

Institutional elements for adaptive water management regimes. Comparing two regional water management regimes in the Rhine basin

Sabine Möllenkamp¹, Machiel Lamers², Eva Ebenhöf¹

¹Institute of Environmental Systems Research (USF),
University of Osnabrück, Germany

²International Centre for Integrated assessment and Sustainable development (ICIS), Maastricht
University, The Netherlands

Abstract

In times of rapidly changing physical and regulatory environments, adaptiveness is one of the central parameters of sustainable water management. To investigate how different institutional settings are able to adapt to new conditions, two organisational settings in the Rhine basin are compared: the German water association Wupperverband and the Dutch water board Hoogheemraadschap De Stichtse Rijnlanden (HDSR). To facilitate comparison, the institutional settings of both regulatory systems are analysed based on empirical data, and using the Institutional Analysis and Development framework (IAD) (Ostrom 2005).

Historical development, Institutional settings for membership, roles and decision making of responsible water management agencies are analysed and compared in view of important adaptive management prerequisites. We argue that combinations of different institutional elements influence the capacity of both water agencies to adapt to changing conditions in an effective and legitimate way. Special focus is put on the role of emergent leadership, social learning, and both formal and informal forms of participation by stakeholders outside of the regulatory system.