

Empowered to Govern Hydropower?

River Basin Organizations between Water and Energy

GWSP Conference

19 May 2014, Bonn, Germany

Dr. Susanne Schmeier
GIZ – Transboundary Water Management
susanne.schmeier@giz.de

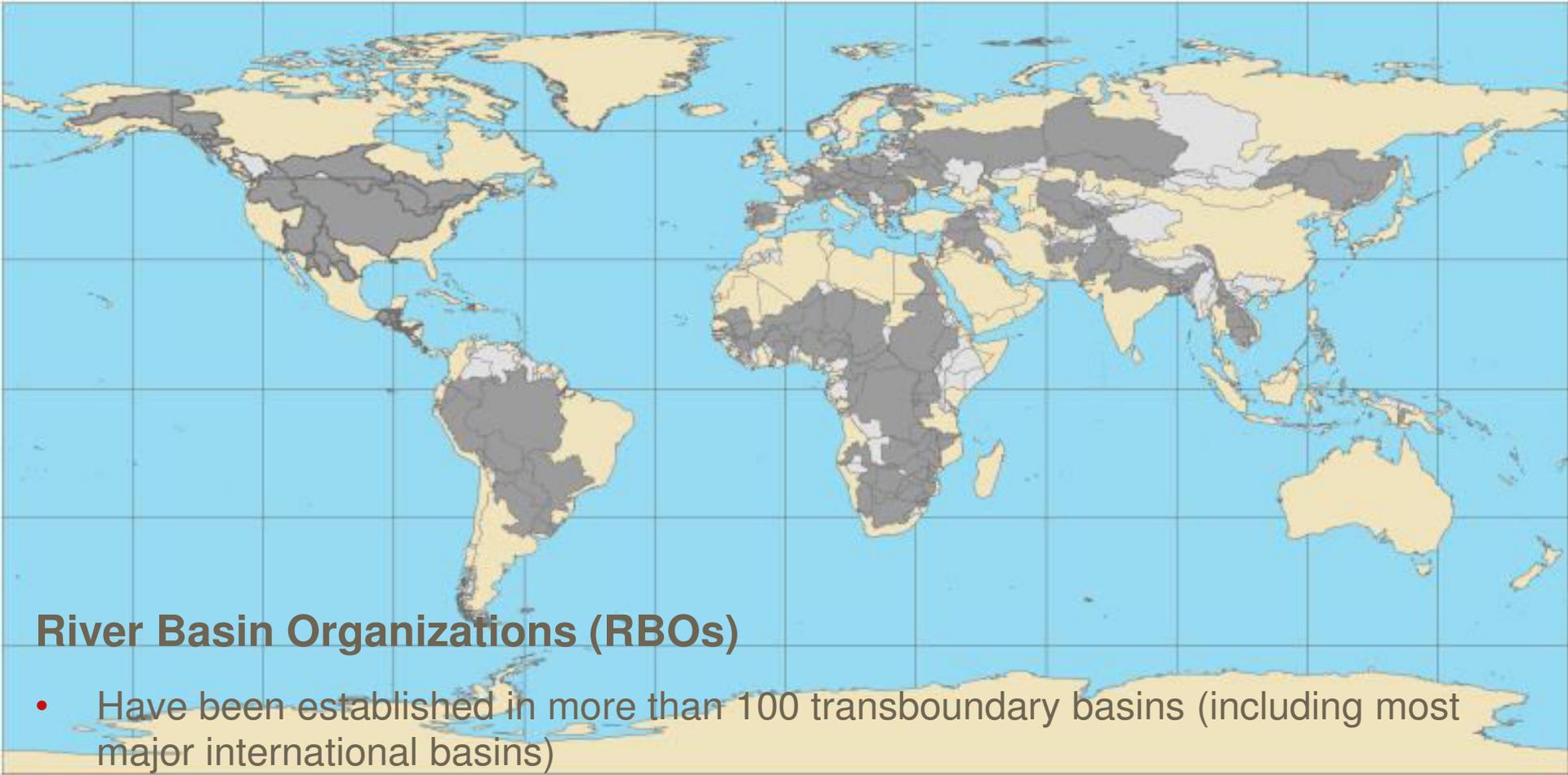
Hydropower Challenges in Transboundary Basins

Hydropower development influences rivers, ecosystems and riparians by

- Altering river flows (including sediments), water availability and quality
- Affecting riverine flora and fauna (biodiversity), including riparian agricultural and food needs
- Influencing other water uses (agriculture, industry, household) and related services (fisheries, navigation)
- Influencing socioeconomic opportunities of riparian communities and countries

Transboundary basins add an international dimension and hence more complexity – upstream-downstream differences in interests, political or economic power differences, spill-over effects and interdependencies...

River Basin Organizations as Response to Water Governance Challenges



River Basin Organizations (RBOs)

- Have been established in more than 100 transboundary basins (including most major international basins)
- Are based on international agreements and often implement the commitments riparian states make in such agreements



Under which conditions are RBOs able to reconcile different interests among riparian states with regards to hydropower development towards sustainable river basin governance?



Hydropower Governance by RBOs – Key Means and Mechanisms

For addressing hydropower-related challenges successfully, RBOs require a set of institutional design characteristics, namely

- The inclusion of hydropower into the RBO's functional scope
- Well-defined and efficient decision-making mechanisms
- Data and information exchange mechanisms
- Monitoring and compliance mechanisms
- Procedures for notification of co-riparians on projects
- Mechanisms for ensuring a fair distribution of costs and benefits
- Pre-defined and functioning dispute-resolution mechanisms



Bridging the Water-Energy Divide – RBOs and Hydropower Governance

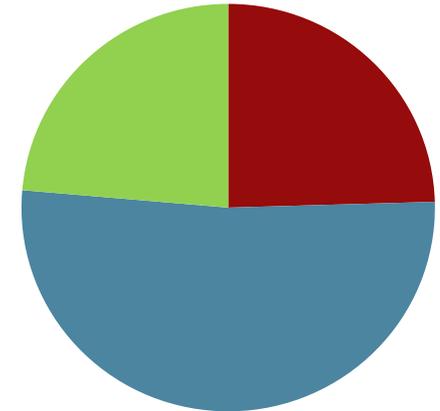
IWRM and Nexus-approaches call for an integration of different uses, sectors and interests. For hydropower, this concerns

- Water quality and quantity
- Water use for agriculture, industry and households
- Water use of infrastructure (e.g. navigation)
- River ecology and riverine ecosystems, biodiversity

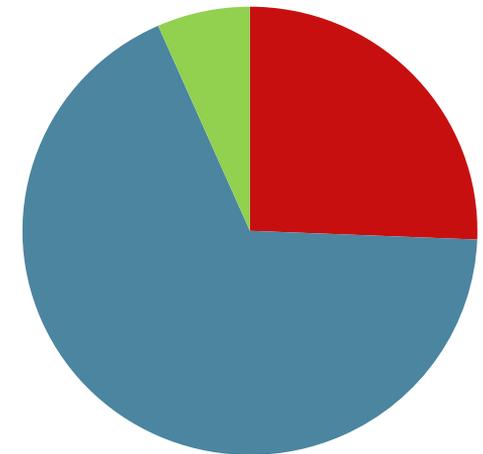
Consequently, various problems can occur due to

- An overly limited functional scope of RBOs/ incapacity to implement IWRM
- Exclusion of hydropower (specific projects) from RBO's mandate or work
- Insufficient use of synergies/opportunities from multi-purpose projects

Issue-Specificity of RBOs



■ Single-Issue ■ Few-Issue ■ Multi-Issue



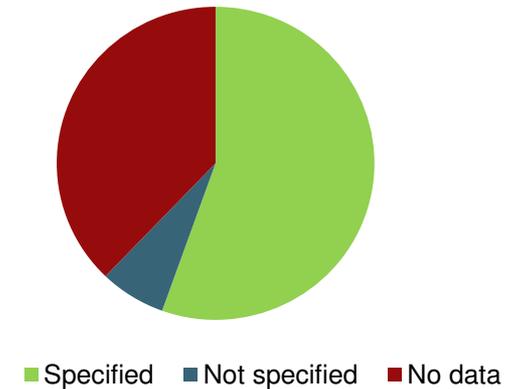
■ Hydropower ■ No Hydropower ■ Not categorized

Ensuring Sustainable and Cooperative Decisions

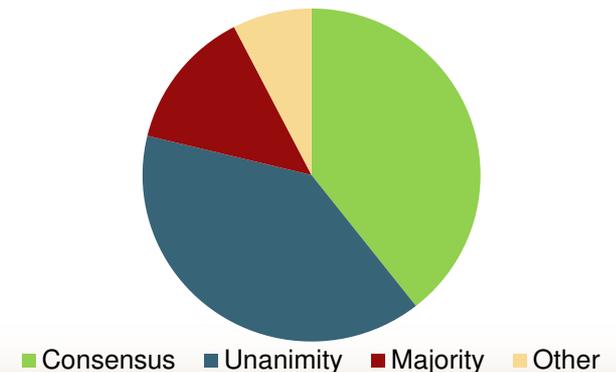
Pre-defined and well-functioning decision-making mechanisms are crucial for arriving at mutually acceptable decisions on hydropower, however

- Many RBOs do not possess decision-making mechanisms/rely on informal (bilateral) negotiation
- Processes are often insufficiently specified and unclear, leaving loopholes
- Where defined, in most cases, decision-making relies on consensus or unanimity principles
- Often problems of coming to decisions that are mutually acceptable to all actors involved (leading to compliance problems)

Specification of Decision-Making Mechanisms



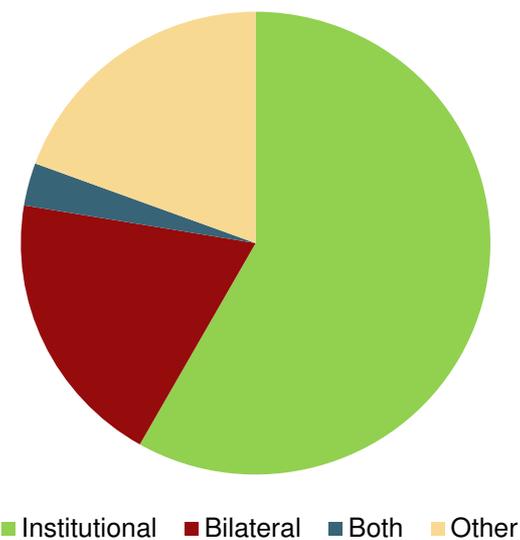
Decision-Making Mechanisms of RBOs



Sharing Data and Information on Hydropower and Beyond

Sustainably governing hydropower requires data and information on

- Hydrological and ecological state of the watercourse
- Current uses of water resources
- Existing and expected challenges to the watercourse
- Existing and planned hydropower projects
- Environmental impacts of projects
- Social impacts of projects
- Effectiveness of mitigation measures



RBOs play a crucial role in monitoring the state of the basin and exchanging data and information among riparian states.

However, data and information is often insufficiently available and shared – disadvantaging those riparians with less data available to inform their decisions

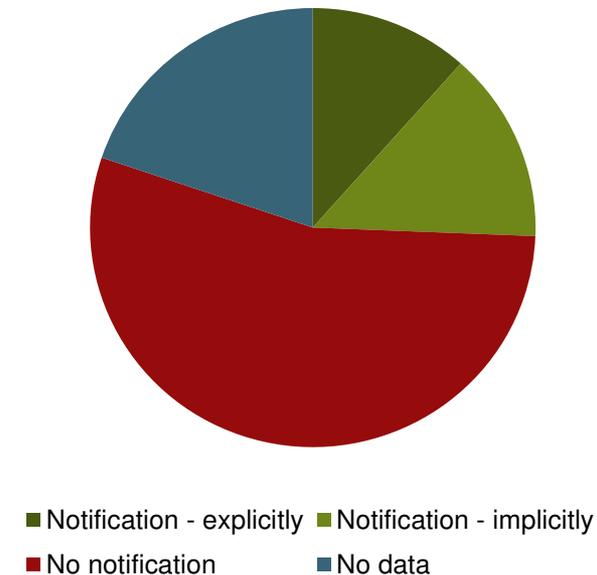


Ensuring Notification and Consultation

Notifying co-riparians about planned hydropower projects with a potentially transboundary impact (and sharing data/information on the project) is crucial for sharing information and bridging diverging interests, however

- Notification is specified in only $\frac{1}{4}$ of all RBOs (in more than half of these cases only explicitly by referring to international water law provisions)
- The vast majority of RBOs does not provide any notification mechanisms
- Where existing, notification requirements are not always complied with, especially if unilateral development strategies prevail

Notification Provisions





Sharing Costs and Benefits

Benefit-sharing is regarded as an innovative tool for bridging the water-energy divide and overcoming differences in riparian interests, however

- Very few RBOs provide cost and benefit-sharing mechanisms, especially at the transboundary level
- Most often, benefit-sharing is monetary and related to costs of specific projects from which benefits are derived
- Non-monetary benefit-sharing (e.g. hydropower for flood control) is extremely rare
- Often problems related to willingness to share benefits/unilateral development aspiration, especially when combined with power imbalances



	Irrigation		Energy		Navigation		Totals	
	Dama and Manantali	%	Manantali	%	Manantali	%	Total	%
Mali	6.04	11	18.59	52	12.66	82	37.29	35.3
Mauritania	16.7	31	5.36	15	1.81	12	23.87	22.6
Senegal	31.66	58	11.8	33	1.02	6	44.48	42.1
Totals	54.40		35.75		15.49		105.64	

Solving or Mitigating Disputes over Hydropower

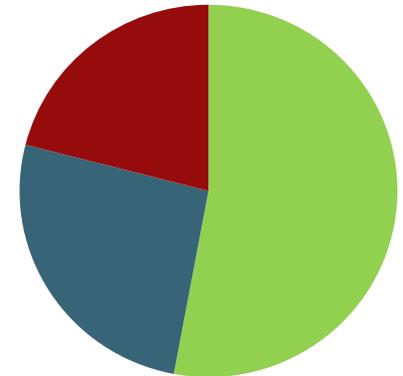


Disputes emerge due to differences among riparian states' interests (water-energy divide) – even once RBOs have been established.

Most difficulties with regards to dispute-resolution are due to

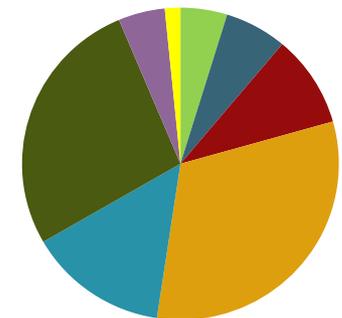
- Inexisting dispute-resolution mechanisms (in more than 25% of all RBOs)
- Ill-defined/insufficiently clarified dispute-resolution mechanisms
- Lack of competent instance for dispute-resolution (including lack of referral to external/neutral parties)
- Lack of follow-up mechanisms (including monitoring and enforcement)

Specification of Dispute-Resolution Mechanisms



■ Specified ■ Not specified ■ No data

Dispute-Resolution Mechanisms



■ RBO-level ■ RBO, bilateral
■ RBO, external ■ Bilateral
■ Bilateral, RBO ■ Bilateral, external

Conclusions



For successfully governing hydropower and its challenges, RBOs need to

- Be based on the willingness of members to cooperate and engage for mutual benefits
- Be involved in hydropower planning and management from the beginning
- Ensure the integrated and inters-sectoral management of water resources (water-energy nexus)
- Be equipped with efficient and functioning decision-making mechanisms
- Provide data and information sharing mechanisms and data-based decision-support systems
- Provide pre-defined and well-functioning dispute-resolution mechanisms
- Be supported by external actors where appropriate (foreign diplomats, international bilateral and multilateral donors, NGOs, arbitrators, etc.)



Thank you very much.



Dr. Susanne Schmeier, susanne.schmeier@giz.de

22.05.2014