

Biodiversity, the keystone of our  
agricultural and food landscape

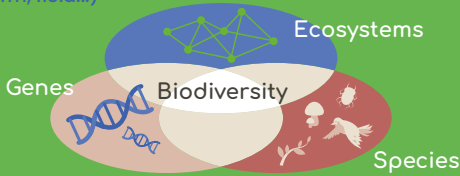


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·ecosystem

# What is Biodiversity ?

Biodiversity is the heartbeat of life, connecting ecosystems, genes, and species.

We can measure biodiversity at different scales to understand the richness of life (planet, regions, farm, field...)



Biodiversity supports life on earth by providing numerous ecosystem services



## Supporting

Soil formation, pollination, nutrient cycling



## Provisioning

Fresh water, food, materials



## Regulating

Water purification, carbon sequestration, climate regulation



## Cultural

Cultural legacy, patrimony



Biodiversity is critically declining, driven by the loss of species and habitats.

## Species Extinction

- 1 out of 4 species is in critical danger of extinction
- Wildlife population sizes have drastically declined since 1970:
  - **73%** fall in vertebrate population
  - **85%** drop in freshwater populations

## Forest losses

- Forests are vital for biodiversity, providing shelter for 80% of terrestrial species.
  - Since 1970, the Amazon rainforest has lost **18%** of its surface area
  - As of 2023, we are losing **3.7 million hectares** ~10 soccer fields of primary tropical forest per minute.

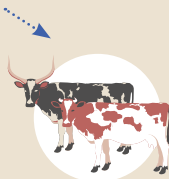
# Biodiversity and agriculture, a close relationship

## Biodiversity and agriculture are deeply interconnected.

Biodiverse ecosystems support agriculture by maintaining soil health, providing pollinators, controlling pests, and ensuring climate resilience.



Pollinators are responsible for **35%** of overall crop production by volume: a gradual loss of pollination services would cost ~800 billions dollars.



Livestock diversity increases the resilience of local breeds (drought, flood, diseases).

## Agriculture has a strong impact on biodiversity

4 out of 5 main causes of biodiversity loss are directly or indirectly linked to agriculture

1

Land use

2

Overexploitation

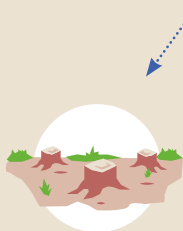
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Climate Change

4

Pollution

Intensive farming through monoculture, soil tillage, and agrochemical inputs drastically weakens agricultural biodiversity:



Agricultural expansion drives almost **90%** of global deforestation.



**80%** of all bird and mammal species are threatened by habitat loss due to agriculture.



Between 1900 and 2000, crop diversity decreased by **75%**



**This interconnectedness between agriculture and biodiversity highlights the urgent need for global action.**

In this context, biodiversity awareness has gained momentum worldwide, leading to the adoption of the Kunming-Montreal Global Biodiversity Framework (GBF), often referred to as the "Paris Agreement for Nature" at COP 15 in 2022.

# How to Take Action at Global Scale\*

**Public organizations** and **private companies** are increasingly committed to safeguarding biodiversity

## By the end of February 2025, COP 16 on biodiversity wrapped up with positive outcomes !



Strategy for Resource Mobilisation defined to implement Global Biodiversity Framework

Parties agreed on the way that indicators would be measured and used.



It will ensure every party **tracks progress in a nationally interpretable way**, while enabling global data aggregation for a comprehensive **view of implementation**.

Private companies are aware of the **risks of biodiversity loss** for both ecosystems and their value chains, and are **assessing** and **reducing** their impact.

To follow their commitments, countries and companies have various tools at their disposal for assessing biodiversity at different scales. Here some examples



### UN Biodiversity Lab (UNLB)

- For governments
- Integrate spacial data such as Biodiv habitat intactness, to help decision making at a country scale



### Global Biodiversity Score (GBS)

- Mainly for companies
- Access and quantify the biodiversity of a specific area
- Helps to define biodiversity strategies thanks to biodiversity footprints analysis



### Planet Score

- From farm to fork tool, aimed at agro-compagnies.
- Score based on farming practices, pesticide use, deforestation etc... but also on transportation mode and type of packaging.

# Actions Through On-Farm Projects

**Danone Ecosystem** co-finance projects worldwide to support farmers in adopting sustainable practices. These initiatives encompass **watershed protection**, **regenerative agriculture**, and efforts to **preserve** and **restore biodiversity**.



**Rejoso Kita project:** Preserving watersheds through sustainable practices

## Actions on field



**Planting and preserving** native tree species



**Dig sediment pits:** trenches filled with compost at the end of tree roots

## Biodiversity Outputs

Enhance **tree biodiversity** and habitat for fauna.

Improve **soil organism** populations thanks to organic matter.



**Madre Tierra project:** Enable producers to develop high quality, sustainable and regenerative production.

## Actions on field



**Soil covering and mulching:** crop residues or weeds.



Implement **lower strips** with aromatic plants and native species.

## Biodiversity Outputs

Increase populations of **soil fauna**, macro and **microorganisms** by reducing erosion.

Diversify plant species on farm, habitat for **pollinators**



**Pachamama project:** Support French farmers in their transition to Regenerative agriculture

## Actions on field



Reducing **soil tillage**



**Intra-plot hedge** planting



Development of a **Decision Support Tool** for arborists.

## Biodiversity Outputs

Improve **soil organism** populations.

Provides **habitat** for local fauna.

Help farmers enhance the presence of **beneficial insects** on their plots.



We know what's putting pressure on biodiversity indicators. In the near future, Danone Ecosystem wants to step up its efforts to support biodiversity, while testing impact indicators that allow the measurement of tangible outcomes.

This includes improving how we monitor the status of biodiversity linked to Danone Ecosystem projects, and how biodiversity is changing as a result of those projects.

Our ambition: work with partners on long-term projects (at least four years in duration) to enable more meaningful and reliable impact measurement.

# Partners & Roles



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## IMPLEMENTING AND TECHNICAL PARTNERS

EIT FOOD  
(DANONE)

WORLD AGROFORESTRY [ICRAF]  
POUR UNE AGRICULTURE DU VIVANT  
[PADV]

NUUP

BIOSPHERES

APEXAGRI

FRENCH AGROFORESTRY

ASSOCIATION [AFAF]

NOE

FRENCH LIVESTOCK INSTITUTE [IDELE]

## DANONE ECOSYSTEM

Supports, structures, monitors, and challenges the projects



## FARMERS

Beneficiaries and actors in the transition to sustainable agricultural practices which impact positively biodiversity.

## Sources:

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- Planet Score <https://www.planet-score.org/en/>
- AFD, 6 raisons to preserve forests <https://www.afd.fr/fr/actualites/6-bonnes-raisons-de-preserved-les-forets#:~:text=Si%20les%20for%C3%Aats%20garden%20encore,d%27invert%C3%A9%20%C3%A9s%20en%20moyenne>

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