



# **Sustainability is political**

## **Building pathways in a safe and just space for humanity**

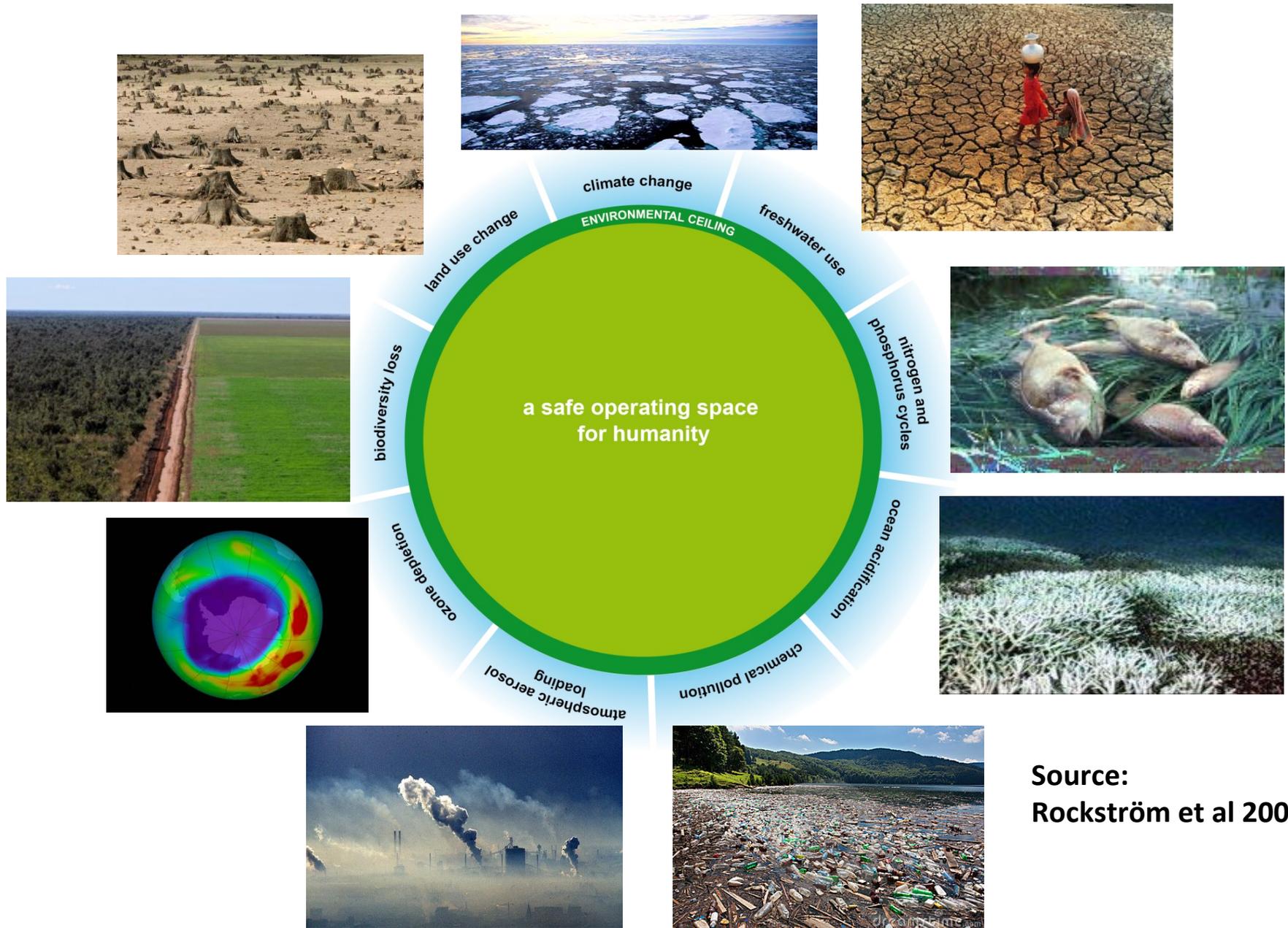
**Melissa Leach**



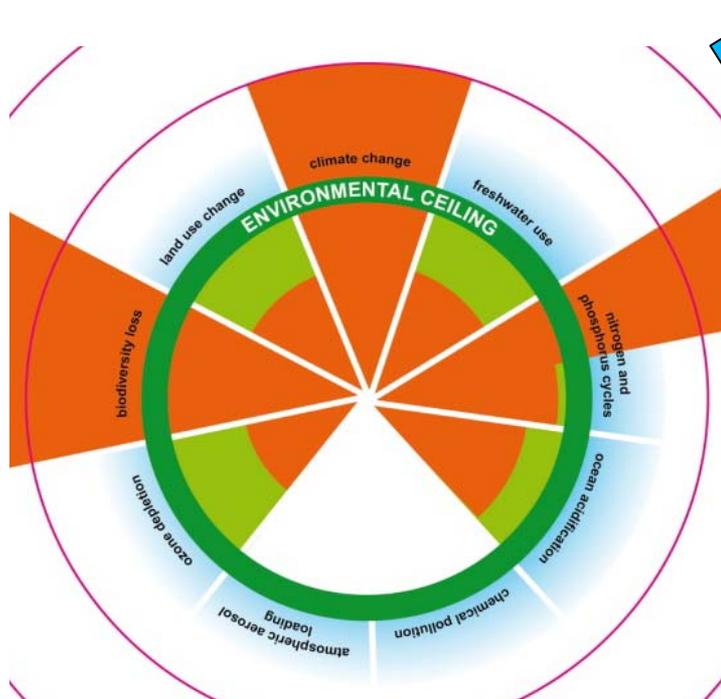
**Expert Group Meeting on “Science and  
Sustainable Development Goals”**

**UN Headquarters, 20-21 March 2012**

# Planetary boundaries



# Resource stresses



social meanings;  
institutions;  
political-economy

Scarcities, challenges,  
deprivations

What outlook for people already living in poverty?

Land grabs



Food price crises



Water scarcity

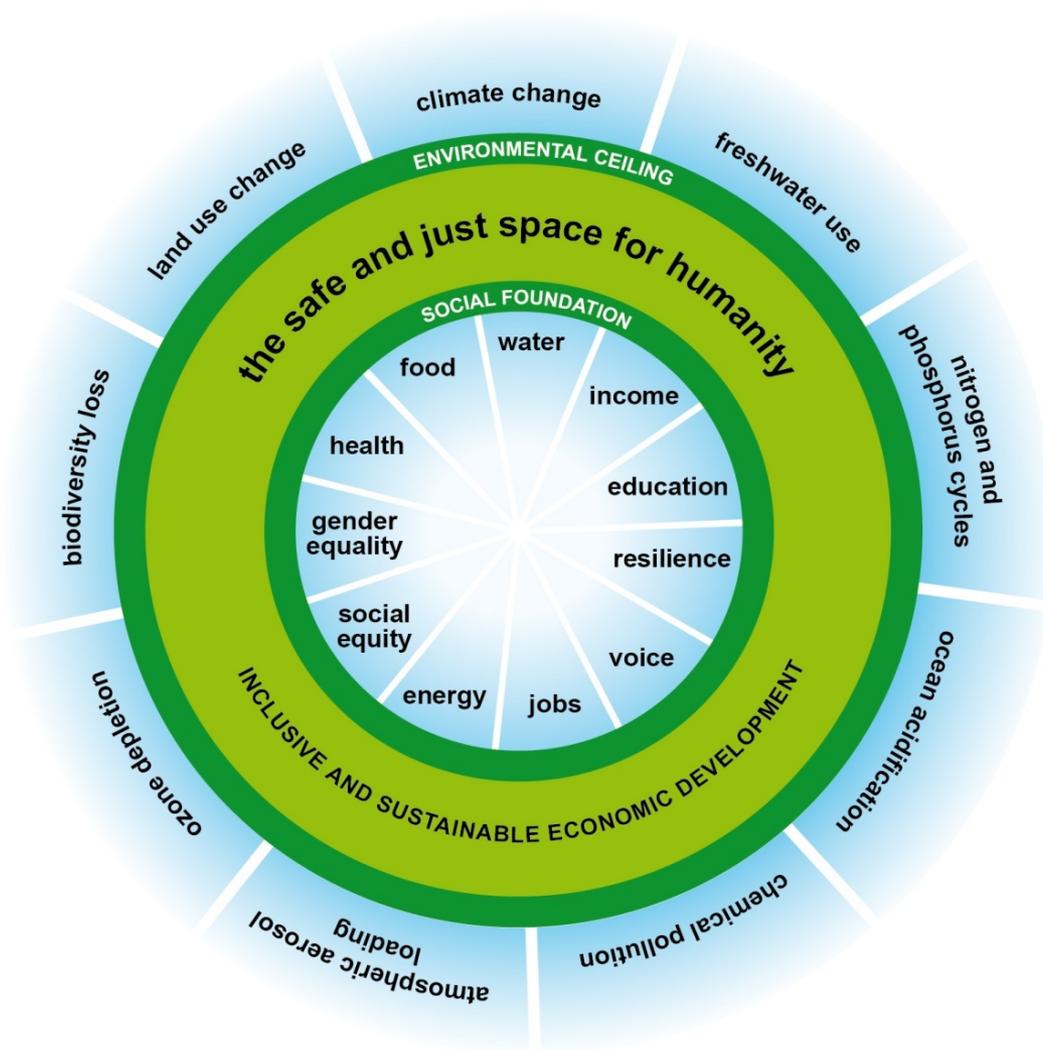


Energy poverty





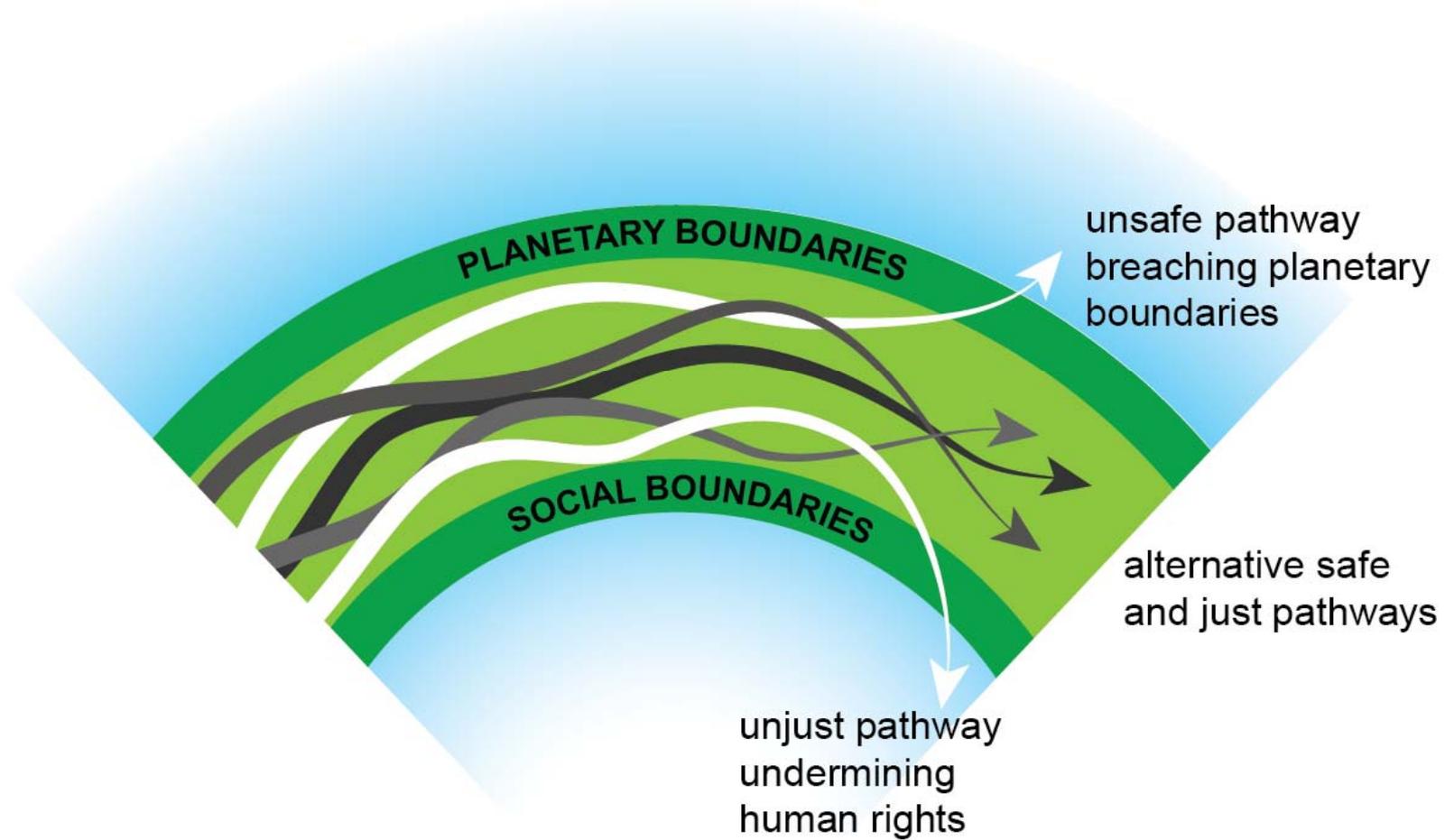
# Social and planetary boundaries: creating a safe and just space for humanity



Source: Raworth 2012,  
based on Rockström et  
al 2009



**Possibilities within the safe and just space:  
diverse pathways, alternative directions and varying distributional outcomes**



# For example, alternative pathways to 'sustainable food futures'



small-scale farmer livelihoods



Biochar and climate-smart agriculture



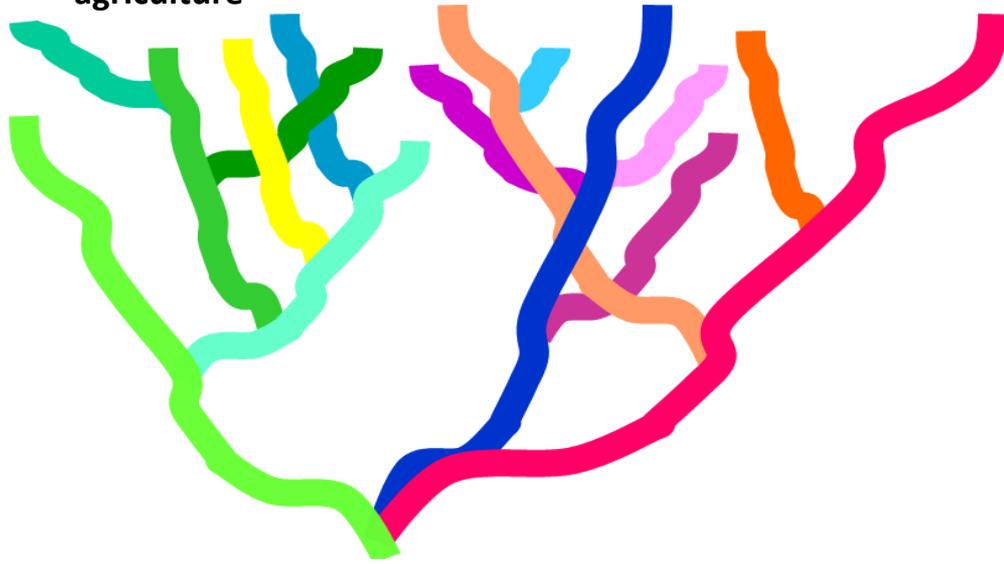
industrial hybrids



transgenics

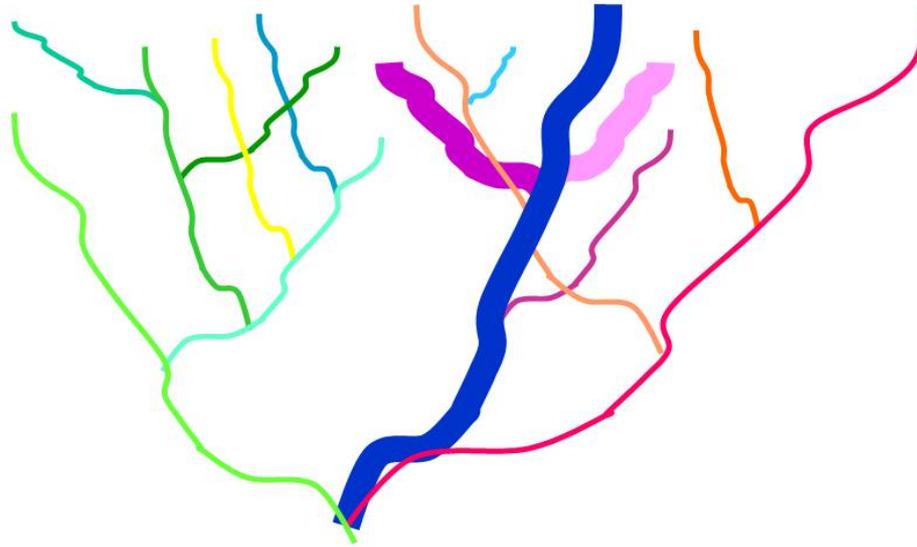


participatory breeding





# power and contingency 'close down' choices





# **‘Opening up’ sustainable development – three Ds**

## **Direction**

- What directions are different pathways headed in?
- What directions do other possible pathways offer?
- What goals, values, interests, power relations are driving particular pathways – and how might they be ‘re-steered’?



# Diversity

- Is there a sufficient diversity of approaches?
- Resists powerful processes of lock-in
- Responds to uncertainty, build resilience – avoid ‘putting all eggs in one basket’
- Responds to variety of contexts and values



## Distribution

- Who stands to gain or lose from current or proposed pathways, or alternatives?
- Gains in resource access, well-being, power
- Bearing of costs and risks
- How will choosing between different pathways affect inequalities of wealth, power, resource use, and opportunity?



STEPS<sup>centre</sup>

## Sustainability is political

“

- There are many pathways to sustainability
- Power often closes these down
- Sustainability is about empowerment, not necessarily the surest experts or the loudest voice
- Answers lie in equality of engagement, plurality of interests and diversity of paths



# A new science for pathways to sustainability

## **Interdisciplinary and transdisciplinary approaches**

Characterising actors, systems, boundaries and pathways

Understanding the technical, social and political processes that shape pathway directions, diversity and distribution

## **Integration of science and engagement**

Science advice that is plural, conditional and involves decision-makers and citizens

Fostering critical, reflexive, engaged approaches within science

## **Inclusive debate and dialogue**

Amongst groups of scientists, publics, policy-makers

Debating the politics of knowledge