



**EEB**  
European  
Environmental  
Bureau

# Impact of climate change on food systems

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# Who we are

**The EEB is Europe's largest network of environmental citizens' organisations**

Our 180 members from 38 countries have more than 30 million individual supporters.

We have over 40 years of EU environmental policy expertise.

## Our work areas



Climate



Nature and  
Agriculture



Circular  
Economy



Economic  
Transition



European  
Institutions and  
Governance



Global and  
Regional  
Policies



Health  
and  
Environment



Environmental  
Law and  
Justice



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# Climate impacts on food systems

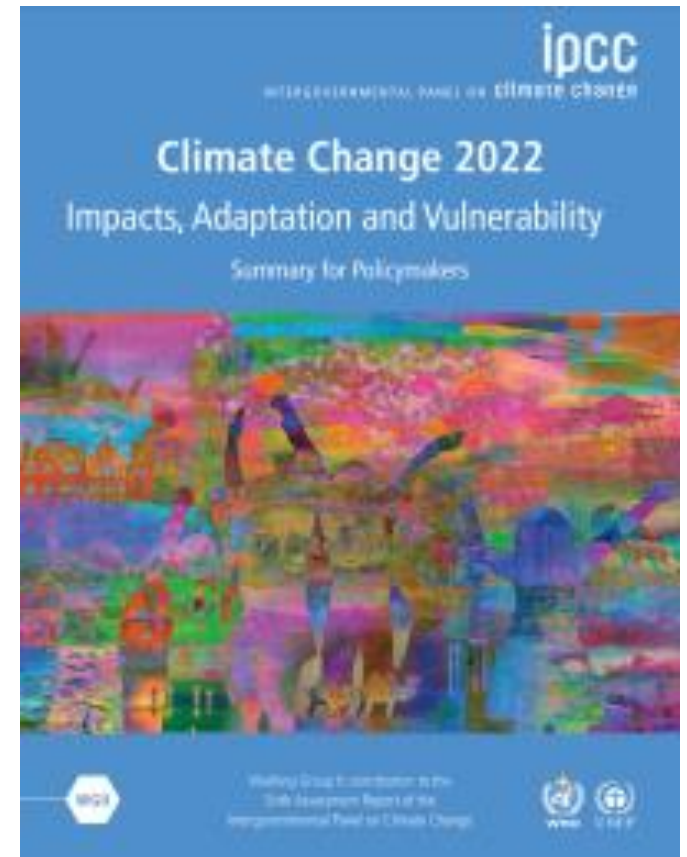




# What the IPCC says

*“Global warming, reaching 1.5°C in the near-term, would cause unavoidable increases in **multiple climate hazards** and present multiple risks to ecosystems and humans.”*

*“Climate change impacts and risks are becoming **increasingly complex and more difficult to manage**. Multiple climate hazards will occur **simultaneously**, and multiple climatic and non-climatic risks will interact, resulting in **compounding overall risk** and risks **cascading** across sectors and regions.”*





# Climate impacts

In sum:

1. **26% of total damage and losses** from climate-related disasters: from **within the agricultural sector**
2. Risks are multiple and increasing. The risk of **simultaneous** crop & other **failures** is increasing
3. **Urgent action** on cutting biodiversity loss, GHG emissions and increasing carbon removals is crucial to limit those risks
4. We need to adapt but there are **limits to adaptation**



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# Food systems' impacts on climate and biodiversity



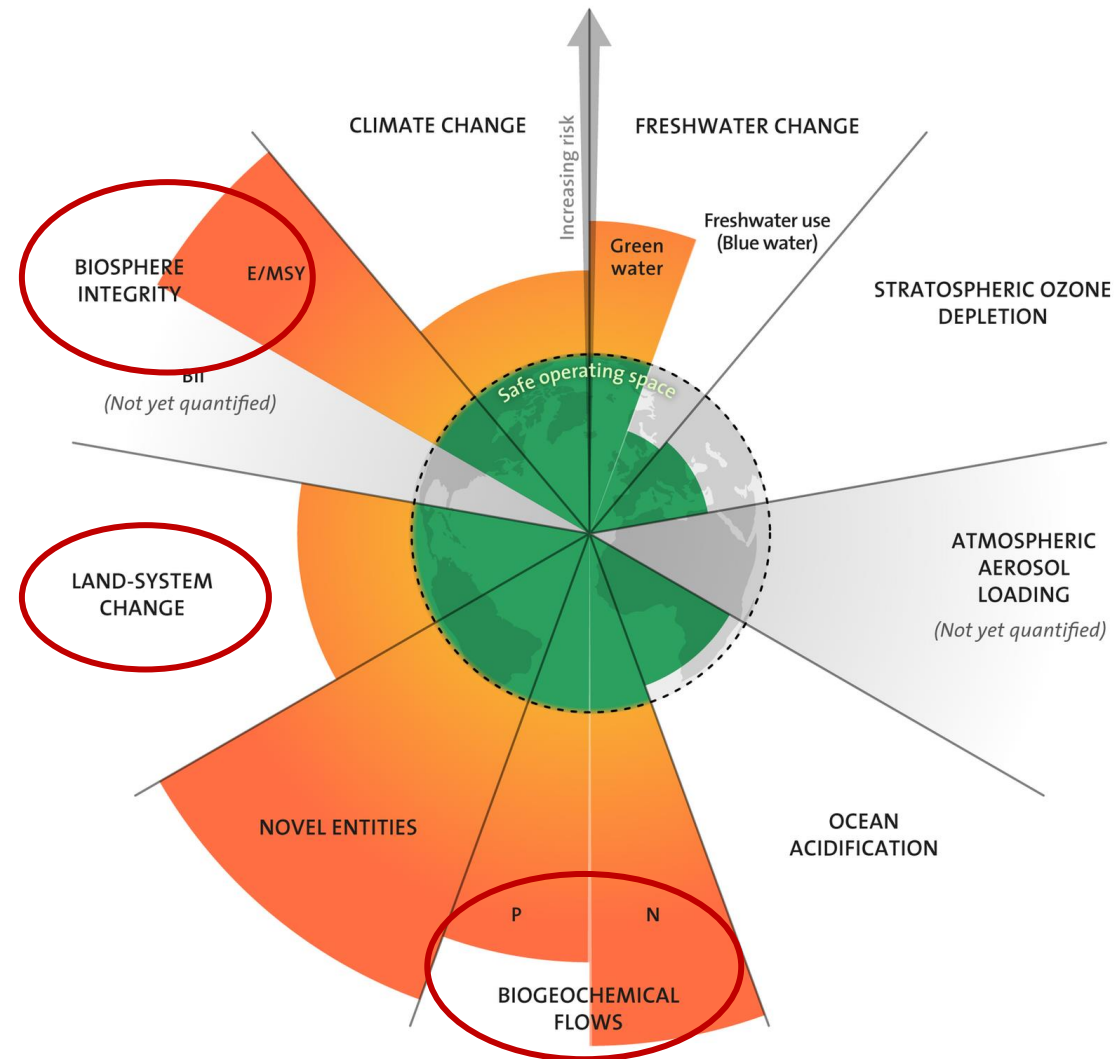
# Food system impacts

An overview:

1. Food systems are responsible for **one third** of GHG emissions globally
2. Agricultural land-use change and unsustainable land management are the **main drivers of biodiversity loss**
3. Intensive industrial livestock farming **concentrates** environmental pressures in small areas, with dire impacts on ecosystems & human health



# Planetary boundaries





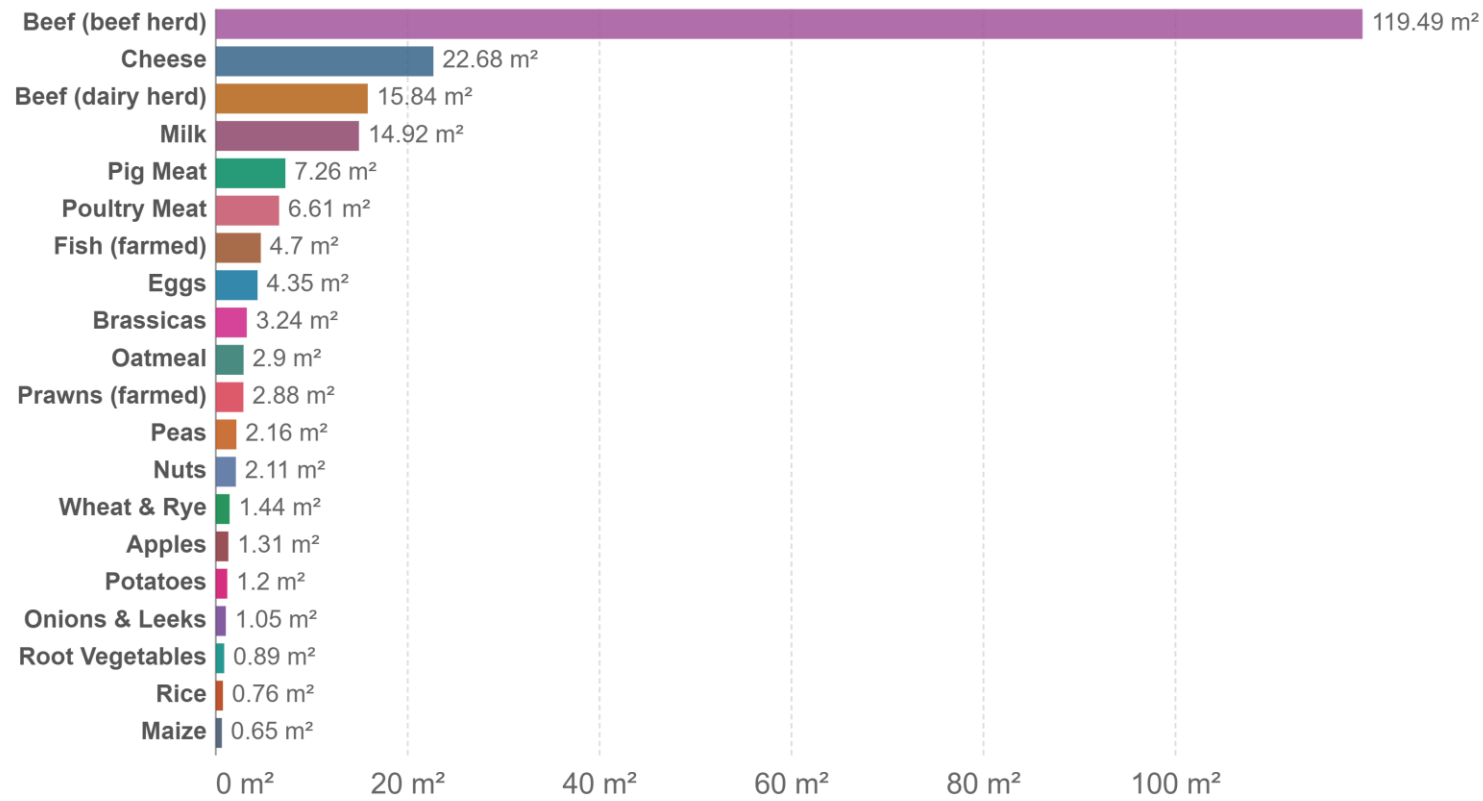


# Land use

## Land use of foods per 1000 kilocalories

Land use is measured in meters squared (m<sup>2</sup>) required to produce 1000 kilocalories of a given food product.

Our World  
in Data



Source: Poore, J., & Nemecek, T. (2018). Additional calculations by Our World in Data.

Note: The median year of the studies involved in this research was 2010.

OurWorldInData.org/environmental-impacts-of-food • CC BY

[If the world adopted a plant-based diet we would reduce global agricultural land use from 4 to 1 billion hectares - Our World in Data](#)



# ...again from the IPCC

*“While agricultural development contributes to food security, **unsustainable agricultural expansion**, driven in part by **unbalanced diets**, **increases** ecosystem and human **vulnerability** and leads to competition for land and/or water resources”.*



# Not only about production!

*Making our food system socially and environmentally sustainable requires addressing current consumption patterns.*

1. 13 M EU citizens face acute to severe food insecurity
2. Diets – lead cause of non-communicable diseases (NCDs) = 90% of all premature deaths in the EU
3. **Food environments:**
  - a) currently enable unhealthy and unsustainable dietary choices
  - b) are disproportionately shaped by a few, increasingly powerful actors in the middle of the supply chain



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**Why is now a good time for  
the EU to act?**



# What's the solution?

*How to tackle these cross-cutting and mutually-influencing issues?*

1. Integrated legal and political action to initiate a **just transition** to **healthy and sustainable food systems**
2. Corresponding coordinated legal and political action to properly **tackle the drivers of the biodiversity and climate crises**
3. Involvement of **all relevant stakeholders** at **every level of governance**





# What are the opportunities?

EUROPEAN  
GREEN DEAL

Farm to Fork  
Strategy

Biodiversity  
Strategy



Sustainable Food Systems  
framework initiative  
exp. Q3 2023

*“To **accelerate and facilitate the transition** and ensure that all foods placed on the EU market become increasingly sustainable”*

*“This will promote policy coherence at EU and national level, mainstream sustainability in all food-related policies and strengthen the resilience of food systems.”*

Farm to Fork Strategy, May 2020





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**eeb.org**

**Thanks for listening!**

## Keep in touch

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