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Interbasin water transfers and integrated water resources management; where engineering, science and society interlock

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Pressure on water is increasing with the demand for it. The risk that the required amounts of water will not be available is increasing in many semi-arid areas because of expected climate change impacts. Access to water must be secured. Interbasin water transfers are designed to do just that, namely to artificially convey water to where people need it. They are typical supply oriented engineering measures to large societal challenges. The engineering works are frequently daunting, involving diversion works, tunnels and/or large pumping schemes and reservoirs, and the costs are correspondingly large. The scale of engineering works and funds required are indicative of the magnitude of the needs and interests to be served.

Interbasin water transfers trigger pertinent questions from different interests groups and communities involved and affected. These questions typically address a great variety of issues related to different disciplines and academic traditions, including technical feasibility, technological challenges and the need for expert systems (engineering), environmental impacts (ecology), implications from a rights perspective, both municipal and international (law), how benefits and costs are distributed (economics), and issues related to public participation and the wider political process (public administration and political science). The multi-disciplinary study of such transfers has the potential to reveal how different academic discourses are strategically utilised, often within the same stated framework of "integrated water resource s management".

The paper will apply these general ideas to the case of the River Linking project in

India, which intends to transfer 178 km3 yr-1 for domestic and irrigation use as well as for hydropower generation. The paper intends to conclude how the phenomenon of interbasin water transfers can be related to principles of integrated water resources management.