Coorganisé par :

SÉMINAIRE INTERNATIONAL SUR LA PRÉSERVATION ET LA RESTAURATION DES SOLS FORESTIERS EN AFRIQUE DE L'OUEST

ABIDJAN - 15-17 MAI 2023

INTERNATIONAL SEMINAR ON THE PRESERVATION AND RESTORATION OF FOREST SOILS IN WEST AFRICA

ABIDJAN - MAY 15th-17th, 2023

Avec le soutien financier de :

Presentation of Coalition of Action 4 Soil Health

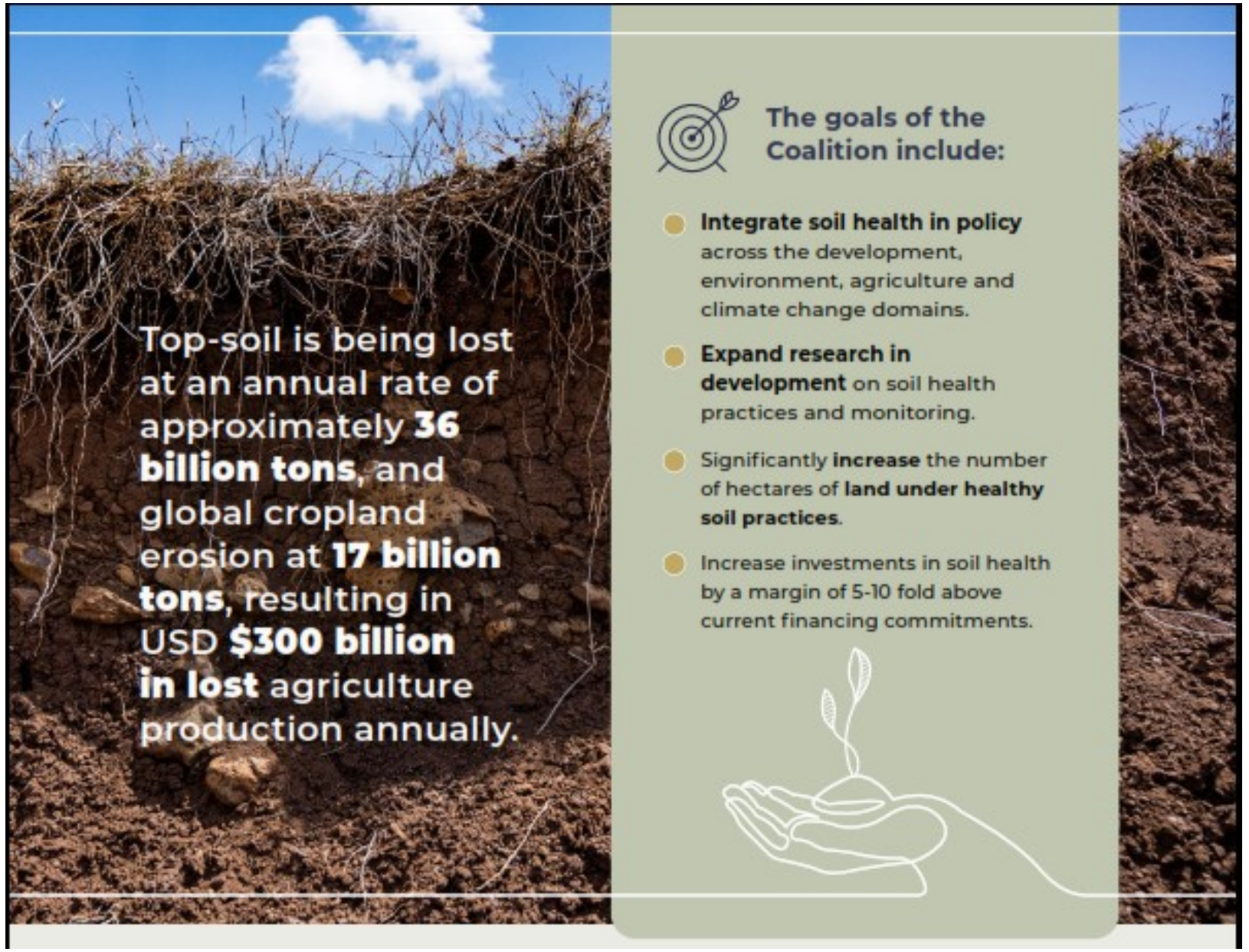
Roël D. Houdanon

CA4SH
COALITION OF ACTION 4 SOIL HEALTH

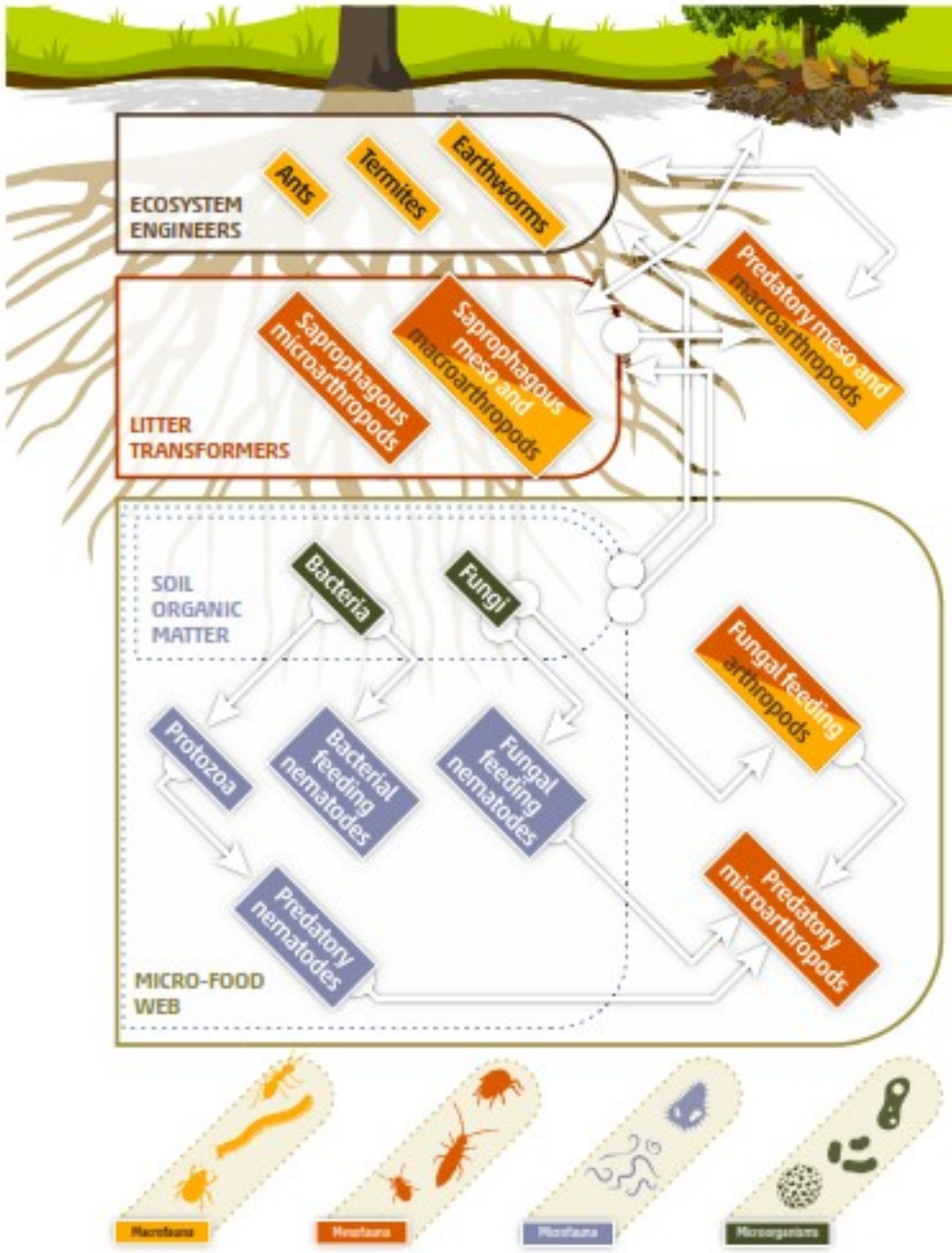
Presentation of Coalition of Action 4 Soil Health

The main objective of the Coalition of Action 4 Soil Health (CA4SH) is to improve soil health globally.

CA4SH
COALITION OF ACTION 4 SOIL HEALTH

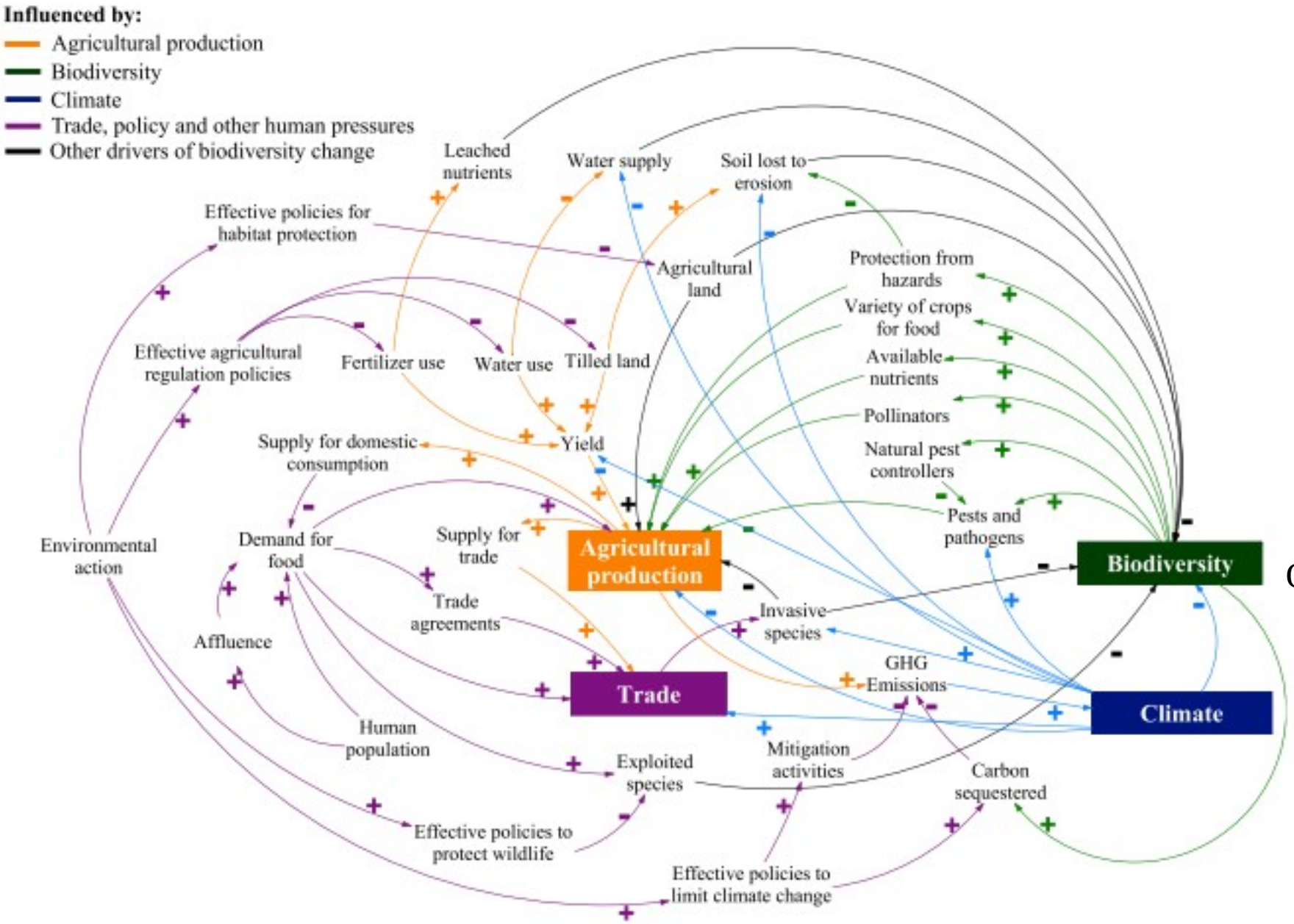


1. What are the stakes of land and soil degradation for soil biodiversity

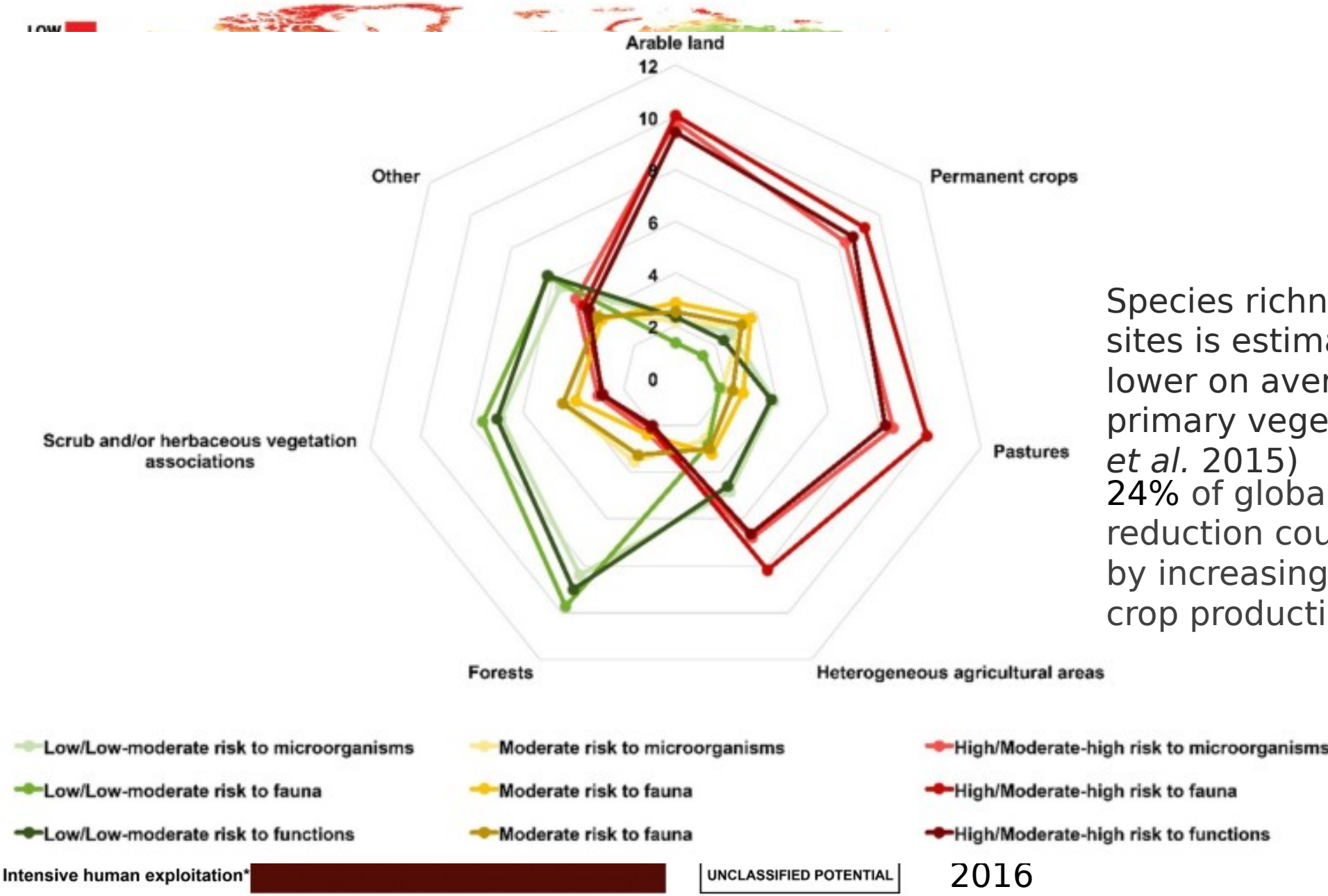


Coleman and Wall 2015.

Role of soil biodiversity



Ortiz *et al.* 2020



Species richness in cropland sites is estimated to be 40% lower on average than in primary vegetation (Newbold, *et al.* 2015)

24% of global extinction, risk reduction could be achieved by increasing sustainability in crop production

2016

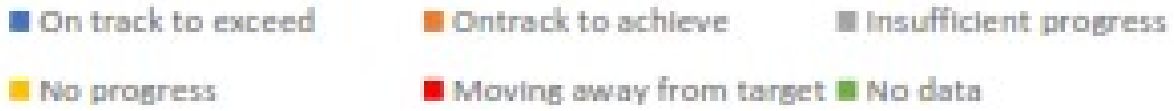
- Soil biodiversity: Targets Aichi objectives 7, 2, 4, 8, 14

- Post-2020 Global Biodiversity Framework. Almost all targets b
  mainly target 10.

Mycosphere X(X): X–X (XXXX) www.mycosphere.org ISSN 2077 7019
Article – Special issue
Doi 10.5943/mycosphere/si/1f/2
Online first

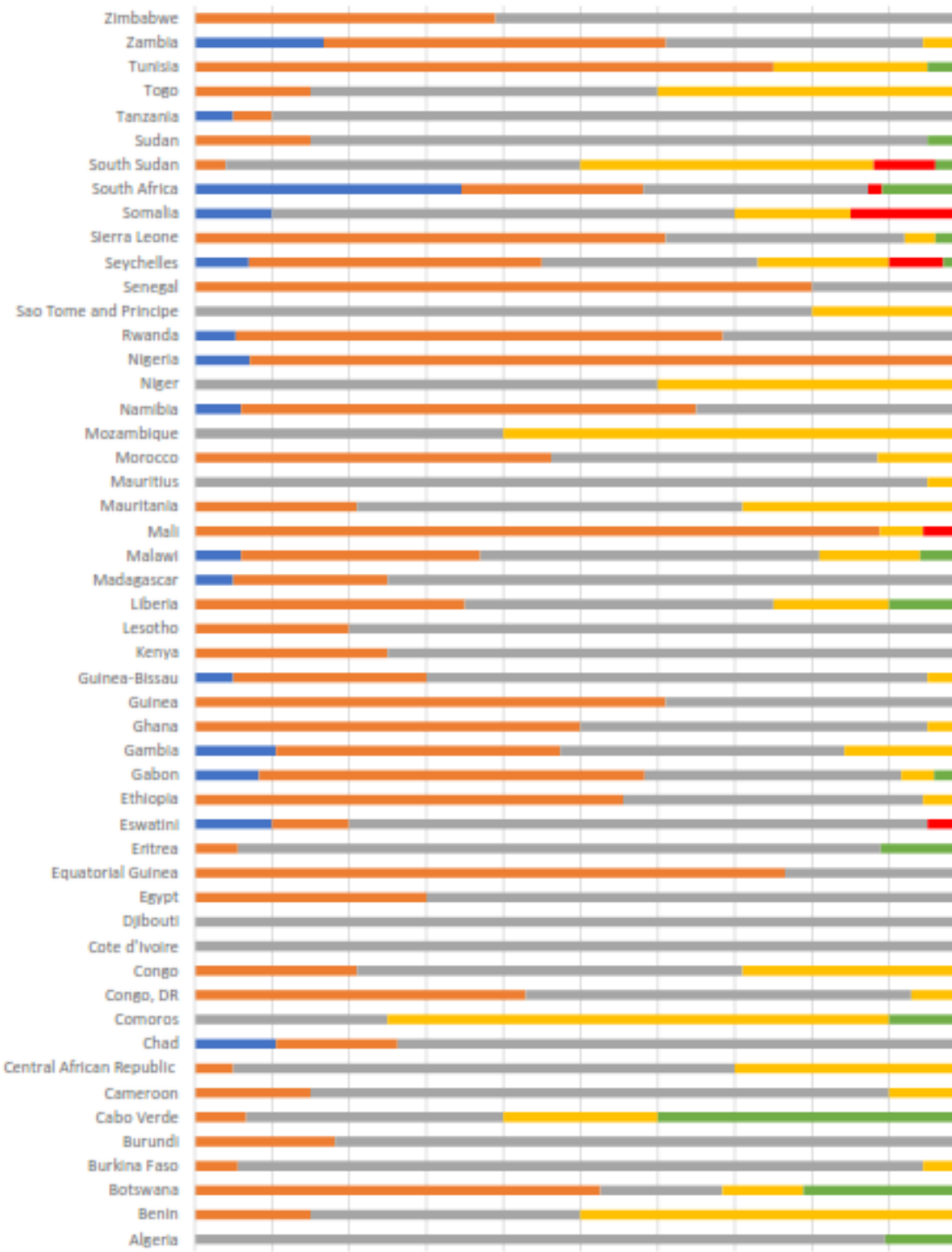
Phylogenetic diversity and affiliation of tropical African ectomycorrhizal fungi

Houdanon RD[1,*], Furneaux B[2,3], Yorou NS[1] and Ryberg M[2]



Progress in implementing the National Biodiversity Strategies and Action Plans and contribution to the

Mulongoy 2022



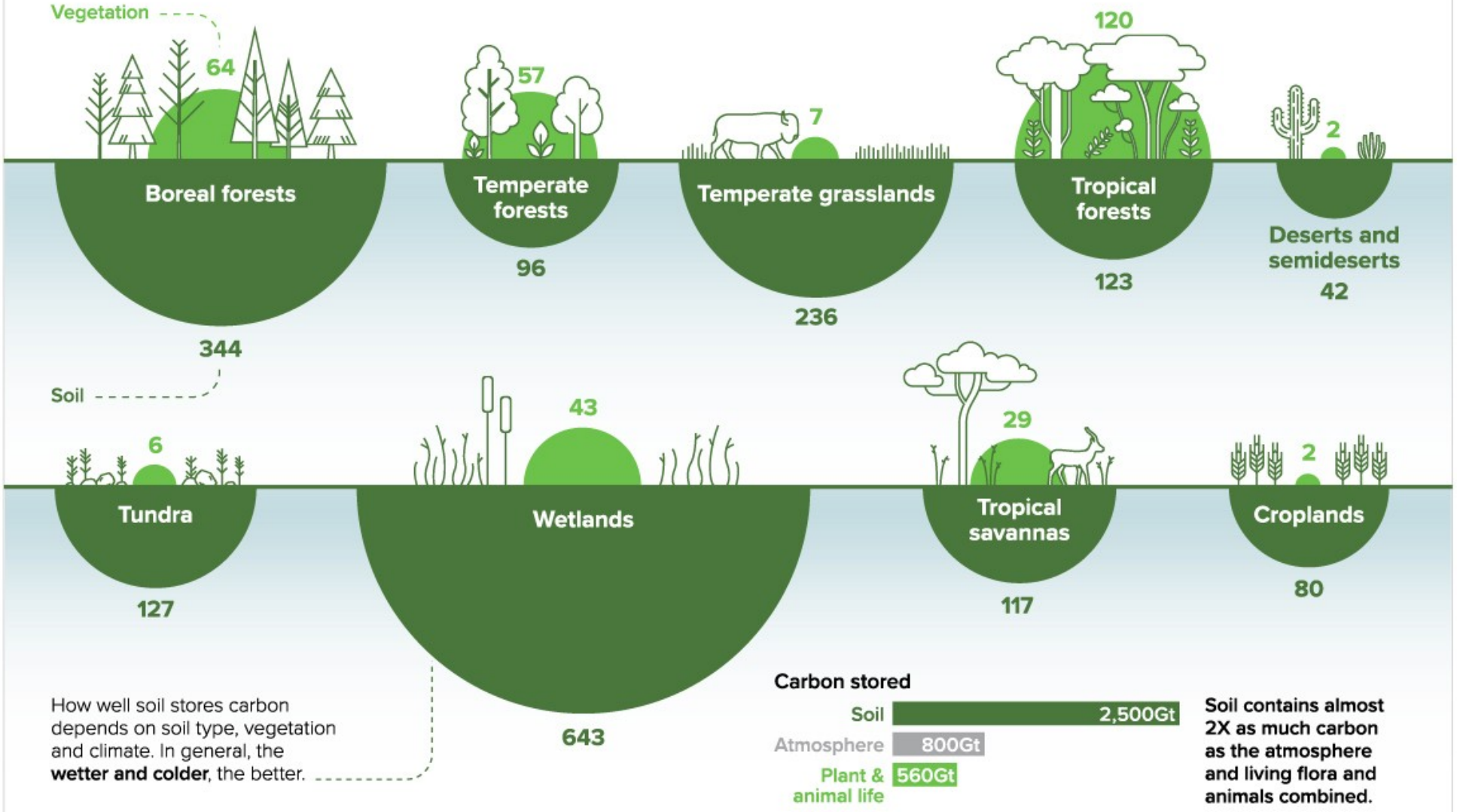
2. What are the stakes of land and soil degradation for climate change

Carbon Storage

Tonnes of Carbon

The world's forests absorb around **15.6 gigatonnes** of CO_2 each year. That's around 3X the annual CO_2 emissions of the United States.

However, around **8.1 gigatonnes of CO_2 leaks back into the atmosphere** due to deforestation, fires and other disturbances.



How well soil stores carbon depends on soil type, vegetation and climate. In general, the **wetter and colder**, the better.

Carbon stored

Soil contains almost 2X as much carbon as the atmosphere and living flora and animals combined.

Average stored carbon in tonnes per hectare at a ground depth of one meter

Sources: IPCC; NASA

3. How to tackle soil degradation issue in west Africa forest region

Soil Health Gap: A concept to establish a benchmark for soil health management

Bijesh Maharjan [a,*], Saurav Das [a], Bharat Sharma Acharya [b]

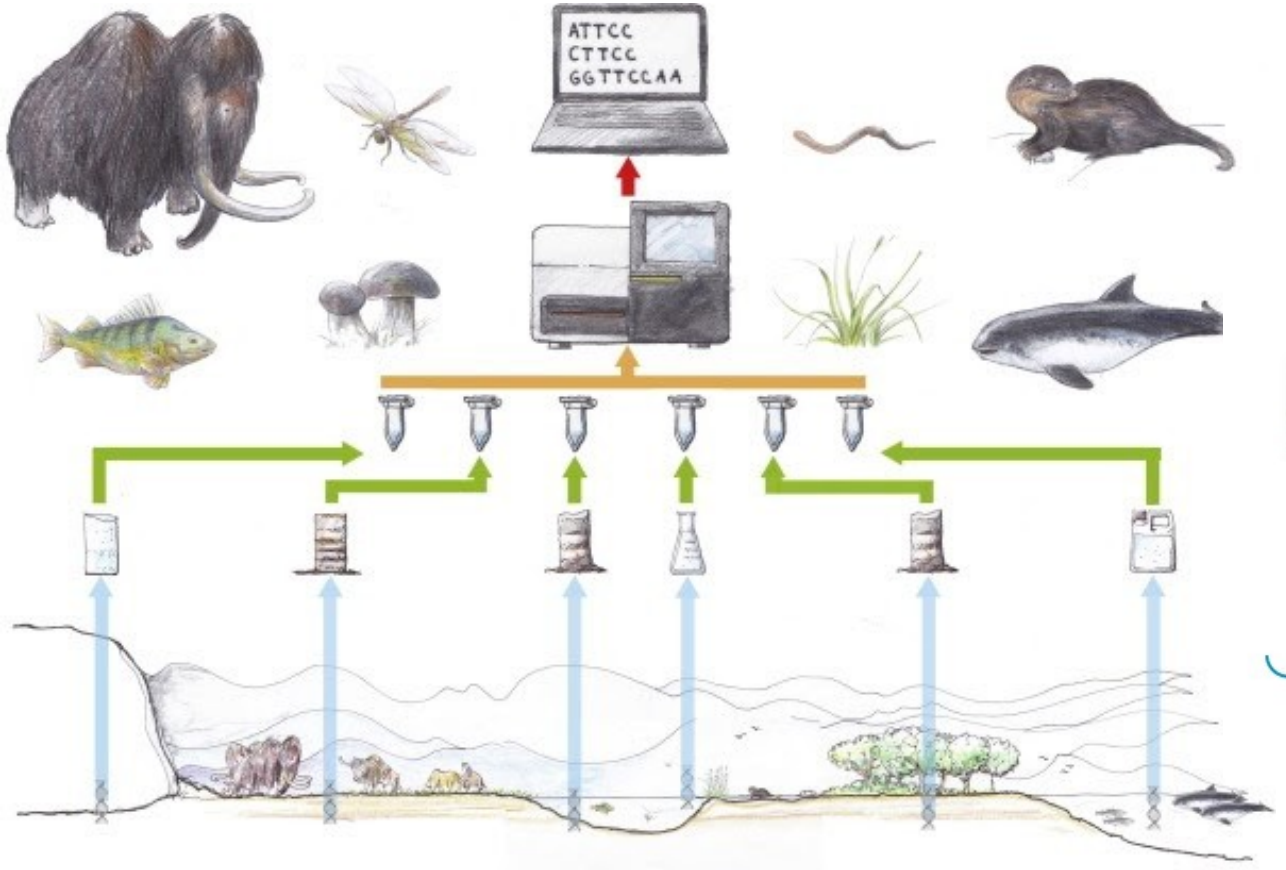
[a] Department of Agronomy and Horticulture, University of Nebraska, Lincoln, USA
[b] Oklahoma Department of Mines, Oklahoma, USA

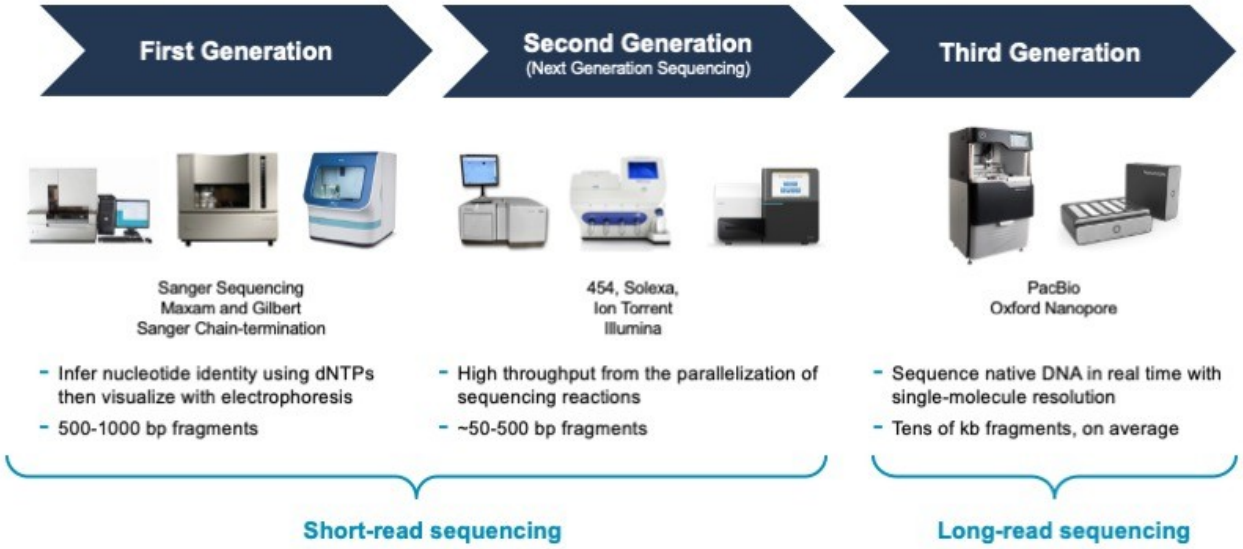
Predicting the responsiveness of soil biodiversity to deforestation: a cross-biome study

THOMAS W. CROWTHER[1], DANIEL S. MAYNARD[1], JONATHAN W. LEFF[2], EMILY E. OLDFIELD[1], REBECCA L. MCCULLEY[3], NOAH FIERER[2] and MARK A. BRADFORD[1]

[1]School of Forestry and Environmental Studies, Yale University, New Haven, CT 06511, USA, [2]Department of Ecology and Evolutionary Biology, University of Colorado, Boulder, CO 80309, USA, [3]Department of Plant and Soil Sciences, University of Kentucky, Ag Science Center North, Lexington, KY 40546, USA

Africa need technology to assess and monitor soil biodiversity communities





POLICY BRIEF

DECEMBER 2022 SERIES 02

Including soil organic carbon into nationally determined contributions: Insights from Ghana

Diwediga Badabat, Adeyemi Chabi, Djalal Ademonla Arinloye, Sabrina Chesterman, Tor-Gunnar Vagen, Ermias Aynekulu and Leigh Ann Winowiecki

POLICY BRIEF

DECEMBER 2022 SERIES 05

Including soil organic carbon into nationally determined contributions: Insights from Senegal

Adeyemi Chabi, Djalal Ademonla Arinloye, Tor-Gunnar Vagen, Ermias Aynekulu and Leigh Ann Winowiecki

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4 PER 1000

What is the Soil Health Resolution?

The **Soil Health Resolution** is a set of commitments to enable and scale healthy soil practices to mitigate and adapt to climate change, restore biodiversity, improve water resilience, enhance food and nutrition security, and protect natural and cultural heritage.

The Soil Health Resolution calls on government leaders to:

1. **RECOGNIZE** that soils are the basis of life and that soil health[1] is the foundation of sustainable and regenerative food systems;
2. **AFFIRM** that agricultural systems are part of the climate solution and that sustainable land management practices enhance productivity, resilience and biodiversity;
3. **STRESS** the importance of aligning UN conventions and providing legal instruments to synergize organisational efforts and accelerate the action on the ground;
4. **CONSIDER** the critical role played by increased soil health to achieve the objectives of the UN Decade of Ecosystem Restoration, among other declarations;
5. **REAFFIRM** the need for further international action and cooperation to revert current soil degradation processes.

Agroforestry,
Agroecology

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Thanks