The role of collaborative governance approaches in mitigating institutional misfit in nature conservation areas to spur ecosystem service provision

Claudia Sattler[1], Barbara Schröter[1], Ulrich Stachow[1], Bettina Matzdorf[1], Angelika Wurbs[1], Michael Glemnitz[1], Angela Meyer[2], Gregor Giersch[2], Rudolf de Groot[3], Roy Remme[3]

1 = ZALF - Leibniz-Centre for Agricultural Landscape Research, Müncheberg, Germany
2 = IDC - Organisation for International Dialogue and Conflict Management, Austria
3 = WUR - Wageningen University, Department of Environmental Sciences, Netherlands

8th ESP World Conference, Stellenbosch, South Africa || November 9-13, 2015 || Session S4

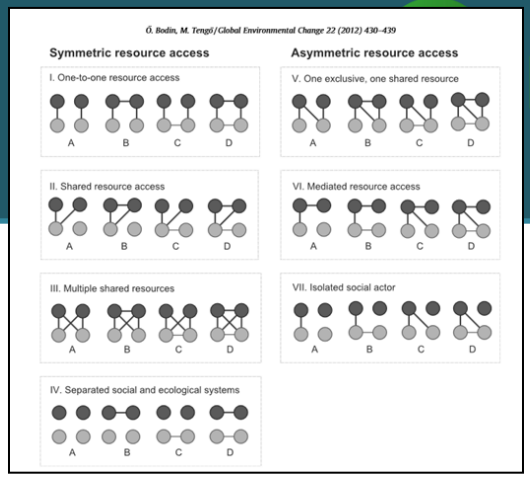
Background

- Theory: institutional fit
- Question: Are established governance approaches optimally aligned with the ecosystems/natural resources which they are meant to govern?
- Consequence of misfit: suboptimal provision of ecosystem services (valued by specific groups of stakeholders or society as a whole)

Sources: e.g. Bodin et al. 2014, Lebel et al. 2013, Vatn and Vedeld 2012; Cox 2012, Ekstrom and Young 2009; Cash et al. 2006, Young 2002

Theory: types of misfit (2 examples)

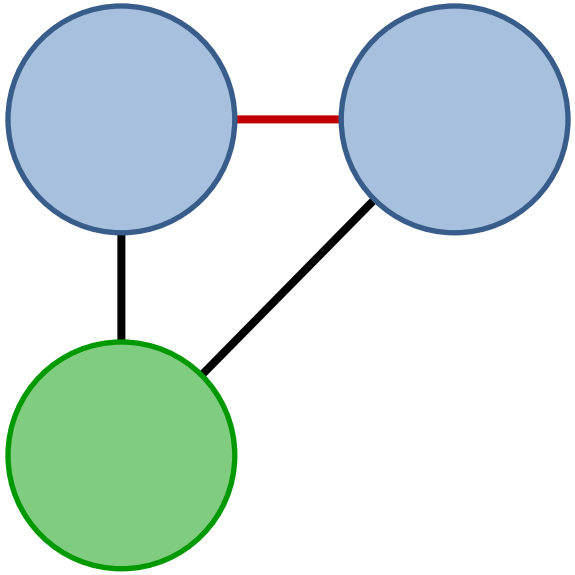
Source: Bodin et al. 2014, p. 1374 (-> social ecological systems can be interpreted as networks)



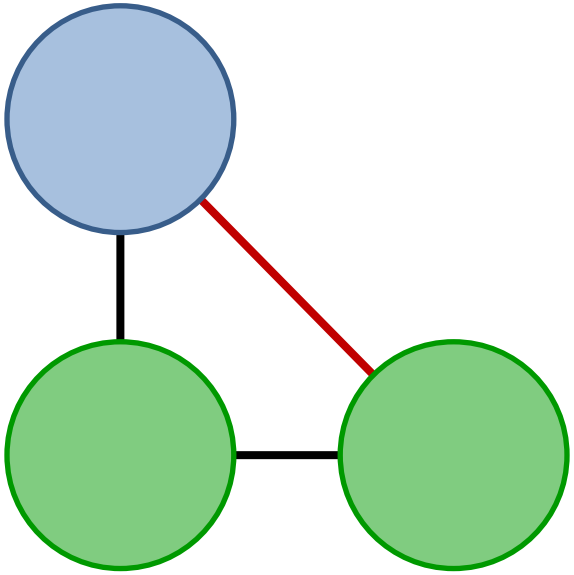
Source: Bodin & Tengö 2012, p. 434

Social system:
e.g. different governance actors, governance models, resource users, …

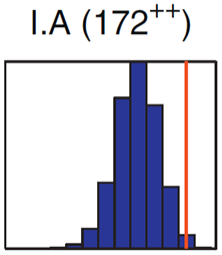
Natural system:
e.g. different ecosystems, natural resources, …



Type 1



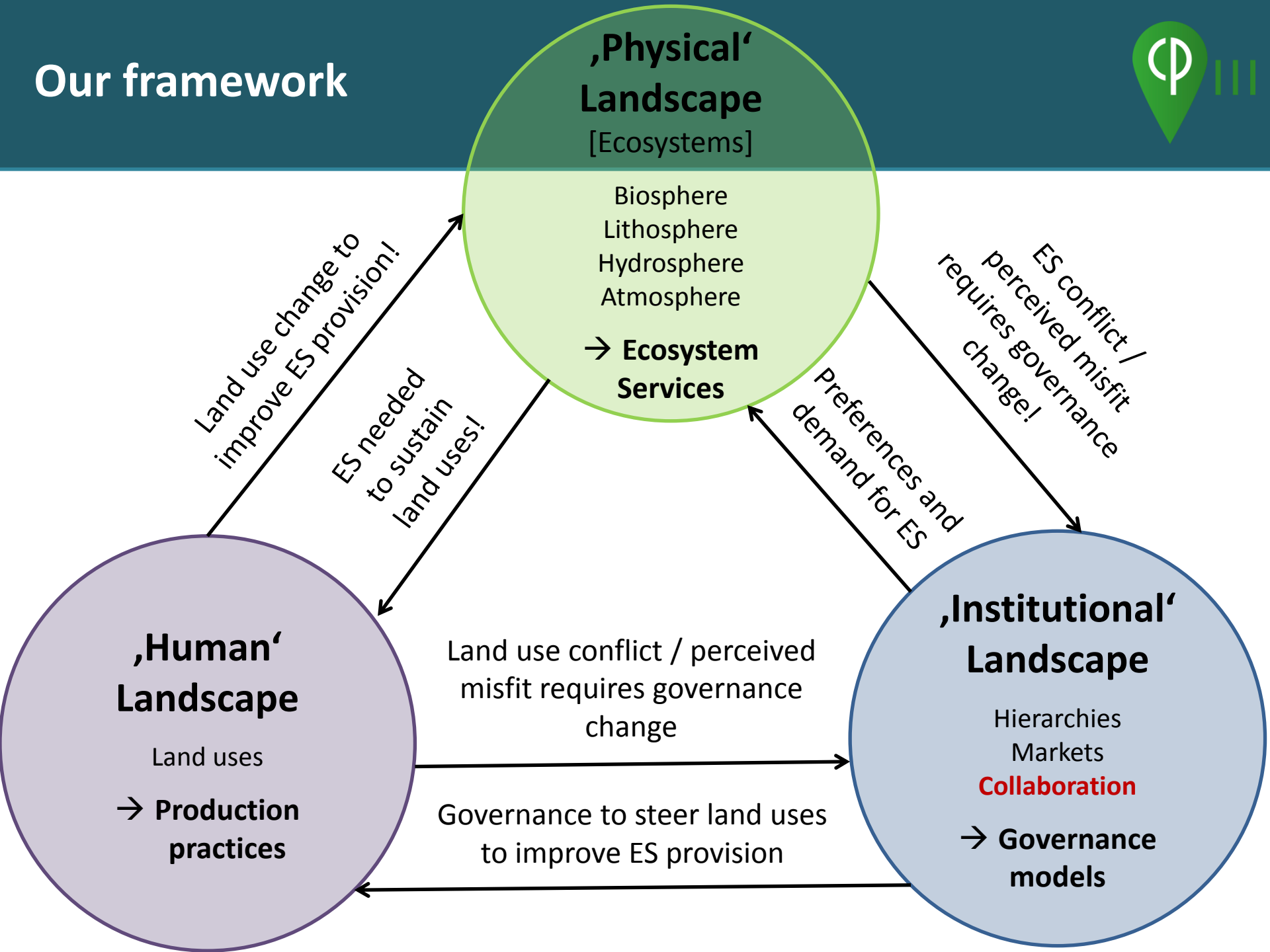
Type 2



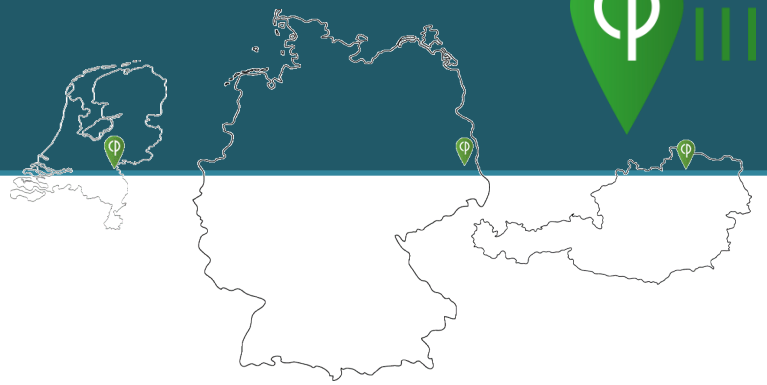
Source: Bodin & Tengö 2012, p. 436

-> calculate how often different types exist in the overall network and compare against random network

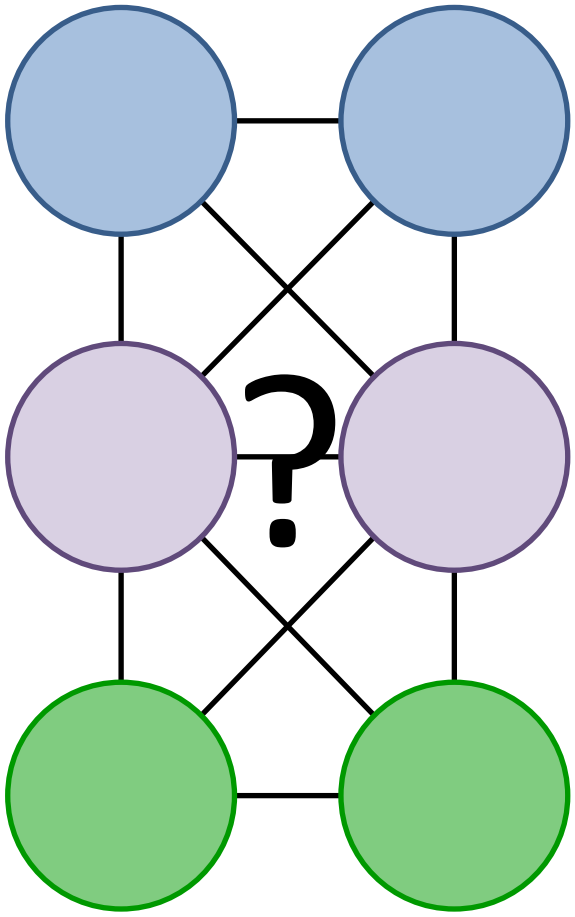
Our framework



Application in case studies



Step 1: inventory



Governance models (GM)

Land uses (LU)

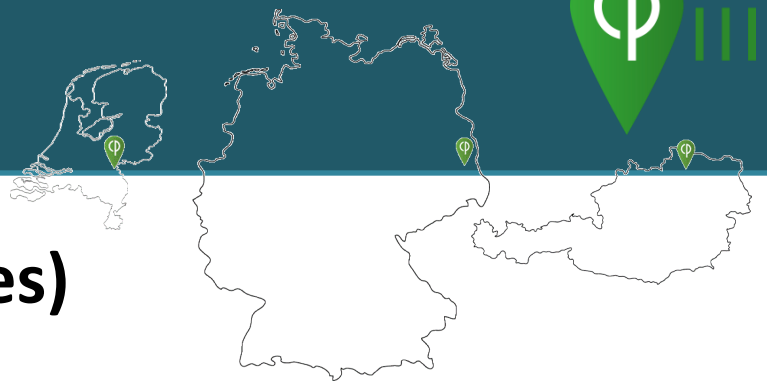
Ecosystem services (ES)

	LU#1	LU#2	LU#3
GM#1			
GM#2	steers/regulates?		
GM#3			

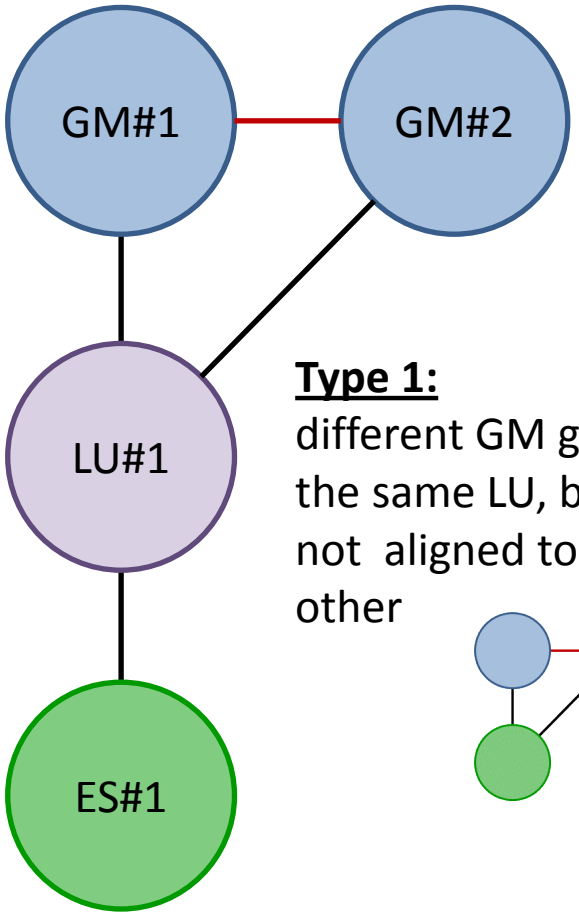
	ES#1	ES#2	ES#3
LU#1			
LU#2	needs/provides?		
LU#3			

	GM#1	GM#2	GM#3
ES#1			
ES#2	meant to be safeguarded by?		
ES#3			

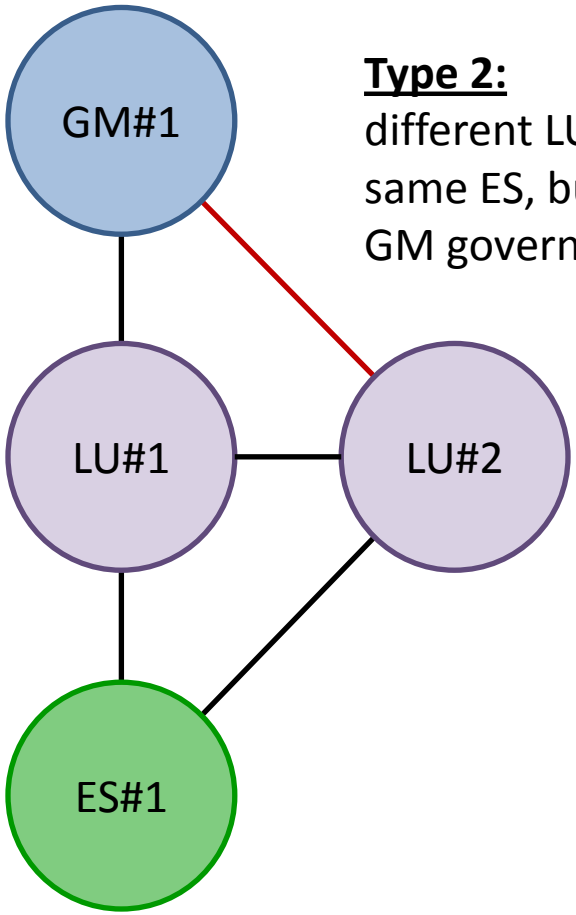
Application in case studies



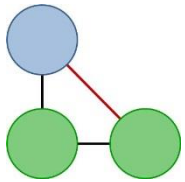
Step 2: analysis of misfit (2 examples)

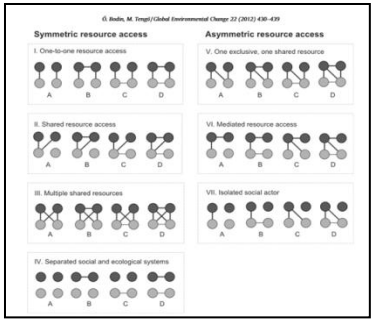


Type 1:
different GM govern the same LU, but are not aligned to each other



Type 2:
different LU depend on the same ES, but the existing GM governs only one LU





Source: Bodin & Tengö 2012, p. 434

Application in case studies

Spatial analysis:

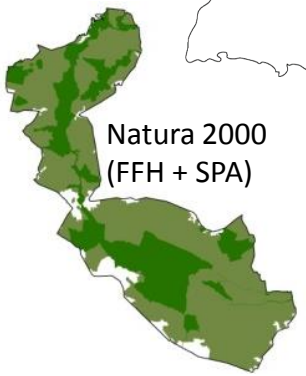
GMs

Federal and state laws

Economic zone

Biosphere reserve

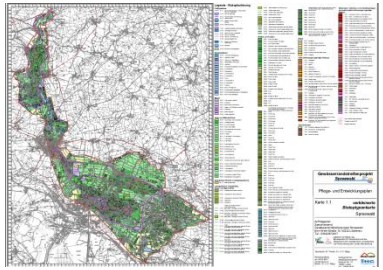
Natura 2000 (FFH + SPA)



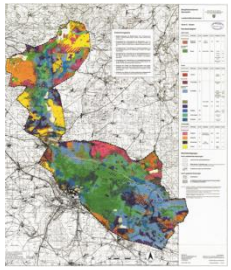
LUs

Source: CLC 2006

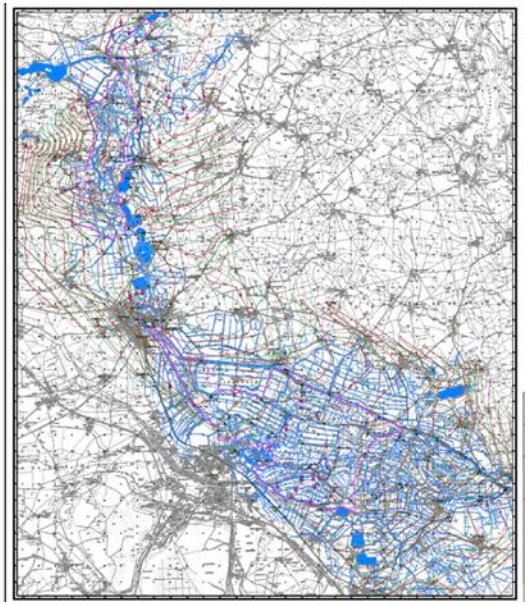
ES



Biotop types



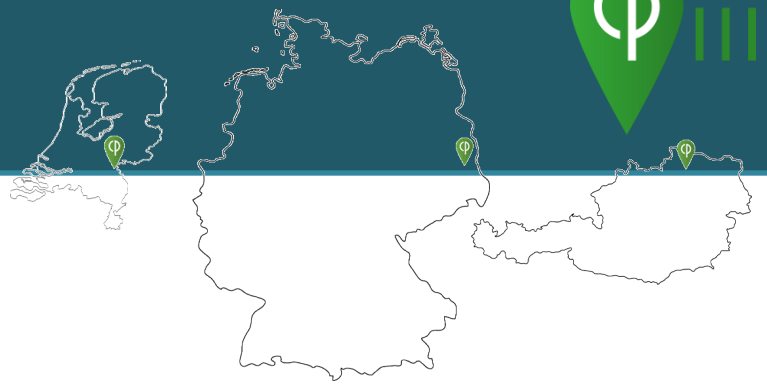
Soil types



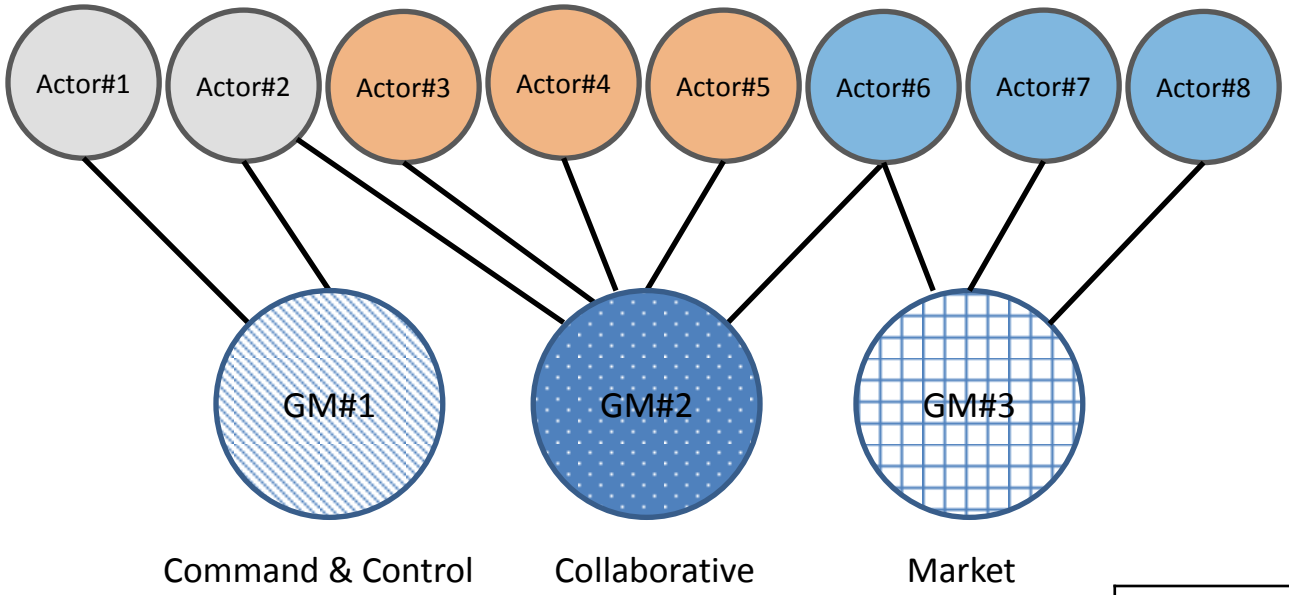
Waterways

→ **Temporal analysis!**

Application in case studies



Governance actors:



Civil society actors
State actors
Market actors

-> calculate index of fit with vs. without collaborative GM!

	Actor#1	Actor#2	Actor#3
GM#1	1	1	0
GM#2	0	1	1
GM#3	0	0	0

Thank you!!!

Contact info:

Dr. Claudia Sattler

Institute of Socio-Economics,
Leibniz-Centre for Agricultural Landscape Research (ZALF),
Eberswalder Strasse 84, 15374 Muencheberg, Germany

E: csattler@zalf.de
W: www.cp3-project.eu

Partners:

Funding scheme:

National funders:

Federal Ministry of Education and Research

DLR