

## **Stakeholder networks for ecologically sustainable land use decisions: experiences from two case studies in Estonia**

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### **Abstract**

The Estonian concept of ecological networks aims at ensuring sustainable use of landscapes and is being brought into practice through various land use sectors. Taking stakeholder analysis and actor network approaches as starting points; we first identify stakeholders related to ecological networks and explore the relationships between them across different policy levels. Secondly, we analyze the potential of participatory arenas to foster information and knowledge exchange. In-depth interviews with stakeholders from case studies at regional (Harju County) and local level (Keila Municipality of Harju County) form the empirical basis of our analysis. Results from the Harju County case show that a set of stakeholders connected to each other through formal responsibilities and shared or conflicting interests participate in the governance of ecological networks in Estonia. Spatial planners, environmental impact assessors, and scientists have a central position in this stakeholder setting, being connected to many other actors. Interactions between these stakeholders occur mostly in formal policy processes which are, though, not regarded as efficient in terms of meaningful deliberation and interest bargaining. A mixture of informal relationships and formal arenas of participation have proven to be successful for gaining knowledge input for sustainable land use decisions from certain local resource users (foresters, hunters) and from scientists. Moreover, stakeholders, even with contradictory interests, are starting to perceive the importance of cooperation to achieve their goals. The second case (Keila Municipality) identifies main sources of and ways to use environmental information relevant for ecologically sound land use decisions at local level. Additionally, stakeholder's satisfaction regarding their involvement in local land use governance and adequacy of data accessibility for them is analyzed. We found considerable dichotomies in the way in which local authorities and other stakeholders view their role and needs for environmental information in the local governance of land use. Both cases refer to the need for mutual understanding between stakeholders about each others' activities, goals and needs in order to enable constructive cooperation among them.

*Keywords:* land use; stakeholder analysis; stakeholder and ecological networks; participation; information flows; knowledge exchange