

Is climate change adaptation all about water?



International conference | 25-26 April 2023 | Brussels

Societal (stakeholders involvement) perspective

Luc Janssens de Bisthoven (Royal Belgian Institute for Natural Sciences, CEBioS)

Prominent elements of the context

Science → International Union for Conservation of Nature →

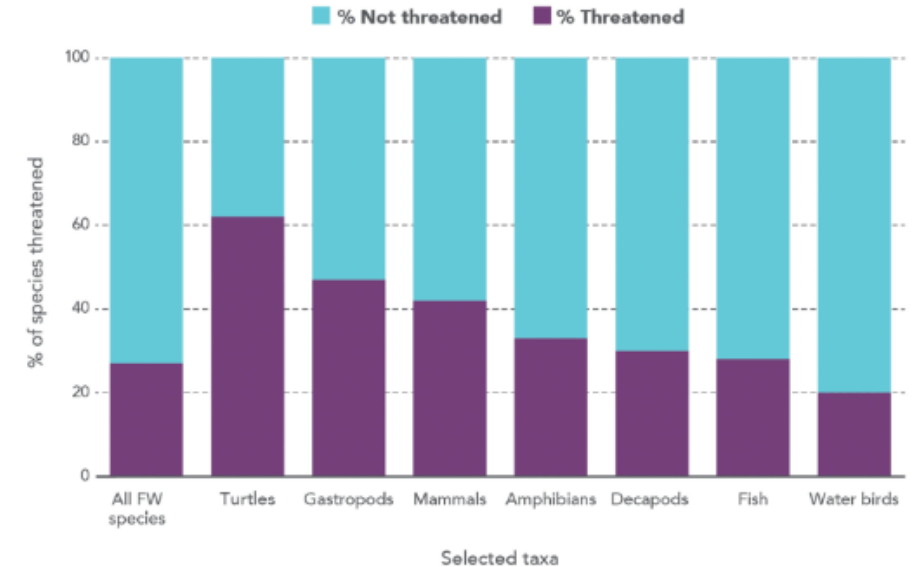
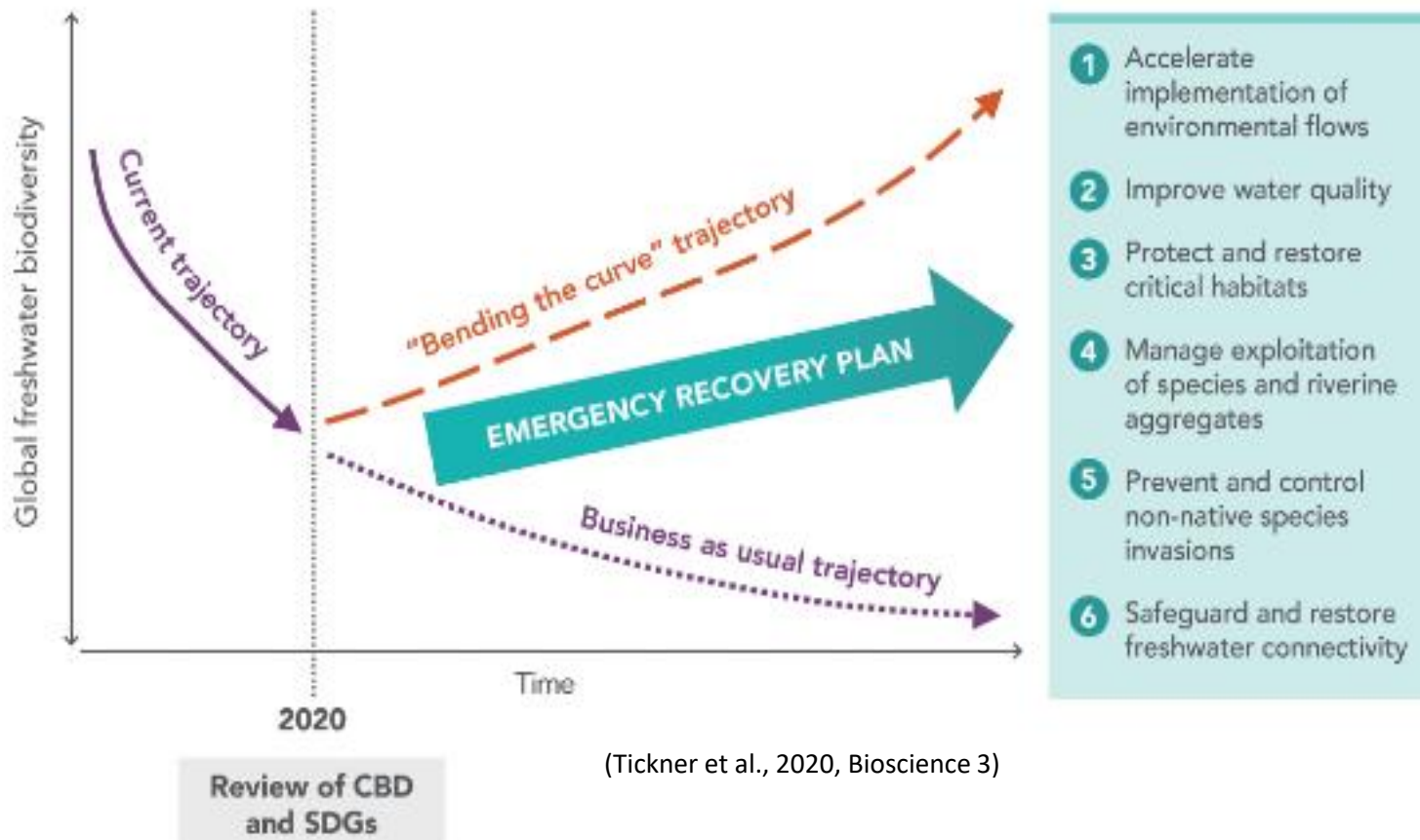


Figure 1. Proportions of freshwater taxa threatened with extinction. Source: IUCN (2019).

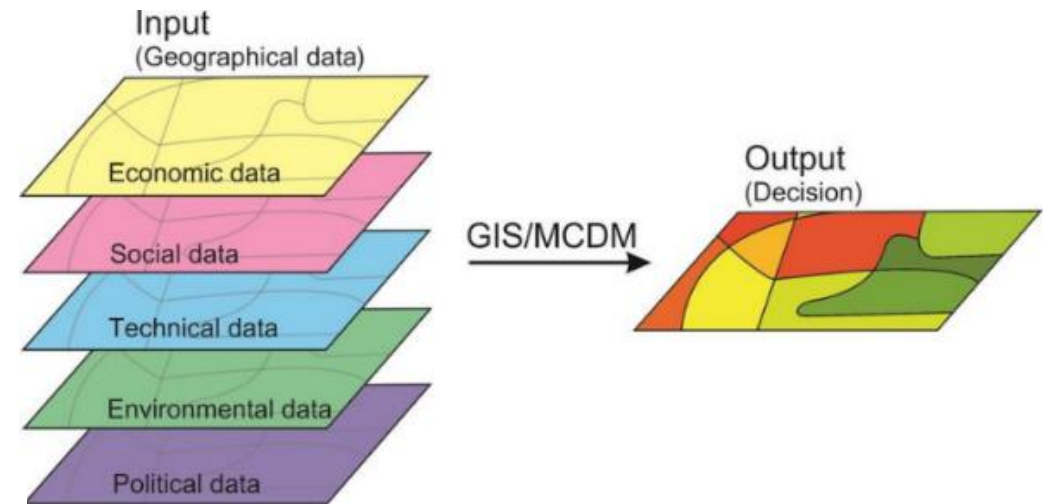
“ Freshwater biodiversity is disproportionately threatened and underprioritized relative to the marine and terrestrial biota, despite supporting a richness of species and ecosystems with their own intrinsic value and providing multiple essential ecosystem services.” (Van Rees et al., 2020. Conservation Letters)

Figure 2. The Emergency Recovery Plan for freshwater biodiversity: Six priority actions for global action to bend the curve of freshwater biodiversity loss that should be reflected in the post-2020 biodiversity framework. Threats to freshwater biodiversity are often synergistic so coherent planning of interacting priority actions to address such threats is necessary.

→ Intergovernmental Platform for Biodiversity and Ecosystem Services → Convention on Biological Diversity / Global Biodiversity Framework → Solutions?



IPBES

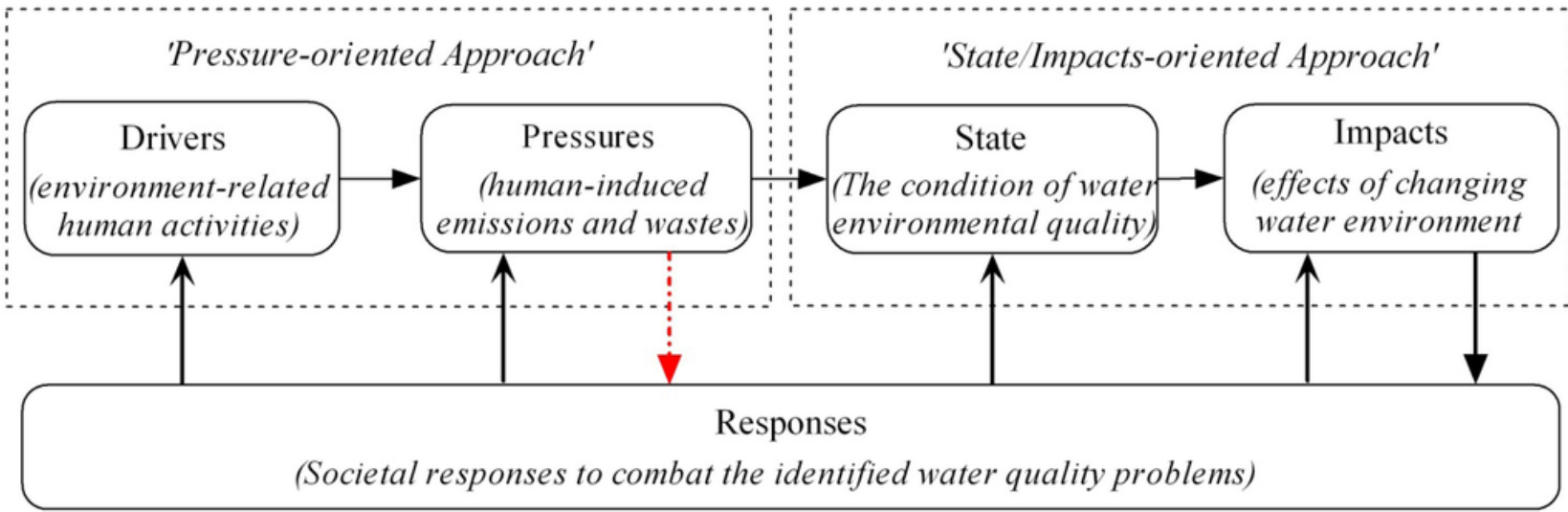
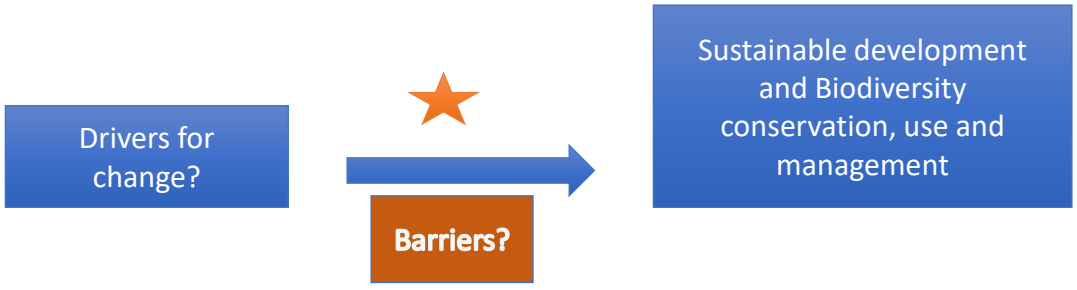
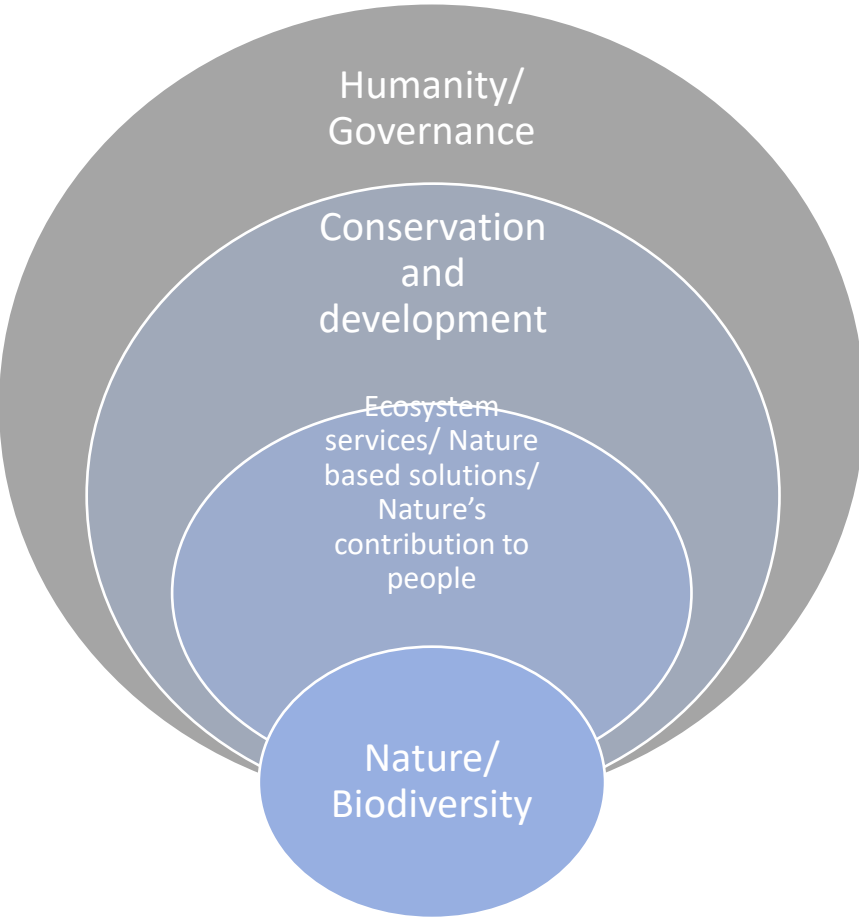


Kunming-Montreal Global Biodiversity Framework: 23 targets

TARGET 1

Ensure that all areas are under participatory integrated biodiversity inclusive spatial planning and/or effective management processes addressing land and sea use change, to bring the loss of areas of high biodiversity importance, including ecosystems of high ecological integrity, close to zero by 2030, while respecting the rights of indigenous peoples and local communities,

Resilient socio-ecological systems



“Innovative” features

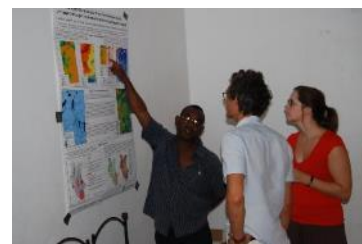
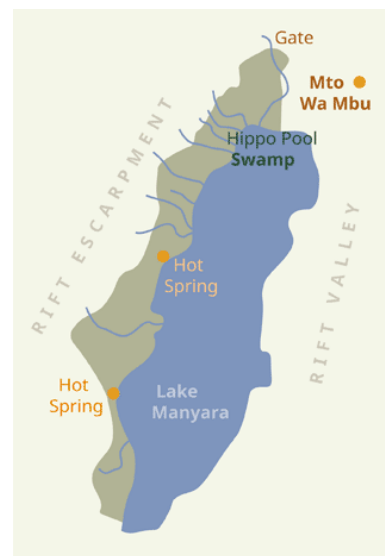
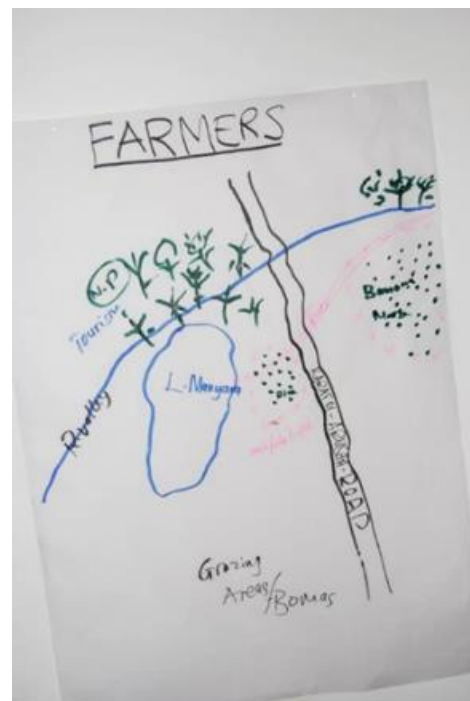
Listen to stakeholders to find solutions for the management of freshwater



Lake Manyara, Tanzania



Community mapping



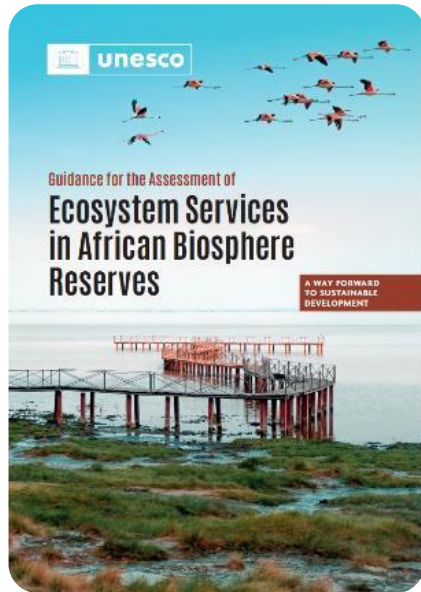
Research article

Social-ecological assessment of Lake Manyara basin, Tanzania: A mixed method approach

L. Janssens de Bisthoven^{a,*}, M.P.M. Vanhove^{a,b,c,d,m}, A.-J. Rochetteⁿ, J. Hugé^{i,k,n,o}, S. Verbesselt^b, R. Machunda^d, L. Munishi^d, M. Wynants^e, A. Steensels^b, M. Malan-Meerkotter^f, S. Henok^g, T. Nhiwatiwa^h, B. Casier^h, Y.A. Kiwango^l, R. Kaitila^h, H. Komakech^g, L. Brendonck^h

Valuation of ecosystem services

<https://unesdoc.unesco.org/ark:/48223/pf0000382278>



d Social-Ecological system

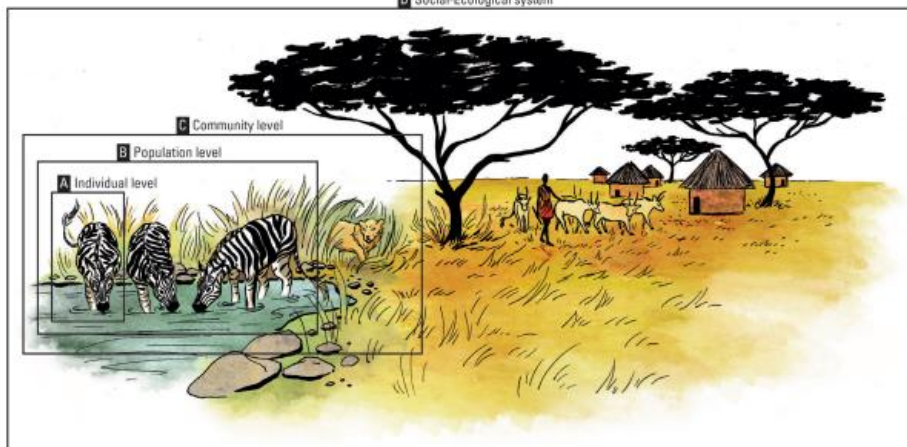


Illustration : Mado Berthet, RBINS

FIGURE 1. STRUCTURE OF THE MANUAL

I would like to...

I am a community representative, community leader, NGO representative

I am a policy maker, decision maker, politician, authority

I am a Biosphere Reserve manager

Better understand the concept of ecosystem services

Refresh my understanding of MAB

Have some idea about existing rapid assessment tools for assessing ecosystem services

Understand how to value ES and have some examples
Understand Payments for Ecosystem Services

Translate this knowledge into concrete actions towards better conservation, sustainable development and a greener economy



CHAPTER 1
Ecosystem services



CHAPTER 2
Biosphere Reserves



CHAPTER 3
Ecosystem Services Assessment Tools



CHAPTER 4
How to value ecosystem services?



CHAPTER 5
From ecosystem services assessment to real changes

And throughout the manual



Examples and case studies from African Biosphere Reserves

References to additional useful resources at the end of each chapter

Good practices



To **elicit perceptions and judgements, ideas, traditional knowledge**

With structured, moderated conversation, dialogue, debate with stakeholders, tiered and multi-actor process



OUTCOMES:

- increased **information** and **knowledge** for all parties
- increased **understanding** of each other, of the situation, environmental conflict, **trade-offs (arbitrages)**
- Provide **transparent** governance, **fair, equitable** and effective **decisions**, strategies, plans and implementation of management
- **DECISION SUPPORT SYSTEM** based on different knowledge systems (science, traditional)
- Increased **ownership** of conservation & other processes!
- Increased chance of **success** (and **impact!**) of decisions, measures, management of freshwaters & other ecosystems

Lessons learned



UN Water Conference and
main conclusions → related to
stakeholders



1. Professionalisation of (multi-actor & South-South) stakeholder engagement (and budget accordingly)
2. Holistic & integrative approach, focus on RESILIENCE
3. Innovation within existing institutions
4. → capacity building
5. Multi-disciplinarity teams
6. Embrace complexity !
7. **Development Cooperation** is about change management with people
8. **Nature-based solutions** work if they are human-based → human in the sense of humanity, respectful steward of people & nature → **Nature's contributions to people**

Thank you!

