


Can collaborative governance approaches reduce the trade-offs between agricultural related ecosystem services and enhance their spatial and temporal fit?



Authors:

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cp³ partners:



cp³ funding scheme:



cp³ national funders:




Structure




- Introduction
- Analytical Approach
- Types of interactions between Provisioning and other ecosystem services
- Application to case study regions
 - Community „Berg en Dal“, The Netherlands
 - Biosphere Reserve „Spree-forest“, Germany
 - Communities of the Nature Park „Jauerling-Wachau“, Austria
- Summary


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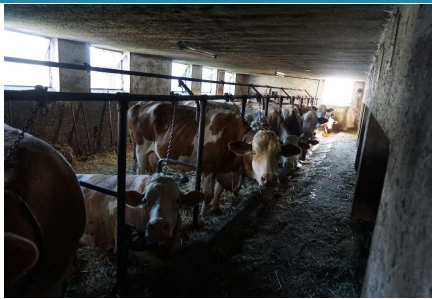

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Introduction



- Project: **cp³** (= **c**ivil **p**ublic **p**rivate **p**artnership), BiodivERsA/facce
- Project presumption:
In agricultural landscapes the provision of ES is related to production practices and can be steered by governance (collaborative governance)
- Research questions:
 - How can we govern the **agriculture** to support the provision of **ecosystem services**? → reducing trade-offs, balancing ES
 - What is the specific role of **collaborative governance** approaches? → enhance the spatial and temporal fit

Sources: Vatn 2010: definition of collaborative governance approaches

Analytical Approach



based on agricultural location theory

1. components

- Agricultural production conditions
 - site conditions
 - farm conditions
- Farming systems and their production practices
 - land use program
 - land use intensity

2. Agricultural production conditions affect the farm systems predictably

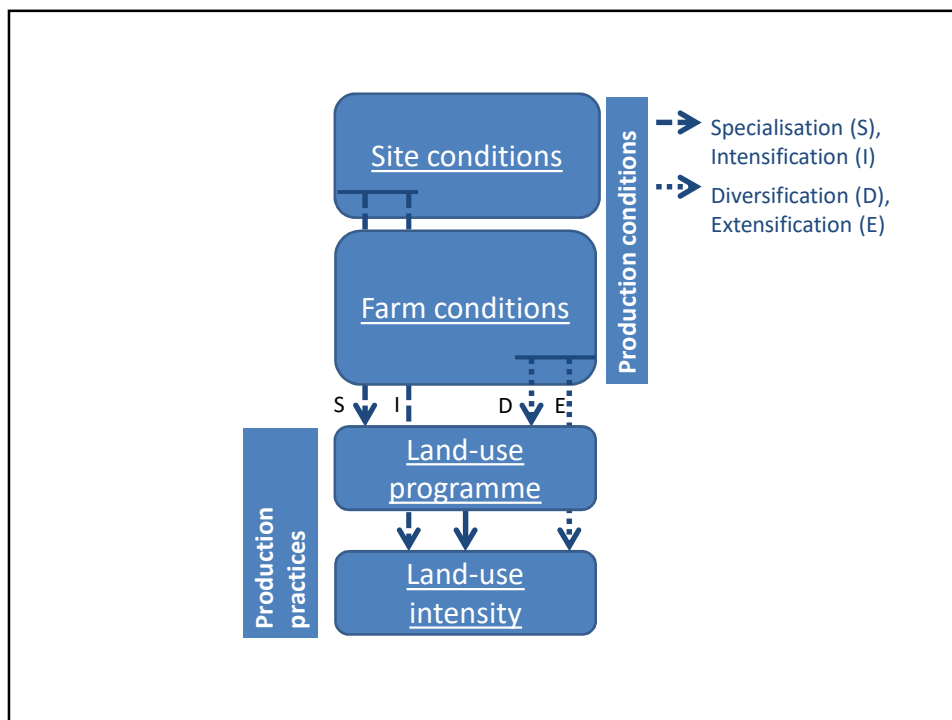
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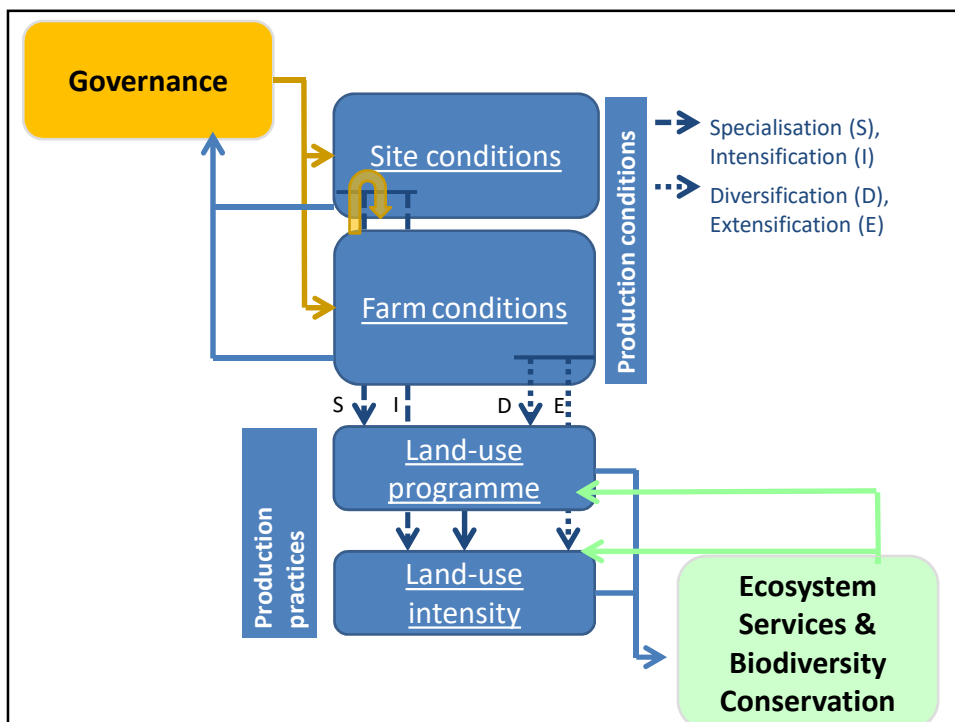
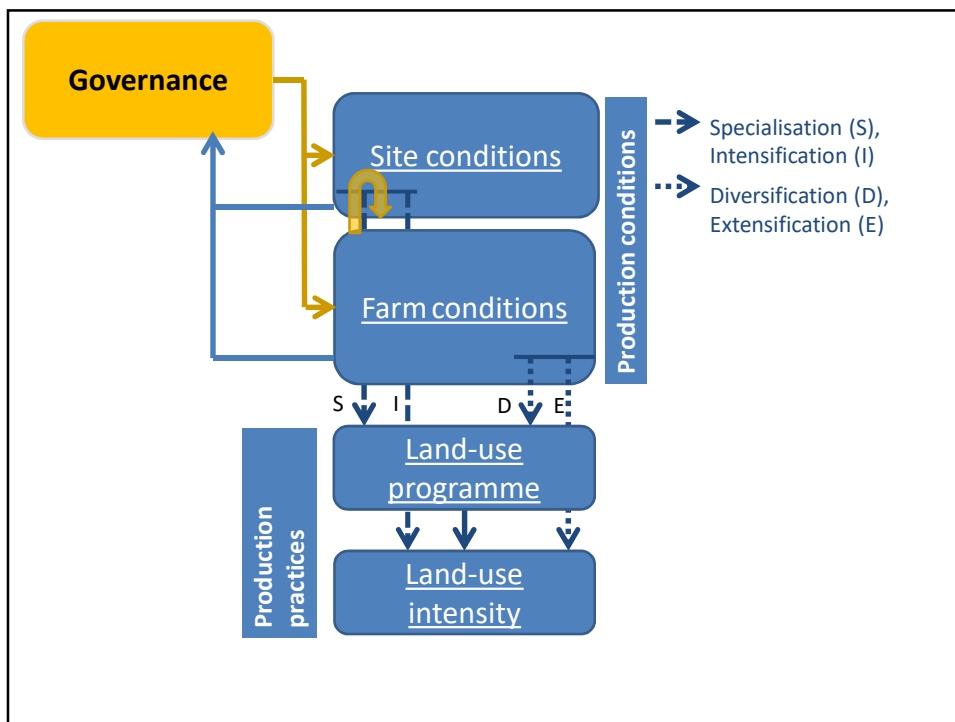


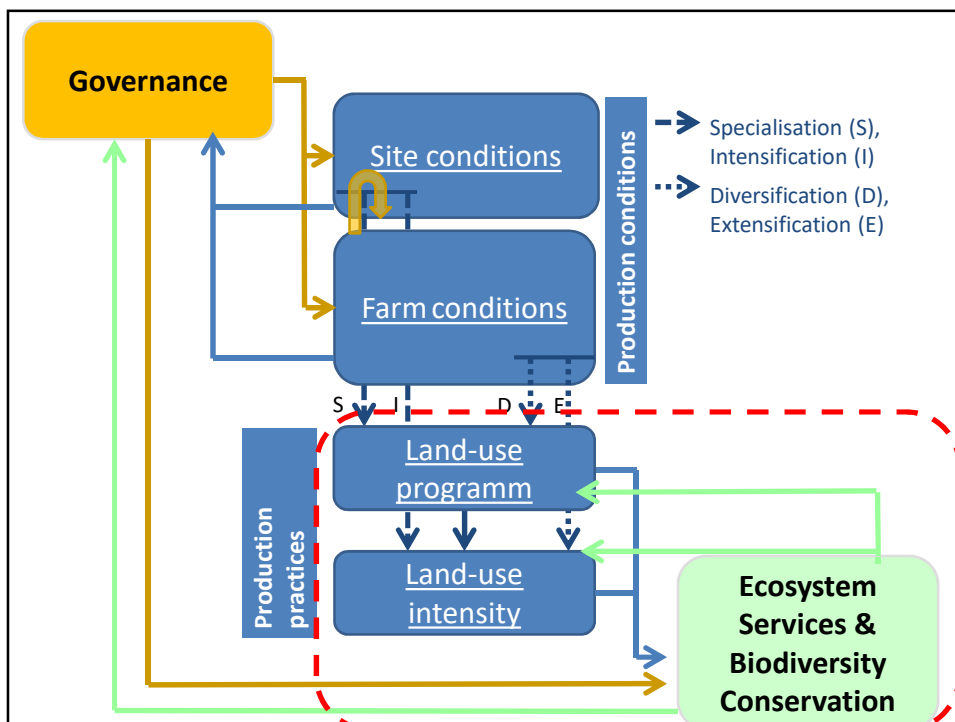
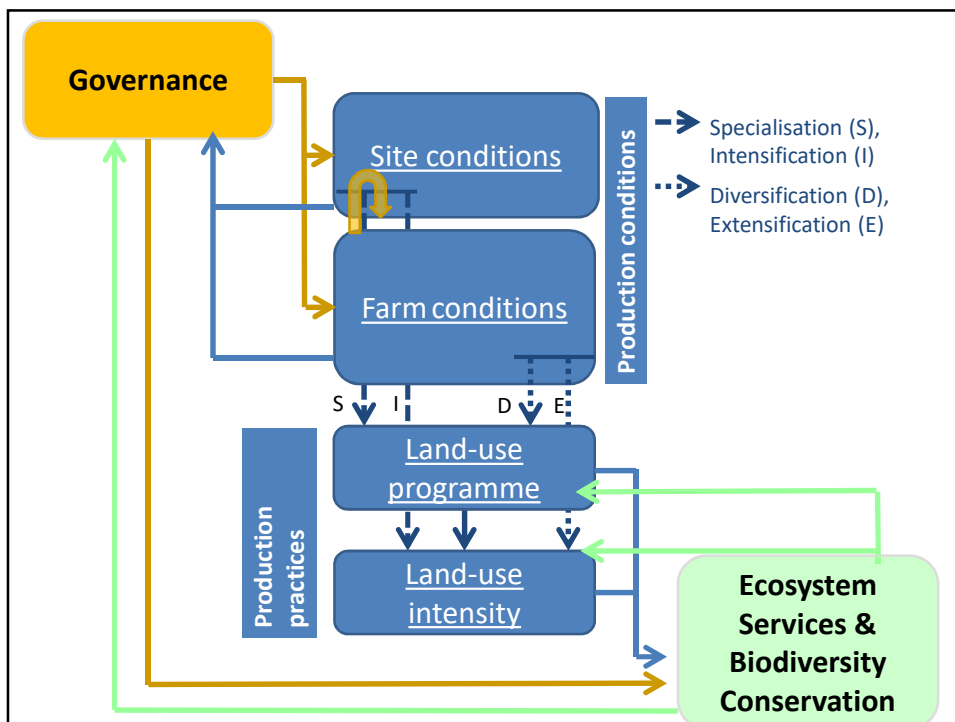
a) connect governance-agriculture-ES,

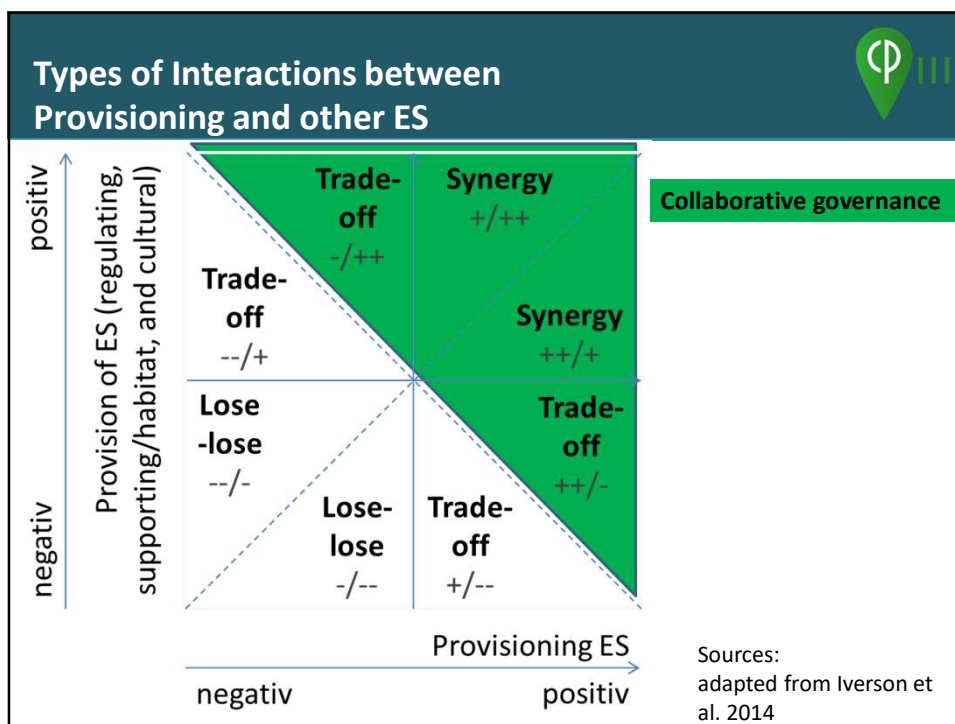
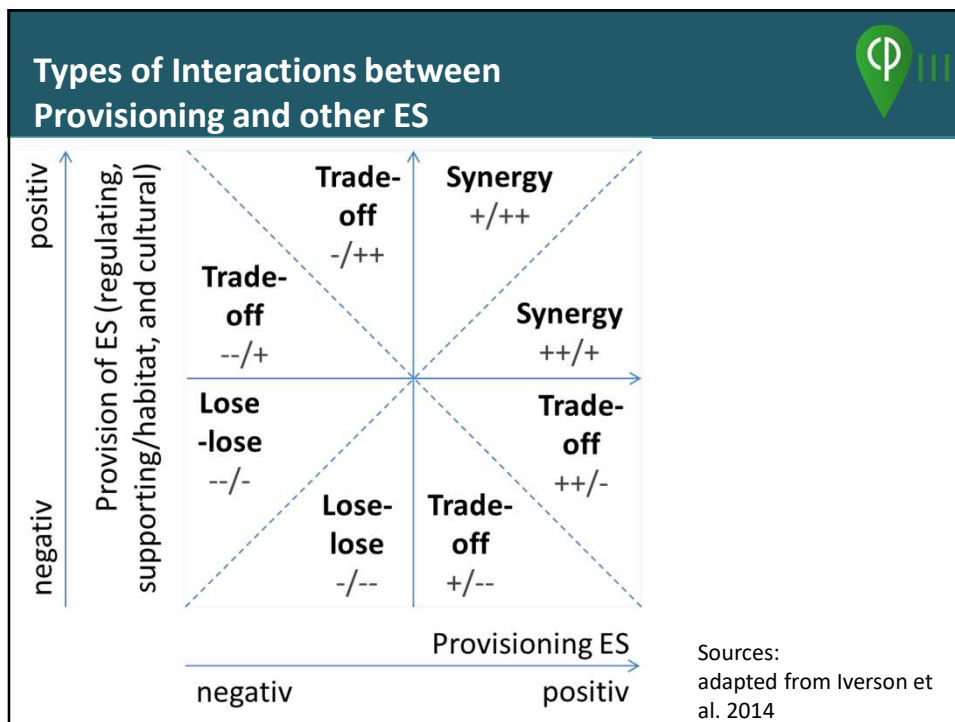
b) regional application

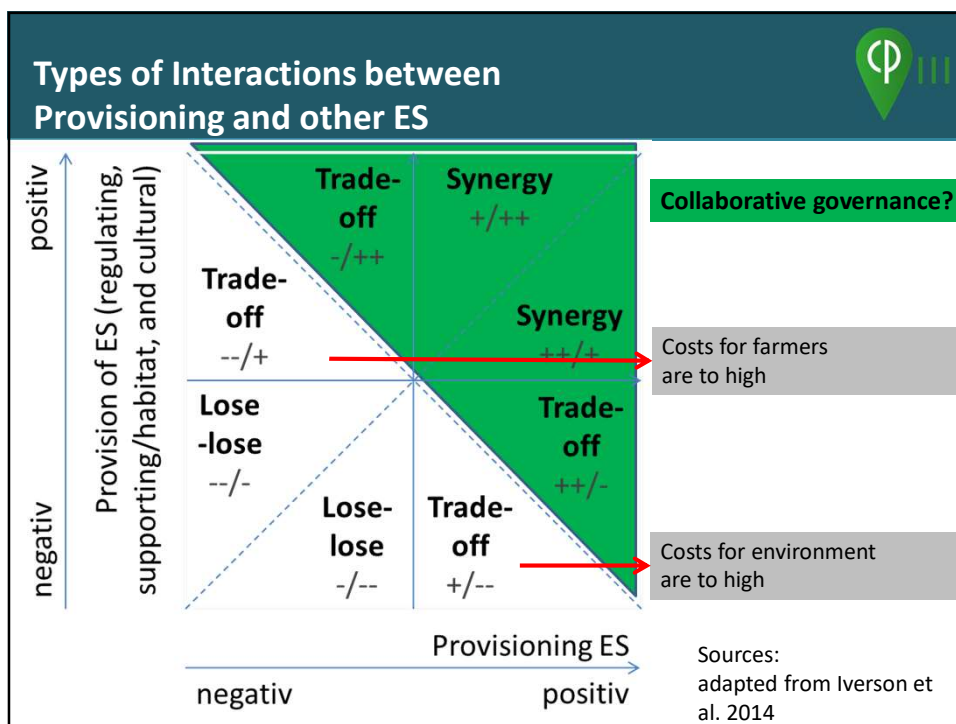
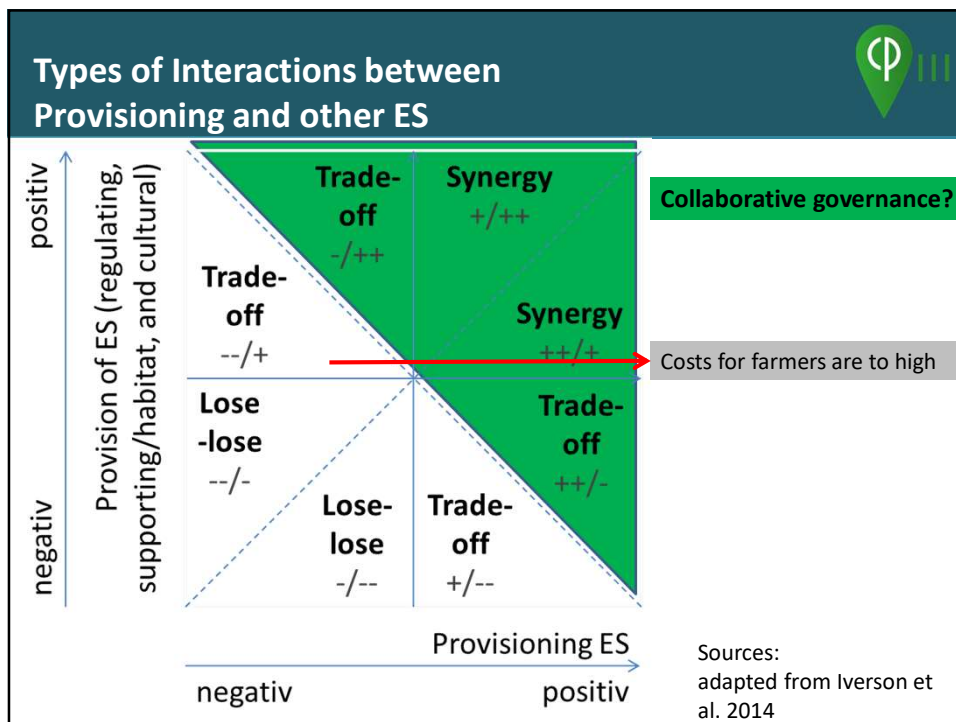
Sources: adapted from Kuhlmann 2015

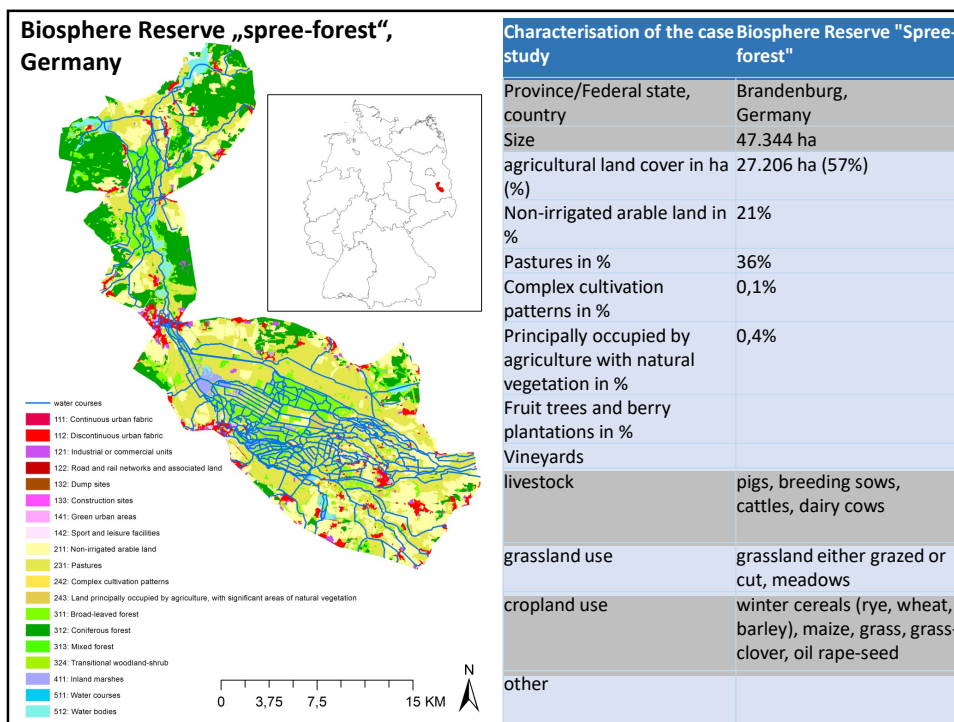
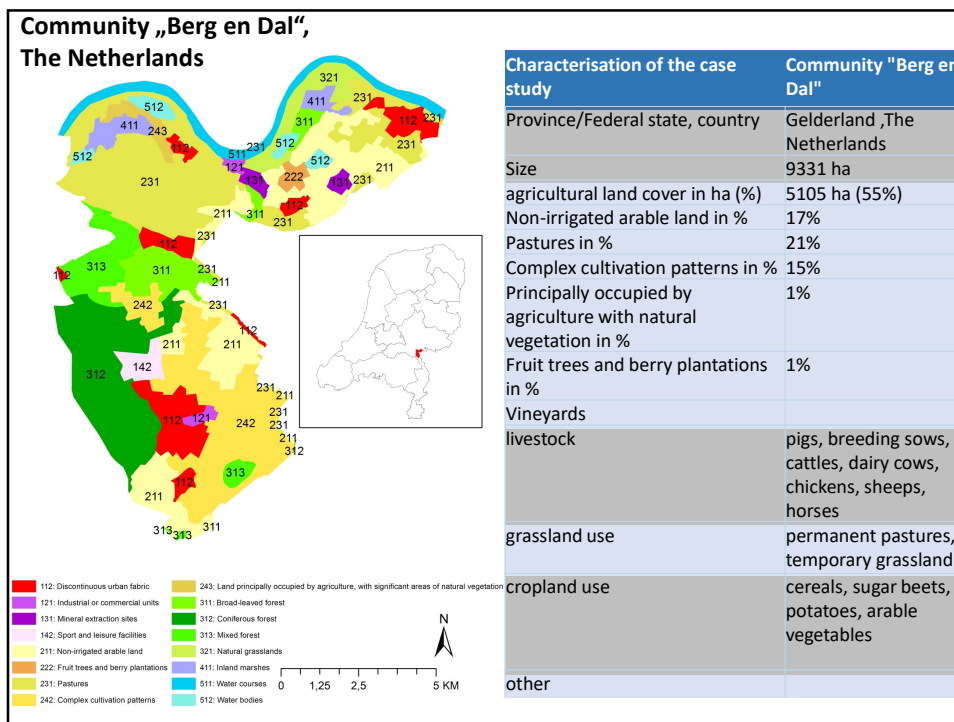


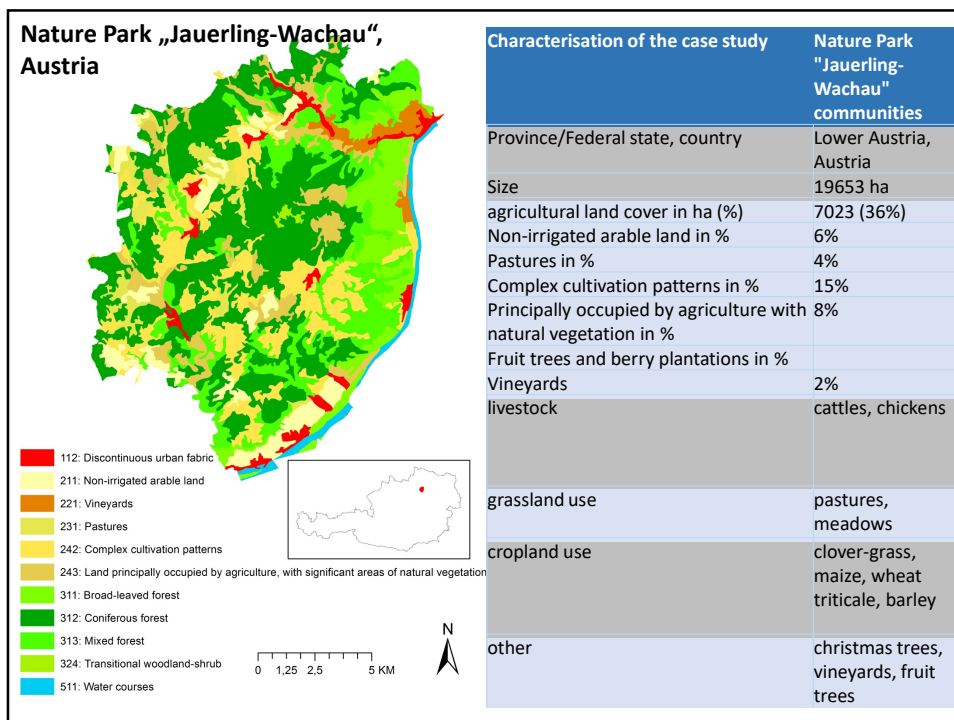












Synergies and trade-offs aimed by governance

- High intensive agriculture vs. landscape structure,
- access to the landscape (visitors, nearby recreation)
- Establish landscape elements (targeted species)

- Balancing demands of different users (agriculture, forest, fisheries, tourists)
- specific regulation of water
- Sustain the cultural landscape (open character)

- Support regional brands, labels (vine, fruits, christmas trees, agricultural products)
- Sustain cultural landscape & agriculture (retated to chr. trees, agricultural structure)

Synergies and trade-offs aimed by governance CP III




- High intensive agriculture vs. landscape structure,
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Synergies and trade-offs aimed by governance: spree-forest CP III







- Balancing demands of different users (agriculture, forest, fisheries, tourists)
- specific regulation of water
- Sustain the cultural landscape (open character)

Governance Approach	water advisory board in the upper spree-forest
Ecosystem services	balancing ES: agricultural products, fishes, wood, recreation and tourism, nature protection targets

Governance	water advisory board in the upper spree-forest
Ecosystem services	agricultural products, fish, wood, recreation and tourism, nature protection targets
Management	water storage level: winter & summer level, steering the water supply in the water courses, steering the water balance for agriculturally & forestry plots, arrange target dates (farmers, foresters, boat trip suppliers)
Stakeholders	levels: administration federal state, county, communities; professional associations, individuals and companies sectors: water managem., agriculture, forestry, fishery, tourism
Agricultural production and farm conditions	site conditions: availability of water in dry and wet years, nutrient supply for flooded meadows, workability of the plots farm conditions: arrange the agriculturally target dates into the demands of the other users (access to the plots for management events (ploughing, sowing, .../ cutting meadows)
Spatial fit	specific to floodplain with a complex system of water regulation
Temporal fit	regularly meetings twice a year: winter storage level, summer storage level

Synergies and trade-offs aimed by governance: spree-forest



	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="background-color: #cccccc;">Governance Approach</td> <td>Citizen foundation cultural landscape spree-forest</td> </tr> <tr> <td>Ecosystem services</td> <td>cultural landscape (open character): cultural services, recreation and tourism, nature protection targets</td> </tr> </table>	Governance Approach	Citizen foundation cultural landscape spree-forest	Ecosystem services	cultural landscape (open character): cultural services, recreation and tourism, nature protection targets
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Governance	Citizen foundation cultural landscape spree-forest
Ecosystem services	cultural landscape (open character): cultural services, recreation and tourism, nature protection targets
Objective & projects	Objective: Generate financial sources from private sector (companies, tourists, ...), work independently, Projects: meadow stock, public bee-keeping, ...
Stakeholders	Founders: counties, communities; associations, individuals and companies Steering Committee and Curatorship: both deliver professional input, functions: project development, control function
Agricultural production and farm conditions	site conditions: Generate a market for the management of the meadows for farmers (request to farmers)
Spatial fit	specific to the cultural landscape of the floodplain, for example they target the not easily to maintain, small meadows
Temporal fit	the budget can be used independently from the financial year

Summary



- collaborative approaches
 - can target specific site conditions (e.g. floodplain, complex water regulation)
 - can target gaps of the AECM (e.g. open landscape, Spree-forest)
 - can improve the site conditions and help individual farmers (e.g. regional brands and labels, Spree-forest, Jauerling-Wachau)
- established collaborative approaches allow fast and site specific reaction and involve specific and region-based knowledge
- non well-established collaborative approaches need time to react

Thank you!!!



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cp³ partners:



cp³ funding scheme:



cp³ national funders:

