Institutional Settings in Transboundary Water Management: Lessons from the Fergana Valley and the Lower Jordan Basin

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Transboundary water management should mean the effective and fair allocation of water, but one of its main problems is the design of adequate institutions between upstream and downstream users that guarantee this, and this often leads to severe conflicts between riparian states.

In this publication we concentrate on transboundary water management by focussing on the institutions and processes within the governance systems. By analysing and comparing the governance systems in two case studies – the Fergana Valley and the Lower Jordan Basin Valley – we have drawn some general lessons for the institutional settings for transboundary water management conditions. We will include the rules and regulations as set by the international water law in our analysis.

Our research is part of the Interdisciplinary Research Group Society – Water – Technology (IRG SWT) of the Berlin Brandenburg Academy of Sciences and Humanities.

Our analytical method is inspired by the diagnostic approach of Ostrom and Cox (2010) and Ostrom (2009). The evaluation framework (see
Table 1) is divided into different system classes and their arrays. The choice of these system classes corresponds widely to the selected thematic foci of the Interdisciplinary Research Group, namely Water (resource system class), Society (governance and social system class) and Technology (technological system class).

We briefly describe the historical development and geographic situation in the two case studies. Following the general description of the case studies we focus our analysis on institutions and rules, in order to conduct a comparative analysis of the investigated institutions. Based on this comparative analysis and under consideration of exemplary institutions from other transboundary basins we develop some examples of instruments for an adaptive water basin management.
Table 1. Evaluation framework of major water engineering projects (based upon Ostrom and Cox (2010) and Ostrom (2009))

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<th>Systems and Processes</th>
<th>Governance Systems</th>
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<td>Governance mode</td>
<td>Capacity and social capital</td>
<td>Monitoring (environmental, social, economic)</td>
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<td>Productivity and effectiveness</td>
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<td>Resource challenges (e.g. climate and demographic change)</td>
<td>Network structure</td>
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<td>Outcomes</td>
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<td>Ecological Performance (e.g. exploitation, ecosystem resilience and resistance, biodiversity, sustainability)</td>
<td>Economic Performance (e.g. efficiency, cost-recovery, cost-benefit ratio, external costs)</td>
<td>Social performance (e.g. equity, accountability, sustainability)</td>
<td></td>
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