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

Source: Rockström et al 2009
What outlook for people already living in poverty?

Resource stresses

<table>
<thead>
<tr>
<th>Social meanings; institutions; political-economy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scarcities, challenges, deprivations</td>
</tr>
</tbody>
</table>

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
- participatory breeding
- transgenics
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?
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