

# DATA AND INFORMATION MANAGEMENT IN TRANSBOUNDARY WATER GOVERNANCE: THE MAURI RIVER CASE

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# Introduction

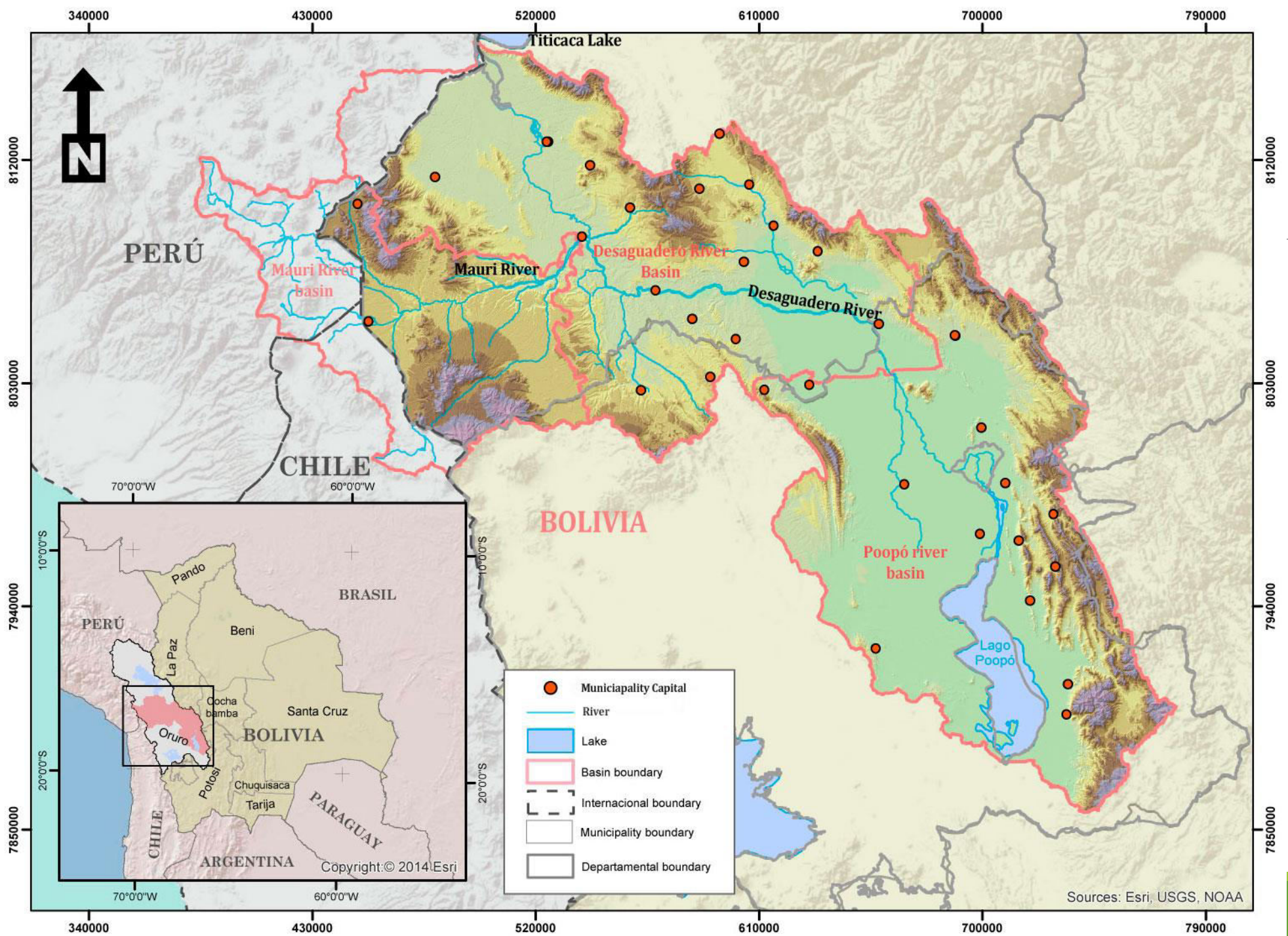
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The principle of equitable and reasonable utilization and the duty to prevent significant harm are the two main pillars of international water law.

Despite this principle, conflicts still surface when there is insufficient water to meet needs or when competing demands of watercourse states clash with each other.

In this context, efficient information management and exchange, partially derived from the aforementioned principles, may provide innovative solutions to the complex challenges of transboundary water law.

**These interdisciplinary solutions, drawn from social and technical fields, may encourage closer cooperation and conflict prevention.**





# Problematics

In this South American watershed, Peru and Chile have been transferring water from the upper basin to the Pacific coast (currently, there are further proposals to extract and transfer more water).

There have been various undertakings of the Special Tacna Project. These operations primarily concern water transfers from the main course of the Mauri and its tributaries towards the coastal basins of the Tacna región.

This has a direct impact on Bolivian communities regarding access to water resources; communities where water rights are a pivotal issue in the struggle to defend traditional livelihoods.



# DATA AND INFORMATION IN INTERNATIONAL WATER LAW

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The relevance and importance of data and information generation and exchange, as a critical aspect of the sustainable management of transboundary waters, has long been recognized by international water law. It has been identified and developed by principles that have arisen through multiple sources: customary law, judicial decisions and international treaties. No matter their origins, these principles are important for bolstering cooperative resource management through increased information exchange and communication.

There are two seminal international documents:

- The Helsinki Rules (1966) and
- The UN Watercourses Convention (1997).

## HELSINKI RULES

Recommends the availability of information (with a view to dispute prevention), the notification of other parties if possible changes in water basin occur, and the accessibility of all relevant information in the case of questions or a dispute over water resources.

## UN WATERCOURSES CONVENTION

Watercourse states shall on a regular basis exchange readily available data and information on the condition of the watercourse, in particular that of a hydrological, meteorological, hydrogeological and ecological nature and related to the water quality as well as related forecasts.

If a watercourse state is requested by another watercourse state to provide data or information that is not readily available, it shall employ its best efforts to comply with the request but may condition its compliance upon payment by the requesting state of the reasonable costs of collecting and, where appropriate, processing such data or information.

Watercourse states shall employ their best efforts to collect and, where appropriate, to process data and information in a manner which facilitates its utilization by the other watercourse states to which it is communicated.

# INFORMATION GENERATION

Public participation

Water rights mapping

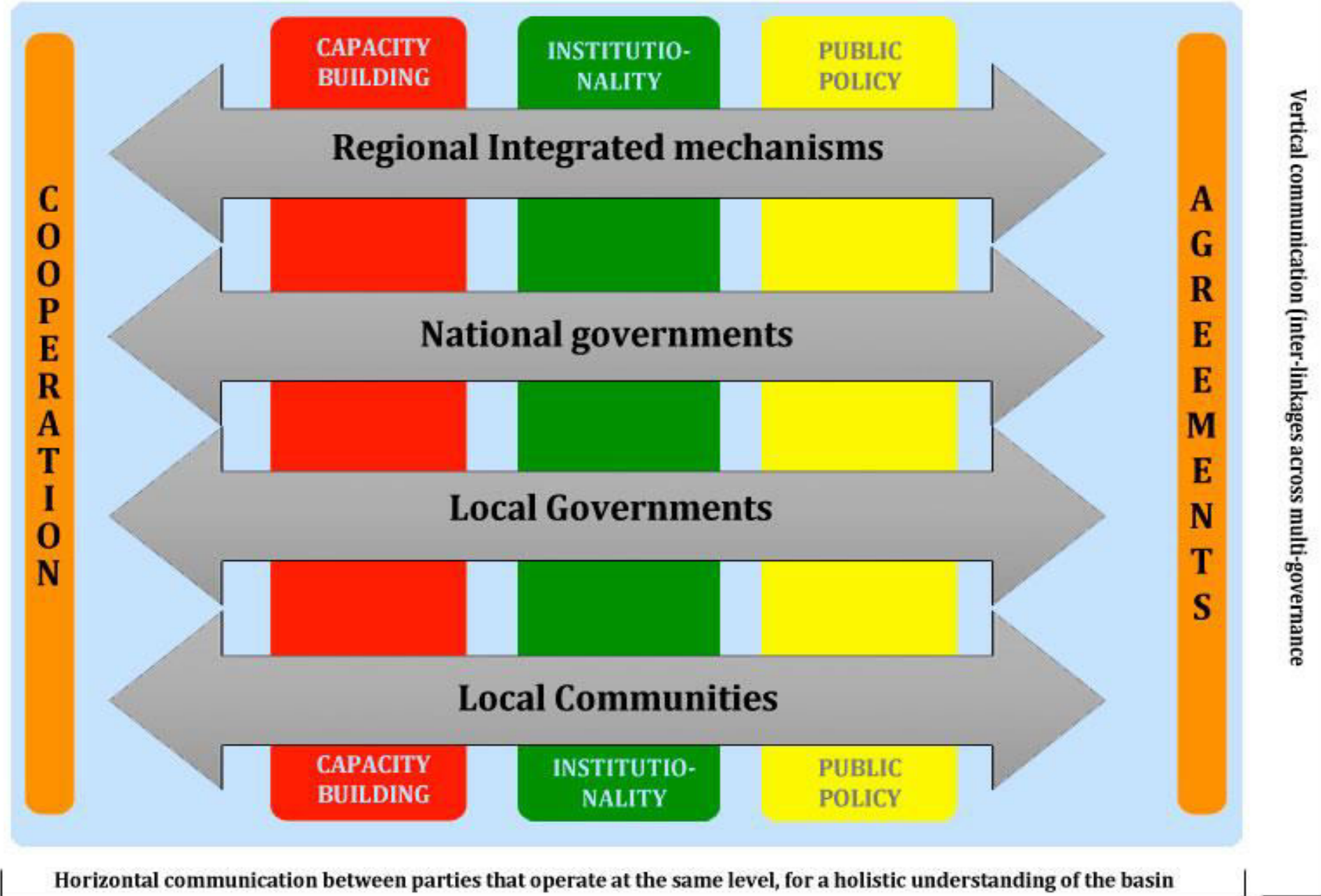
Water requirements

Allocation model





# Multi-level water governance





# Conclusions

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It should also be recognised, as the case of the Mauri shows, that effective water governance not only requires the willingness of parties to cooperate, but also a comprehensive system of information management, exchange and communication.

In this case, the information and conclusions of the study, together with the principles of water sharing, have been crucial in the recent talks between the governments of Bolivia and Peru (October 2010). Both governments have decided to implement hydrometric bi-national stations to jointly monitor the water sharing of the Mauri river.

It has also been decided to construct a mathematical management model using Mike Basin39 and a Water evaluation and planning system in order to establish the equitable amount of water for each country without causing harm to the other.

# Conclusions

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The approach of the case studied could help to solve other similar transboundary river cases in the region.

The position and proposals of Bolivia and Peru are directly or indirectly based on studies reflecting the importance of a good base of information in negotiations in transboundary basins.

The principle is that the information and knowledge generated with the essential participation of stakeholders and users, help decision-makers and negotiators to reach agreements on transboundary basins.

