



Circular Agricultural Day

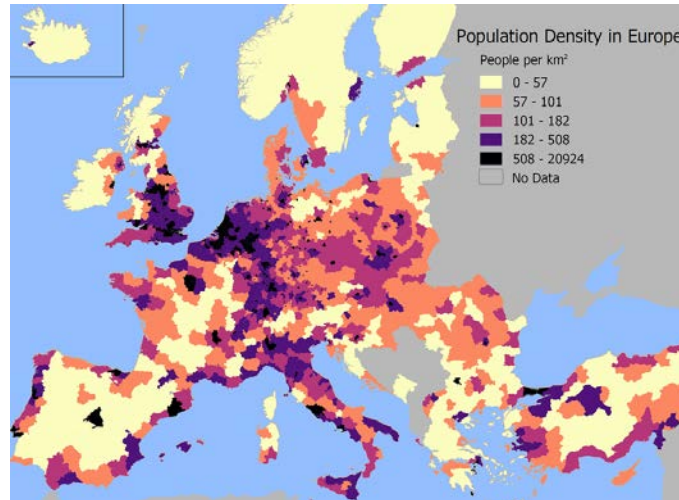
Nederlands Centrum voor Mestverwaarding
(Dutch Center for Valorisation of Manure)



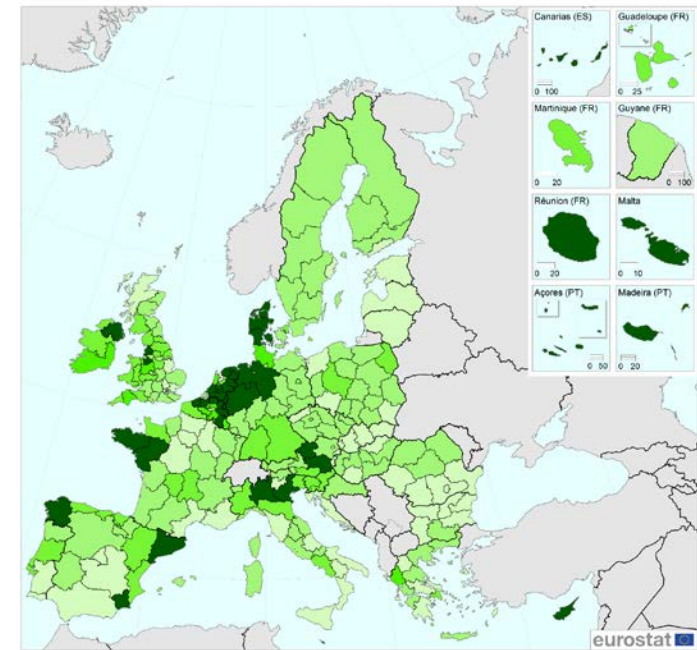
Jan Roefs MSc MBA



About manure in the Netherlands...



Population density



Livestock density

Many
animals

IV: livestock

I: Deltas



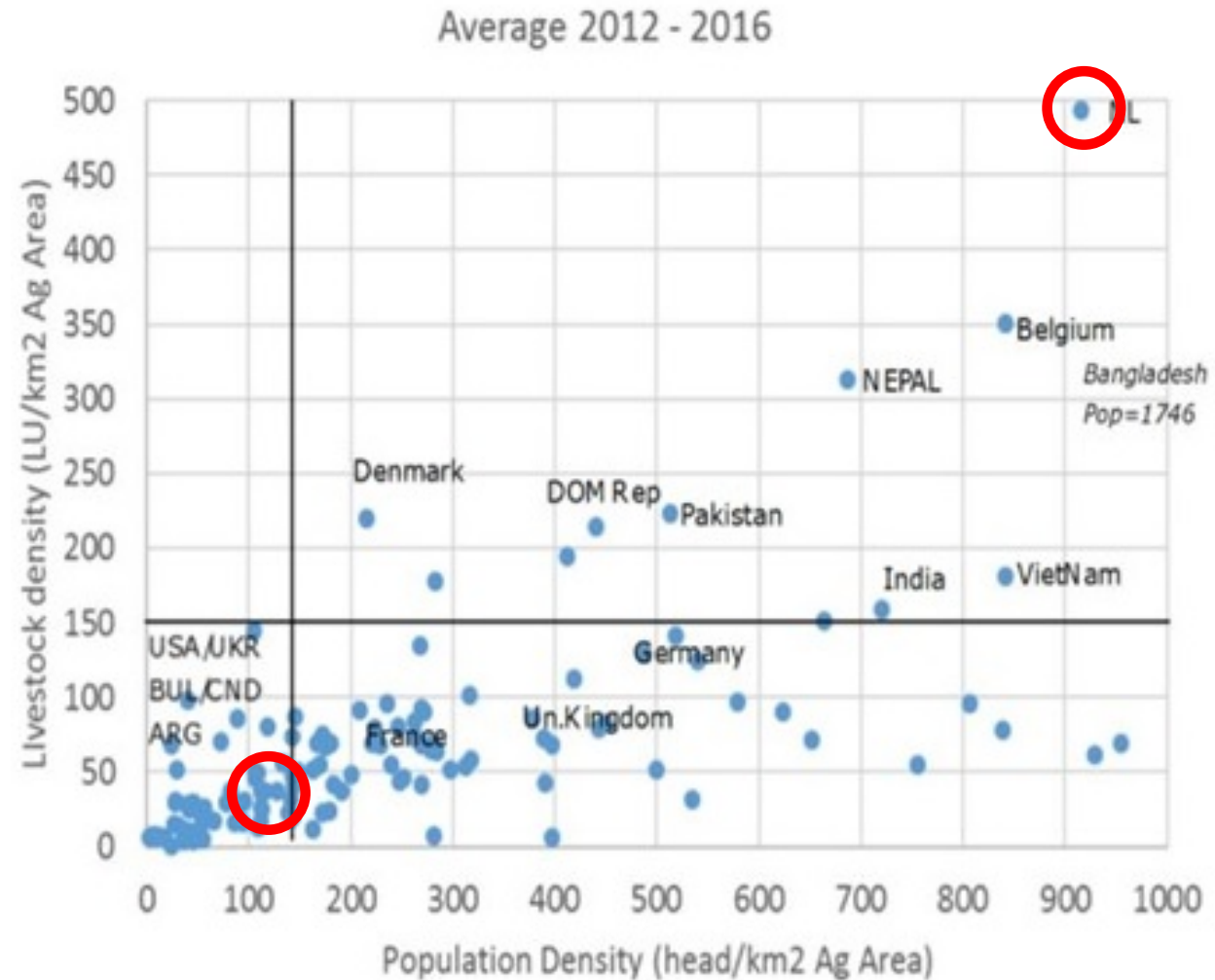
Many
people

III: Arable areas

II: Metropolises



Poland vs the Netherlands



Many
animals



IV: livestock

I: Deltas

Many
people

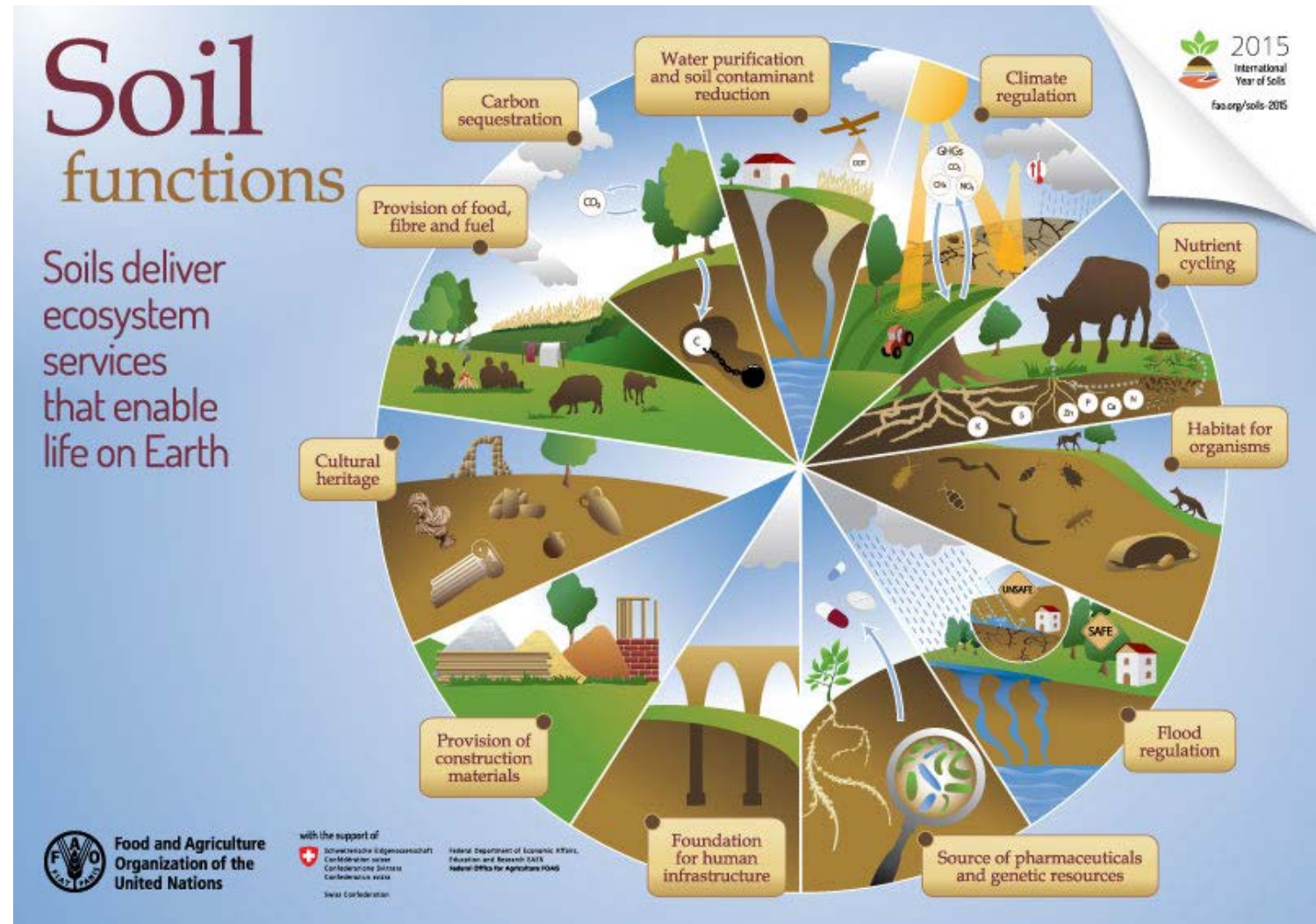
III: Arable areas

II: Metropolises





Soil quality is key..





For soil quality, organic matter is key



The role of manure..

- Supply of a full range of nutrients
- Improving soil quality by supply of essential organic matter
- Further improvement of soil quality by better plant growth





Dutch policy regarding manure

- Protect the environment and nature
- Closing nutrient cycles
- Keep a strong agricultural sector





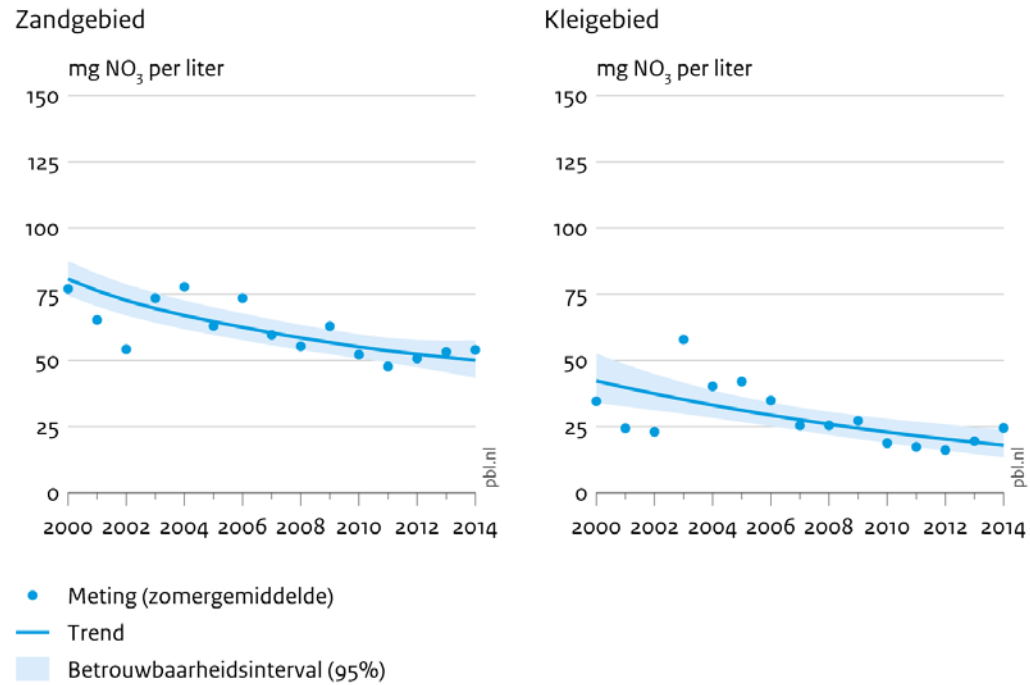
Regulations regarding manure

- Quantity of N and P
- Quantity, period and way of application of manure
- Other obligations for crop and soil management
- Regulation about the trade and manure
- Maximum number of animals (per
- Mandatory manure treatment



Nitrate and phosphate

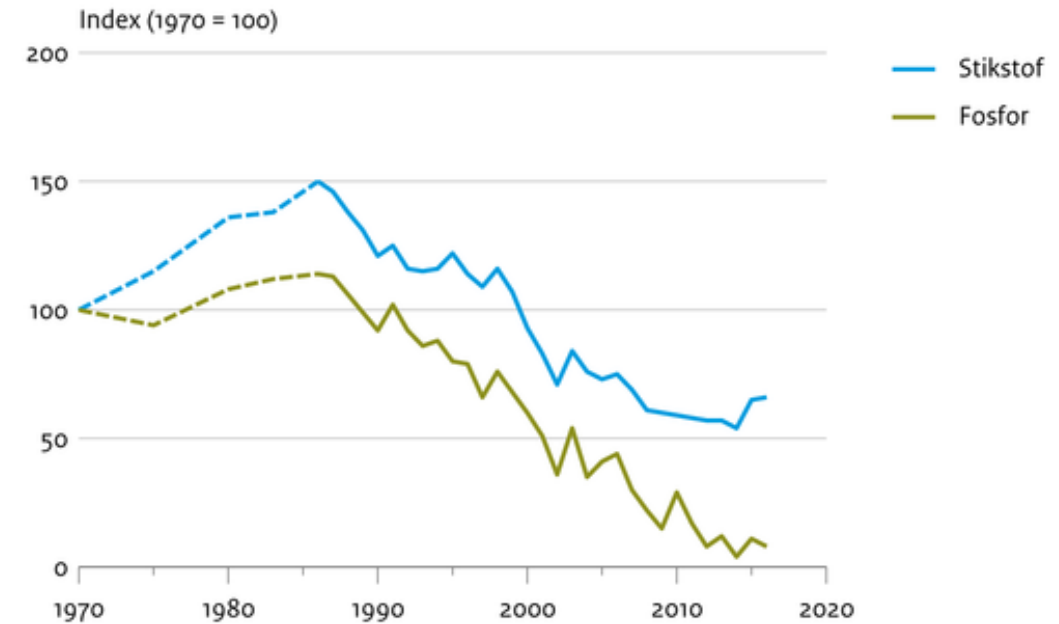
Nitratconcentratie in uitspoelend water per grondsoortgebied



Bron: RIVM LMM; bewerking PBL

Nitrate concentrations in surface water

Nutriëntenoverschot in landbouw



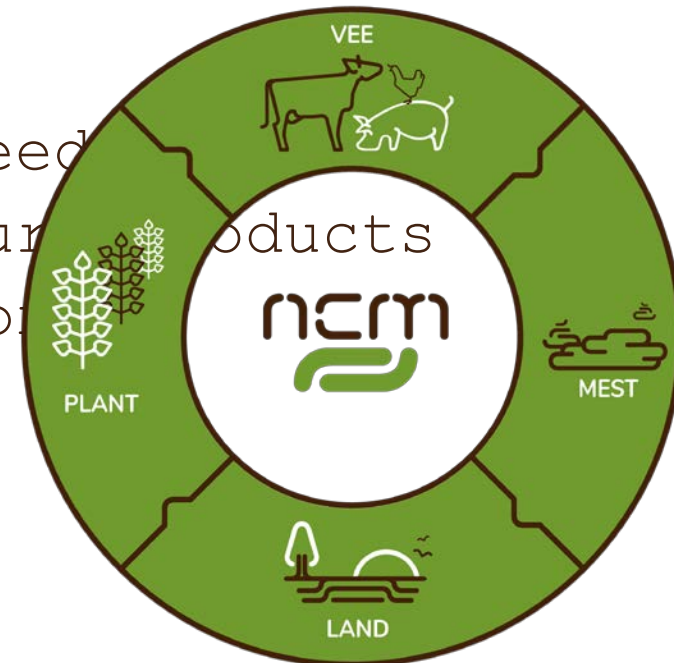
Bron: CBS

National surplus N and P



NCM: Dutch Center for valorisation of manure

- Started in 2018
- Collaboration between government, agribusiness and knowledge institutes
- Tasks:
 - Knowledge center
 - Set up and facilitate the projects needed
 - Support of value driven sales of manure products
 - Promote collaboration and coordination





Thank you for your
attention!

Tip: come to



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www.mestverwaarding.nl

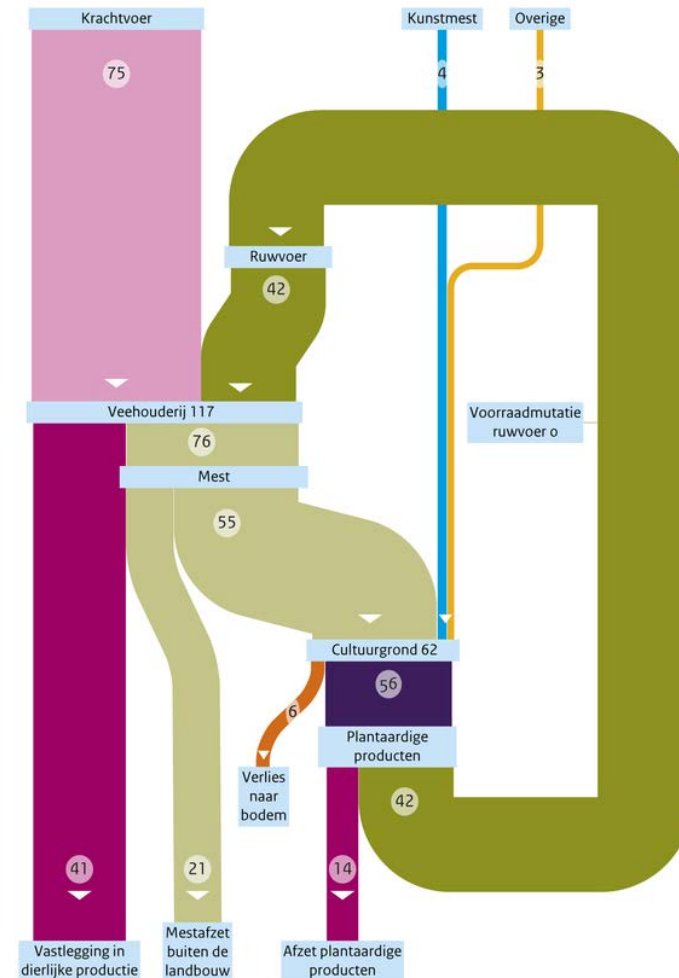


www.manuresource.org

Dutch phosphate balance

Fosfor 2016

Eenheid: miljoen kg fosfor



$$2,29 \text{ kg P} = 1 \text{ kg P}_2\text{O}_5$$