Earth System
Science Partnership

Global Water
System Project

Report from the GWSP endorsed project Twin2Go

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Quick Facts

GWSP Global Water System Project

- Full Title: „Coordinating **Twin**ning partnerships **to**wards more adaptive **Go**vernance in river basins“
- EU project in the 7th Framework Programme
- Coordination Action
- Running from 2009 to 2011
- Consortium:

USF	**University of Osnabrück (coordinator)**	**Germany**
Adelphi	Adelphi Research gGmbH	Germany
Vituki	Env. Protection and Water Management Research Institute	Hungary
Soresma	Soresma	Belgium
DHI	DHI Institut for Van dog Miljo Forening	Denmark
FSU-Jena	University of Jena, Inst. for Geography, Dep. of Geoinformatics	Germany
EcoPolicy	EcoPolicy	Russia
USER	Unit for Social and Env. Research, Chiang Mai University	Thailand

- Advisory Board to bridge the science-policy gap

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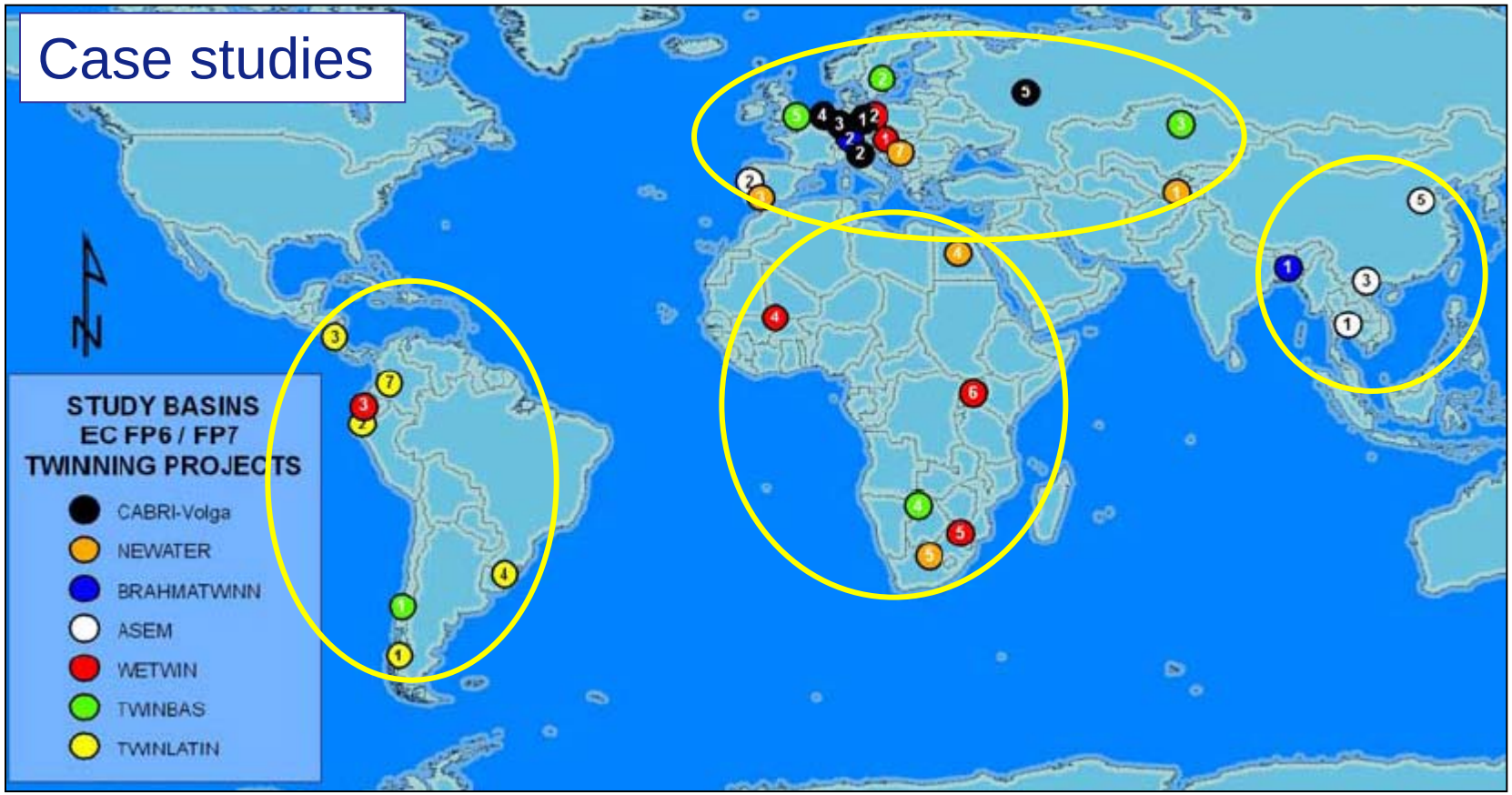
Projects & Case Studies

Global Water System Project

- 7 Projects: CABRI-Volga, NeWater, Brahmatwinn, ASEM WaterNet, WETwin, TwinBas, Twinlatin



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Objectives

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1. Review, compare, synthesize and consolidate the outcomes of several EU projects
2. Draw context-sensitive, but transferable approaches for improved (adaptive) water governance

3. Formulate policy-relevant best practices and tools for implementing adaptive water governance
4. Disseminate outcomes effectively to relevant stakeholders at the policy level

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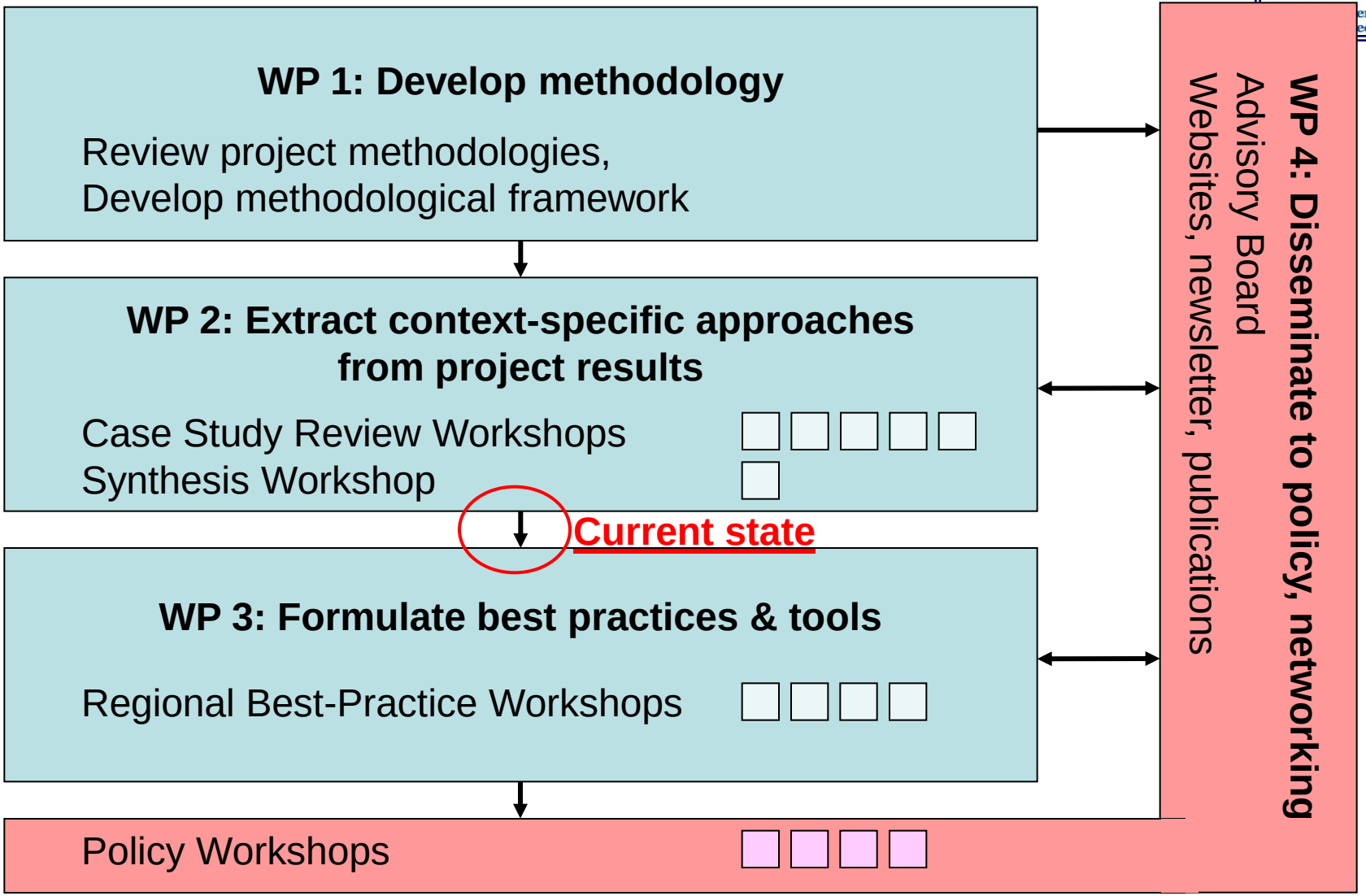
Workflow



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A diagnostic approach

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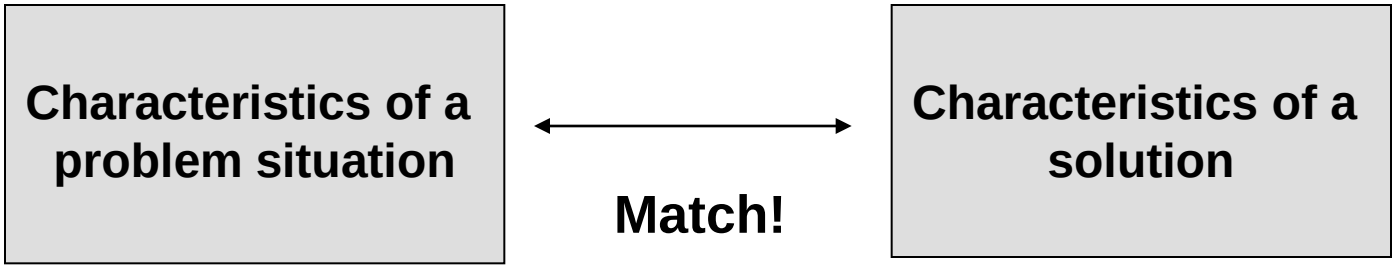
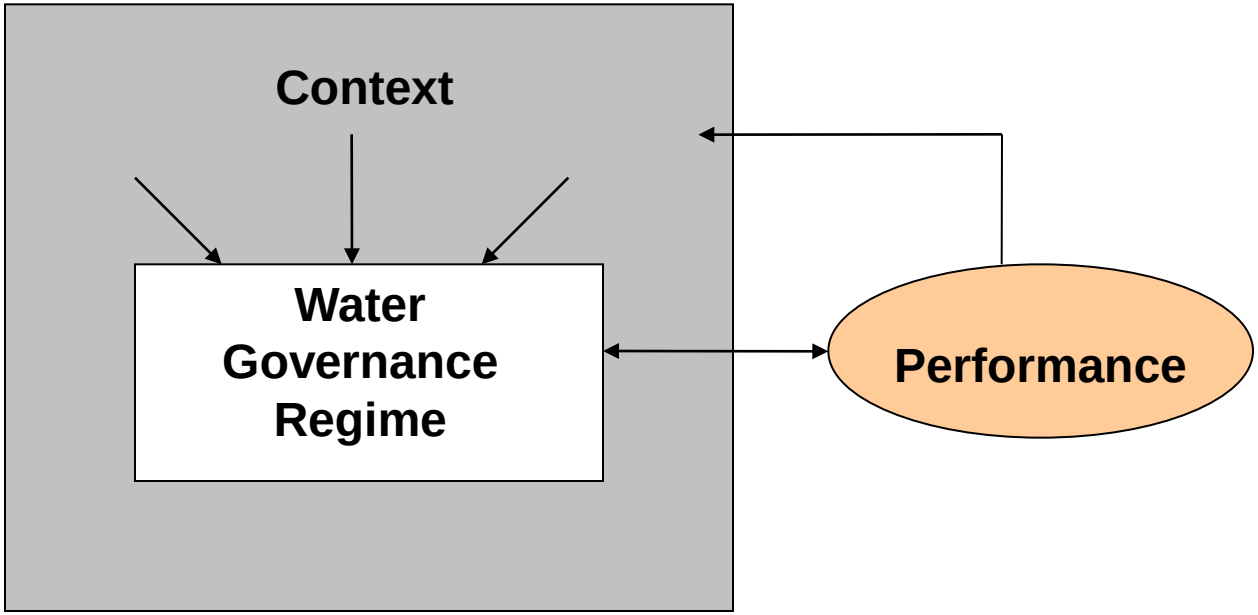


No panaceas but context sensitive solutions (processes, instruments….) to improve the performance of water governance and management

Framework of analysis



…. analyse how certain characteristics of a water governance regime influence its performance given a certain context in which the regime is embedded

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Performance

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Progress towards stated goals (MDGs)

Good governance principles (realized) as indicators for process dimension

Stakeholder participation (realized)

Response to Climate Change

State of the aquatic environment

Water Management Practice

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Development of hypotheses aggregating across scores

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- ***Institutional Settings***
- ***Regime architecture – type***
- ***Integration and Coordination***
- ***Information and Knowledge Management***

Hypotheses link characteristics of water governance systems to performance – they do not yet take context into account Of interest to see if differences can be explained with context

Hypotheses should be seen as heuristics guiding the analyses!

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Comparative Analyses of Case Study Data

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- ***Multivariate statistics***
- ***Cross-tab interpretation***
- ***Qualitative examination of hypotheses***

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Hypo 12 Good Governance	Score Hypo 12	P2	CPI
Thames/UK	16	16	7,70
Rhine/TheNetherlands	16	15	8,90
Norrström/Sweden	16	14	9,20
Tisza/Hungary	16	14	5,10
Elbe/Germany	16	13	8,00
Quaraí/Brasil	14	14	3,70
Cuareim/Uruguay	14	14	6,70
Orange/SouthAfrica	14	8	4,70
Brahmaputra/Bhutan	12	16	5,00
Guadiana/Spain	12	13	6,10
Catamayo/Peru	12	11	3,70
Niger/Mali	12	10	2,80
Brahmaputra/Nepal	12	10	2,30
Cauca/Colombia	12	9	3,70
Cocibolca/Nicaragua	12	7	2,50
Brahmaputra/India	12	7	3,40
Olifants/SouthAfrica	12	6	4,70
Volga/Russia	10	10	2,20
Kyoga/Uganda	10	8	2,50
Baker/Chile	10	6	6,70
Okavango/Namibia	8	10	4,50
Nura/Kazahstan	8	8	2,70
RedRiver/Vietnam	8	5	2,70
Biobio/Chile	6	4	6,70
Guayas/Ecuador	6	0	2,20
BangPakong/Thailand	2	8	3,40
Paute/Ecuador	2	3	2,20
Catamayo/Ecuador	2	0	2,20
Amudarya/Uzbekistan	2	0	1,70

Having good governance principles in legislation in place is a necessary but not sufficient condition for increasing the performance of the water governance and management regime regarding a good governance process.

Good governance principles in water legislation

Good governance realized

Effectiveness Formal Institutions

Claudia Pahl-Wostl, GWSP SSC Dec 2010

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Link Type - Performance

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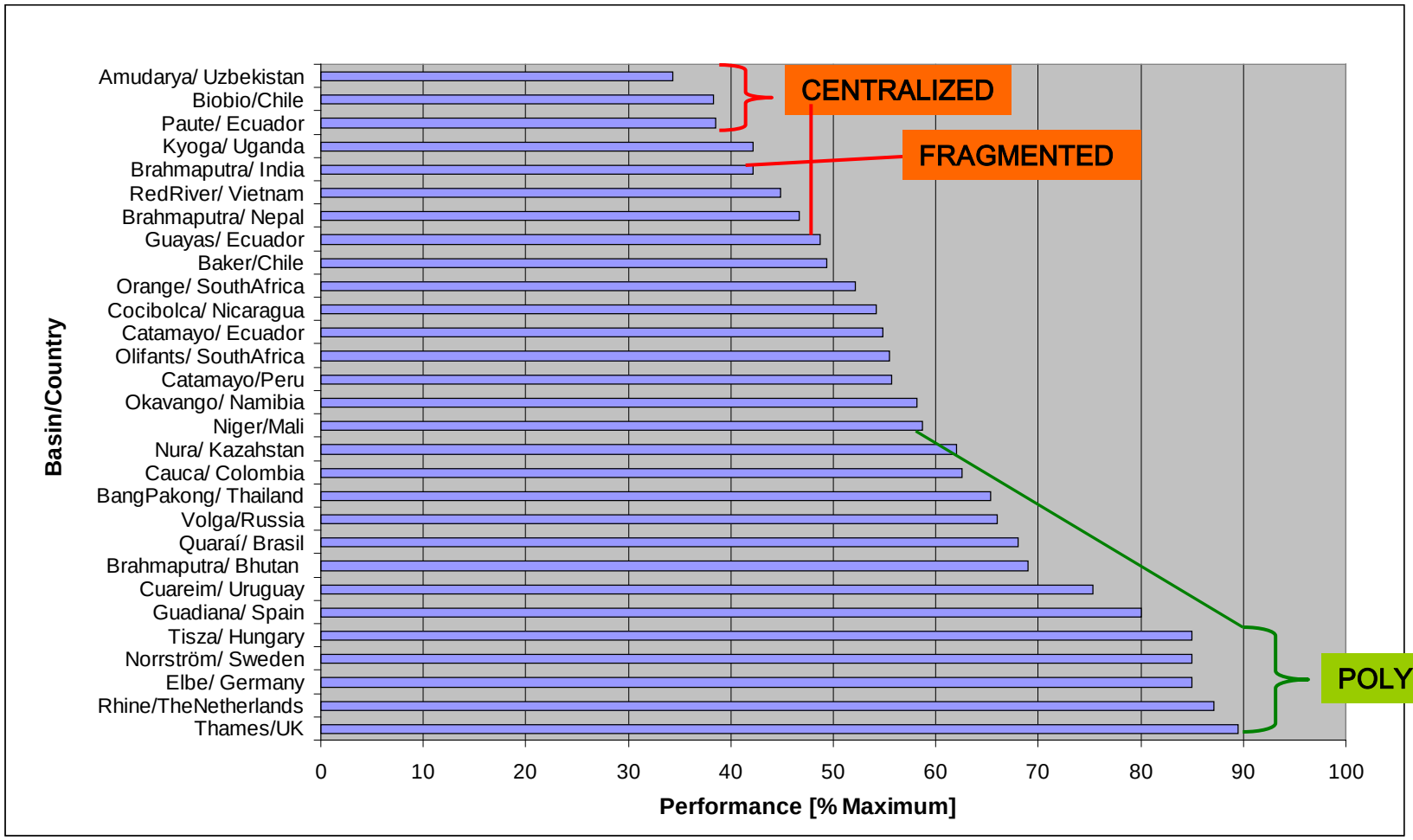

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Preliminary overall conclusions

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- ***Overall most hypotheses regarding the influence of regime characteristics on process quality (good governance, stakeholder participation) are supported – context important for more refined explanations***
- ***Climate change adaptation seems to be most strongly related to knowledge management, horizontal integration and innovative ways for dealing with uncertainty***
- ***No simple relationship between regime characteristics and state of the environment***
- ***Environmental management practice strongly influenced by institutional setting but state of economic development decisive***
- ***Development of typologies promising***
  - ***polycentric, centralized, fragmented***
  - ***relationship formal and informal institutions***
  - ***context – economic and societal***

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Further work

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- ***Further refinement of analyses – towards diagnostic approach***
- ***Set of policy workshops targeted at national policy level***
- ***Addition of further basins***
- ***In depth studies guided by findings from exploratory analyses***
- ***Development of a database on the web – for scientists and practitioners***

Link to GWSP

- ***Demand from people to be on a water governance network – distribution list for communication***
- ***Development of global data base on global water governance systems under umbrella of GWSP?***

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