



25-26 June 2019 in Lisieux,  
Normandy - France

Thematic Session 1: How to reduce the use of inputs as a way to increase the self-sufficiency of farms?

## Workshop 1.1: Feed self-sufficiency and animal health

*Bram Moeskops, Research & Innovation Manager -  
IFOAM EU*

<https://www.reseaurural.fr/Sommet-agri-innovation-2019>

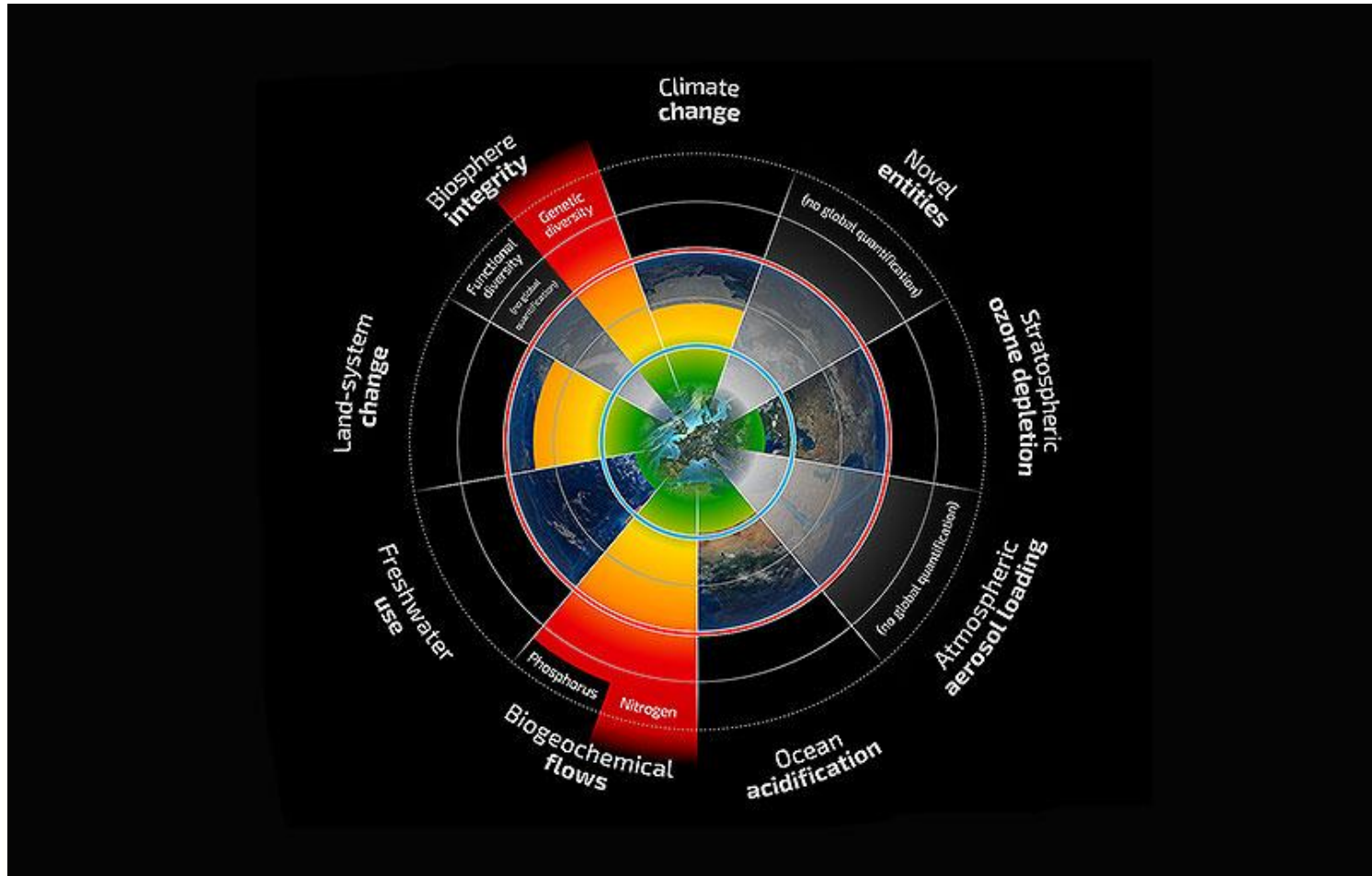
<https://ec.europa.eu/eip/agriculture/en/event/agri-innovation-summit-2019>



Cette action est cofinancée par le Fonds européen agricole pour le développement rural : l'Europe investit dans les zones rurales.



# Livestock and planetary boundaries



Source: The Stockholm Resilience Centre, 2015. Planetary Boundaries

# Relation with agroecology



Recycling



Culture and food traditions



Human and social values



Circular and solidarity  
economy

- Less but better meat
- Add less reactive nitrogen and phosphorous to the agro-ecosystem
- Rigorous closing of nutrient cycles

# What are the most promising innovations?

- Cultivating duckweed on animal manure
- Protein extraction from grass-clover
- Again using by-products and food waste
  - Whey
  - Beer yeast
  - Bakery waste
- Feeding grass to cattle
- Robust animal breeds fit for outdoor rearing
- Better design of housing and outdoor areas



# What will it take to implement the innovations?

- Change in consumer attitude – new marketing
- Better regulation (animal welfare, food safety, nutrients)
- Attractive conversion pathways for intensive livestock producers
- Address competition between animal production and bioeconomy



# Have a good discussion!

