Reconnecting biodiversity above and below ground

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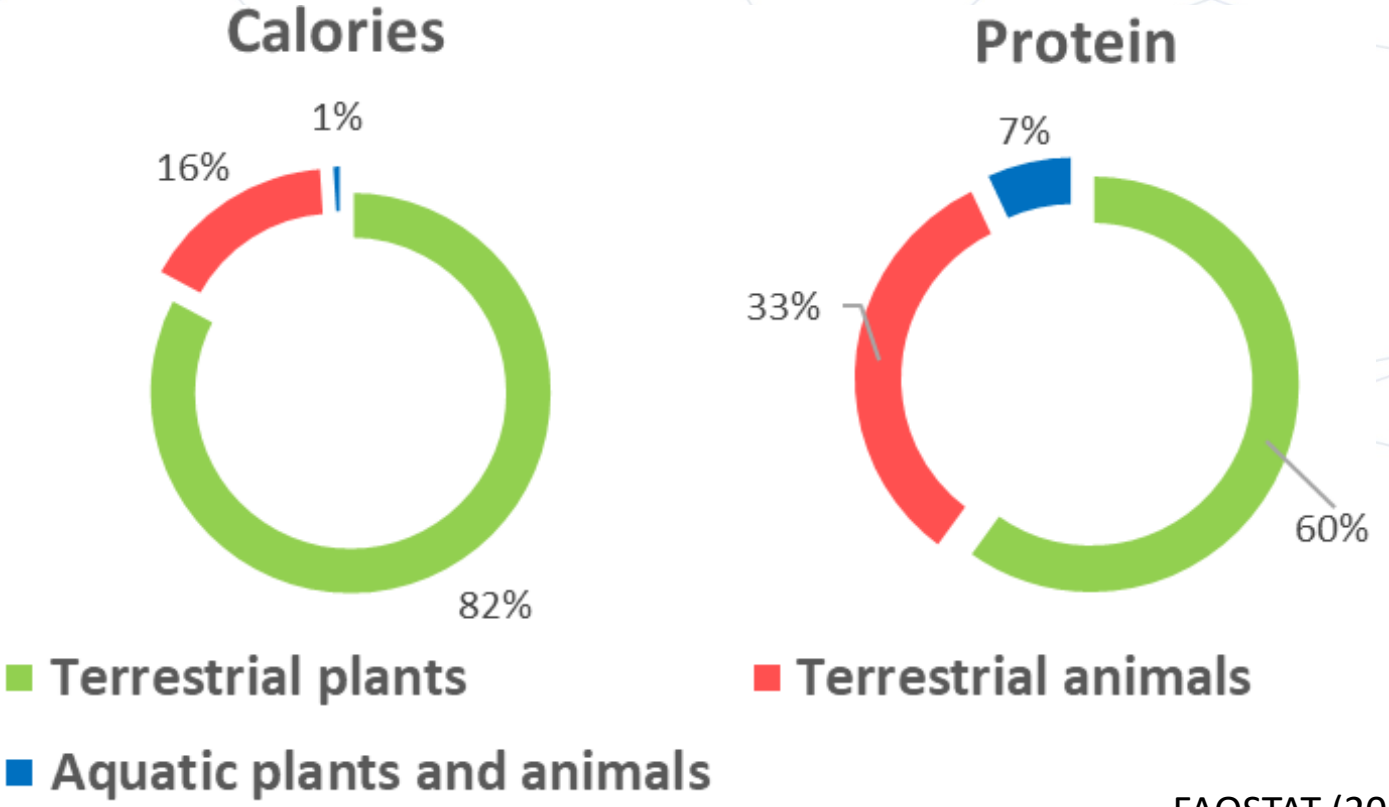
Biodiversity: the cornerstone of global food security

A multitude of species that contribute to our food, renewable material supplies, and the ecosystems that hosts them.

- > **6 000** plants species cultivated for food
- > **12 000** aquatic species items in fisheries and aquaculture
- **38** species allows for thousands of breeds of domesticated terrestrial animals
- > **9 000** wild species are used for food (re. IUCN Red List)
- **100 000s** more support food and agriculture in different ways

Almost all species for food and agriculture rely on soil biodiversity

Human food supply… and soils



FAOSTAT (2021)

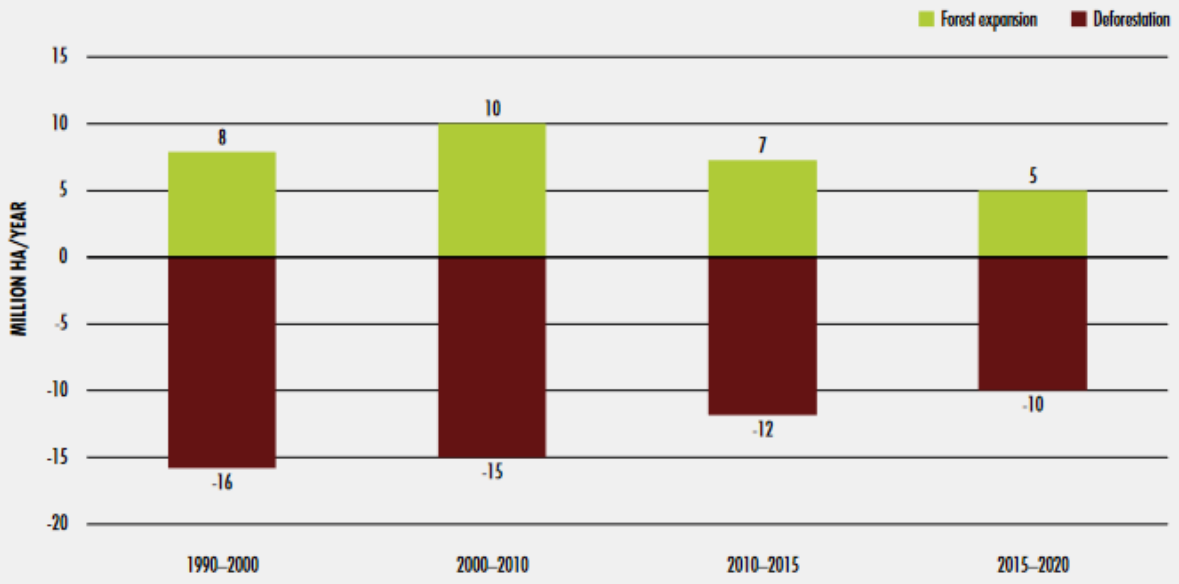
Biodiversity…

- supports food security and nutrition, human health, livelihoods;
- supports nearly all economic sectors;
- plays an essential role in the delivery of ecosystem services;
- is essential for climate change adaptation and mitigation.

Biodiversity is being lost

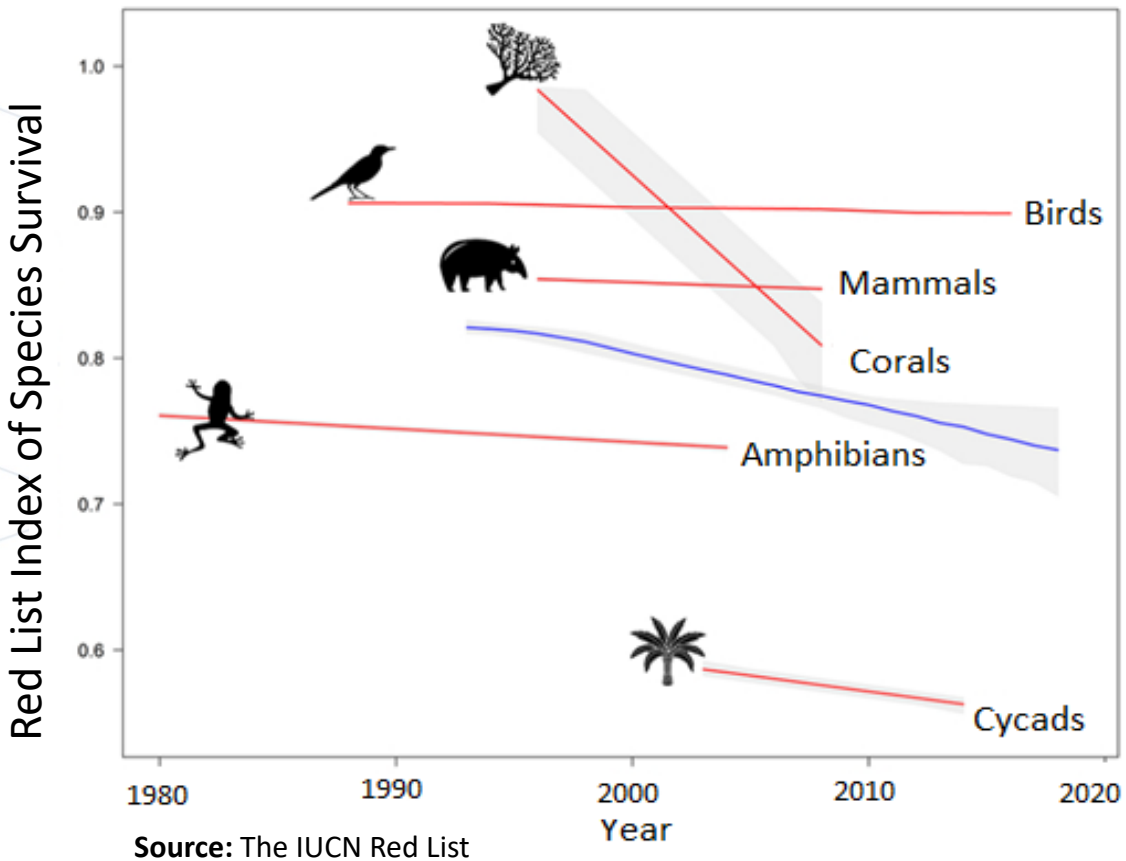
Ecosystems are declining

FIGURE 4 GLOBAL FOREST EXPANSION AND DEFORESTATION 1990–2020 (MILLION HECTARES PER YEAR)



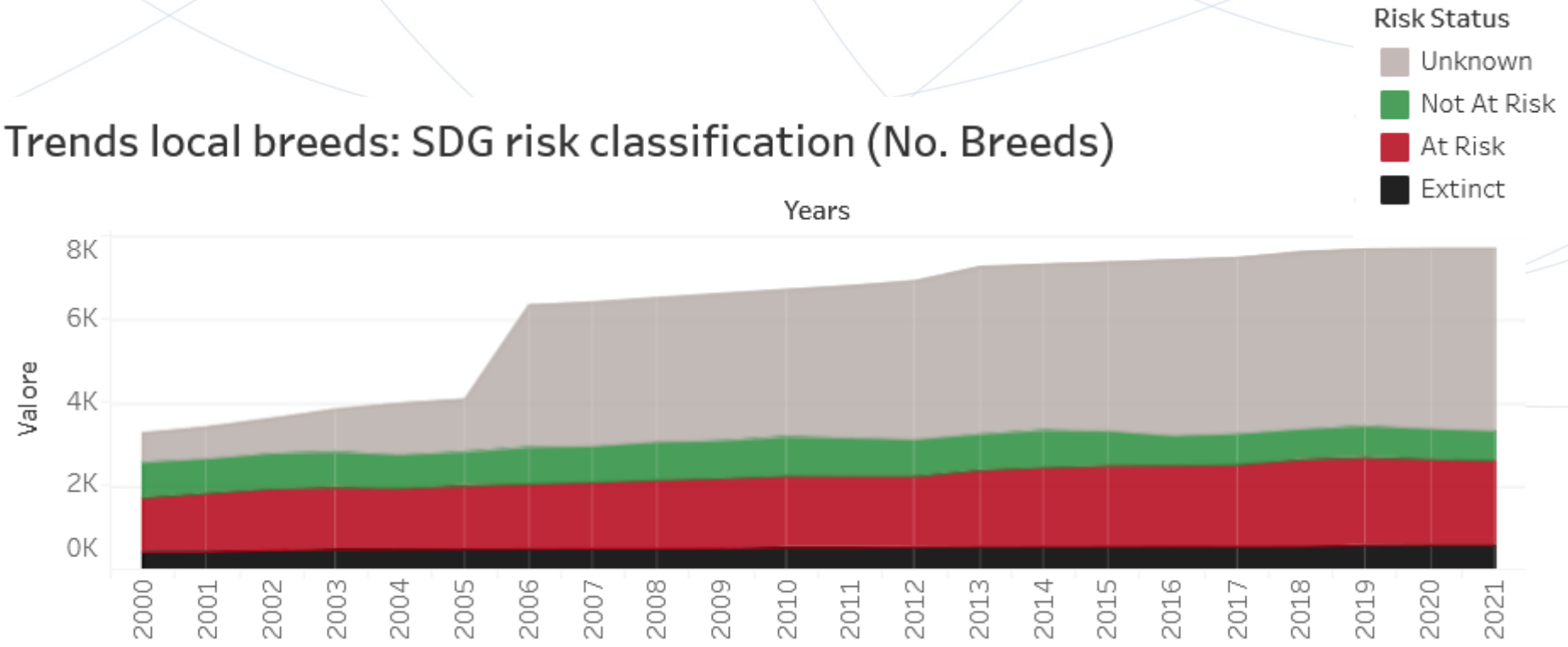
SOURCE: FAO, 2020.

Species are increasely threatened



Source: The IUCN Red List

Genetic diversity at risk



FAO DAD-IS (2021).



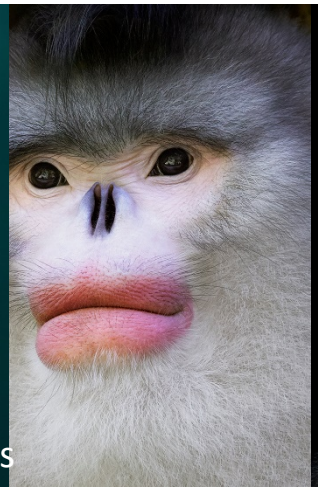


Source: www.especiesenpeligro.com

Today, more than ever, there is a global concern about biodiversity loss and its impact in agri-food systems and the health of our planet…….

But common understanding to **biodiversity loss** is to what people can see……



Source: NationalGeographic.es

Food and Agriculture Organization of the United Nations

World Soil Day

SOIL IS ALIVE!

Soil is home to more than 25% of our planet's biodiversity

25%

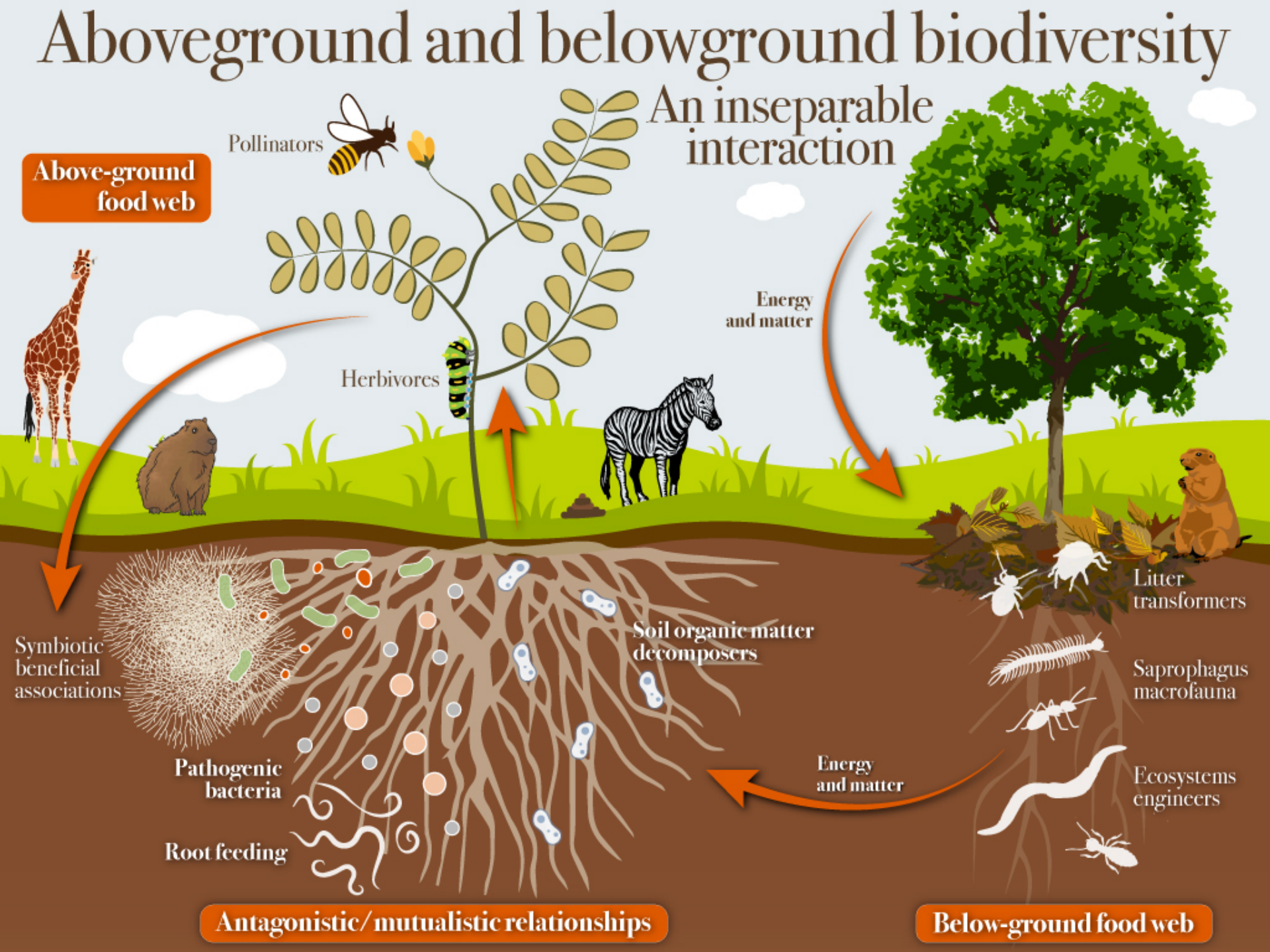
Yet, we know only 1% of this universe

1%

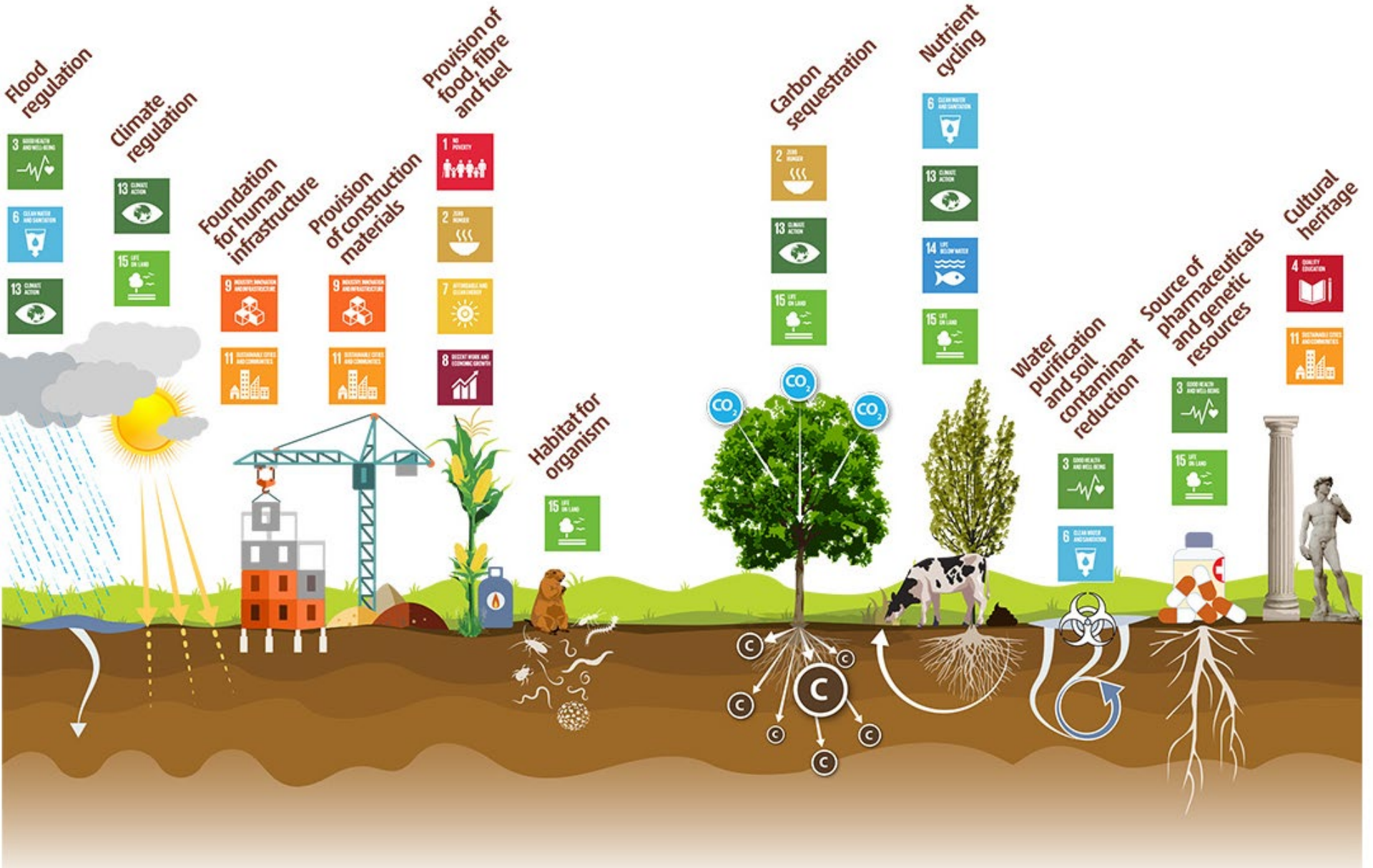
Beneath our feet there is a world full of life, it is the basis of a healthy soil.

How they look like?

Aboveground and belowground biodiversity



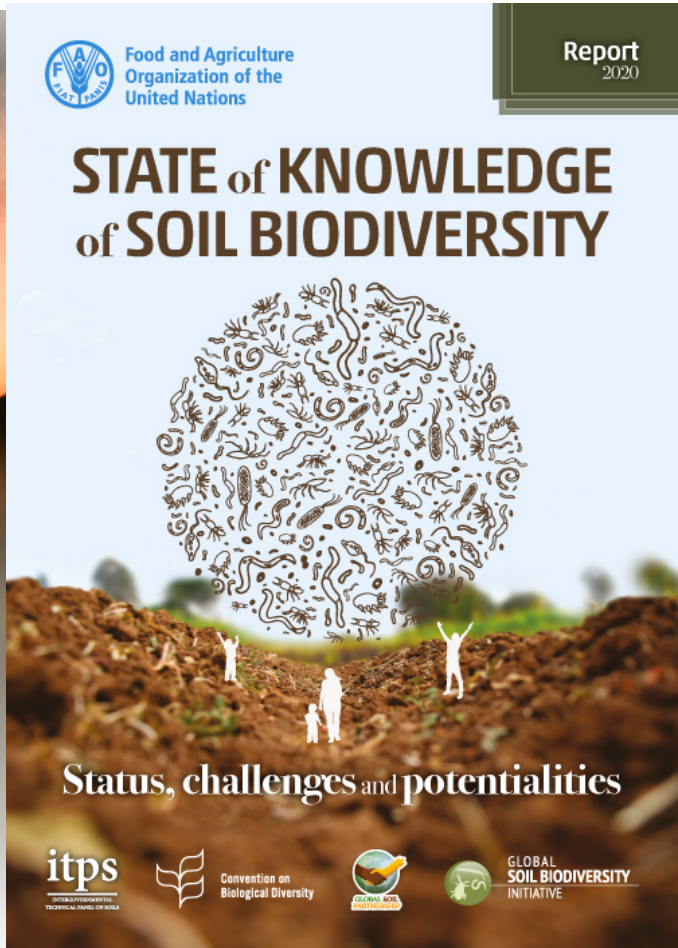
A healthy soil is capable of providing most terrestrial ecosystem services, contributing to sustainability and human well-being



Our key themes for this week:

- Theme 1 - State of Knowledge on Soil Biodiversity;
- Theme 2 - Soil Biodiversity in Action;
- Theme 3 - Soil Biodiversity Shaping the Future of Food Systems.

- The Global Symposium on Soil Biodiversity gives a voice to the invisible and silent organisms that make life on earth possible.
- Action can be done at all levels
- Let's include ***soil biodiversity*** in the Biodiversity debate!



"Keep soils alive, protect soil biodiversity"

Food and Agriculture Organization of the United Nations

GLOBAL SOIL PARTNERSHIP

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Convention on Biological Diversity

GLOBAL SOIL BIODIVERSITY INITIATIVE

UNCCD SPI Science - Policy Interface