Does participatory scenario development keep its promises?
A reality check for land use change assessment on a European scale

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Scenarios and Forward Studies Group
European Environment Agency
The promises

1. Participatory approaches to scenario development increase the *quality* of the exercise

2. Participatory approaches to scenario development increase the *relevance* and *legitimacy* of the scenarios exercise

3. ...but participatory scenario development can also be cumbersome and lengthy, providing little value for money and fail to meet the high expectations...
## Different levels of involvement

<table>
<thead>
<tr>
<th>Degree of involvement</th>
<th>Role of stakeholders</th>
<th>Role of Scientists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultation</td>
<td>Supportive</td>
<td>Lead</td>
</tr>
<tr>
<td>Co-Design</td>
<td>Content supportive, process co-lead</td>
<td>Content lead, process co-lead</td>
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<tr>
<td>Co-Decision</td>
<td>Co-lead on content and process</td>
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<td>Supportive</td>
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Level of involvement and methods should be informed by the main purpose

Scientific exploration and research

• Broadening information base – check of quality
• Bridging scientific communities – learning space
• *need for credibility* – *more formalised process*
• *stakeholder involvement is rather consultative*

Level of involvement and methods should be informed by the main purpose

Public outreach, information and learning

- Increasing the relevance – embedding different perspectives
- Learning process – facilitate consensus building
- need for salience – informal process
- stakeholder involvement is rather co-decision or decision
Level of involvement and methods should be informed by the main purpose

Support to decision-making

- Informing policy – issue framing
- Facilitating policy development and implementation
- Increasing the legitimacy – symbolic functioning
- *need for legitimacy: mix of formal/informal methods*
- *stakeholder involvement is rather co-design, less co-decision*
Challenges

- Many actors with different interests
- Need for a broader format that encourages long-term, alternative thinking, yet is still suitable to allow for sound analysis
  - Advocacy-discourse dilemma
  - Policy-science dilemma
The PRELUDE project

Project objectives:

To explore **plausible long-term developments** in land use and their effects on the environment – from 2005 to 2035 for EU 25 plus Norway and Switzerland – in a set of alternative scenarios.

To provide a **context** against which the potential of (environmental) **policy initiatives** can be judged.
The main driving forces behind land use change are climate change, population growth, and technical and economic development, particularly of the transport and agriculture sectors. The environmental impacts of land use change are complex and may affect air quality, water quality and quantity, landscape structure, biodiversity, and so on. These impacts need to be understood to make informed decisions about land use planning and management.
Rules of engagement

- Main responsibility for the scenario storylines lies with the stakeholders
- EEA officials and experts take a rather supportive role – changes are agreed with stakeholders
- The process is facilitated by external partners
A Prelude to Europe’s Future

5 contrasting yet plausible environmental scenarios of future changes in land use and European landscape

- Europe of Contrast – *Great Escape*
- Europe of Harmony – *Evolved Society*
- Europe of Structure – *Clustered Networks*
- Europe of Innovation – *Lettuce Surprise U*
- Europe of Cohesion – *Big Crisis*

*More information on www.eea.europa.eu/prelude*
Driver assumptions

- Mid Low
- High

Environmental concern

Solidarity & equity

Technology & Innovation

Governance & intervention

Agricultural optimisation

Great Escape

Evolved Society

Clustered Networks

Lettuce Surprise

Big Crisis
Land use modelling

Louvain-la-neuve model, Pelcom Data, 2005-2035 EU 25 + Norway/Switzerland

6 land use classes were modelled:

- urban areas
- cropland
- grassland
- biofuels
- forest
- surplus (abandoned)

• The demand for each land use is derived for each scenario at country- or NUTS-2-level.
• Land use is then allocated to a 10 minute latitude/longitude grid.
Keeping the promises?

- Stakeholder involvement improves scenario analysis....
  - Innovative scenarios
  - High exploratory value
  - Great energy and creativity
  - High sense of ownership

- ... but comes at a price
  - Several iterations with stakeholders are crucial
  - Translation qualitative stories to quantitative model input parameters is cumbersome
  - Overall consistency is Achilles heel
The PRELUDE 2action outreach process

- Took place from summer 2005 – winter 2007

- **High-level events:**
  - Informal meeting of agriculture and environmental ministers in London
  - Official launch together with Friends of Europe in Brussels
  - Special session at GREEN WEEK 2007

- **Targeted EEA workshops:**
  - PRELUDE 2action workshop in Copenhagen
  - PRELUDE in Austria

- **Targeted policy information and support**
  - DG RTD
  - DG AGRI
  - Land Use Policy Group / German Presidency conferences
  - Different societal stakeholder events / meetings
## Types of outreach action

<table>
<thead>
<tr>
<th>Specific Topic</th>
<th>General Topic</th>
</tr>
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<tbody>
<tr>
<td><strong>Specific Audience</strong></td>
<td></td>
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<td><strong>General Audience</strong></td>
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Keeping the promises?

Relevance
• Usefulness for stimulating discussions across a range of different communities

Legitimacy
• Opening access to different, earlier on closed, policy networks

Allows for different forms of policy support – the PRELUDE scenarios work the better, the higher you are in the hierarchy
Thank you
Level of involvement and purpose – who is involved, and when?

<table>
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<td><strong>Scientific exploration and research</strong></td>
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The development – use nexus

• Purpose, role and level of involvement have to fit...

• ...getting some dimension right:
  • The appropriateness of the development process
  • Suitability of scenario format and type
  • Match between type of context and communication strategy
  • “Fit of scale”
Challenges

- Many actors affected by land use change
- Purpose, roles and responsibilities have to be clear and have to fit...
  - Advocacy-discourse dilemma
  - Policy-science dilemma
- For outreach & information and (although less important) support to decision-making: External facilitation is sometimes essential, often helpful, but also no “silver bullet”.

European Environment Agency
Different use of methods

- **Formalised methods**
  - elicit information in a systemic way,
  - but leave little room for stakeholders

- **Non-formalised methods**
  - Increase buy-in and stimulate creativity and ownership, but
  - produce the risk of producing irrelevant or inconsistent information if not well-facilitated

- The non-formality of methods often increases with the degree of stakeholder involvement