# Values and Water Governance in the Upper Paraguay River Basin, Mato Grosso, Brazil

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## Introduction

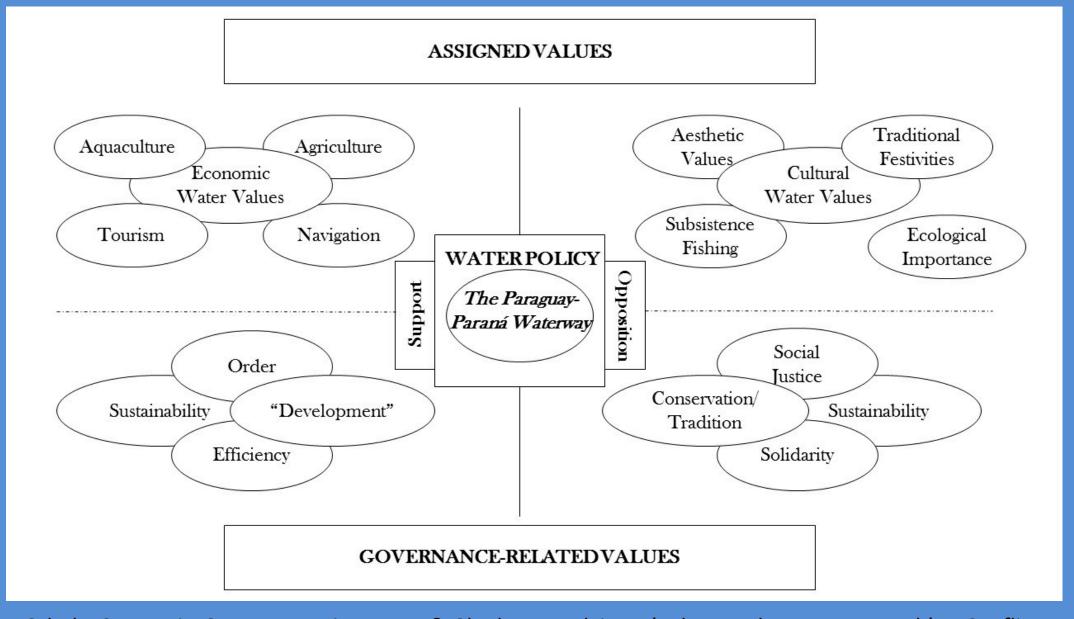
- Values are a core variable in several disciplines, including ecological economics and environmental psychology
- Values are seen as 1) a factor to predict people's preferences, including for different water governance scenarios, and 2) determining the political legitimacy of water governance projects
- In this PhD project, I studied the values surrounding water governance in the Upper Paraguay River Basin, Mato Grosso, which contains parts of both the world's biggest wetland (the Pantanal), as well as the rapidly expanding agribusiness and soybean frontier of Brazil

# Methods

- The PhD employed a mix of qualitative and quantitative methods
- In a first stage, 24 semi-structured interviews were conducted with stakeholders from water-related sectors (October-December 2014), representing government agencies, civil society, NGOs, academics, as well as the agribusiness, tourism, fishing, and navigation sectors
- In a second stage, 1068 structured interviews were carried out with members of the public to evaluate water governance in the river basin, as input into a Structural Equation Modelling (SEM) study (January-June 2016)

### Results

- Multiple and contradicting 'value landscapes' could be identified among stakeholders, which were described within a novel conceptual framework, published in Ecological Economics, vol. 131, 2017
- There is a clash between a more traditional set of values around non-monetary water values, and more economically oriented values
- This clash of values manifests itself e.g. in the conflict around the planned construction of a waterway through the Pantanal



Schulz, C., Martin-Ortega, J., Ioris, A.A.R., & Glenk, K.: Applying a 'Value Landscapes Approach' to Conflicts in Water Governance: The Case of the Paraguay-Paraná Waterway, submitted to *Ecology and Society*.

### Future

- To conclude the PhD project, the quantitative data collected in 2016 will be analysed, using Structural Equation Modelling Techniques (SEM)
- The goal is to establish whether and how the identified value landscapes correlate with water governance preferences, as the qualitative fieldwork would suggest
- As a side project, I am also working on a further publication using the qualitative data from my previous interviews, discussing the status of water governance in Mato Grosso more generally



Settlers washing their clothes in the river, as seen on the road between Jaciara and Poxoréu, Mato Grosso, Brazil (C. Schulz, June 2016)

#### Acknowledgements

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