

Methods	Definition
Institutional analysis *	An analysis of the rules regulating the behaviour people, groups or organizations, paying attention to formal regulations and laws and/or informal rules about customs and practices. The interest lies in what rules have produced current behaviour, or what rules might produce targeted behaviour. Institutional analysis merges approaches from law, economics and organizational studies. [OpenNESS glossary]
Ecosystem services impact models	To measure the environmental effect of a scheme a distinction will be made between performance and outcomes. Performance relates to the uptake of the schemes and the effects on agricultural practices as described in the agreements. The outcomes relate to the effects of farming on the quality of the environment and subsequently the provision of ecosystem services. The impact model is thus, following Primdahl et al. (2003): 1) implemented AECM → 2) adapted farming practices → 3) effects on the adapted farming practices on environmental quality.
Ecosystem service modelling/ mapping	mapping is a useful tool to illustrate the spatial mismatch between ecosystem services supply and demand. Maps are useful for communication with stakeholders and to support decision-making. An indicator is selected per ecosystem service. Models or other quantification methods generate the values for this indicator, which are displayed on the maps (Crossman et al. 2013).
Transaction cost analysis	<i>still awaiting input</i> see: transaction costs
Social network analysis	Social network analysis (SNA) is one methodological approach that has been found very useful in dissecting and better understanding complex governance arrangements. In this context, it has been applied in numerous studies to understand how social structures and relationships impact on natural resource management and ecosystem services governance (e.g. Isaac and Matous 2017, Mbaru and Barnes 2017, Bodin and Crona 2009). It aims to analyze how the structural features of an actors' networks, defined by the number

	and type of nodes and the social ties connecting them, inform individual choices on ecosystem management.
Net-Map tool	One particular method for social network analysis (SNA) is the Net-Map tool (cf. Schiffer and Hauck 2010). Net-Map is an interview-based, participatory network mapping method which combines quantitative SNA measurements with qualitative network narratives. The Net-Map tool aims to identify all relevant actors in a concrete governance setting, understand actors' roles and interlinkages, their motives, influence, and obtained benefits. The network maps co-created during the interviews by the interviewee and interviewer are then used to discuss striking characteristics of the mapped network, such as absent links between actors, very central actors, or similar where underlying reasons are provided through the qualitative information gathered through the interviews.
Stakeholders mapping	Stakeholder mapping is a descriptive-analytic tool to discover and visualize the relationship among the stakeholders of a focal issue (i.e. a land use planning process, an ecological restoration project, or a change of the legislation of protected areas, etc.). Background information about stakeholders is collected through media- and document analysis and key-informant interviews. Data are analyzed by qualitative methods in order to list the stakeholder groups relevant to the focal issue and to discover the intensity and character of their relationships. The final outcome of the analysis is the stakeholder map: a graphical representation of stakeholder relationships which includes all relevant stakeholder groups, their subgroups, their basic interests in the focal issue, and the linkages among them. [OpenNESS Manual on Stakeholder Analysis]
Multi-criteria analysis	Multi-Criteria Decision Analysis (MCDA) is a general framework for supporting complex decision-making situations with multiple and often conflicting objectives that stakeholders groups and/or decision-makers value differently. MCDA methods are integrative evaluation methods in the sense that they combine information about the performance of the alternatives with respect to the criteria with subjective judgments about the relative importance of the evaluation criteria in the particular decision-making context.

Participatory workshop	<p>An event involving possibly all the different stakeholders interested in the analysed issue. The interactive workshop is using both systematically collected empirical material (surveys, interviews, document-analysis, etc.) and stakeholders knowledge to gain new insights, to increase engagement and add legitimacy of the decision-making. It uses several different participatory methods.</p>									
SWOT analysis	<p>SWOT stands for Strengths - Weaknesses - Opportunities - Threats. The SWOT analysis is used in strategic planning and is intended to identify key factors that are important for achieving a specific goal.</p> <p>Strengths and weaknesses are internal characteristics of the system under consideration and can be directly influenced by an actor. Opportunities and threats are external conditions that cannot be directly influenced by an actor (e.g., politics or the economy). The SWOT analysis is a method of subjective examination of data. For this purpose, the data are arranged in a matrix:</p> <table border="1" data-bbox="528 1120 1204 1442"> <tr> <td data-bbox="528 1120 751 1205">SWOT strategy matrix</td> <td data-bbox="751 1120 975 1205">Strengths</td> <td data-bbox="975 1120 1204 1205">Weaknesses</td> </tr> <tr> <td data-bbox="528 1205 751 1323">Opportunities</td> <td data-bbox="751 1205 975 1323">Using strengths that take advantage of opportunities</td> <td data-bbox="975 1205 1204 1323">Using opportunities to eliminate weaknesses</td> </tr> <tr> <td data-bbox="528 1323 751 1442">Threats</td> <td data-bbox="751 1323 975 1442">Using strengths to avoid threats</td> <td data-bbox="975 1323 1204 1442">Minimize weaknesses and avoid threats</td> </tr> </table> <p>[Fürst & Scholles (eds.) 2008; Hunger & Wheelen 2000]</p>	SWOT strategy matrix	Strengths	Weaknesses	Opportunities	Using strengths that take advantage of opportunities	Using opportunities to eliminate weaknesses	Threats	Using strengths to avoid threats	Minimize weaknesses and avoid threats
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Delphi-method	<p>The Delphi method is a systematic and interactive methods, mostly used for forecasting. In policy relevant situations Delphi is usually used to develop consensual ideas on potential policy pathways by paying attention to the integration of outlier opinion. The Delphi method consists of two or more rounds of questioning, either via personal (online or offline) questionnaires or group discussions. After each round the researchers or facilitators provide a summary of results (incl. answers and comments provided), and questions for the next</p>									

	round are developed on this basis, allowing experts to reconsider their opinion in each round.
Stated preference valuation	<p>Stated preference valuation is a term for survey-based methods which are often applied to estimate <u>willingness-to-pay</u> for non-market goods (e.g., <u>environmental public goods</u>) or for policy evaluation. In contrast to revealed preferences methods (using observations on actual behavior), they are based on hypothetical choices made in carefully designed situations.</p> <p>The contingent valuation method and <u>discrete choice experiments</u> are the most popular stated preference valuation methods.</p>
Economic experiments	typically use (cash) incentives to study economic decision-making under controlled conditions in abstract (laboratory) or somewhat contextualized (field) settings.
Public goods games	<p>are a widely applied <u>economic experiment</u>. In a public goods game, a group of people is endowed with resources which they can either place in a private or a joint account (public good). In a standard linear voluntary contributions public goods game, all benefits are internalized from the private account, but only a fraction is internalized from the group account. However, the group account generates additional benefits, creating a social dilemma (a clash between self-interest and group interest) where it is individually rational to free-ride on the contributions of others, but socially optimal to contribute everything.</p> <p>In Contracts2.0 we will use public goods games to investigate the impact of contract characteristics on collective decision-making.</p>
Choice experiment	<i>See: Discrete Choice Experiment (DCE)</i>