

# Integrated Landscape Approach & System Resilience Thinking

Exploring the concepts and their interrelations

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# Programme

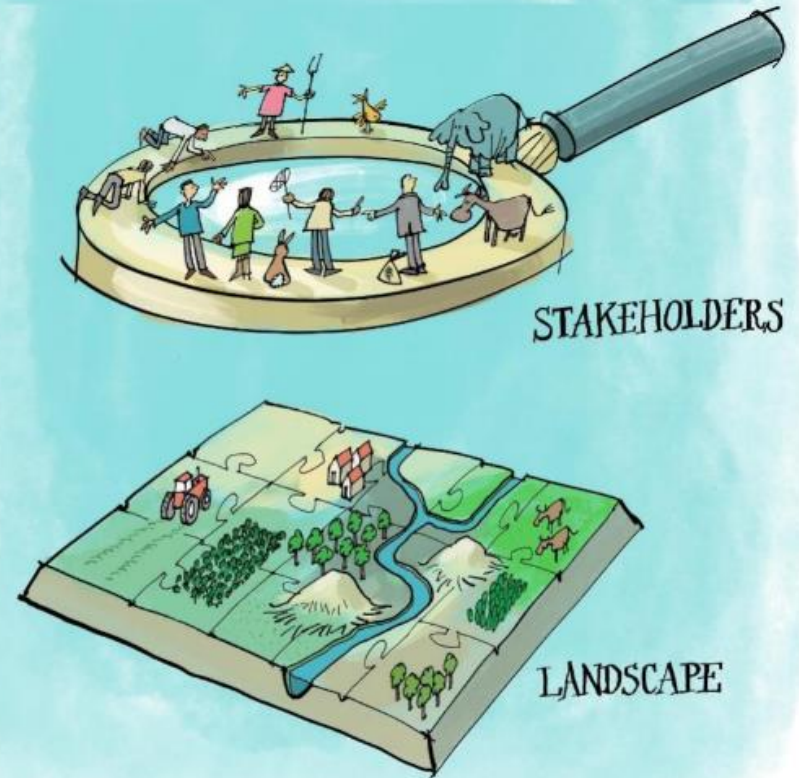
- Introduction of the concept Integrated Landscape Approach
- Principles for building resilient socio-ecological landscapes
- From rationale to application: the case of Terschelling
- Conclusions and food for thought

# Concept of Integrated Landscape Approach (ILA)

**Integrated:** spanning various domains and related stakeholders *with different norms and values*

**Landscape:** composition and configuration of land use types

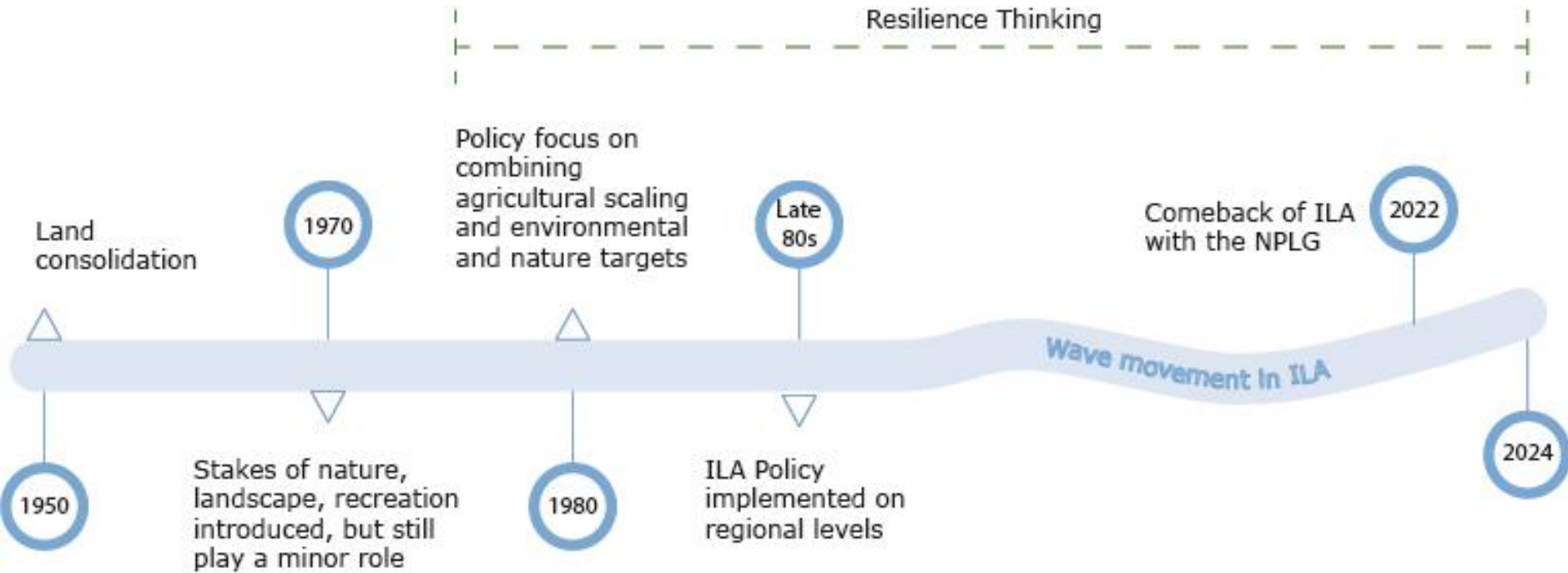
**Approach:** a methodology, a process, train of thought, awareness of what you in- and exclude



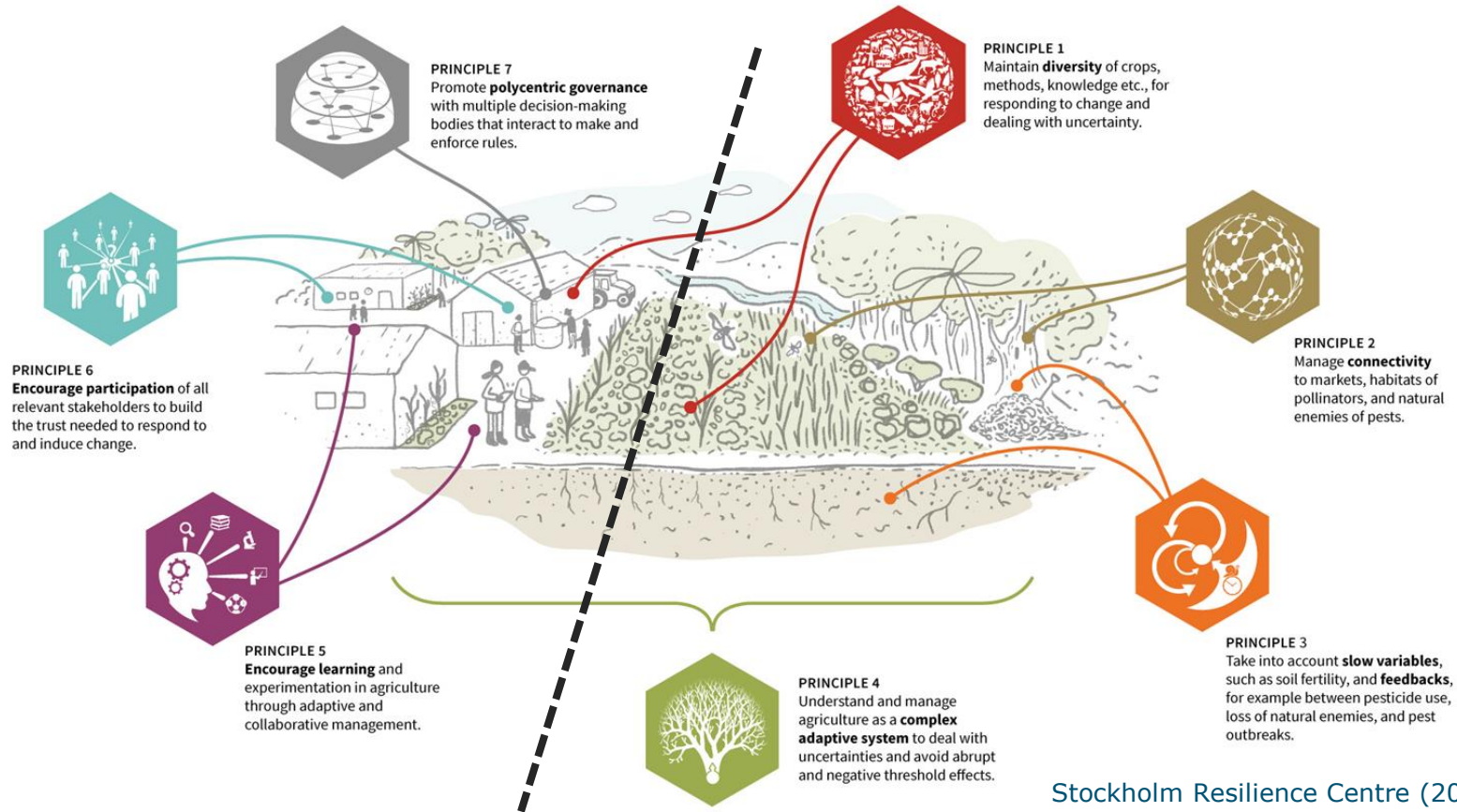
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Adapted from: van Oosten, C. (2021). *Landscape governance : from analysing challenges to capacitating stakeholders*. [internal PhD, WU, Wageningen University]. Wageningen University. <https://doi.org/10.18174/540838>

# Dutch (policy) context of ILA



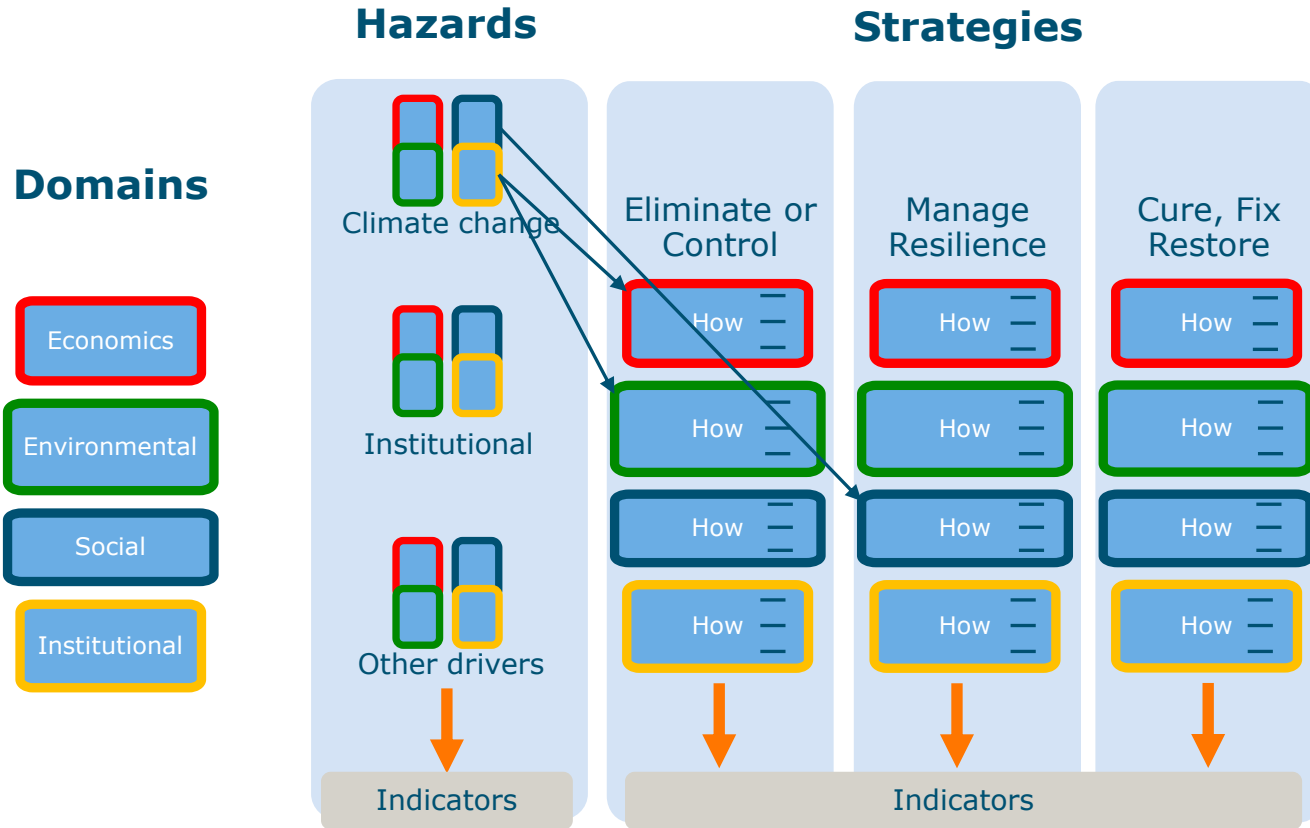
# 7 principles for building resilience in socio-ecological landscapes



Stockholm Resilience Centre (2015)

Illustration: E. Wikander/Azote

# The resilience matrix & ILA



# From rationale to application: the case of Terschelling

- Main objective: developing (economically) feasible perspectives for *agriculture, nature and drinking water supply* in relation to *water availability now and in the future*.
- Partners/stakeholders: Province, municipality, water board, knowledge institutions (WUR/HVHL/Deltares), collectives, societies, local agricultural and recreational businesses.
- Functions to combine: agriculture, nature, drinking water supply, recreation/tourism



# Example: Environmental Hazards & Potential Strategies

Hazards	Strategies	Category
Geese grazing pressure	Chase away	Eliminate or control
	...	...
Intensifying droughts	Raise groundwater table	Manage resilience
	Increase soil organic matter	Manage resilience
	Irrigate	Cure, fix, restore
	...	...

- Aims to provide an objective inventory of potential strategies
- But from whose perspective?
- ILA: How to jointly decide upon which strategy to choose?



# Applying the matrix in an ILA-approach: considerations and complexities

- Envisioned strategies differ per stakeholder, based on differentiated perceived threats, diverging interests and varying capacities
- Hazards are difficult to define and categorize unilaterally
- It is essential to clearly define and communicate the system level/scale!



# ILA & system resilience thinking: a comparison

- Both ILA and resilience thinking take a holistic approach
- ILA presupposes a relatively greater scale, whereas system resilience can assume various levels
- Depending on the level, system resilience thinking can include a variety of stakeholders, while ILA per definition integrates multi-actor perspectives
- System resilience explicitly addresses and prioritises adaptation measures; within ILA, it can be a consideration deriving from a shared vision
- System resilience often focusses on merely one challenge/hazard while ILA's main characteristic is to consider the integrated character of all challenges/hazards a landscape might face
- **Cross-considerations could benefit both concepts**

Thank you!

