

# Measuring Social Learning in Participatory Approaches to Natural Resource Management

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# Measuring Social Learning in Participatory Approaches to Natural Resource Management

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## ABSTRACT

The role of social learning as a governance mechanism in natural resource management has been frequently highlighted, but progress in finding evidence for this role and gaining insight into the conditions that promote it are hampered by the lack of operational definitions of social learning and practical methods to measure it. In this article, we present a simple and flexible method to measure social learning, whether it has occurred and to what extent, among stakeholders in natural resource management. The method yields measurements of social learning that are visual, quantitative and qualitative. First, we elaborate our definition of social learning as a convergence of perspectives and outline how stakeholder perspectives in natural resource management can be described with Cultural Theory. Next, we provide a generic description of the method, followed by two examples illustrating its application to the domains of water and land management. Finally, we discuss relative strengths and weaknesses of the method and how it could be applied to improve our understanding of factors that contribute to social learning. Copyright © 2013 John Wiley & Sons, Ltd and ERP Environment

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## Introduction

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**M**ANY OF THE CURRENT ISSUES IN THE MANAGEMENT OF NATURAL RESOURCES CAN BE QUALIFIED AS 'WICKED' OR 'unstructured' problems (Hisschemöller and Hoppe, 1995; Rittel and Webber, 1973). These are complex and dynamic multi-actor problems, characterized by structural uncertainties in knowledge and a diversity of perspectives on what the problem actually is and how it should be solved. A typical example concerns adaptation of natural resource management to climate change (Adger *et al.*, 2007). To cope with such problems, participatory approaches that involve stakeholders in the development of integrated solutions have become popular (Reed, 2008). The expected benefits of such a participatory approach can be summarized as (1)

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