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“Filling gaps and removing traps  
for sustainable resource management”

## From Conflict to Engagement in Agricultural Water Governance: The Case of Zayandeh-Rud Basin, Iran

MOHAMMAD NASER REYHANI<sup>1,2</sup>, PHILIPP GRUNDMANN<sup>2,1</sup>

<sup>1</sup>*Leibniz Institute for Agricultural Engineering and Bioeconomy, Germany*

<sup>2</sup>*Humboldt Universität zur Berlin, Division of Resource Economics, Germany*

### Abstract

With rapid population growth, expansion of agricultural areas, industrialisation and urbanisation, effective engagement of multiple stakeholders is crucial in ecological and political dimensions of spatial planning during the times of changing climate, particularly in countries facing water scarcity. The main objective of this paper is to enhance the potential contribution of stakeholder analysis to an effective stakeholder engagement by considering novel factors like stakeholders capacity for change, distinct formal and informal relationships, and perception of stakeholders. Our findings are based on a case study of the Zayandeh-Rud river basin in central Iran that suffers from growing socio-economic and environmental consequences of water scarcity. In this study we used a qualitative research design by conducting series of interviews, focus group discussions, and workshops with a total number of 74 people from water, agriculture and environment sectors, farmers and civil society. Additionally, three main groups (affecting, affected, and affected) of the identified key-stakeholders (n=156) were asked in form of a self-administrated questionnaire. Relying on common understanding of stakeholder engagement in water governance, the research design has been formed jointly, stakeholders have been identified and categorised based on their level of power, interest and capacity for change, and finally mapped by considering the type and degree of inter-relations using Social Network Analysis tool. Notably, we obtained these results after analysing the perceptions of the three groups of key stakeholders across the entire basin. An elaborated stakeholder map and social network proved to provide valuable findings for decision makers to understand: how the roles and responsibilities are shared, how they interact, and how they can get engaged effectively? As an outcome, an adaptive process of Participatory Stakeholder Analysis with respective tasks has been introduced for formulation of engagement strategies. Our analysis extends the literature on institutional change, and informs the debate over effective engagement process toward adaptive governance of resources.

**Keywords:** Engagement process, institutional change, participatory stakeholder analysis, water governance