

Scenarios and Transformative change

Rio Conventions Pavilion, CBD COP 14, Sharm El-Sheik, Egypt

- **Chairs for the day:** Carolyn Lundquist & Simon Ferrier
- **Partners:** CSIRO, DRIFT, IIASA, NIWA, PBL Netherlands Environmental Assessment Agency, Université Paris-Sud,
- **Focal Point:** Rob Alkemade and Marcel Kok (PBL)

Description:

A day programme, consisting of several building blocks, in which we will present and discuss scenario results as input in / tool for thinking about transformative change. Scenarios (quantitative and qualitative, across all scales) and sectors will be presented to discuss pathways for transformative change for biodiversity. Panellists from different stakeholder groups will be involved to discuss how the scenario-results can be used for a transformative change agenda for biodiversity. Sessions in the morning present insights two major ongoing scenario-efforts, while panels in the morning will focus more on the relevance of these analysis for transformative change and the post-2020 global biodiversity framework.

Objectives:

- 1) To present a number of ongoing scenario-exercises that are currently under way that look at the **implications of climate change scenario's for biodiversity** and scenarios for **'bending the curve'** of biodiversity trends.
- 2) To discuss how to realise the transformative changes necessary to achieve bending the trend, i.e. a **discussion on pathways** on various scales.
- 3) To discuss insights from scenario-analysis that can contribute to the **post-2020 global biodiversity framework**.

Topics for the day include:

- Provide an overview of scenario exercises that are currently underway that could support the achievement of the objectives of the CBD, UNFCCC and UNCCD?
- What lessons can be drawn from harmonized modelling exercises aiming to project magnitudes and spatial distribution of biodiversity and ecosystem services loss or gain under a range of climate and land-use future scenarios? And could these strengthen the link between CBD, UNFCCC and UNCCD?
- Shed light on different wedges able to bend the curve of biodiversity trends as affected by land-use change, the biggest current threat to biodiversity?
- The contribution of sectoral scenarios (i.e. scenarios especially developed for food production, agriculture, water, fisheries within the context of those sectors) in the broader mainstreaming agenda, and how are outcomes relevant for biodiversity policies?
- What is the contribution of scenario-analysis in transformative change in biodiversity, to support the achievement of the objectives of the Rio Conventions and the United Nations' Sustainable Development Goals? How can this operationalise in national contexts?

- Targets for human development are increasingly connected with targets for nature, however, existing scenarios do not explicitly address this relationship. Can new Nature's Futures scenario currently under development in IPBES, fill this gap?
- And how could a scenarios approach support the relation between those, taking into account potential trade-offs between nature conservation and other development goals.

Time	Event	Lead organisation /speakers / panellists
09:00-09:15	Welcome	Carolyn Lundquist
09:15-10:10	Scenarios and transformative change Introduction to what has been done in terms of scenario development, how scenarios landed in the international environment and how these scenarios aid in decision making. Main topic: how can scenario-analysis support the achievement of the objectives of the CBD, UNFCCC and UNCCD, the development of the new strategic plan and how can it contribute to realising transformative change for biodiversity? This session will set the stage for subsequent sessions.	Carolyn Lundquist David Cooper Derk Loorbach Astrid Hilgers Anne Larigauderie FAO (tbc)
10:10-10:30	<i>Break with drinks</i>	
10:30-10:45	Introduction to rest of the day	Simon Ferrier
10:45-11:45	Shared-Socio Economic Pathways (SSPs) & biodiversity This session will present the outcomes of analyses of the SSPs for biodiversity and ecosystem services. Results of these analyses have been used in the UNCCD Global Land Outlook and the IPBES regional and land degradation and restoration assessments. For the IPBES Global Assessment, results from over 10 different biodiversity models have been applied, using harmonized input from SSP scenarios. The session will further provide insight in the implications of the recent IPCC 1.5 C report for biodiversity. The session will discuss lessons that can be drawn from harmonized modelling exercises aiming to project magnitudes and spatial distribution of biodiversity and ecosystem services loss or gain under a range of climate and land-use future scenarios.	Paul Leadley Rob Alkemade Piero Visconti David LeClere
12:00-13:00	Bending the curve of 21st century biodiversity trends In the recent years, the scientific community produced a few global-scale assessments of forward-looking scenarios for biodiversity, as impacted by future land-use change. For example, the Rio+20 scenarios as analysed in GBO-4 aimed at	David LeClere Rob Alkemade Piero Visconti

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	<p>eliciting alternative pathways compatible with both halting biodiversity loss and reaching a set of broader targets such as maintaining global warming below 1.5°Celsius by 2100 and feeding the world. The Bending The Curve fast track analysis explored scenarios aiming to bend upwards the global trends of biodiversity loss from habitat loss. Additionally, some proposals of conserving half of the Earth were put forward.</p> <p>This session will provide a few insights on the lessons learned from these scientific exercises for the post-2020 strategy for biodiversity, followed by a discussion.</p>	
13:00-14:00	<i>Lunch</i>	
14:00-15:10	Scenario-insights for operationalising the 2050 vision	
	<p>Short recap of morning sessions, followed by a roundtable discussion on what we can learn about operationalising and quantifying objectives for the 2050 vision from scenario-analysis.</p>	<p>Simon Ferrier Piero Visconti David LeClere Sarah Cornell WCMC (tbc) TNC/WWF (tbc) IUCN (tbc)</p>
15:20-16:30	Interdisciplinary scientific support for sustainability transitions to bend the curve of biodiversity loss	
	<p>The need for transformative change is broadly acknowledged but requires new approaches. This session introduces and discusses the idea to develop governance and scenario support for countries to advance desired sustainability transitions in biodiversity-relevant sectors of their economies.</p> <p>Building on transition governance research, action research and scenarios approaches, we aim to mobilize different scientific and practice based perspectives to support developing transformative networks on the local level that proactively scale natural capital positive practices and phase out unsustainable economic practices. The philosophy is to activate all the knowledge available about persistent unsustainability as well as with regards to available technological, economic and social solutions to facilitates participatory processes that empower change agents and transformations in practice. Scenario work and scenario methodologies in this approach play a critical role in helping actors to develop future oriented strategic thinking, explore different desirable futures and understand the potentials of short term radical alternatives.</p>	<p>Derk Loorbach Mark Rounsevell Bernardo Strassburg Fiona Kinniburgh Country representatives</p>

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	Based on an introduction, a panel will discuss the role of knowledge in these processes, how it could be systematically facilitated and how it could provide a rich empirical testing ground for accelerating desired transformations.	
16:30-16:45	<i>Break with drinks</i>	
16:45-18:00	Closing panel CBD Post-2020 and connections UNCCD, UNFCCC, SDG Agenda	
	<p>What are the major lessons from scenario-analysis for the new post-2020 Global Biodiversity framework?</p> <p>This last session will bring the outcomes of the day together through a panel discussion on how the discussions of today can contribute to the further development of the transformative change agenda for biodiversity and the post-2020 global biodiversity framework. It will also address the question how scenario-analysis could strengthen the link between IPCC, IPBES and the Global Land Outlook to support more coherent policy agendas of these conventions, as well as the realisation of the SDGs?</p>	<p>Carolyn Lundquist David Cooper Derk Loorbach Sylvia Karlsson-Vinkhuyzen Bernadette Fischler (WWF) Joji Carino (FPP) Thomas Brooks (IUCN)</p>
18:00-19:00	<i>Reception</i>	