

GLOBAL
RESEARCH
ALLIANCE

ON AGRICULTURAL GREENHOUSE GASES

Climate Smart Circular Food Systems

Dr. Martin.C.Th. Scholten
Wageningen University & Research

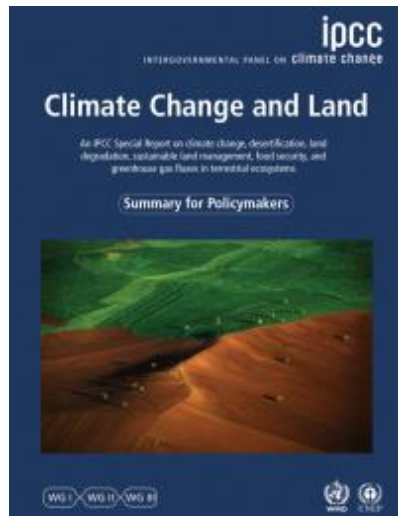


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Does livestock fit in climate smart food production?

ipcc

The Intergovernmental Panel on Climate Change

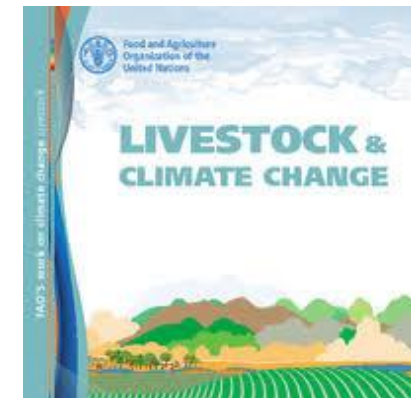
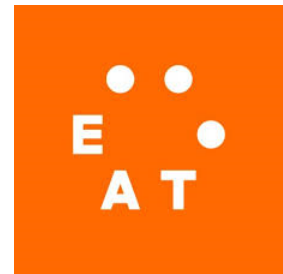
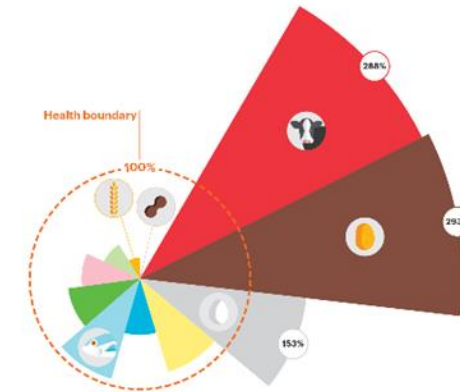


www.theguardian.com

Avoiding meat and dairy is 'single biggest way' to reduce your impact on Earth

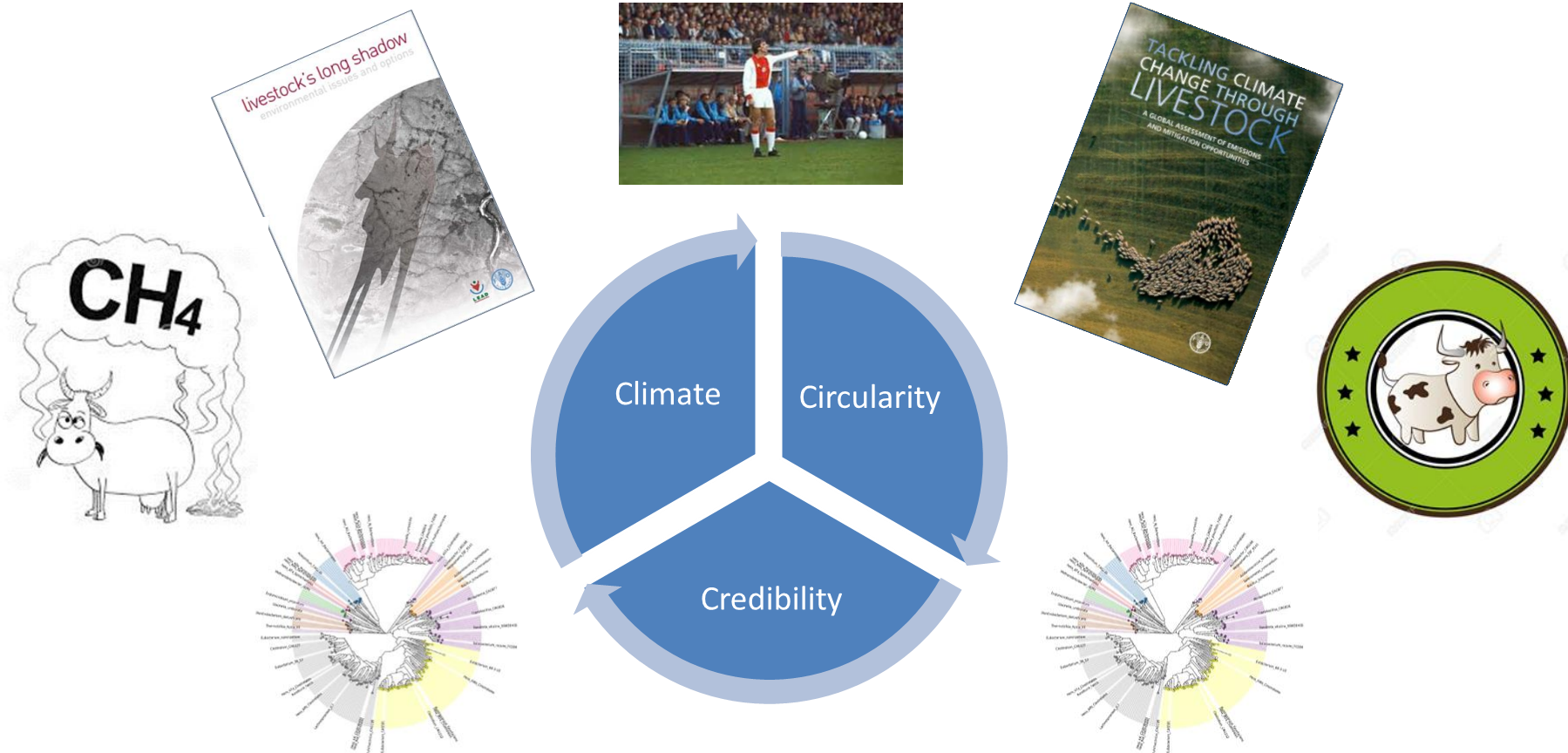
Current Diets vs Planetary Health Diet

Global



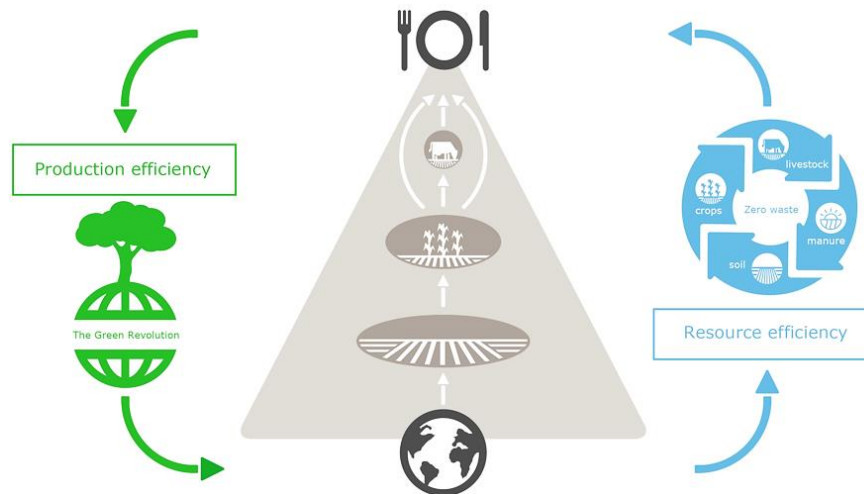
Towards climate smart livestock management

Concerns are Challenges

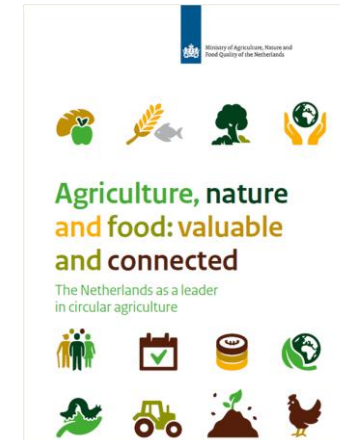


Food Security connected to Resource Security

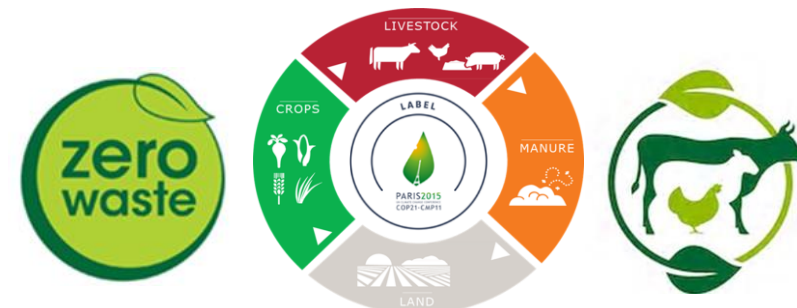
FOOD SECURITY



RESOURCE SECURITY



- Optimized use natural & renewable resource
- No waste of produced biomass
- Valorisation of residual biomass as coproducts
- Interconnected integration within foodsystem

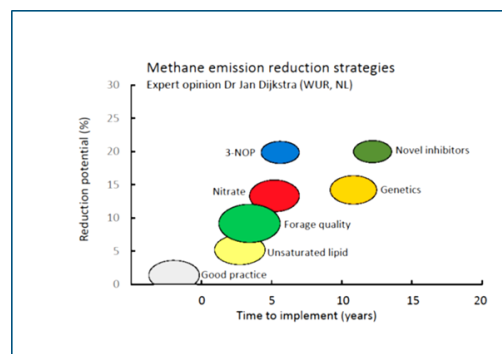
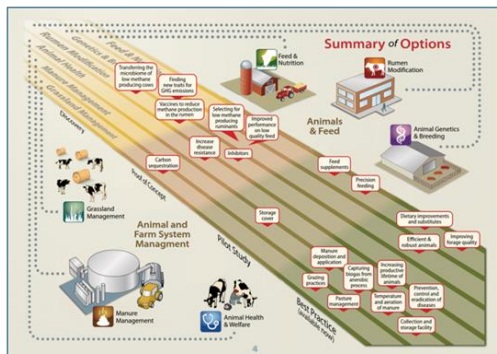


Direct Mitigation Options

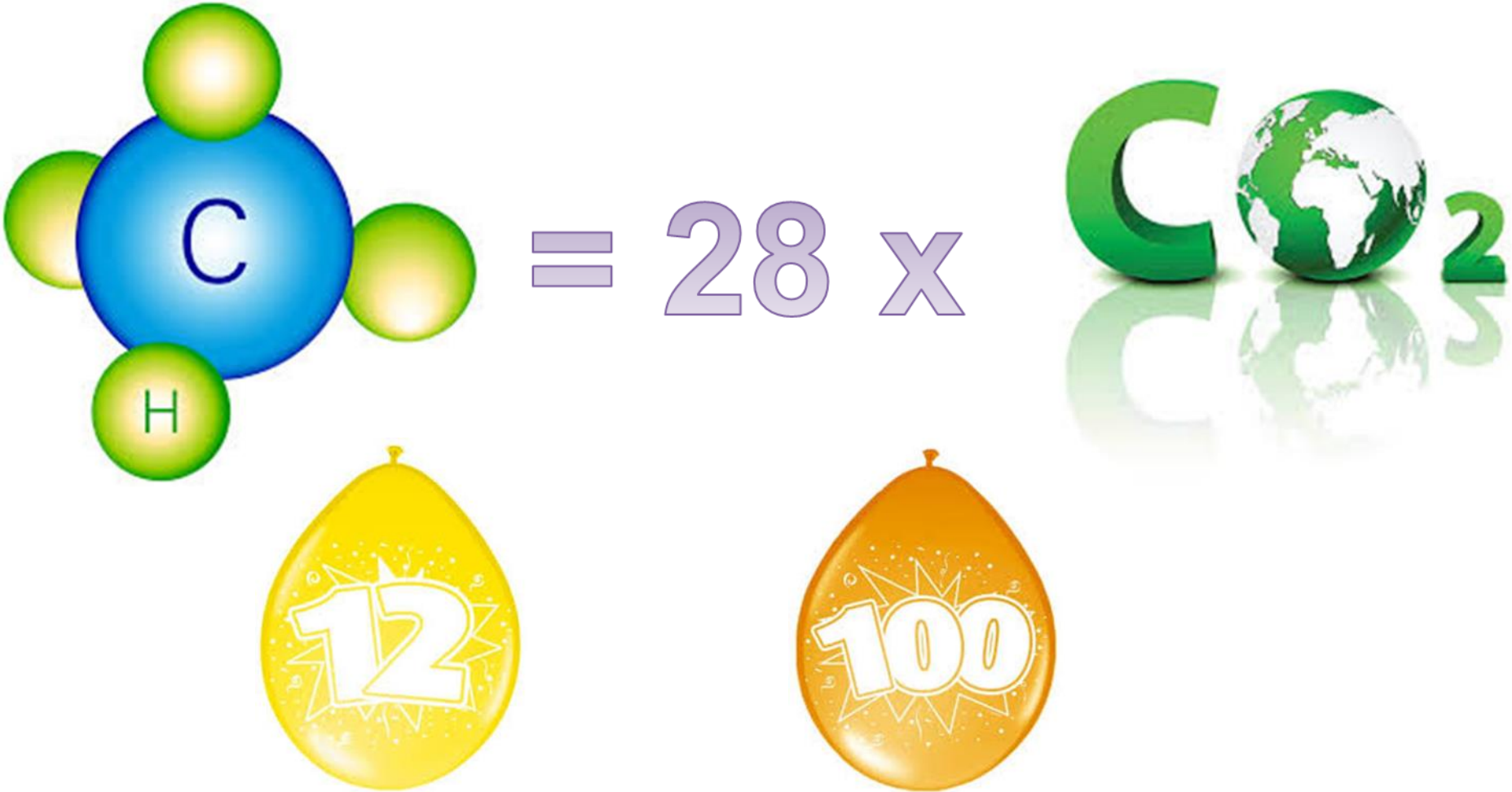


> 50% reduction

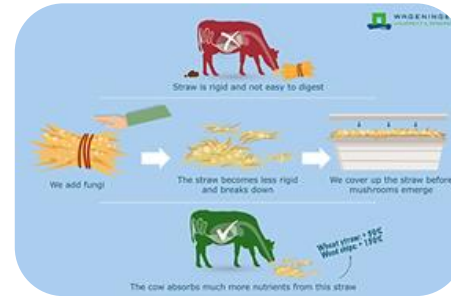
- Genotyping low methane production for selection
- Improving feed quality and digestibility, rumen microbes
- Improving animal health and husbandry conditions
- Manure management: collection, storage and utilisation
- Precision Livestock Farming



Methane focussed

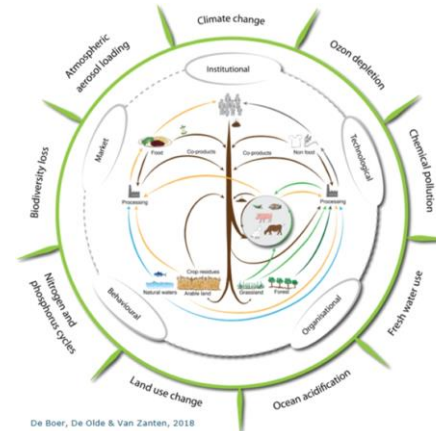


Indirect Mitigation Options: carbon focussed

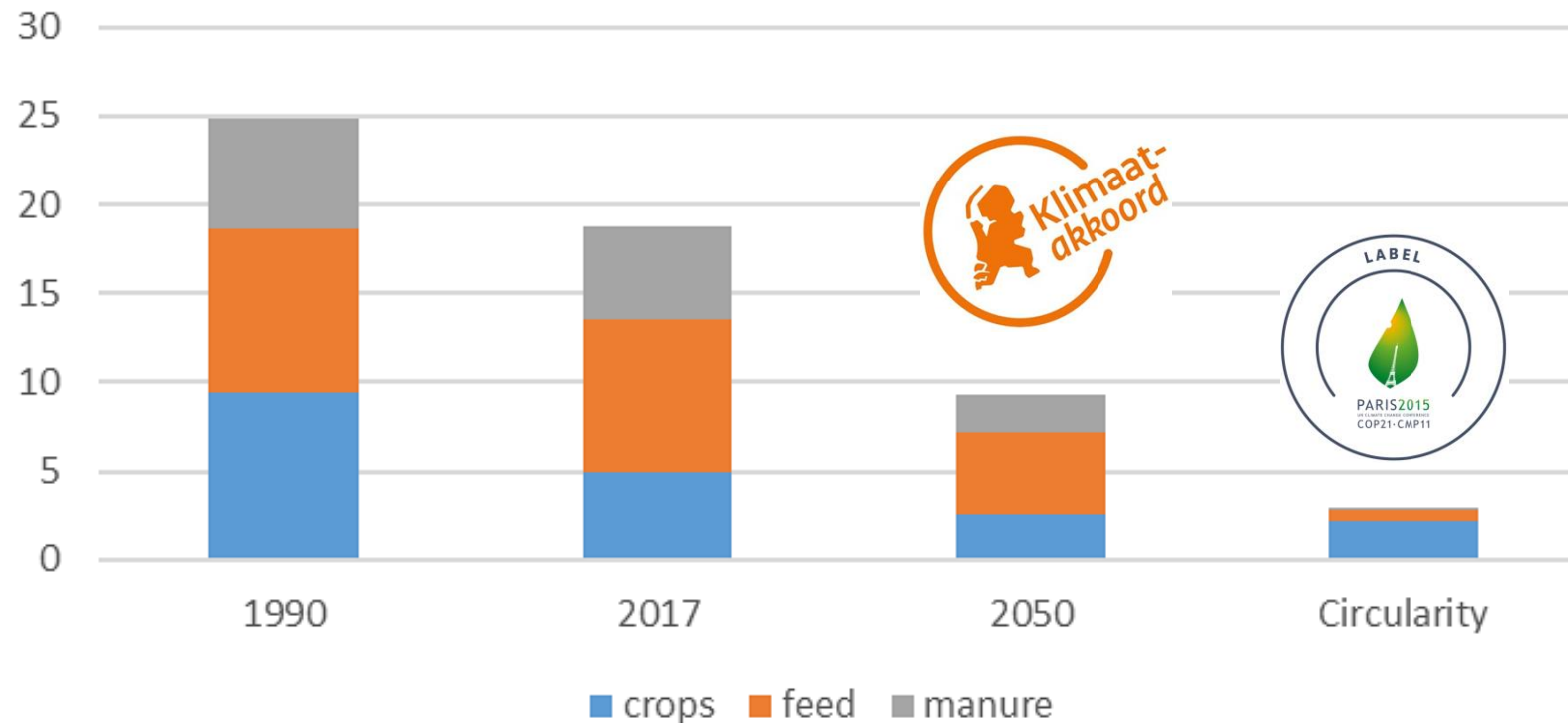


- Better agricultural land use
- More efficient use of food crops (including residuals), grass and other marginal crops
- Less specific feed production
- Low emission husbandry management
- Smart use of manure for biobased organic fertilizing
- More carbon sequestration in soils and biomass

+ 40% reduction



GHG (Agri Emissions Netherlands) (mTon CO2 eq/year)





Task Force to Develop a Flagship Proposal on Circular Food Systems (CFS)

- Aim: to improve food security with lower GHG emissions by circularity across the entire agri-food system with an economy on by/co-products
 - Identify diverse concepts, best practices and evidences for potential to reduce GHG at various scales
 - Identify R&D topics to transfer concepts to the practice in showcases
 - Developing a strategy to accelerate a transition towards circularity



RESEARCH PROGRAM ON
Climate Change,
Agriculture and
Food Security



Food and Agriculture
Organization of the
United Nations



THE WORLD BANK



@mcthscholten

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We are open for all your support



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