Highlights from LCA sessions

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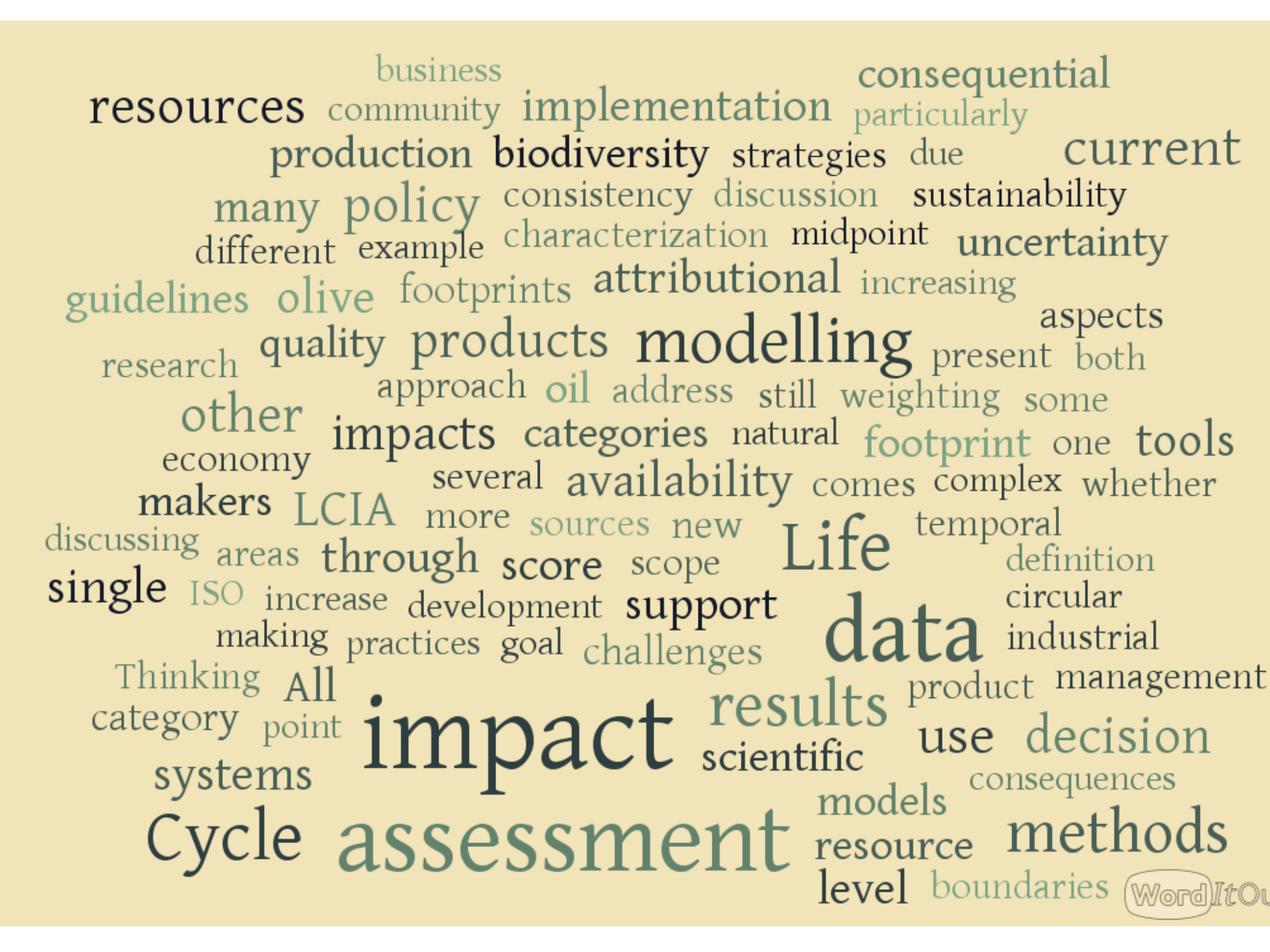
The numbers

- 7 sessions + 2 special sessions
- 16 time slots
- 98 + 6 oral presentations
- 24 session chairs
- very large attendance even with parallel sessions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My “take home message”: Key concepts

- Uncertainties
- Urgency
- Complexity and Transdisciplinarity
- Planetary boundaries
- Resilience

} • post-normal science or sustainability science

Uncertainty: the elephant in the room

Urgency

- Nature of problems requires to find solutions supporting sustainability decision making at policy and industrial levels
- A compromise between scientific robustness and practicability is required

Complexity and transdisciplinarity

- Growing participation
  - of people with a background different from traditional SETAC attendees (Environmental Science, Toxicology and Chemistry)
  - in inventory modelling and sustainability assessment sessions
- Socio-economic models
- Only analytical methods?
  - Explore the potentiality of mixed narrative-analytical analysis
  - Avoid the “arrogance of science”: values are strongly intertwined with sustainability assessment

Planetary boundaries

- *How to model and assess land use related impacts on biodiversity is a major challenge…New definitions, conceptual advancements, and practical examples were proposed …. comprehensive state-of-the-art and outlook on cutting-edge opportunities were given*
- Divergent opinions but a lot of momentum
- Contributions from beyond the LCA community is required

Resilience

- First use of this concept in LCA session
- Concept strongly connected with sustainability of human society and ecosystems
- Promising field of research the exploitation of this concept within the Life Cycle Sutainability Assessment

Modeling N and P in agricolture

- *…N and P should be better efficiently used in agriculture and recycled as much as possible. LCA could be used to couple Material Flows Analyses in order to monitor environmental performance of agriculture sectors and to assess recycling techniques*.

How to comunicate results

- *Many authors are convinced that there is a need of single score assessment for sound and effective decision making processes.*
- Work in progress by JRC on weighting
- *Still, mid-point indicators are helpful in identifying reduction targets and measures for specific environmental concerns (e.g. climate change, acidification, water scarcity).*

Harmonization and cooperation

- Many international initiatives are in progress:
  - UNEP-SETAC LCI
  - FAO
  - UE
  - LCA Forum
- A crucial phase for LCA and its applicability into sustainable consumption and production policies

Thanks to all chairs

Thanks to all presenters