

The role of animals in the transition towards a more circular food system

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INTERNATIONALT

Holland varsler fartgrænse på maksimalt 100 kilometer i timen

For at mindske kvælstofudledning skal den maksimale fartgrænse om dagen være 100 kilometer i timen i Holland.

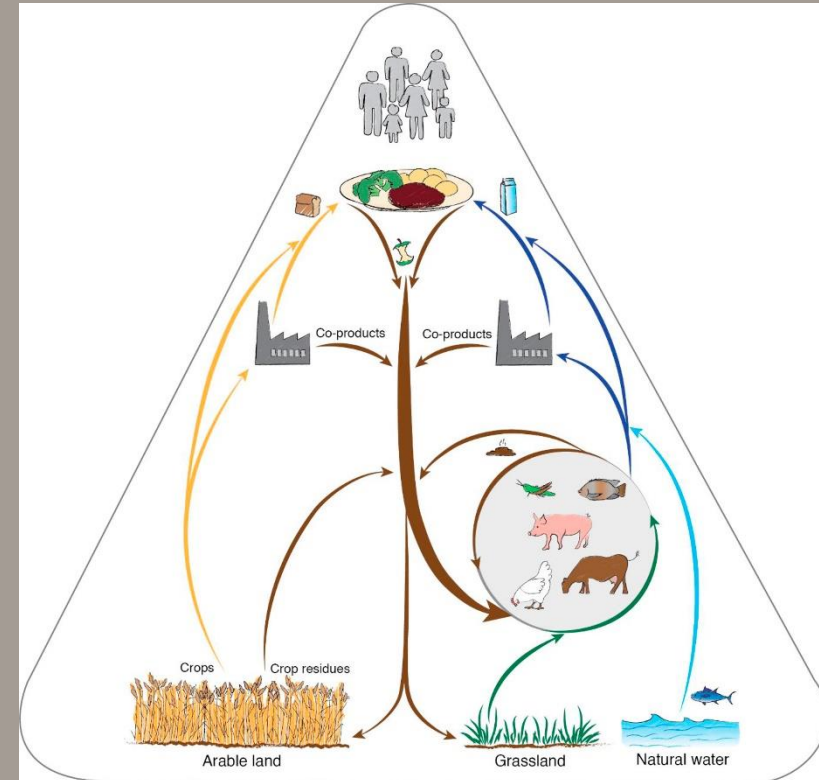


Ny protest i Holland: Tusindvis af landmænd viser deres utilfredshed



The role of animals

- Principles for a circular food system
- The Netherlands
- Sweden



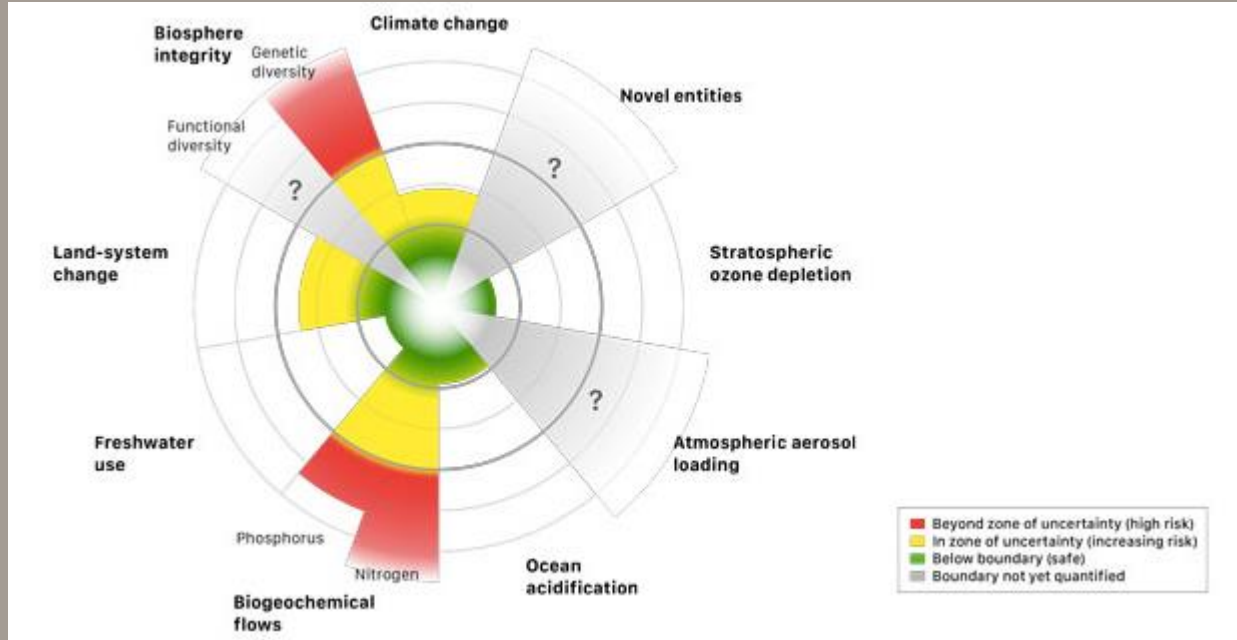
Van Zanten et al. 2019

The role of farm animals in a circular food system - Global Food Security

A healthy planet



A healthy planet



Steffen et al. 2015

EARTH OVERSHOOT DAY WAS JULY 29



Denmark?

4.1 earths



1.75

Global Average

A large iceberg is melting in the ocean, with a massive plume of white water and ice chunks being ejected from its base. The sky is a clear, pale blue.

56–58%

A close-up view of a golden wheat field under a clear blue sky. The wheat stalks are ripe and stand tall, with some heads in sharp focus in the foreground.

40%

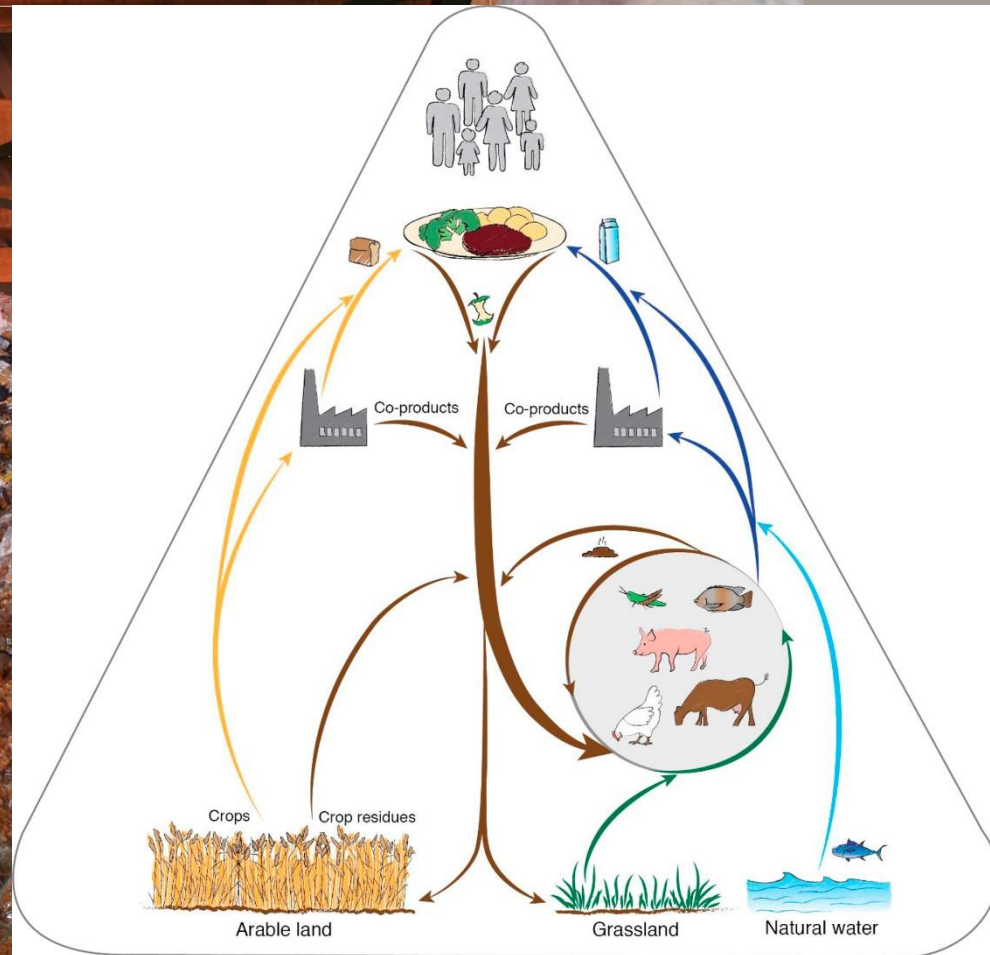


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Food waste



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How much animal protein can we consume?

Daily protein requirement (60g)

9-23g

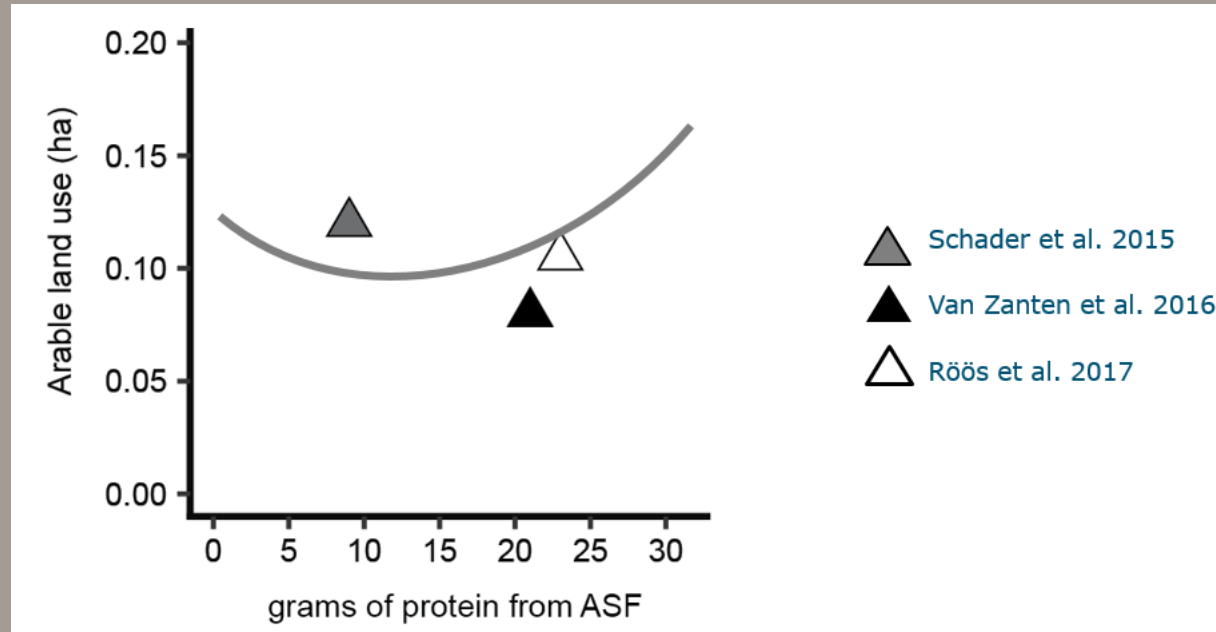


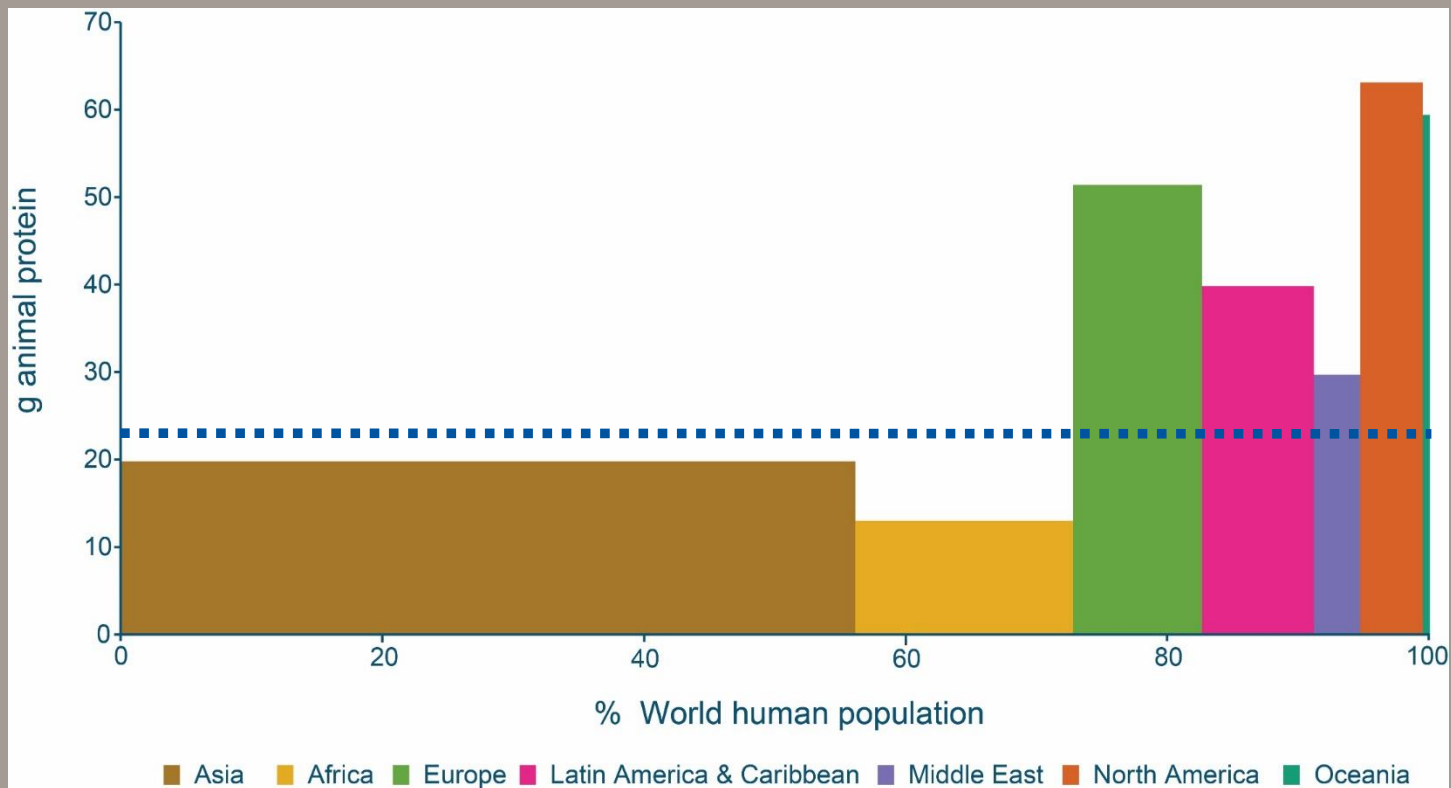
Plant protein



Animal protein

How much animal protein can we consume?





Requires different indicators

How to produce food while respecting the planet?

Produce
with less impact

Herd productivity

Nutrient-dense feed

Feed-food competition

Eat
with less impact

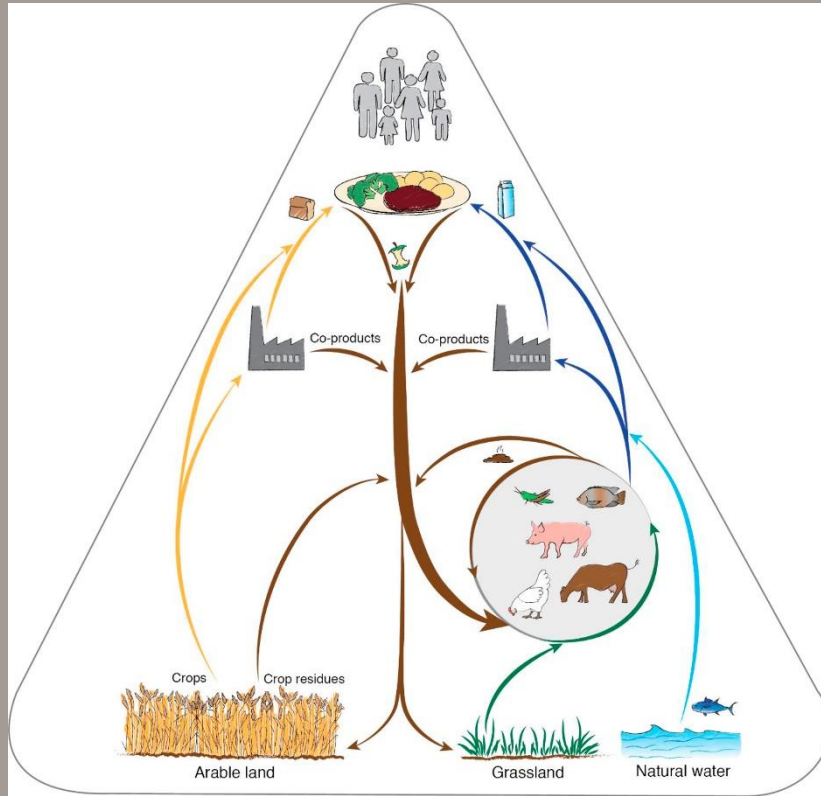
Eat chicken
and no beef

Go vegan

By-products
&
Grass?



Think in circular systems



Van Zanten et al. 2019

The role of farm animals in a circular food system - Global Food Security

Prioritize

1. Safeguard natural resources
2. Plant biomass should be used for food first
3. By-products from food production, processing and consumption should be recycled back into the food system

- Soil quality
- Animal Feed
- Bioenergy, biomaterials, fertilizer
- Carbon sequestration

De Boer & Van Ittersum, 2018

Scale

Nutrients

Land use

Water use

**Animal health
& welfare**

Productivity

Future foods

Transition

Initiatives

Certification

Indicators



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100 years
1918 — 2018



WIJ ZIJN VERBINDEND

*Wij maken van oud **brood**, overheerlijk nieuw **bier***

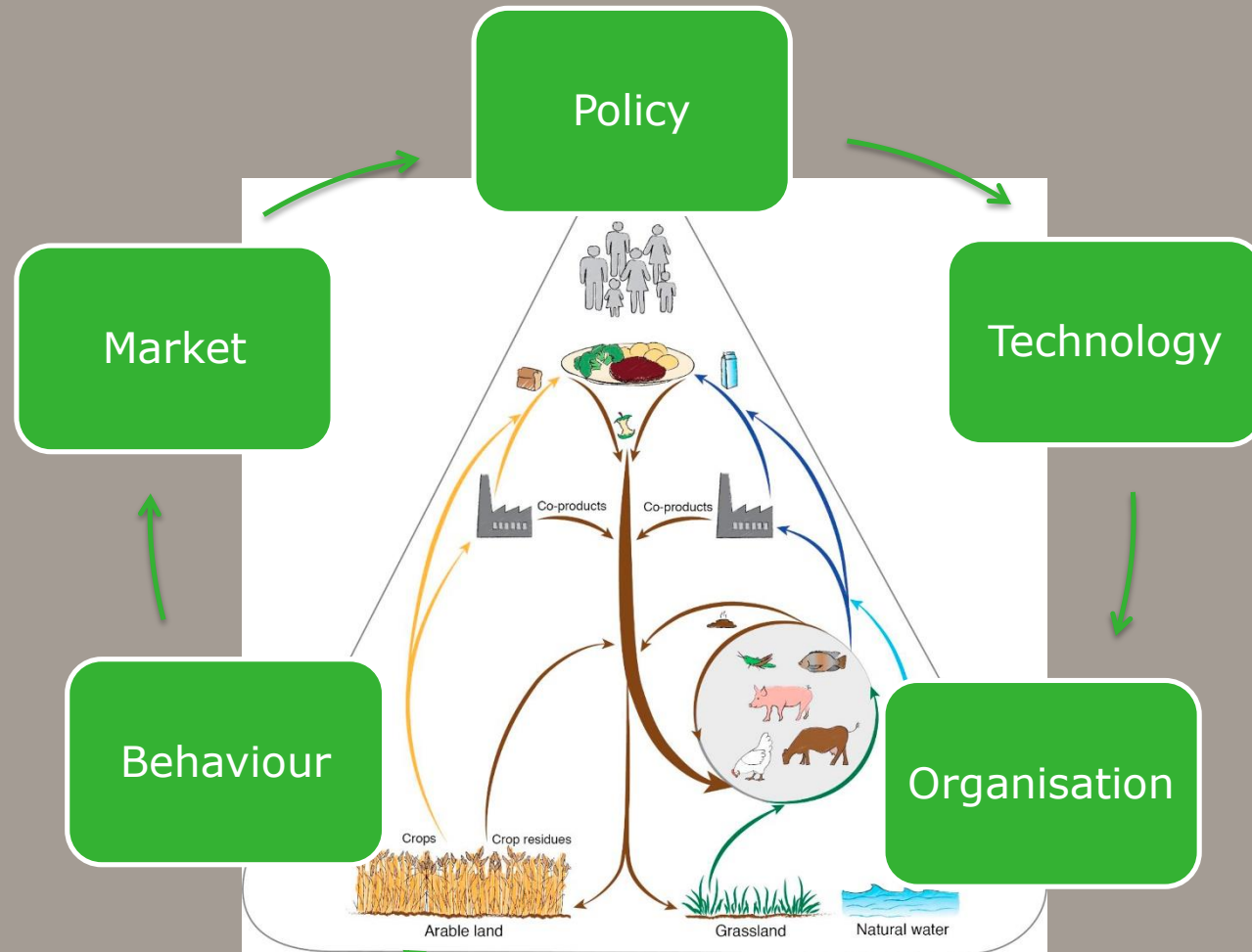
[ABOUT](#)[CONTACT](#)



WE ARE LIMITED EDITIONS.

Fantastische boxershorts gemaakt van textiel
met nog een heel (tweede) leven voor zich.

IK WIL EEN VANHULLEY >



Vision Dutch Ministry

September 2018

The government's goal is for cycles of raw materials and resources to be closed at the lowest possible level, either nationally or internationally, by 2030 and for the Netherlands to be a leader in circular agriculture.

How?



Ministry of Agriculture, Nature and
Food Quality of the Netherlands



**Agriculture, nature
and food: valuable
and connected**

The Netherlands as a leader
in circular agriculture



1. do they help to close cycles, to reduce emissions and to reduce biomass wastage throughout the food system?

2. with regard to fisheries, do they contribute to sustainable fish stock management without damaging the natural environment?

3. do they strengthen the socio-economic position of the farmer in the supply chain?

4. do they contribute to the climate task for agriculture and land use?

5. do they enhance the appeal and vitality of the countryside and contribute to a thriving regional economy?

6. do they benefit ecosystems (water, soil, air), biodiversity and the natural value of the farming landscape?

7. has animal welfare been considered?

8. do they contribute to the recognition of the value of food and to strengthening the relationship between farmers and citizens?

9. do they strengthen the position of the Netherlands as a developer and exporter of integrated solutions for climate-smart and ecologically sustainable food systems?





Ministerie van Landbouw,
Natuur en Voedselkwaliteit

Platform Kringlooplandbouw

Zoeken



Kom in actie

- > Ik doe mee aan de omslag naar kringlooplandbouw!
- Stel vragen over wet- en regelgeving bij het Agroloket
- > Nieuwsbrief Platform Omslag naar Kringlooplandbouw



Actueel

Nieuws en agenda



Initiatieven en inspiratie

Verhalen en voorbeelden



Energie in de regio

Samenwerken met andere overheden



Wat is kringlooplandbouw

Visie en realisatieplan



Over dit platform

Team en contact



Klankbord en Taskforce

Advies en verdieping



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Thanks

Special thanks to Imke de Boer & Hannah van Zanten

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Curious how circular you are?

www.resource.wur.nl/en/show/How-circular-are-you.htm



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Mindre madspild: Øllebrød