



GLF AFRICA
DIGITAL
CONFERENCE
15.9.2022

HOW TO
BUILD AN
EQUITABLE,
RESILIENT
FOOD FUTURE



VALUING BIODIVERSITY TO RESTORE RESILIENT LANDSCAPES

The role of transformative policies

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WHITE PAPER

ECOSYSTEM RESTORATION – TRADE-OFF BETWEEN BIODIVERSITY VS. ECONOMY?

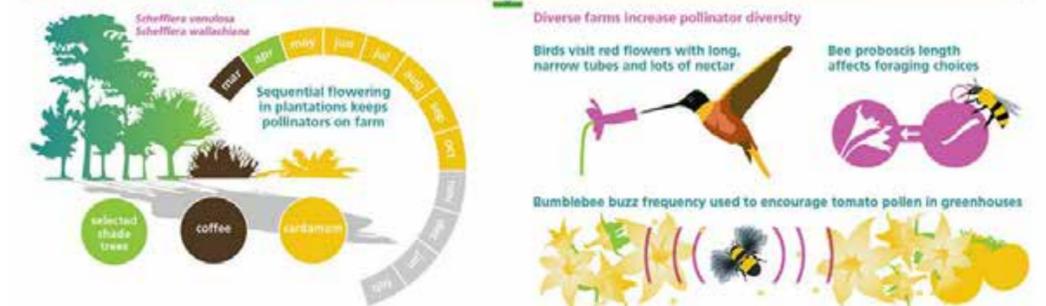
The UN Decade on Ecosystem Restoration promotes an inclusive restoration approach which increases healthy and biodiverse ecosystems, while also incrementing human health and well-being (FAO et al. 2021). On-the-ground implementation, however, regularly reveals conflict between the economic and ecological aspects of restoration. Local communities are often forced to focus on income-generating restoration activities to secure their livelihoods in the short-term. Dependence on timber production, firewood collection and non-timber forest products can lead to a preference for fast-growing and economically valuable tree species, which often are non-native and therefore do not support local biodiversity. At the same time, local communities are forced to forego the ecosystem services that arise from restoring biodiverse ecosystems, knowing that they are essential to ensure resilient food systems in the long-term (WHO and CBD Secretariat 2015). These ecosystem services include the regulation of water abundance and quality, the formation of nutrient-rich soils and the dispersal of seeds and pollen (see Figure 1 and Brondizio et al. 2019).

Ecosystem services and resilience



Using an ecosystem service-based approach can increase agricultural productivity and strengthen the resilience of rural communities and their natural resource base.

Using biodiversity to improve pollination



Find out more:
www.cgiar.org
www.biodiversityinternational.org

Sources:
 Nikkels et al., 2004
 Kallman et al., 2008
 Ray et al., 2013
 Emerson, 2005
 Tiplall and Clethor, 1997
 Estrella and Ochoa, 2012
 Zhou et al., 2013
 Greg Gryn and Jennifer Warren, 2012

Figure 1. How ecosystem services influence food system resilience.

Source: Biodiversity International (2014)

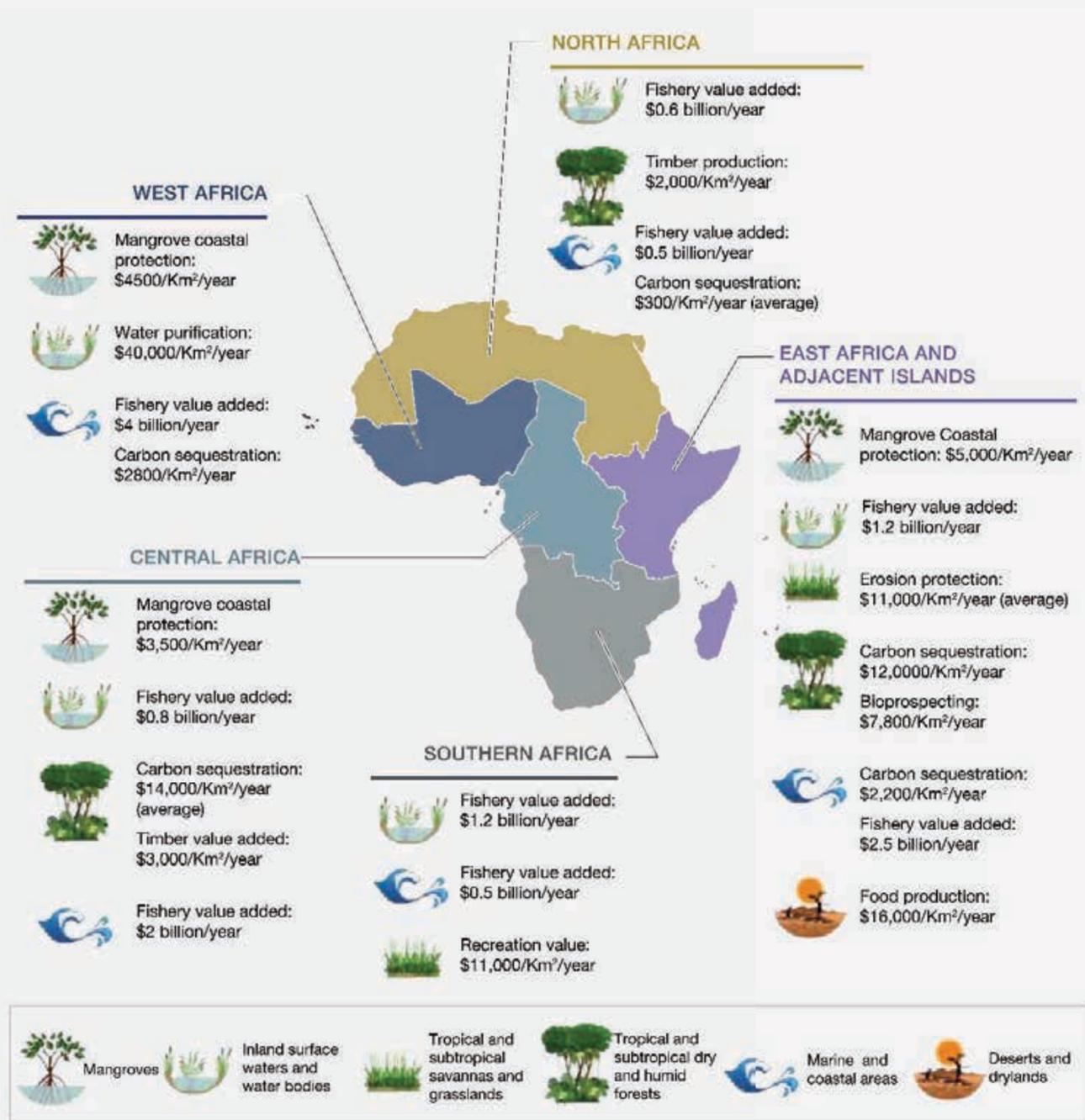


Figure 2. Indicative lists of economic values of nature's contributions to people in Africa.

Source: IPBES (2018)

AFRICA'S BIODIVERSITY IS KEY TO RESILIENT FOOD SYSTEMS

Africa has especially rich and diverse ecosystems which provide services that are essential in securing the continent's food, water, energy health and secure livelihood needs (see Figure 2). In rural areas of the continent, more than 62 percent of the population depend directly on these services. Africa's unique and important genetic diversity strengthens the resilience of its food systems and communities against the consequences of droughts, pests and climate change. However, the accelerating decline and loss of biodiversity is threatening food, water, energy and health security.

At the same time, Africa's abundant biodiversity is an asset for achieving the Sustainable Development Goals (SDGs) and can be used to reduce inequality and poverty on the continent. A key factor for this is the support of existing Indigenous and local knowledge on management of biodiversity and nature's contributions to people. This knowledge deserves more attention from governments and society, as it can complement the lack of sufficient scientific information on species and ecosystems and help in the management of natural resources.

Deficiencies, such as limited financial and institutional capacity to make effective use of natural resources, still undermine development (IPBES 2018).

INTEGRATING BIODIVERSITY INTO ECOSYSTEM RESTORATION

Promising solutions for the integration of biodiversity into restoration practices on the local and landscape level lie in landscape approaches like Forest Landscape Restoration (FLR), and the development of sustainable and nature-positive value chains. By taking into account entire landscapes and interacting ecosystems within, landscape approaches address the drivers of deforestation and degradation in a comprehensive manner while improving agricultural systems, restoring forest cover and improving food and water security (IUCN 2019).

To ensure the long-term success of such landscape approaches, they need to be embedded into a favourable policy environment on the national and global level (Slobodian et al. 2020). To address the occurring trade-offs between ecological and economic aspects in restoration, the design of policy instruments should allow for the valuation of biodiversity, and leverage its conservation and sustainable use.



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CONSIDER BIODIVERSITY'S VALUE INTO DECISION-MAKING

Globally, biodiversity and its value need to be integrated into economic and finance decision-making in the same way buildings, machines, roads and skills are. This requires a transformative change in global economies. Current economic measurements such as the Gross Domestic Product (GDP) do not account for the depreciation of the natural environment and its biodiversity, and therefore

encourage the pursuance of unsustainable economic growth and development. Replacing these measures with key statistics like inclusive wealth will lead to the accounting of a wider set of values, including produced capital, human capital and natural capital (Dasgupta 2021).

A first step towards the valuation of biodiversity is natural capital accounting and valuation of ecosystem services. Within the UN Decade on Ecosystem Restoration the TEER (The Economics of Ecosystem Restoration) initiative (FAO, no date) aims to collect standardized data about the costs and benefits of ecosystem restoration worldwide.



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In order to enable policymakers to integrate biodiversity's values into decision-making, the latest Value Assessment Report of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES 2022) developed a novel and comprehensive typology which presents four general perspectives.

These are: living from, with, in and as nature (Figure 3). It identifies the reformation of policies and regulations to internalize nature's values as one of the four value-centred 'leverage points' for transformative change, and assesses the transformative potential of selected environmental policy instruments (Figure 4).

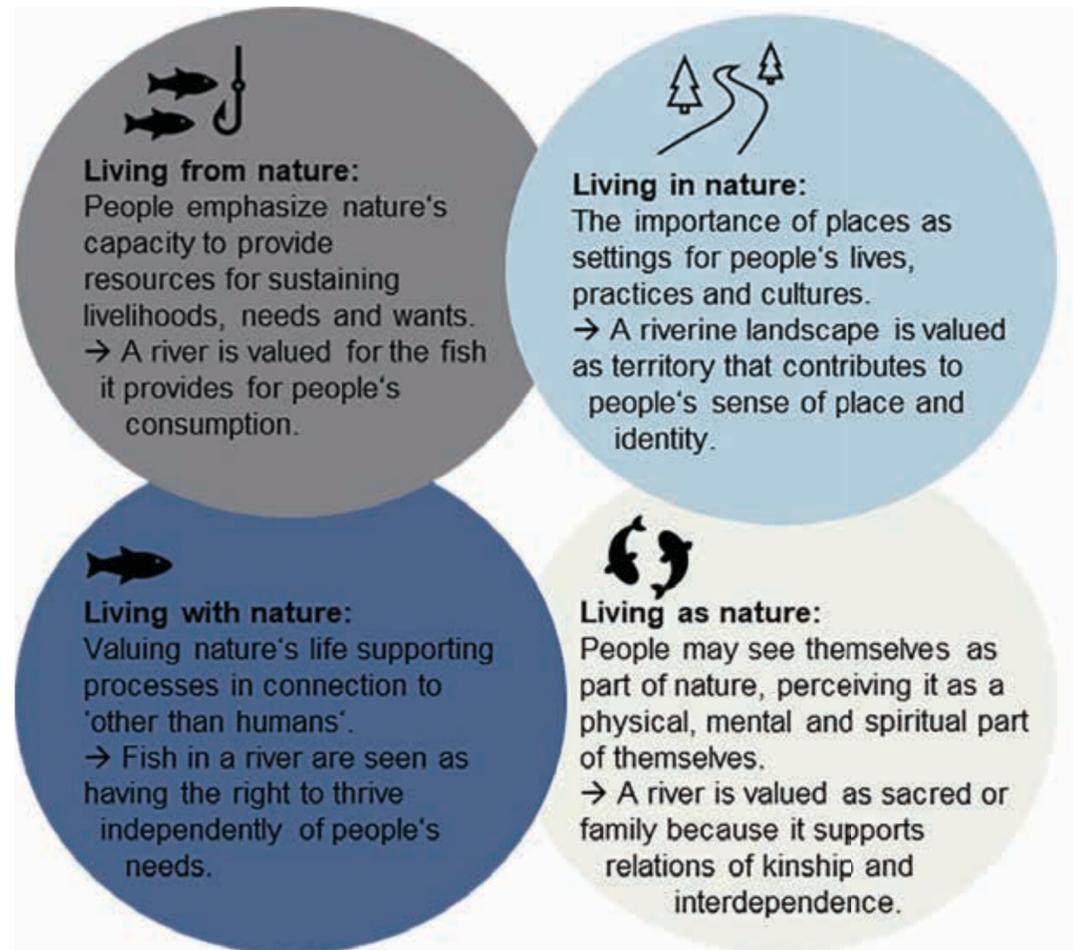


Figure 3. The many ways that people relate with nature can be organized into four general modes: living from, in, with and as nature.
Source: IPBES (2022)

Illustrative policy instruments	Potential for transformative change					Relevant decision-making scales	Key stakeholders to act
	Representing diverse values	Addressing direct and indirect drivers	Stimulating institutional change	Enhancing capacities	Being integrative and adaptive		
More transformative	Co-management regimes	●	●	●	●	●	Resource users NGOs Governments
	Eliminating harmful subsidies	●	●	●	●	●	Governments Intergovernmental organizations
	Payments for ecosystem services	●	●	●	●	●	Governments NGOs Business actors
	Other effective area-based conservation measures	●	●	●	●	●	IPLCs Donors Governments Intergovernmental organizations
	Rights of nature	●	●	●	●	●	Governments
Less transformative	Certification schemes	●	●	●	●	●	Business actors Governments Intergovernmental organizations
	Environmental accounting	●	●	●	●	●	Intergovernmental organizations Governments Business actors
	Legally protected areas	●	●	●	●	●	Governments Intergovernmental organizations NGOs
Business-as-usual	Biodiversity offsets	●	●	●	●	●	Governments Business actors
	Trade bans	●	●	●	●	●	Governments Intergovernmental organizations Business actors

Figure 4. Potential of environmental policy instruments to support transformative change towards more sustainable and just futures by representing diverse values.
Source: IPBES (2022)



WHICH KIND OF POLICY INSTRUMENTS DO WE NEED TO STRENGTHEN TO ACCELERATE INCLUSIVE RESTORATION PROCESSES?

This session introduces and discusses how sociocultural, customary and rights-based policy instruments can support transformative change on the national level and hence solve the conflict arising between ecological and economic aspects in ecosystem restoration.

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