

# Impacts of consumption at national scale on biodiversity world-wide

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Wageningen University & Research, 14-05-2025

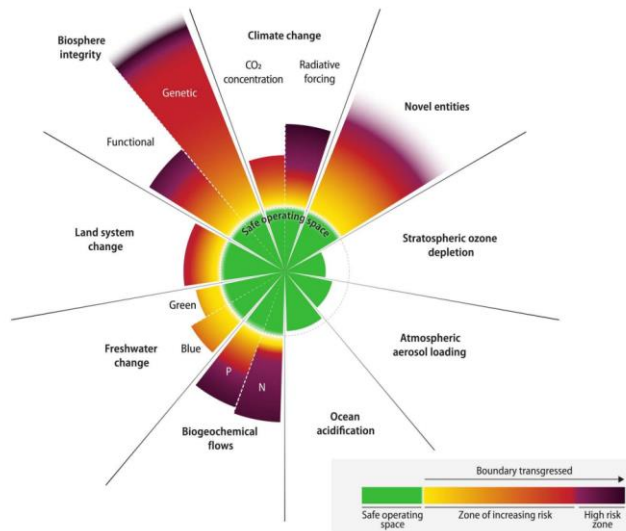


# Initiative to cooperate and develop a framework for biodiversity impacts

- NL started an initiative to develop a footprint framework for impacts of consumption at national scale on biodiversity
- Impacts on biodiversity: both within/outside a country
- With this framework countries can be compared, and impacts of consumption categories can be illustrated
- This announcement =
  - Short introduction into this initiative
  - Invitation to join and collaborate

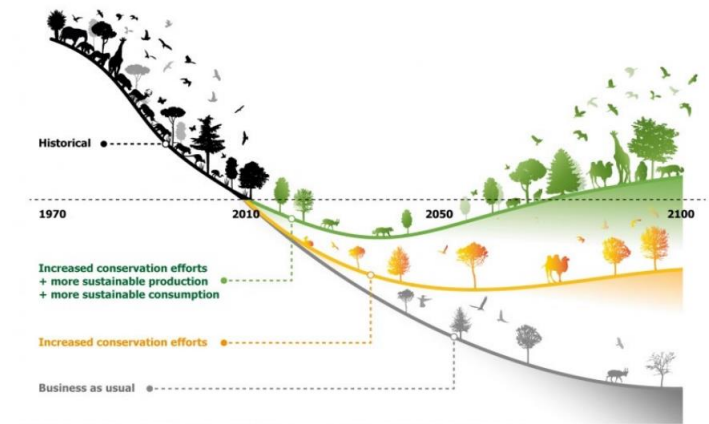
# What motivates us?

- Biodiversity loss (contin.)
- Planetary boundaries (SOS)



Richardson et al., 2023. Science Advances

- Not only relevant for species, but also for humans (IPBES)



This artwork illustrates the main findings of the article, but does not intend to accurately represent its results (<https://doi.org/10.1038/s41586-020-2705-y>)

Footprint day - Connecting footprint models for biodiversity

Leclère et al., Nature (2020)

*Humanity is waging a war on nature. This is suicidal. Making peace with nature is the defining task of the 21st century. It must be the top, top priority of everyone, everywhere.*

UN Secretary General Antonio Guterres,  
December 2020

# What kind of footprint framework?

## ■ Various existing initiatives:

- Product environmental footprints (PEF's),
- Regulations for deforestation-free products,
- Protected areas, etc.
- ....

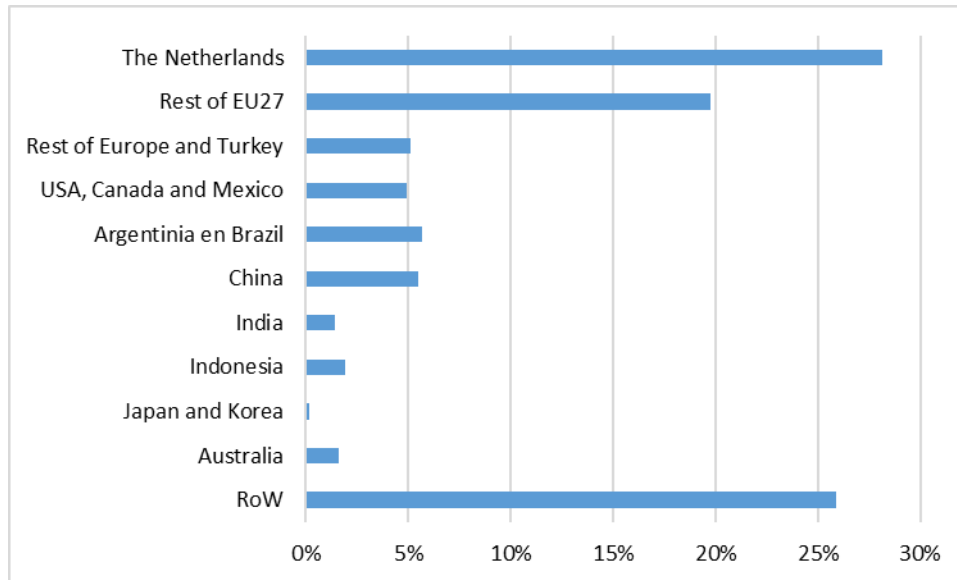
## ■ However, still missing:

- An option to **compare countries** with respect to their impact on biodiversity due to consumption and
- being able to **inform consumers** about their impact on biodiversity

# Why a biodiversity consumption footprint?

- Consumption has important impacts on biodiversity worldwide
- Effects abroad are less visible, and hidden in some cases

PBL/CBS (2025)



*Distribution of the reduction in species abundance due to Dutch consumption in 2020 per region in %.*

(Ex.: soybean yields oil and meal, oil is **food**, meal is **feed**, feed can be **imported**, while the animal product can be **exported**, and therefore **consumed elsewhere**)

# Policy background

## ■ SDGs

- Goals: Life on land / below water
- Indicators 8.4.1 and 12.2.1: material footprint

## ■ GBF

- Target 16: reducing consumption footprint
- NBSAPs

## ■ OECD

- Support in designing biodiversity policies
- Footprint work (GHG, land, ...)

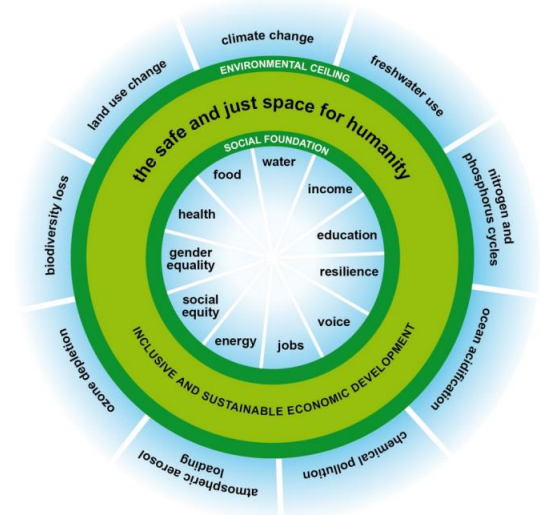
## ■ EU

- Biodiversity Strategy for 2030



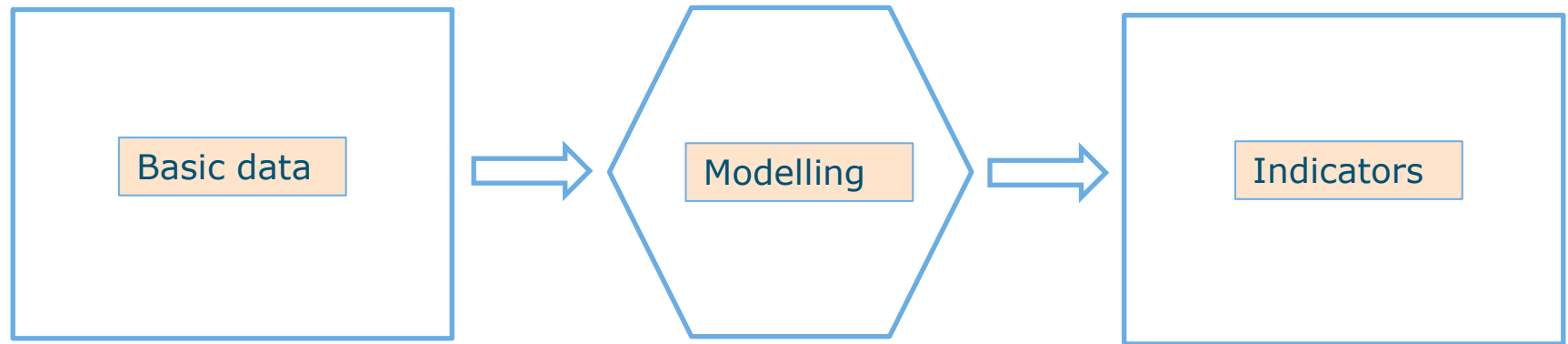
Folke et al., Ecology & Society, 2016

Figure 4. A safe and just space for humanity to thrive in: a first illustration



Kate Raworth, Oxfam discussion paper, 2012

# Digging a little bit deeper



- Production, consumption, trade
  - Financial / mass / area
  - Exiobase, GTAP, FIGARO, FAO, ICIO, etc.
  - ...
- Consistent (EE)MRIO
  - Linking to pressures
  - Estimating impacts on biodiversity
  - ...
- Combination of footprints
  - Biodiversity (multiple)
  - Coherence with other indicators
  - ...

# Some 'building blocks'/specifications

- Use **existing databases**, already monitored for other purposes (OECD, EU, FAO, ...?)
- Look for **connections with other consumption footprints**, already assessed for other purposes (GHG, land, (bio)mass, ...)
- Use data with **sufficient frequency** ((bi)annual) **and coverage** of consumption categories and countries
- **Characteristics:** time- and cost-efficient, clear meaning, linked to policy options, scientifically accepted, transparent and agreed by countries



# Initiative to develop a footprint framework

- For its purpose, a **uniform approach** of the footprint framework is needed (*avoiding fragmentation*)
- Development in collaboration **with OECD (and CBD)**
- Start with **interested countries and experts** to discuss specifications and opportunities for this uniform approach (*autumn, 2025*)
- Involve also **non-governmental organisations**, like WWF (*with whom we already discussed this initiative in 2024*)

Thank you for  
your attention!

Any Questions?

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