



Leibniz-Zentrum für
Agrarlandschaftsforschung
(ZALF) e.V.



Leibniz Centre for **Agricultural Landscape Research**

Developing an Integrated Sustainable Land Management Scheme facing the Challenges of Global Change:

The ELaN project

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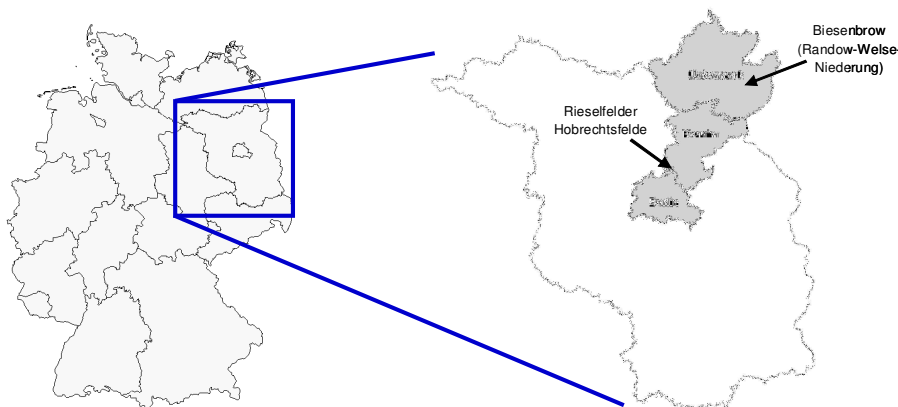
Challenges of Global Change

Challenges	Climate Change	Land use Change	Demographic Change	Economic Change
Need for added value in rural regions			x	x
Need for decentralised infrastructure			x	x
Increasing demand for bio-energy		x		x
Need for nutrient recycling		x		x
Decreasing groundwater and lake water levels	x	x		
Drainage of wetlands (biodiversity, carbon sequestration)	x	x		x
Contamination of streams and rivers by sewage plants effluents (xenobiotics, micropollutants)			x	x

The ELaN Project – Basic Approach



- Using contaminated or rewetted sites for biomass production
- Using cleaned waste water for crop production
- Phosphorus recycling from sewage sludge
- Interdisciplinary integration of related knowledge from civil engineering, science, sociology and economics
- Developing approaches for transdisciplinary integration of practical knowledge
- Developing an integrated systemic scheme for the Berlin - Brandenburg region



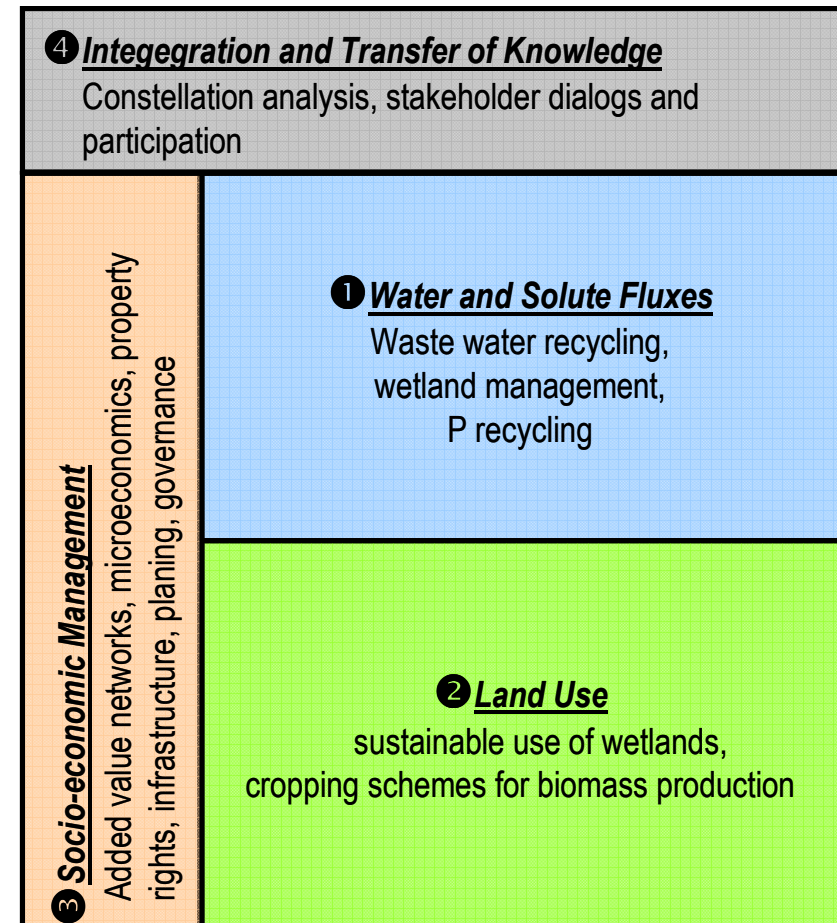
The ELaN Project - Implementation



Partners:

	Leibniz-Zentrum für Agrarlandschaftsforschung (ZALF)		Hochschule für Nachhaltige Entwicklung Eberswalde (HNEE)
	Technische Universität Berlin (TUB)		Leibniz-Institut für Regionalentwicklung und Strukturplanung (IRS)
	Humboldt Universität zu Berlin (HUB)		Berliner Wasserbetriebe (BWB)
	Bundesanstalt für Gewässerkunde (BfG)		Leibniz-Institut für Agrartechnik Potsdam-Bornim (ATB)
	ECT Ökotoxikologie GmbH (ECT)		Leibniz-Institut für Gewässerökologie und Binnenfischerei (IGB)
	Freie Universität Berlin		Forschungsinstitut Bioaktive Polymersysteme e.V. (Biopos)

Structure:



→ <http://www.elan-bb.de>

Research Needs

- Considering interactions between different aspects of global change
- Systemic approaches to solving complex problems → benefitting from synergies
- Rethinking and adapting infrastructure („*learning organisations*“)
- Alternative ways of governance
- Going beyond panaceas (*Ostrom 2007*)