

Synthesising research for adaptive water governance

Twin2Go reviews, consolidates, and synthesises research on adaptive and integrated water resources management in basins around the world. The aim is to draw insights relevant to policy and research on issues around adaptive water governance in the context of climate change, and to make them transferable to other basins. Twin2Go further promotes sharing of research results with practitioners and high level decision makers through effective dialogue. Twin2Go is a Coordinating Activity funded under the European Commission's 7th Framework Programme from June 2009 until May 2011. Periodic newsletters every 6 months will keep you updated about Twin2Go's progress and related news.

The Twin2Go methodological framework: A questionnaire to examine water governance

In its initial phase, Twin2Go developed a methodological framework, the goal of which is to evaluate in a comparative way important attributes of adaptive water management and governance in the context of climate change. It was also important to link this assessment to an analysis of factors that determine success, failure, and the potential transferability of insights from one basin to another. While building on approaches from the projects involved, the Twin2Go methodology therefore pays special attention to the environmental and societal context and how this influences the degree to which results can be transferred from one basin to another. This systemic approach allows Twin2Go to move away from recommending simplistic panaceas and toward a context-based analysis. Indeed, with one notable exception—a 2004 cross-country analysis of water policy reforms performance using an institutional economics framework—there are no comparative governance regimes analyses of similar scope.

The method that seemed most appropriate for addressing questions in a systemic approach and encouraging participants to fill knowledge gaps is that of indicators—checklist and / or score cards. The Twin2Go methodology thus contains a questionnaire and an accompanying guidance document to collect case study data from the participating twinning projects. The questionnaire comprises 86 indicators in three sections:

- 1 **Water Governance Regime**
- 2 **Context**
- 3 **Performance**

- 1 The section ›Water Governance Regime‹ focuses on specific water governance properties in a case study. It deals with the regulatory framework, actor networks, power relationships, and interaction patterns across administrative levels.
- 2 The ›Context‹ section serves to examine the societal and environmental dimensions in a case study as well as the incorporation of Good Governance Principles in national water legislation.
- 3 Finally, the ›Performance‹ section measures the impacts of water governance. It deals with progress made towards water-related Millennium Development Goals, the practical implementation of Good Governance Principles, as well as with stakeholder participation and the response to climate change.

For most indicators, experts may select one value from a set of pre-defined scores. The context and performance sections also build on indicators from standardised, international data collections, such as *Water Availability (mm/year)*, *Corruption Perception Index*, and *Proportion of total population using an improved drinking water source*.

In the next phase, Twin2Go will analyse the data collected from the case studies. Comparative analyses will serve to identify those water governance properties that work well and highlight ways in which context influences performance. Together with experts from different target regions, Twin2Go will formulate best-practices and recommendations for adaptive water governance in the context of climate change. In the final project phase, Twin2Go will host four Policy Workshops as side events to water conferences and other relevant meetings, in order to disseminate the consolidated results to decision-makers at multiple levels.

The questionnaire and further information on the methodological framework are available at www.twin2go.uos.de/approach/work-package-1

Case Study Review Workshops

After the development of the methodological framework described above, Twin2Go hosted six case study review workshops in order to collect water governance data in the context of climate change. Between March and June 2010 case study experts provided data for 25 case studies from Europe, Latin America, Africa and Asia. The six workshops brought together an international mix of scientists and representatives from government, river basin organizations, business, civil society, and non-governmental organizations, as well as Twin2Go team members to discuss water governance. Overall more than 120 participants took part in the six workshops.

Through this comparative analysis of different water management regimes the project gains new insights into adaptive governance, and can initiate dialogues for mutual learning between these basins and with other water governance professionals. The combination of regions, countries and river basins at each workshop provided a robust first test of the methodological framework and triggered thoughtful comparisons between the water basins reviewed.

Name @ Location	Date	Basins reviewed
ASEM, CABRI-VOLGA Chiang Mai University Thailand	25–27 March 2010	Volga Red River Bang Pakong
WETWIN Loskop Dam South Africa	14–15 April 2010	Niger Kyoga Olifants Orange Okavango
NEWATER Berlin Germany	5–7 May 2010	Rhine Elbe Guadiana Tisza Amu Darya
TWINLATIN Santiago de Chile Chile	27–28 April 2010	Biobio Baker Catamayo-Chira Quarai-Cuareim Upper Cauca Cocibolca Guayas Paute
TWINBAS Copenhagen Denmark	27–28 May 2010	Norrström Nura Thames
BRAHMATWINN Guwahati India	3–4 June 2010	Upper Brahmaputra

For a map showing the locations of the Twin2Go case study basins please see the next page.

The methodological framework gave participants a solid basis for the comparative work, encouraged rich discussions and provided a layered set of insights that drew on the varied experiences and expertise. The framework's questionnaire was discussed during brainstorming sessions that focused on the indicator scoring as well as the choice of indicators themselves. Part of the challenges in applying the methodological framework was the difficulty in differentiating progress on paper from changed practices on the ground. Additionally, laws and appropriate regulation may exist, but the implementation of those laws is impeded by the lack of control mechanism. Many participants also agreed that involving further experts into a discussion on the questionnaire may give a more nuanced understanding of the scores.

Due to the different backgrounds and work experience of participants, the knowledge exchange included research results as well as concrete best practices. This exchange of lessons from existing every-day practices by stakeholders showed that a diverse set of adaptive water governance options are either considered or already in place in the reviewed river basins. Among the conclusions reached in the workshops was the fact that many river basins analysed received similar scores, even though they find themselves in different socio-economic contexts with varied historical, social, political, economic, religious and ecological backgrounds. Among the main challenges to adaptive governance identified were stiff bureaucratic structures. An existing context of transition in the legal and institutional framework, on the other hand, presents a good opportunity to place adaptive water governance on the agenda; this is currently the case in many Latin American countries, where new national water laws are under discussion.

Some further general observations from the workshops:

- Discussing the lessons learned by other basins in stakeholder participation and the governance of water-related insecurities such as droughts and floods was helpful for the comparative analysis — ASEMWaterNet and CABRI-Volga workshop, Thailand
- Cross-checking the questionnaire answers between participants with varied backgrounds and work experience helped enrich the comparative analysis — WETwin workshop, South Africa
- The practical lessons learned, knowledge exchange and networking opportunities generated by the meeting led to a strengthened collaboration between participants, many of whom showed great interest in continuing their involvement in the project — TwinLatin workshop, Chile
- Exchange of water management knowledge between stakeholders of the Brahmaputra riparian states leads to fruitful discussions between representatives from up- and downstream countries — BRAHMATWINN workshop, India

Twin2Go Synthesis Workshop

1–3 September
2010

Following the case study review workshops that took place between March and June, a synthesis workshop will take place this September. During the workshop, which will take place in Stockholm just before the World Water Week, results of the basin reviews will be discussed in a cross-basin comparison. The synthesis is a crucial step in the project, as it aims to test hypotheses about adaptive water governance, to detect patterns, and to identify key factors for good water governance performance in a given context. Twin2Go project members are developing a methodology intended to support the comparison between the ongoing projects and/or river basins, and synthesise lessons. This synthesis methodology will consist of a range of techniques for hypothesis testing and pattern searching, including visual and statistical methods.

The synthesis workshop will be attended by Twin2Go project staff, members of the advisory board, and external experts in adaptive governance research.

Consolidated results will feed into a synthesis report describing how adaptive water governance in the context of climate change can be included in sustainable water resources management plans and programmes. Before dissemination the report will be discussed with the Twin2Go advisory board for policy relevance. Lessons learnt and best practices that can be identified will be validated with stakeholders and disseminated throughout future project activities.

For additional information please see our website www.twin2go.uos.de/approach/work-package-2 or contact tom.dhaeyer@soresma.be



Reports for each case study review workshop will be made available soon at www.twin2go.uos.de/approach/work-package-2



Regional Best Practice Workshops

October–December
2010

In order to facilitate the transfer from theory into practice, lessons learnt and best practices for implementing adaptive water governance will be identified from the global comparisons of the Twin2Go case study basins and its synthesised results. Inquiry will be made into ways to better transfer and adapt best practices to the national specifics of different countries and river basins' context. People are the driving force behind the transition from present water resources management practices to more adaptive water management strategies. Twin2Go will therefore organise Regional Best Practice Workshops to share practical insights for transitions towards more adaptive and participatory integrated water resources management (IWRM). In these workshops, Twin2Go's initial outcomes will be presented and discussed among stakeholders groups in case study basins and broader water management communities in the targeted regions of Africa, Latin America, South East Asia, and Russia/New Independent States.

Further information on the Regional Best Practice Workshops will be made available in due course on the Twin2Go website www.twin2go.uos.de/workshops/best-practice-workshops

»I-Five« Innovative Instruments and Institutions for Integrated Water Resources Management

»I-Five« is a participatory research project comparing three regional case studies in France, Germany and The Netherlands, and funded through the IWRM-Net. »I-Five« focuses on using Innovative Instruments and Institutions in Implementing the European Water Framework Directive.

Three regional case studies were conducted in three different sub-basins: the Thau basin in France, the Brabantse Delta in The Netherlands, and the Weser basin in Germany. They analysed the institutional settings with regard to the implementation of the river basin management approach, featuring sectoral and cross-scale integration management. »I-Five« also studied the effectiveness of innovative instruments and institutions within the national context, and their potential use in other contexts. The results stress the need for coordination and for careful designing of structures in multi-level governance settings, and showed that active involvement of stakeholders is severely hindered by focusing too much on methodological complexities and administrative demands, instead of on the basic principle of improving water quality.

As a result of comparing experiences a *QuickScan* tool was developed to assess whether, and how, instruments or institutions from other basins can be used in, or adapted to, the conditions of a different (sub) river basin. *QuickScan* will be introduced in three national training sessions and at the IWRM-Net conference.

The case study reports are available at www.i-five.org.
For further information on the training seminar please contact ilke.borowski@seecon.org

UNECE Workshop on water and adaptation in transboundary basins launches pilot projects programme

The »Water and Climate Change — How to develop an Adaptation Strategy in Transboundary Basins« workshop was held on 10 – 11 May 2010 in Geneva. Among other outcomes it launched the programme of pilot projects aimed at promoting cooperation on climate change adaptation under the UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention). The first cycle of work on climate change adaptation that occurred under the Water Convention between 2006 – 2009 focused on the development of strategic material, namely the Guidance on Water and Adaptation to Climate Change. The new cycle 2010 – 2012 however, focuses on a platform for exchanging experience and on promoting action on the ground through the pilot projects programme.

The workshop was thus an important step: the almost 90 participants shared challenges and lessons learnt from several basins and regions, including the Great Lakes, the Caucasus, and Central Asia. The workshop showed that transboundary cooperation on adaptation is now starting in several European river basins such as the Rhine, Meuse or Danube and that most of them currently focus on jointly assessing climate change impacts; however, there are still numerous difficulties such as differences in scenarios and models used. The need for »learning by doing« was underlined, but also for learning from similar initiatives in other basins. The Twin2go results, which aim at a transferability between basins, may be very useful in this regard and could be shared at a future workshop.

For more information on the workshop please see our website at: www.unece.org/env/water/meetings/transboundary_adaptation_workshop.html

NeWater publication: »The Adaptive Water Resource Management Handbook«

»The Adaptive Water Resource Management Handbook« explains the benefits, outcomes and lessons learned from adaptive water management (AWM). In essence AWM is a way of responding to uncertainty by designing policy measures that are provisional and incremental, subject to subsequent modification in response to environmental change and other variables. The Handbook is an output of the NeWater project, which is one of the projects that Twin2Go builds on. NeWater has provided improved knowledge about the practical implementation of AWM. The book provides tools and instruments for adaptive management as well as a chapter on training, capacity building and knowledge transfer. The process of introducing AWM is further illustrated by case studies from seven river basins across Europe, West Asia and Africa: the Elbe, Rhine, Guadiana, Tisza, Orange, Nile and Amu Darya. These highlight the key challenges of adaptive water management, especially when rivers cross national boundaries, creating additional challenges of governance.



»The Adaptive Water Resource Management Handbook«
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The newsletters are also available on our website www.twin2go.eu

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