Mainstreaming (or) Transformation? biodiversity in transition

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Prof.dr. Derk Loorbach

loorbach@drift.eur.nl       twitter: @drk75
Biodiversity loss: a persistent problem
A biodiversity ‘regime’?

• Science and policy process focus predominantly at biodiversity loss and nature and institutional ways towards ‘making economic development less bad’

• (Similar to climate change) a science-policy-society regime has developed around understanding and mitigating a symptom of unsustainability

• There is increasing recognition of lock-in and search for alternatives by engaging more with economic, social sciences and transformation

• But addressing the fundamental problem, an inherently unsustainable economic development, requires new approaches
Transformational change wanted

SBSTTA Conclusions:

• *The pathways towards a sustainable future, while plausible, require transformational change*, including changes in behaviour at the levels of producers and consumers, Governments and businesses.

• Further efforts will be needed to understand motivations and facilitate change.

• Societal and disruptive technological developments can lead to transitions that may contribute to, or counter, sustainability and the achievement of CBD objectives.

• Governments and international institutions can play a critical role in establishing an enabling environment to foster positive change.

• Further visioning exercises, at multiple scales and with strong stakeholder engagement are needed to further elucidate options and promote action.

• Further work is required to identify ways and means by which the Convention and the post-2020 global biodiversity framework can leverage such change.
Governance approaches

Analytical
- Governance
- Social learning
- Institutions
- Actors

Evaluative
- Social innovation
- Experiments
- Programs
- Monitoring

Experimental
- Transition arenas
- Niche experiments
- Action research
- Scenarios

Power
- Agency
- Discourse
- Visions
- Experimentation
- Learning
Mapping transition dynamics (Dutch government)

Energy

Mobility

Circular Economy

Urban sustainability

Climate adaptation

(Drift, 2017)
3 billion people rely on fish as their primary source of protein

260 million people globally are employed directly or indirectly in fishing, 37% of these are in developing countries

Fisheries could be worth an extra $50 billion every year if managed sustainably

Increased by 222% since the introduction of sustainable management programmes

$274 billion a year to global GDP

75% of global fisheries are underperforming

Sustainable Fisheries

Conventional/ Productivist Systems

Systems in Transition to Sustainability

Indigenous/ Traditional Systems

Agricultural Systems

Sustainable

High Probability

Low Probability

Unsustainable

Natural processes

Supportive

Ecosystem services

Regulating

Cultural

Disposal agents

Landscape mosaic structure

Propagation

Seed rain

Seed bank

Diversity

Reproductive

Productive

Tree diversity

Natural dispersal

Human dispersal and conservation

Land use change & management dynamics

Market demand, prices, forest & land policies

Labour availability, demographics

Current Opinion in Environmental Sustainability

Source: John Melack and the Contractor, Summary for Decision Makers, p. 9
Transition governance principles

Radical on the long-term, diplomatic on the short-term

- **Systemic**: engage with emerging dynamics across societal levels
- **Selective**: focus on change agents, frontrunners to create transformative networks
- **Back-casting**: envisioning and scenarios as instruments for change
- **Adaptive**: experimenting towards multiple goals and transition pathways
- **Learning-by-doing and doing-by-learning**: ensure monitoring and reflexivity
Transition governance mix: top-down, bottom-up and phase-out

Change the present
Pricing externalities, changing subsidies, setting transformative goals, stricter regulations

Build the new
Finding, connecting and empowering niches, new practices, technologies, ...

Phase-out the old
Fossil fuels, waste and emissions, Inefficient consumption, ...

Adjusting and Learning
50% of nature protected and regenerated
50% of nature sustainably managed
100% of natural capital preserved
Transition Governance Tools

- Problem structuring, shared sense of urgency, guiding visions
- Institutional and structural changes, new networks/coalitions
- Monitoring, evaluating and learning
- Breakthrough actions, projects and initiatives, new organisations

Regular policy arena
- short term
- mainstream
- incremental improvement
- problem solving

Transition Arena
- long term
- change agents
- transition
- problem searching

Guiding values and future images

System analysis

Time

- 2000
- 2010
- 2020
- 2030
- 2040
- 2050
- 2060
Sustainability transitions in biodiversity relevant economic sectors

By definition specific to national contexts in terms of existing regimes, dynamics and potentials

\textit{no generic frames or procedures or goals}

Need to build up governance capacities to guide and accelerate transitions

\textit{provide knowledge support and capacity building}

In developed countries escaping lock-in versus shifting pathways in developing countries

\textit{find context-specific pathways to sustainable economies}
Process approach

**Transition teams**
- Policy commitment and entrepreneurial policy makers
- Matchmaking with transition experts/local knowledge holders

**Transition analysis**
- Identification of local risk and global niche potentials
- Mapping dynamics and transformative agency for transitions

**Transition arenas**
- Transformative ambitions for biodiversity relevant sectors
- Pathways, intermediate goals and conditions

**Transition experiments**
- Collaborative interventions to accelerate transitions
- Social learning and empowerment strategy
Transition agendas Circular Economy

Five transition processes involving different stakeholders to formulate transition targets, pathways and actions

Food and biomass, construction, consumer products, plastics, manufacturing

High level policy commitment to long-term transition: reduce, replace, refurbish, reuse and recycle
Final reflections

Next years will be decisive to achieve lock-out and accelerate transformation

Emerging potential of sustainability transitions needs to be captured and mobilised

This is an inherently political and disruptive challenge: a lot is at stake

Try to create space for transformation by challenging incremental and institutional processes and empowering change agents