access and benefit sharing, and sustainable use of natural resources at multiple spatial levels (ALD, 2020; IPBES, 2019a; Reed et al., 2020b; UN-Habitat, 2019; UNU-IAS and UT-IR3S, 2018).

Given the multi-dimensional and spatially diverse character of biodiversity and ecosystem services, and the essential need to create synergies between global policies on food and nutrition security, climate change and health, operationalising such a desired transformative



change seems very appropriate on a regional or landscape scale. This is where national level ambitions and policies meet with local level initiatives and actions. Over the last decade, many landscape initiatives, often driven by non-state and sub-national actors, have emerged (Figure 1.1). These initiatives commonly apply an integrative perspective and promote the sustainable use and mainstreaming of biodiversity in all sectors of society, including production, consumption and health.

### Overview of landscape initiatives connected to various networks



**Figure 1.1: Global overview of landscape initiatives connected to various landscape networks promoting integrated approaches. Many initiatives focus on landscapes with moderate to higher degrees of human modification.**

The CBD bases itself on the ecosystem approach that constitutes an overall framework for supporting decisions in policy-making and planning relating to the goals of the Convention, to be implemented and organized in an integrated and inclusive way at the level of ecosystems. The landscape approach broadens this perspective by including the socio-ecological context that could cover multiple ecosystems and specifically focuses on the human perspective to also influence various indirect drivers of biodiversity loss. Importantly, the landscape approach aims to integrate the multiple values in a landscape (natural, economic, cultural, spiritual, historical, heritage-related, nutritional and others), and promote multi-stakeholder participation in managing the environment and conserving biodiversity. Landscape initiatives promote finding ways of integrating across sectorial policy silos, leading to horizontal mainstreaming of biodiversity across different sectors, including agriculture, forestry, fisheries, tourism, health, energy and mining, infrastructure and urbanisation, manufacturing and processing sectors. Many of them are also well embedded in international networks that offer opportunities for learning and influencing national policy making through concerted international action. National Biodiversity Strategies and Action Plans (NBSAPs), which is considered the main national level instrument within the CBD, could also build on this momentum to expand their reach and effectiveness by applying landscape approaches. Currently, in many countries, NBSAPs are only limitedly making reference to integrated landscape approaches, in this way missing out on the opportunities they provide for mainstreaming of biodiversity objectives in multiple sectors.

The global overview of landscape initiatives (Figure 1.1) provides an indication of on-the-ground action to achieve global sustainability targets, including the conservation and sustainable use of biodiversity, through landscape initiatives. The Action Agenda for Nature and People, that was initiated at CBD COP 14 in 2018 in Sharm El-Sheikh, Egypt, is aimed to encourage non-state and sub-national actors to make voluntary commitments that contribute to the CBD objectives and the post-2020 GBF. Stronger involvement, recognition and commitment by landscape initiatives and their representative international network organizations would add value to the process, and contribute to a feasible and impactful way forward (Kok et al., 2019). While the sustainable development agenda of sub-national governments and cities is gaining momentum and has also found its place in the CBD and the negotiations of the GBF via the Edinburgh process, actions of landscape level actors are less recognised, as these fall outside the traditional levels of government and operate at the combined area of interest addressed by ecosystem approaches, territorial/jurisdictional approaches and bottom-up societal initiatives.

### **Objective of this report**

Focussing on the potential of non-state and sub-national action for the design and implementation of the post-2020 GBF, we will focus in this report on 2 main questions:

- What can landscape governance arrangements, seen as the living examples of landscape approaches, contribute to implementing the GBF, recognizing their role as catalysts in bringing together multiple actors and facilitating a transformation towards a whole of society approach in the GBF?
- How can the post-2020 GBF build upon landscape governance arrangements and their international network organizations to further harness the potential of landscape approaches for nature and people?

For this we explored recent literature and also built on the outcomes of 3 recent meetings: (1) the *Expert Thematic Workshop on Landscape Approaches for the Post-2020 Global Biodiversity Framework* held in September 2019 in Kumamoto, Japan (UNU-IAS, 2019) and (2) the *African Landscapes Dialogue* which convened in November 2019 in Arusha, Tanzania (ALD, 2020). Feedback on the key messages of this policy brief was collected via an (3) online session at the Global Landscapes Forum on Biodiversity which took place in October 2020 (GLF, 2021).

The updated zero-draft GBF document (CBD, 2020a) is built around a theory of change that promotes a whole-of-government and whole-of-society approach, covering all levels of government and including all actors in society. It contains many goals and targets where landscape approaches and initiatives could contribute to the envisioned transformative change. These include ambitions on area-based protection, comprehensive and landscape scale spatial planning, sustainable use and managing nature's contributions to people, as well as inclusive decision-making. We question, however, whether the CBD at this point has fully embedded landscape approaches and spatial planning perspectives, and whether it sufficiently recognizes the potential of current landscape initiatives and global networks connecting them worldwide to contribute to the implementation of the post-2020 GBF as part of its whole-of-government approach. Following this, it appears that the updated zero-draft GBF document still mainly reflects a business-as-usual approach, instead of enabling new approaches to tackle the global negative trends and complex challenges outlined before. The CBD documents remain vague as to how this should be done, and what international and national action is needed. Suggestions to seize the landscape opportunity are provided in the following sections of this report. We focus on the planning and governance arrangements in landscapes that integrate land, freshwater and coastal area objectives, and as such are also often referred to as land- and seascapes.

In the next chapters we outline (Chapter 2) how the CBD ambition to realise the 2050 Vision could built on already ongoing integrated landscape governance and management initiatives

around the world, applying landscape approach principles. Next we focus (Chapter 3) on the challenges that currently hamper effectiveness of landscape governance arrangements and how they, including the role of involved non-state and sub-national actors, could be strengthened. Finally (Chapter 4) we highlight how the GBF could embed a landscape perspective to support shaping the envisioned transformative change required to achieve the 2050 vision of living in harmony with nature.

# 2 The landscape opportunity for the CBD 2050 vision

This chapter discusses how landscape governance and integrated landscape initiatives can contribute to the multiple objectives of the CBD, i.e. conservation, sustainable use and fair sharing of benefits, and shows how landscape governance arrangements align with the GBF in the ambition to involve whole of society and to shape transformative action in order to realise the CBD 2050 vision on living in harmony with nature.

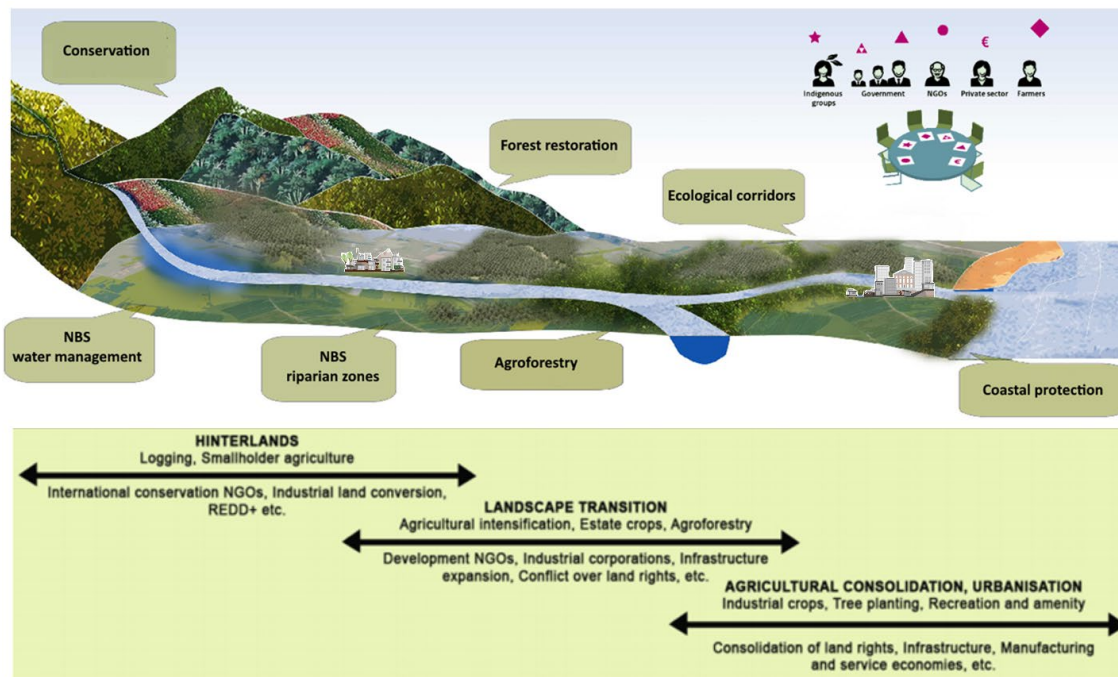
## 2.1 Conserving nature as part of the SDG agenda

Given that conversion of natural land to agriculture is a leading cause of biodiversity loss, mainstreaming biodiversity and sustainable natural resource use into production sectors and development planning remains ever essential, especially when it is increasingly realized that nature is part of the solution in order to sustainably manage various interlinked societal challenges. These challenges come together in landscapes and seascapes in a context in which there is an increasing competition for available space (IPBES, 2019a). As such, conventional policy approaches and practices that assume particular lands have one priority objective, such as farming or forestry, and that this objective is a “trade-off” against other objectives, are no longer viable in much of the world (Gassner et al., 2020).

The need for more integrated and inclusive management of natural land and water resources has also resonated within the context of the main global policy agenda focusing on involving the whole of society: the 17 Sustainable Development Goals (SDGs) and 169 targets provide a comprehensive, integrated and inseparable framework for countries to plan and achieve an inclusive and sustainable development vision by 2030. This coincides with the timeframe of the emerging post-2020 GBF and also the UN Decade on Ecosystem Restoration.

In line with this, the recent 5<sup>th</sup> Global Biodiversity Outlook (CBD, 2020b) stated that the solutions to bend the curve for biodiversity need to seek an integrated approach that simultaneously addresses the conservation of the planet’s genetic diversity, species and ecosystems, the capacity of nature to deliver material benefits to human societies, and the less tangible but highly-valued connections with nature that help to define our identities, cultures and beliefs.

The specific actions of individual countries that are being implemented to achieve the SDGs and existing and forthcoming goals and commitments on biodiversity and ecosystem conservation, restoration and sustainable use, convene and potentially conflict at sub-national levels. It is at the landscape scale, as illustrated in Figure 2.1, that stakeholders should be more involved in planning and decision-making regarding the environment in which they live and work, and be able to more clearly understand the context and impact of specific actions (Albrechts et al. 2020; Kindornay et al., 2019; Thaxton et al., 2015).



**Figure 2.1: Integrated approaches to land- and seascapes can be applied in a spectrum of situations, include various landscape actors, combine land and water objectives, and provide the perspective to successfully implement nature-based solutions and restoration activities (adapted from Sayer et al. 2013, Appleton 2018 and PBL 2018).**

Landscape approaches do not only refer to land-based or terrestrial activities or objectives, but equally aim to cover freshwater, coastal and marine environments. The frequently applied “ridge-to-reef” approach is a typical landscape approach that integrates activities relating to terrestrial, freshwater, coastal and marine ecosystems. It builds actor and institution linkages that demonstrate the interconnected terrestrial, coastal and marine environments from upstream to downstream. In doing so, it comprehensively addresses all drivers and actors within the landscape, including those affecting the so called “seascape”, without being compromised by sectoral or jurisdictional boundaries. This means that landscape approaches address multiple SDGs, including SDG 15 which refers to life on land, but could also cover SDG 14 which is about the conservation and sustainable use of oceans, seas and marine resources. As such, landscape approaches are well placed to enable effective implementation of the CBD 2050 Vision along with other global goals as covered by the SDGs. As they place high value on human wellbeing at their centre along with biodiversity conservation, they are therefore often also more attractive to stakeholders outside of typical conservation circles (UNU-IAS, 2019).

## 2.2 Enabling a whole-of-society approach

Over the past decades, landscape inhabitants, producers, citizens, governmental and non-governmental agencies and other interest groups around the world have become more involved in landscape governance, starting their own initiatives aimed at developing effective strategies to conserve biodiversity within the environment in which they live and work (Arts, 2017; Kozar, 2019; Reed et al., 2020a and 2020b). These initiatives are reflected in numerous forms of projects, networks, platforms or coalitions. They represent citizens, youth, farmers, cooperatives, landowners, companies and other landscape actors taking up an active and often voluntary role in environmental stewardship. Many of these initiatives have given way to the development of innovative and participatory approaches to land use

planning, new types of locally managed conservancies and new ways to incorporate biodiversity benefits in livelihood strategies (UNU-IAS and IGES, 2019). They also inspired the transformation of agricultural systems for biodiversity benefits and financial innovations that encourage to improve economic and development planning by including biodiversity information and natural capital accounts in decision-making (ALD, 2019; Meijer et al., 2020).

Overall, such initiatives are referred to as “landscape governance arrangements” - the living examples of landscape approaches - and seen as place-based multi-stakeholder initiatives of dialogue and decision-making for sustainable land use (Carmenta et al., 2020; Estrada-Carmona et al., 2014; Milder et al., 2014; van Oosten et al., 2018). Landscape governance arrangements confront sectoral thinking and seek to advance landscape performance by reconciling multiple objectives (e.g. livelihoods, production and conservation) and build on collaboration among different sectors and actor groups at multiple levels. These initiatives also often involve indigenous peoples and local communities (IPLCs) (Ayala-Orozco et al., 2018; Larsson et al., 2020; Kusters et al., 2020; Prager, 2015 Scherr et al., 2013).

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### **From theory to practice #1: Empowering communities for natural resource management: the case of Community Resource Management Areas (CREMA) in Western Ghana.**

*With increasing pressure on resources and the resulting land degradation, urgent action to develop a more efficient management system that would sustain the integrity of the natural resources and serve the needs of all stakeholders was required. The CREMAs were established by the Government of Ghana to allow for local participation in natural resource management and to address multiple demands on ecosystem goods and services. Building knowledge on the needs of the different stakeholders was thus critical in designing a more robust management system to enhance the health of the socio-ecological landscape and reduce biodiversity loss. The CREMA intervention focuses on bringing together communities that share common resources and take affirmative action to jointly manage their shared resources. An expected outcome of the CREMA initiative has been the willingness of communities to set aside parcels of undisturbed community-owned forests to be sustainably managed. This result will enhance the preservation of sacred groves and other cultural attractions, as well as regulate agricultural production within the landscape. The diverse but critical services delivered by CREMAs to the vast majority of the communities justify their continued protection through a community-based arrangement.*

Source: [https://satoyama-initiative.org/case\\_studies/empowering-communities-for-natural-resource-management-the-case-of-community-resource-management-areas-crema-in-western-ghana/](https://satoyama-initiative.org/case_studies/empowering-communities-for-natural-resource-management-the-case-of-community-resource-management-areas-crema-in-western-ghana/)

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With the core principles of being bottom-up, participatory, inclusive and multifunctional, landscape approaches create the opportunity to involve the “whole-of-society” in spatial planning processes at subnational levels. These same principles also contribute to strengthen the proposed theory of change underlying the post-2020 GBF, as it assumes that for realising the 2050 Vision a similar strong “whole-of-society” engagement is needed. This implies that involvement and transformative action is needed from all societal actors, including national and sub-national governments, civil society and the corporate world. It also implies a full recognition of gender equality, women’s empowerment and youth engagement as well as the full and effective participation of IPLCs (CBD, 2020a). The United Nations’ 2030 Agenda for Sustainable Development considers whole-of-society governance an instrument to urge national governments to establish mechanisms for multi-stakeholder engagement within their jurisdictions and to assure optimal participation of all societal actors in setting development targets and measuring progress.



Within the CBD post-2020 process this recommendation for multi-stakeholder engagement is also made by the recent Edinburgh Declaration. This declaration is the outcome of a consultation process of subnational governments, cities and local authorities to support the development of the GBF and promotes a whole-of-government approach that aims to connect different levels of government (Edinburgh Declaration, 2020). Given its jurisdictional focus the declaration lacks a land- and seascapes governance and planning perspective, yet, it does highlight the vital role indigenous peoples and local communities, women and youth, non-governmental organisations and wider society play in decision-making and in taking action at subnational, city and local levels. The declaration advocates that there should be a fully collaborative approach to ensure active participation of these groups.

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### **From theory to practice #2: Building up multi-stakeholder cross-sector partnerships for the “Xinshe Forest-River-Village-Sea Ecoagriculture Initiative” in Eastern Rural Taiwan**

*To mediate conflicts over natural resources and to balance the interests of various stakeholders, the “Forest-River-Village-Sea Ecoagriculture Initiative” was launched in October 2016. Two different ethnic groups of indigenous settlements and their farmlands are located in the same watershed surrounded by forests and seas. In the past, different government sectors worked separately on different community affairs for different settlements. Resource conflicts over water usage, hunting and fishing rights happened from time to time between the two settlements. The collaborative mechanism for promoting the initiative involved setting up a Task Force composed of 6 core members as well as a Multi-Stakeholder Platform (MSP) comprised of about 20 stakeholders including local community organizations, central and local governmental institutions, local school, academics, NGOs, non-profits and green enterprises. The MSP manages planning, implementation and monitoring of new goals and an action plan of the Initiative, including area-based conservation measures. The plan is implemented collectively and aimed at enhancing ecosystem services and indigenous cultural values for both indigenous communities. The vision is to help local indigenous communities to live in harmony with nature through revitalization of the land- and seascape.*

Source: [https://satoyama-initiative.org/case\\_studies/building-up-multi-stakeholder-cross-sector-partnerships-for-the-xinshe-forest-river-village-sea-ecoagriculture-initiative-in-eastern-rural-taiwan/](https://satoyama-initiative.org/case_studies/building-up-multi-stakeholder-cross-sector-partnerships-for-the-xinshe-forest-river-village-sea-ecoagriculture-initiative-in-eastern-rural-taiwan/)

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Under the Action Agenda for Nature and People, non-state and sub-national actors, in landscape initiatives, could be encouraged to make voluntary commitments that contribute to the CBD objectives and the post-2020 GBF.

## **2.3 Shaping transformative action and partnerships**

The IPBES Global Assessment states that landscape approaches offer the opportunity to move away from business-as-usual practices in order to alleviate biodiversity loss and declines in human wellbeing (IPBES, 2019a). The assessment emphasizes that effective conservation, restoration and sustainable use of nature also requires the realisation of other global goals such as food and health security, equitable access to resources and benefits to politically and economically marginalized communities, and respecting the diversity of ways of living and practices of different indigenous and local communities.

In this context, transformative change is a process aimed at bringing about a “fundamental, system-wide reorganization across technological, economic and social factors, including

paradigms, goals and values” (IPBES, 2019a). This implies changes to individual and collective actions at various levels of governance from the local to global scale, that move away from viewing nature as simply a factor of production to an integral part of a socio-ecological system. This would require a re-orientation of economic thinking, social mores and political compulsions towards more participatory, inclusive, integrated systemic approaches that account for the priorities of multiple stakeholders in different contexts. To more strategically guide and accelerate desired sustainability transitions, actors need to build and empower transformative coalitions (Bulkeley et al., 2020; Loorbach, 2019).

It is at the landscape scale where ecological, social and economic objectives meet the spatial realities of river systems, forested areas, drylands, coastal zones and agricultural and city regions (see Figure 2.1). It is also at this level where most impacting land use decisions and trade-offs are made, conflicting policy objectives become apparent, and where diverging stakeholder objectives are to be combined into balanced outcomes of sustained economic and social development and biodiversity conservation (Albrechts et al., 2020; Djenontin et al., 2020; Hedden-Dunkhorst et al., 2019; Van der Horn and Meijer, 2015). It seems therefore common sense that for example current dialogues on transitioning to nature-positive food systems, organized under the UN Food Systems Summit process and bringing together many different actors, consider the landscape as the unit for planning and action to realise this transition (UN-FSS, 2021).

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### **From theory to practice #3: Building partnerships in the Litoral Norte, Honduras**

*On the Caribbean north coast of Honduras, the NGO Solidaridad is implementing the PASOS program (Sustainable Landscapes in Honduras), which is an integrated landscape partnership built upon an already functioning partnership among actors within the palm oil sector. This new initiative convenes a broader range of landscape stakeholders including not only those involved in palm oil production, but also conservation NGOs, cocoa and ecotourism companies, indigenous peoples’ and community-based organizations, farmer organizations and cooperatives, municipal governments, research institutes and universities and community water associations. Driven by shifting values and the need of tackling the negative social, economic and environmental impacts from large scale palm oil production on the broader landscape, the partnership focuses on developing alternative sustainable business models that are in line with the key ambitions of this partnership, which include improving livelihoods and food security, improving the sustainable production of palm oil, increasing the productivity and sustainability of mixed cocoa/agroforestry activities, conservation of protected areas and corridors, sustainable management of the watersheds, and making the landscape more resilient to extreme weather events.*

Source: PBL, <http://www.thinklandscape.info>

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The landscape scale also comes closest to those spatial identities and cultures of citizens who are already (partly) living in harmony with nature, predominantly IPLCs. It is their “place attachment”, local knowledge and, often, traditional and informal rights that provide a breeding ground for locally grounded stewardship, which may also be key in achieving the transformative change envisaged in the CBD’s 2050 Vision and enhancing its social bases for living in harmony with nature (Bieling et al., 2020; Fagerholm et al., 2019; Grenni et al., 2019; Reyes-García et al., 2021). This makes landscapes appropriate action arenas where integrative and transformative partnerships between state- and non-state actors can be further developed, and where various the levers for system-wide transformational change are to be found (Bulkeley et al., 2020; ECDPM, 2019; IPBES, 2019a, ch.6).

Governance at the landscape level helps to steer the complex processes of balancing options, negotiating trade-offs, and ensuring that local stakeholders’ voices are heard and reflected



within the resulting plans (Fagerholm et al., 2020, Karrasch et al., 2017; Kusters et al., 2020; Sarmiento Barletti et al., 2019). Typically, environmental governance considers all formal and informal institutions, policy mechanisms, practices and actions related to the management and sustainable use of natural resources, towards the aim of human wellbeing. This is clearly evident at the scale of landscapes where the interplay of various networks, institutions and policies interact and possibly overlap, leading to redundancies in implementation and consequent impacts on both human wellbeing and conservation objectives. These impacts could be conflicting in nature or have synergistic effects, depending on how aligned they are with multiple priorities of different stakeholders in different contexts and how coherent the various policy approaches are (UNU-IAS and IGES, 2019). In light of growing interest in ensuring a transformative approach towards sustainability within the environment sector (both CBD decisions and IPBES assessment results), it is possible to envision a governance process at the landscape scale that acknowledges and is designed to address challenges and identify solutions within socio-ecological systems. This would be a departure from entrenched governance approaches of sector-based implementation towards inter-sectoral, multi-level and multi-actor policy coherence.

## 2.4 Contributing to conserving biodiversity and nature-positive implementation of NBS

With the increase of managed and production landscapes, the future of the world's biodiversity will crucially depend on whether humanity is able to sustainably manage these landscapes and benefit from nature's contribution to people, while at the same time conserving remaining areas with high levels of biodiversity and increase the biodiversity value of managed systems.

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### ***From theory to practice #4: Managing multiple objectives in the Kilombero Valley in Tanzania***

*The Kilombero Valley is nestled between the Kilombero river and the Udzungwa Mountains national park. The landscape is an important wildlife corridor, contains a Ramsar wetland and is part of the agricultural growth initiative covering southern Tanzania. The NGO African Wildlife Foundation (AWF) is working in the landscape to demonstrate how agricultural productivity and biodiversity conservation goals can be balanced within a landscape context where an expanding human population, unplanned land use, conversion, poor forest and waterway management, and changing weather patterns due to climate change are putting extreme strain on the natural systems and on the downstream water users who depend on them. In order to restore wild corridors and to improve and conserve water resources, AWF facilitates a multi-stakeholder platform to oversee and discuss the plans and activities. The platform includes local and regional government actors, and various companies, NGOs, knowledge institutes and farmers organizations. The platform is also supported by the National Land Use Planning Commission as an inspiration for developing more inclusive, locally owned and sustainable land use planning.*

Source: PBL, <http://www.thinklandscape.info>

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Initiated by the Bonn Challenge and related continental initiatives, and encouraged by the UNCCD, the Aichi restoration target, UN Decade on Ecosystem Restoration and ambitions to mitigate climate change following the Paris Agreement, there is an increasing global interest for restoration and nature-based solutions (NBS). This makes landscape arrangements even

more crucial for providing the wider landscape perspective that supports the effective and equitable realization of the much-needed co-benefits. NBS, broadly defined as solutions to societal challenges that are inspired and supported by nature, aim to group a large number of ecosystem-based approaches, such as ecosystem services, green-blue infrastructure, ecological engineering, forest landscape restoration and natural capital. In landscape arrangements an iterative and adaptive management approach is applied and they provide NBS and restoration activities with the understanding of the environmental and socio-ecological context of the broader landscape. As such they focus on realizing synergies by doing the right thing in the right place and can prevent potential trade-offs that can arise if climate mitigation or restoration policies encourage NBS with low biodiversity value, such as reforestation or afforestation activities with non-native monocultures. This provides a clear synergy with locally led adaptation activities, where landscape arrangements can help to ensure that indigenous peoples and local communities are empowered to lead sustainable and effective adaptation to climate change at the landscape scale. Providing coherency and equity in NBS implementation and restoration activities is essential in building resilient multi-functional landscapes that embrace living in harmony with nature (Cohen-Shacham et al., 2019; Djentonin et al., 2020; Raymond et al., 2017; Sayer et al., 2013; Seddon et al., 2020; Soanes et al., 2021).

So landscape arrangements can play a central role in mainstreaming and promoting sustainable use of biodiversity and realising NBS. Such governance arrangements can be initiated in various ways. Some of them are endogenous and locally crafted initiatives, while others are exogenous, being fostered by local governments, non-governmental organisations or international funds with the aim to build on local agency. In many cases, their high levels of local embeddedness, holistic and multi-layered nature harbours a huge potential for bridging state- and non-state actors, knowledge systems and policy sectors once their institutional hurdles are overcome (Garcia Martin et al., 2016; Kozar et al., 2014; Mijatovic et al., 2018; Sayer et al., 2013; van Oosten et al., 2018).

Despite multiple attempts to embrace a spatially oriented and integrated landscape approach, the ecosystem approach remains the primary framework for action under the convention (CBD, 2004). Over the years various additions to support the implementation of ecosystem approaches have been made, including the Addis Ababa guidelines and principles (CBD, 2007). Though rooted in various scientific disciplines, landscape approaches share various principles and guidelines with the ecosystem approach when it comes to sustainable use and conservation of nature in an equitable way. Challenged with the implementation of the new 2011-2020 strategic framework and the Aichi Biodiversity Targets set in 2010, a complement to these principles and guidelines was proposed at the CBD COP 11 in 2012 to specifically provide guidance on how to improve the sustainable use of biodiversity in a landscape perspective (CBD, 2011; CBD, 2012). This proposal was the outcome of a process organized by various international organizations and provided a rationale for addressing the landscape perspective in land-use planning and informed the COP about linkages to various international and multilateral efforts to improve sustainable use of biodiversity at the landscape level. The COP decision XI/25 stated that the proposed guidance could be considered a useful complement to the existing approach. Yet, the COP continued to encourage its members to strengthen the application of the Addis Ababa principles and guidelines on the ecosystem approach to spatial planning, and maintained its sectoral entry points for policy processes.

Landscape approaches, however, recognise that multiple ecosystems (agricultural, forests, wetlands, coastal zones, peri-urban, etc.) usually co-exist, and that it is this co-existence that helps to deal with trade-offs and can create the synergies and co-benefits that multi-functional land use creates. To support the transformative change of the governance of

spatial development and planning processes managing our natural resources as envisioned by the new GBF, embedding and supporting the concept of landscape approaches can strengthen it. As landscape approaches view nature as a holistic, integrated ecosystem and put a stronger emphasis on anthropogenic factors and nature's contributions to people within the spatial context of a landscape. With the aim to mobilize the whole of society, landscape approaches can resonate better with non-environmental agencies and sectors as they seek a common language to mainstream biodiversity conservation and could also enable and stimulate actors in, for instance, agricultural commodity supply chains to pursue sustainability goals that go beyond the level of farms.

# 3 Strengthening landscape governance initiatives

In order to realise the landscape potential within the GBF, we identify several opportunities in this chapter to strengthen landscape governance, including the role of involved non-state and sub-national actors. Various challenges currently hampering effectiveness are highlighted and we argue that recognising bottom-up landscape level action could provide an incentive to take a more integrated approach in national level biodiversity strategies. We also stress the relevance of various active international networks that connect many landscape initiatives worldwide support them in exchanging knowledge and experiences.

## 3.1 Policy-related challenges that hamper effective landscape governance

While the concept of landscape approaches appears promising, and landscape arrangements are grounded in cultural, natural and spatial identities, it is also recognised that landscape arrangements face several implementation challenges and that scientific evidence to support implementation is slowly developing. In general, focusing on creating win-win solutions could seem naïve, and trying to achieve cross-sectoral integration in a world of governmental policy silos is highly ambitious and challenging. This may be problematic, as landscapes are not seldomly caught in webs of contradicting rules and regulations caused by sectoral policy incoherence, which are not easily overcome. Such incoherence may be reflected in contradicting policy goals of food security, economic development and climate change, or securing local livelihoods versus development of global value chains (van Oosten et al., 2020; Vermunt et al., 2020).

At the landscape level interactions and potential trade-offs between different resource uses and benefits to different stakeholders are quite evident. This supports horizontal integration of planning and designing actions that are interlinked across conventional sectors, as all decisions pertain to enhancing the wellbeing of the dependent populations and the integrity of the ecological system. However, it is also observed that designing and implementing such holistic policies are effective only when supported by governance structures and plans at higher levels (Reed et al., 2020b). If mismatches in land use preferences, stakeholder prioritization, generation and distribution of benefits arise, then landscape-level governance principles including inclusivity and preference for diversity can be disrupted. This implies the need to engage and communicate effectively between stakeholders at multiple levels and enable policy innovation through innovative governance arrangements based on spatial contexts and identities. By promoting institutional development via multi-stakeholder platforms, participation in formal environmental assessments, developing governance strategies and supporting processes on joint learning, negotiation and reflection, the various actors involved in landscape arrangements could address these challenges (Arts et al., 2017; Burgi et al., 2017, Kusters, 2015; Reed et al., 2020a and 2020b; Sayer et al., 2016; Van Boven, 2020).

The ambition of vertical integration that links scales from local actions, national policies and global goals also poses several challenges for successful implementation of landscape arrangements. When it comes to managing long-term landscape restoration activities, these could, for instance, relate to mismatches in timelines of political cycles and planning horizons, and differences in national objectives and decentralised realities of land use planning and the availability of funds. Via landscape arrangements the involved actors take on the challenge to produce co-benefits from agriculture, water and biodiversity related restoration activities (Cohen-Shacham et al., 2019; Djentonin et al., 2020; Wiegant et al., 2020).

Another challenge is the mismatch between the boundaries of landscapes and the political and administrative structures within and between states. Whereas landscapes tend to follow catchments, forests, coastal zones or otherwise socio-ecologically defined boundaries, countries, provinces and municipalities follow territorial boundaries which have been politically shaped and often defined by political powers which do not tally with a landscape's interests. This boundary mismatch implies that landscape realities may not always align well with formal spatial decision-making structures of states. Sometimes the formal administrative boundaries do follow ecosystem characteristics or catchment boundaries, yet they rarely recognize multi-functionality in land use. This boundary mismatch could lead to problems with accountability, legitimacy and otherwise perceived democratic deficits or even lacking political will to support ongoing collaboration between actors to produce environmentally sustainable and socially just land use outcomes (Hedden-Dunkhorst et al., 2020; Gaugitsch et al., 2020; Kusters et al., 2020; Ravikumar et al., 2018; Reed et al., 2020a). This not only hampers the institutionalisation of landscape arrangements, but also their up-scaling, as well as their access to support mechanisms related to technical innovation or finance (Tobin-de la Puente et al., 2021). This highlights the need for CBD Parties to recognize and support landscape initiatives and arrangements to overcome internal inconsistencies of sectorial planning frameworks, and to ensure that integrated land use planning takes into account ecological processes as well as socio-cultural and economic processes for optimal realisation of co-benefits, for example from a range of ecosystem services (ALD, 2020).

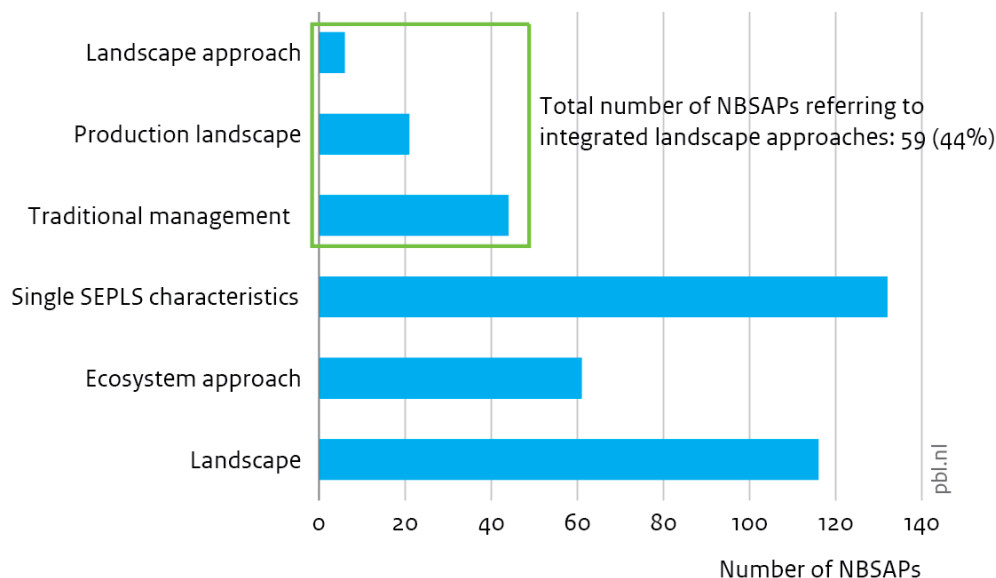
The success of landscape arrangements eventually depends on the capacities of stakeholders involved (Sayer et al., 2013, 2016; Reed et al., 2015, 2017, 2020a, 2020b). Investment in landscape arrangements by strengthening their capacities could inspire a new generation of landscape-inclusive biodiversity strategies and action plans, which integrate multiple policy objectives within a single spatial vision for transformative change, organized in collaboration with sub-national governments and local authorities (Avlonitis et al., 2012; CBD, 2010; Edinburgh Declaration, 2020).

## 3.2 Landscapes and National Biodiversity Strategies and Action Plans

A straightforward way for the CBD to take advantage of the broader potential of landscape arrangements for biodiversity could be realized through their inclusion in those mechanisms already existing and mandated by the Convention and its members. Specifically, by Article 6 of the Convention, all CBD member states are obligated to develop national strategies, policies and programmes for the conservation and sustainable use of biodiversity through their National Biodiversity Strategies and Action Plans (NBSAPs). Through these NBSAPs the conservation and sustainable use of biological resources by all actors is to be integrated into national decision-making, and mainstreamed across all sectors of national economies and policy-making frameworks. This makes NBSAPs a suitable mechanism for integrating

landscape approaches. As such they can build on existing landscape arrangements as frontrunners of biodiversity mainstreaming and sustainable use in national strategies and plans.

### NBSAPs referring to relevant concepts



Source: UNU-IAS, 2018 (total number of NBSAPs assessed: 133)

**Figure 3.1: Analysis of current NBSAPs referring to relevant concepts for integrated approaches in land- and seascapes, (UNU-IAS, 2018)**

According to a recent review of NBSAPs currently submitted by CBD member states, however, landscape approaches in general have not yet been widely incorporated into NBSAPs, and the role of integrated landscape arrangements in particular remains underexplored. According to the review, 44% of the available NBSAPs mentioned integrated policy approaches in land- and seascapes of which only a few included “landscape approach” or “integrated landscape management”. Mostly, these references were made in relation to project and programme design. Many NBSAPs do refer to one of the specific characteristics of socio-ecological production landscapes and seascapes (SEPLS), especially on the importance of local culture and knowledge, ecosystem approaches as a broader context and/or landscape as a concept in general, but these are not considered as part of a broader integrated approach to landscape management. Even though the introduction of integrated landscape approach concepts appears to be increasing worldwide and the concepts have been accorded higher priority in national policy and planning, there remains a gap in global NBSAP coverage, as well as between proposed measures in NBSAPs and projects actually being implemented on the ground. This finding challenges the true transformative potential of the NBSAP mechanism (UNU-IAS, 2018; Uetake et al., 2018).

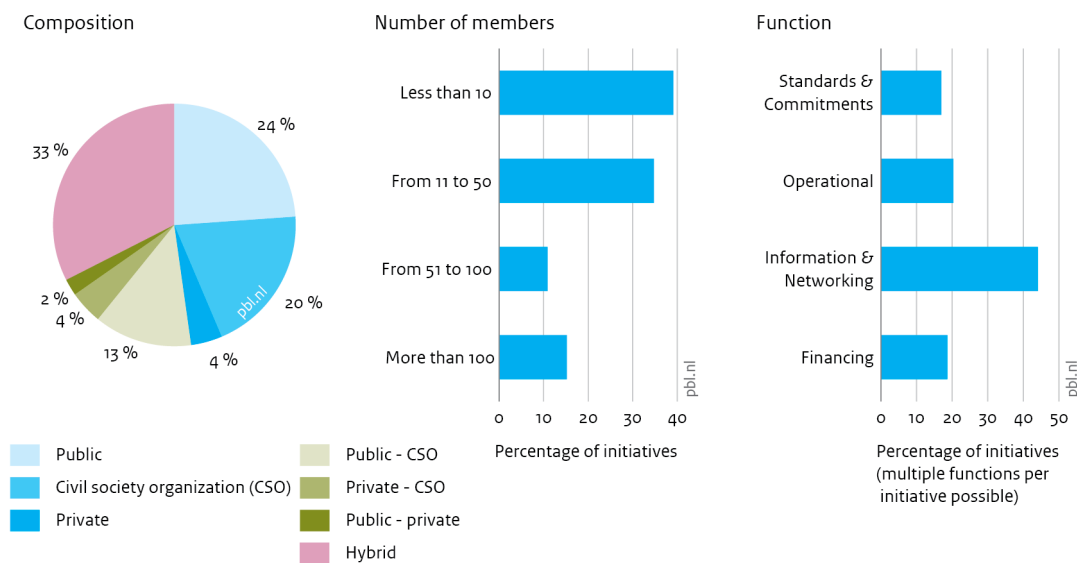
In order to address this challenge, a series of workshops were organised with participation of experts and representatives from landscape initiatives worldwide, with the aim to identify strategies for promoting the use of landscape approaches for the design and implementation of NBSAPs. Based on these efforts, the Expert Thematic Workshop on Landscape Approaches for the Post-2020 Global Biodiversity Framework took place in Kumamoto, Japan, in September 2019 (UNU-IAS, 2019). Landscape approaches, the participants concluded, should be recognized as a way of encouraging cross-sectoral and multilevel collaboration for more effective biodiversity mainstreaming. Following that, landscape arrangements are living examples of landscape approaches, as these reflect the practical arrangements to make landscape approaches work. As the majority of participants were actively engaged in such

arrangements, there was a broad consensus that a stronger embeddedness of these arrangements in policy processes across sectors and levels of policy making will enhance their effectiveness, and strengthen sub-national networking or whole-of-society governance. To make this happen, the NBSAP coordinating bodies and partners should be more sensitive to the potential of landscape arrangements, including those operating in managed landscapes or beyond the traditional scope of the CBD, and strengthen their position within the post-2020 process and resulting GBF. The ongoing initiative by UNU-IAS to produce an NBSAP manual to assist CBD member states in applying landscape approaches and supporting landscape arrangements is a necessary step towards achieving that ambition.

### 3.3 Multi-level networks for stronger positioning of landscapes

Globally, landscape initiatives and arrangements can be seen as important opportunities for non-state actor involvement in planning and decision-making. Although they are a very diverse and heterogenic group, landscape initiatives are increasingly connected and represented through a number of international networks (Figure 3.2). This strengthens their role as non-state actors in the global debate, and offers the opportunity of spearheading the desired “whole of society” approach and supporting the Action Agenda for Nature and People, together with initiatives originating from networks of cities, businesses, financial institutions, groups of indigenous peoples and local communities and also sub-national governments (Bulkeley et al., 2021; Kok et al., 2019; Van Oorschot et al., 2020).

#### International cooperative initiatives promoting landscape approaches



**Figure 3.2: Overview of international initiatives applying and/or promoting landscape approaches (Source: IVM BIOSTAR database)**

These networks have proven to be effective vehicles in providing information and networking and are linking the needs and aspirations of landscapes worldwide to larger international policy arenas, corporate networks and the world of finance (Armitage et al., 2019; Kozar et al., 2019; Pattberg et al., 2018; Shames and Scherr, 2020). Social media analysis has also shown that these networks indeed are highly effective in amplifying local voices, and increase the level of inclusiveness of global policy debates (Brandt et al, 2019).



Though the number of members varies, these international landscape cooperative networks often convene a mix of actors. They also regularly work closely with actors on the ground including rights-holders and land-holders in the landscape, indigenous peoples and local communities. They are often well experienced and savvy in bringing together different perspectives, values and worldviews to understand the landscape related needs and priorities of the stakeholders and then coordinate effective application of landscape approach interventions. They are also brokers in linking global policies to local language and finding local solutions for global challenges. Their knowledge of public policy governance and policymaking processes also enables the outcomes of their activities to be translated to practical and feasible policy-oriented recommendations, which could provide useful insights for policy decision-makers.

The international landscape networks function as mediators, coordinators and matchmakers. Below a short overview of the main well-established international networks is provided. They all share similar ambitions and are complementary in the sense that they have varying origins, institutional structure, thematic entry points and activities. Together, in the run-up to the CBD COP 15 meeting, these international networks have resonated clear messages towards the post-2020 process that landscape initiatives and arrangements provide an opportunity for the new GBF to become a truly transformative process involving the whole of society.

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### Overview of international networks connecting and supporting landscape approaches and initiatives



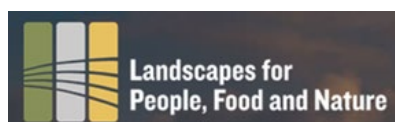
**The International Partnership for the Satoyama Initiative (IPSI)** is the international network most directly linked to the CBD. It was established in 2010 during CBD COP 10 to realize the vision of the Satoyama Initiative with global partners. It has about 270 member organizations from

governments, NGOs, civil society, indigenous peoples and local communities, youths, women, the private sector and academia, a global network expanding to over 80 countries. Its core vision is to realize "societies in harmony with nature" built on positive human-nature relationships. Members collaborate on capacity building and knowledge weaving activities to promote the application of landscape approaches in "socio-ecological production landscapes and seascapes" (SEPLS). The IPSI Secretariat is hosted by the United Nations University Institute for the Advanced Study of Sustainability (UNU-IAS) in Japan.



**The Global Landscapes Forum (GLF)** initially started as a back-to-back meeting with the regular UNFCCC climate COP meetings, conveniently sharing a key audience. From its first event at the 2013 climate COP in Warsaw, it has now developed into the world's largest knowledge-led platform on

integrated land use, dedicated to achieving the Sustainable Development Goals and Paris Climate Agreement. The Forum takes a holistic approach to create sustainable landscapes that are productive, prosperous, equitable and resilient. The GLF considers five cohesive themes: food and livelihood initiatives, landscape restoration, rights, finance and measuring progress. It is led by the Center for International Forestry Research (CIFOR), in collaboration with its co-founders UNEP, the World Bank and the Charter Members. 4,900 organizations and 190,000 participants have taken part in the Forum since its formation in 2013.



**The Landscapes for People, Food and Nature (LPFN)** initiative, which began in 2012, is an international collaborative initiative of knowledge sharing, dialogue and action to support integrated landscape management (ILM)



in order to achieve three simultaneous goals: improved food production, ecosystem conservation, and sustainable livelihoods. The secretariat is managed by EcoAgriculture Partners and together with more than 60 worldwide partner organizations they promote and strengthen ILM and multi-stakeholder processes around the world. The initiative supports the uptake of integrated landscape management at a global scale by sharing and evaluating knowledge, experience and challenges; showcasing and assessing tools and methods for implementation; and building capacity of innovators and institutions.

**The African Landscapes Dialogue** is a continental initiative under the LPFN umbrella and has convened several meetings since 2014. In light of the challenge to implement large scale national commitments by many African countries to restore degraded land and use land-based climate change mitigation options, the Dialogue is designed to discuss progress on the African Landscapes Action Plan and to highlight new locally-led initiatives and innovations, share lessons and experiences in integrated landscape initiatives across Africa, build knowledge, skills, connections and motivation among grassroots leaders and increase the effectiveness of their efforts. Its Action Plan lays out priority actions to advance integrated landscape approaches that work deliberately to support food production, ecosystem conservation and rural livelihoods across entire landscapes.



**The Global Partnership on Forest and Landscape Restoration (GPFLR)** is a global network that unites

governments, organizations, academic/research institutes, communities and individuals under a common goal: to restore the world's lost and degraded forests and their surrounding landscapes. Specifically, the GPFLR responds

directly to the Bonn Challenge to restore 150 million hectares of deforested and degraded land by 2020 and 350 million hectares by 2030. The GPFLR was initiated in 2003 by a small consortium of like-minded organizations and spearheaded by IUCN. Its purpose is to catalyse dynamic, voluntary action through sharing diverse experiences on restoration efforts which deliver tangible benefits to both local communities and nature through a landscape approach, while also fulfilling international commitments on forests.

**1000 Landscapes for 1 Billion People** is a more recently launched initiative described as a radical collaboration for resilient communities and restored nature. Based on extensive experience from participating LPFN partners, the initiative aims to shift the system to position integrated landscape partnerships at the centre of development and environment strategies. With the 2030 ambition to improve lives for over one billion people and help restore and sustain 1000 landscapes it aims to provide a major contribution to the SDGs. The initiative will serve as an accelerator and provide a digital data management platform and integrated tools, along with seed funding and financial innovation, that helps landscape partnerships plan, fund, implement and demonstrate the impact of transformative landscape investment portfolios.

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# 4 The way forward: embedding a transformative landscape perspective in the GBF

Developing approaches to ensure sustainable management of landscapes will be crucial for meeting CBD and SDG goals for 2030. The analysis in this policy brief suggests that landscape governance arrangements, which are burgeoning around the globe, can play an important role in further developing and realizing the post-2020 GBF. Landscape arrangements provide for transformative, whole-of-society approaches for nature and people that will be able to strengthen conservation as well as nature's contribution to people in managed, natural and urban landscapes. The principles of the landscape approach are accepted in the CBD, and countries are urged to apply a landscape perspective to improve the sustainable use of biodiversity

## 4.1 Including a transformative landscape perspective

In the CBD, spatial planning and landscape governance are so far mainly seen as a means of implementation and part of a whole-of-government and jurisdictional approach. This misses out on the potential of bottom-up landscape governance and initiatives as part of a whole-of-society approach. The multitude of landscape governance arrangements that are emerging worldwide beyond the CBD amplifies the potential of landscape initiatives for biodiversity. The GBF could provide an impetus for bottom-up landscape-level action for nature and people.

The growing level of landscape action also offers potential for the development and implementation of a new round of NBSAPs after CBD COP 15. Analysis of the current NBSAPs (UNU-IAS, 2018) shows that integrated landscape and spatial planning approaches have not been widely incorporated into NBSAPs, suggesting room for improvement in traditional CBD implementation mechanisms. In addition, there is no recognition of landscape governance arrangements as potential pathways to move towards a more bottom-up and participatory spatial planning and more inclusive ways towards achieving the biodiversity goals. Moving beyond the hitherto applied jurisdictional approach to a more landscape-inclusive approach to spatial planning would allow for better alignment with locally crafted initiatives and arrangements within landscapes.

The GBF currently runs the risk of missing this landscape opportunity, as it could strengthen the ambitions of the GBF with respect to:

- Providing an opportunity for organising a “whole-of-society” movement towards the environmental sustainability discourse and further conservation consciousness;
- Conserving and restoring nature, improving connectivity and addressing the drivers and indirect drivers of biodiversity loss;
- Capturing nature’s benefits to people, specifically building on the important role indigenous and local communities play in this and strengthening their rights over resources;
- Providing a legitimate overarching spatial framework for realizing coherent nature-based solutions (NBS) within multi-functional landscapes; and
- Combining supply-chain and landscape approaches to develop “nature-positive” or “nature-inclusive” development trajectories in production or working landscapes that involve economic sectors such as agriculture, forestry, fisheries and resource extraction.

Integrating a landscape perspective in the theory of change that underpins the GBF, its goals and targets, means of implementation and review mechanisms, will help to raise the level of ambition of landscape-level action for nature and people. The landscape perspective also needs to be included in the various frameworks that will further operationalise and implement the GBF, such as the *Long-term Approach to Mainstreaming, the Strategic Frameworks for Capacity Development and Resource Mobilisation and Finance* (CBD, 2021). It may also be considered to work towards a new CBD COP decision on landscapes that revisits and further develops Decision XI/25 dating from 2012, in the light of the agreed GBF.

## 4.2 Triggering landscape action

The post-2020 GBF can play an important role in triggering landscape action. The updated zero-draft of the GBF proposes the application of a theory of change that calls for immediate policy actions to transform economic, social and financial models across national, regional and global levels to halt biodiversity loss, allow recovery of nature and attain net improvements by 2050 to achieve CBD’s vision of “living in harmony with nature”. In the updated zero-draft document, 20 action targets provide the framework through which milestones for 2030 and goals for 2050 are to be achieved.

A key element that is clearly mentioned in the theory of change of the GBF is that the implementation will be done in partnership with many organizations at the global, national and local level and that it will take a rights-based approach and recognize the principle of intergenerational equity. Effective landscape governance, however, does entail the participation and co-operation of stakeholders at the local level of policy implementation. This includes indigenous peoples and local communities and directly speaks to the GBF targets on ensuring equity, protection of associated traditional knowledge and rights over resources as well as to the GBF implementation support mechanisms and enabling conditions (UNU-IAS, 2019). Creating enabling language is crucial for further engagement of landscape actors, and an important step to further develop a whole-of-society approach.

Currently, the updated zero-draft document of the GBF makes no explicit reference to landscapes, neither at the level of operation, nor as a means of implementation, nor in its main indicators for monitoring and review, nor as an opportunity for operationalising the whole-of-society approach. It only mentions the need for spatial planning once in Target 1, as part of the targets relating to threats to biodiversity. This target stipulates that “By 2030, [50%] of land and sea areas globally are under spatial planning addressing land/sea use change, retaining most of the existing intact and wilderness areas, and allow to restore [X%]

of degraded freshwater, marine and terrestrial natural ecosystems and connectivity among them”.

While spatial planning is indeed hugely important to realise the conservation objectives of the CBD, the targets in the current draft are missing the point that integrated landscape initiatives especially provide their added value in mixed landscapes. There they are shaping the sustainable use agenda for nature and people. The CBD could, through the GBF, contribute to empowering local communities in the management of their common affairs. To make that happen, the GBF would need to recognise that also the realisation of many of the other targets will rely, at least partially, on landscape-level action and better spatial planning, including:

- Targets 2 and 4, that call for well-connected PAs and OECMs in 2030 for at least 30% of the planet and ensuring the sustainable use of wild species;
- Target 7, to increase contributions to climate change mitigation and adaptation and disaster-risk reduction from nature-based solutions and ecosystems-based approaches;
- Targets 8-12, that focus on meeting people’s needs through sustainable use and benefit-sharing; and
- Targets 13 and 14, that focus on the integration of biodiversity in policies, planning and production. Target 20, that aims to ensure equitable participation in decision-making related to biodiversity and ensure rights over relevant resources of indigenous peoples and local communities, could recognise the importance of landscape-level action.

It will be important that the international community clearly specifies that various kinds of implementation support mechanisms and enabling conditions are both a legitimate and necessary part of any national-level efforts for implementing the GBF through landscape-level action. This would include specifying the role of the “Long term strategy for mainstreaming” that already recognises the importance of integrating ecosystem and biodiversity values into spatial planning at different levels of policymaking and across ministries, and adding or highlighting the role that landscape initiatives can play in mainstreaming biodiversity across society. The success of the post-2020 agenda also depends on its ability to invest in stakeholder capacities to ensure that landscape approaches are implemented in a sustainable, inclusive and just manner.

Developing capacities of landscape actors and enabling them to design coherent landscape biodiversity strategies and action plans cannot be done through standardised capacity development products such as training. It rather requires a flexible framework allowing for an iterative process of trial and adaptation, prototyping and collaborative learning, tailored to the socio-spatial dynamics of a particular landscape (Foli et al., 2018; Ros-Tonen et al., 2018; Reed et al., 2020a). Such a comprehensive and flexible framework is suggested in the *Background document to facilitate discussions on the long-term strategic framework for capacity-building beyond 2020* (CBD, 2020c) and informed the thematic consultation on capacity building and technical and scientific cooperation organized under the post-2020 process. Its application at the landscape scale is what we strongly recommend, since this is where information and knowledge systems that inspire transformative change are often already developed and collaborative learning networks can be built (Providoli et al., 2019).

Capacity building should not only aim to empower local actors by giving them just cooperative and implementation roles, but ultimately enable their direct involvement in policy design and decision-making in their landscapes. Increasing their capacities will in turn mutually enhance the institutional capacities needed to deliver larger national strategies and global goals. Resource mobilization could include channelling investment towards the landscape level, as is, for example, happening through the Land Degradation Neutrality

(LDN) Fund of the UNCCD. As landscape-level initiatives can generate multiple benefits, they in turn can also attract diverse funding sources.

### 4.3 Building on landscape ambition

The post-2020 GBF can build on the potential to further mobilise and raise ambitions of existing landscape initiatives for realising the CBD goals and targets for the coming decade. This will require broadening the way the CBD engages with landscape actors and novel mechanisms for recognition and reporting, along with the better utilizing the existing NBSAPs mechanism in the CBD as the role of landscape arrangements in remains underexplored.

To facilitate the implementation of landscape approaches, identify challenges, organize stakeholder dialogues and promote the exchange of knowledge and experiences within and between landscapes, a number of umbrella organizations with global outreach have become important actors in increasing the momentum for landscape thinking and acting. These networks include the Satoyama Initiative, the Global Landscapes Forum, the Landscapes for People, Food and Nature initiative and others (see section 3.3). Most of these initiatives have only recently started to engage with CBD processes, but the implementation of the GBF could benefit greatly from their work.

The Action Agenda for Nature and People would provide an opportunity for doing so. The Action Agenda was initiated at CBD COP 14 in 2018 in Sharm El-Sheikh, Egypt, to collect non-state commitments to contribute to global goals for nature and people and to provide support for the post-2020 GBF. The Action Agenda offers an opportunity to recognize, collect and ratchet up the positive contribution of landscape initiatives for nature and people (Kok et al., 2019). Stronger involvement, recognition and commitments by landscape initiatives and their umbrella organizations would add value to this process, and contribute to a feasible and impactful way forward. Lessons could be learned from the Urban Agenda and the CBD Edinburgh Process for subnational governments, city and local authorities on the post-2020 GBF (see also Bulkeley et al., 2021).

Could, for example, landscape initiatives for sustainable landscape management get some form of recognition next to protected areas and other effective area-based conservation measures (OECMs), as an instrument within the CBD? This could also become a joint instrument between the Rio Conventions, realising the different objectives of the conventions through integrated landscape management. As landscape governance arrangements are already playing an important role in the UNFCCC and the restoration agenda from the UNCCD, spatial planning and landscape governance arrangements could also play an important role in creating synergies between the three Rio Conventions, the Bonn Declaration and organisations like FAO that especially focus on sustainable production in managed landscapes. The UN Decade on Ecosystem Restoration provides an important opportunity to further develop and implement such joint ambitions (Sewell et al., 2020).

Engagement of landscape actors in the Action Agenda would require some level of political commitment that provides certainty over the next decade to ensure that landscape commitments will be recognised in the GBF and reported globally. This could become part of the emerging accountability framework for the global biodiversity framework. Commitments being made by landscape initiatives then need to become legible at the global level, such that landscape initiatives can rightly claim to be playing their part in global efforts and become explicitly recognised for this role. This would also require landscape initiatives to take part in periodic reporting and updating of commitments, accompanied by plans that set out how transformative action for biodiversity is being undertaken by landscape initiatives. This could also be accompanied by independent processes of peer-review and reward, as for example is now being proposed by the LandScale monitoring framework within the 1000

Landscapes initiative and similarly the Verified Sourcing Areas program developed by the IDH Sustainable Trade Initiative. Such processes would have the advantage of not only ratcheting up the commitments and levels of ambition among landscape initiatives, but also function as a means through which they can be held accountable for their promised actions and through which learning can be generated.

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