

Final report of the Autumn School  
“Concepts, frameworks and methods for the  
comparative analysis of water governance”

28 October – 5 November 2015, Jülich, Germany

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## English summary

From the 28<sup>th</sup> of October until the 6<sup>th</sup> of November 2015 the Institute of Environmental Systems Research (IUSF) and The Integrated Assessment Society (TIAS) organized an Autumn School on “Concepts, frameworks and methods for the comparative analysis of water governance” in Jülich, Germany. The event brought together 23 early career researchers (PhDs and postdocs) and nine session leaders (seven senior scientists and two practitioners) from around the world (see attendee list).

The Autumn School’s key objectives were to stimulate the development of knowledge and insights into comparative water governance research and to provide support to young researchers in developing their careers. Participants were expected to strengthen their theoretical and methodological knowledge and skills as well as to establish new network contacts, develop ideas for future research and strengthen their ability to execute, communicate and publish socially relevant, interdisciplinary water governance research as well as to critically reflect on their own and other research activities and proposals.

To achieve the first main objective, we organized sessions on water governance, frameworks, property rights, causality and explanation, research design, Qualitative Comparative Analysis, water governance assessment and the governance of infrastructure. Also, we organized upon request of the participants, after dinner discussion sessions focusing on developing countries, transboundary and global issues and learning and transformative change (see the detailed programme outline).

To achieve the second main objective, one of the organisers interviewed each of the session leaders at the start of their respective session. In these interviews, the organiser and participants posed questions related to the session leaders’ professional background and career (e.g., their positions, motivation, sources of inspiration), how they were recruiting personnel as well as more personal questions (e.g. combining work and private/family life). In addition, the programme included a session on inter- and transdisciplinary research and science communication and a discussion session on career development was added. Also, the Wasserverband Eifel-Rur provided an introduction to the management and governance of water resources in the region and organized an excursion. Throughout the programme (most notably during the long breaks, in the evenings and over the weekend), participants had plenty of opportunity to informally interact with each other and with the session leaders (see the programme).

On the afternoon of the final day, the organizing committee provided a summary of the sessions and moderated an evaluation session. In the plenary evaluation, participants shared that the Autumn School provided them with a better understanding of water governance, causality, comparative methods and the interlinkages between various concepts and methods. The event further helped them to better position themselves and to formulate and address a research question (including the selection of an approach or framework). We also asked participants to complete an evaluation form. The forms shows that the large majority of the participants ranked all individual sessions as being excellent or very good. Also participants reported that the event met their expectations and was very useful with an appropriate level of difficulty and providing sufficient opportunity for interaction (circa two-third of participants gave the highest possible score and one-third the second highest possible score). Participants were somewhat more critical about the linkages between the sessions. This could have been improved, for example, by organising a plenary discussion session involving various session leaders which is only possible when instructors are will to stay for several days. Overall participants were positive about the venue. The only critiques centred on the fact that location was rather isolated (and difficult to reach by public transport) and internet connectivity was – at times – problematic. On the positive side, all participants highly valued the planning and organisation of the event and many participants would appreciate the opportunity to participate in another IUSF-TIAS event or follow-up activities. To stay in touch with each other, participants joined a LinkedIn group and established an e-mail list.

## Deutsche Zusammenfassung

Vom 28. Oktober bis zum 6. November 2015 haben das Institut für Umweltsystemforschung (IUSF) und ‚The Integrated Assessment Society‘ (TIAS) in Jülich gemeinsam eine Herbstschule zum Thema „Concepts, frameworks and methods for the comparative analysis of water governance“ durchgeführt. An dieser Veranstaltung nahmen 23 Nachwuchsforscher (Doktoranden und Postdoktoranden) sowie neun Dozenten (sieben erfahrene Forscher und zwei Praxisvertreter) aus aller Welt teil. Die Hauptziele der Herbstschule bestanden darin, die Entwicklung von Wissen und Einblicken in vergleichende Wassergovernance-Forschung zu fördern und jungen Forschern Unterstützung in der Weiterentwicklung ihrer Karrieren zu bieten. Teilnehmer sollten ihr theoretisches und methodisches Wissen und Fähigkeiten ausbauen, Kontakte für ihr berufliches Netzwerk knüpfen, Ideen für zukünftige Forschung entwickeln und ihre Fähigkeit stärken, gesellschaftlich relevante, interdisziplinäre Wassergovernance-Forschung durchzuführen, zu kommunizieren und zu publizieren, sowie kritisch über ihre eigenen und andere Forschungsaktivitäten und – vorhaben zu reflektieren.

Um das erste Hauptziel zu erreichen, haben wir Sitzungen über Wassergovernance, Frameworks, Eigentumsrechte, Kausalität und Erklärung, Forschungsdesign, Qualitative Comparative Analysis (QCA), Wassergovernance-Bewertung und Governance von Infrastruktur durchgeführt. Zudem haben wir auf Anfrage der Teilnehmer nach dem Abendessen Diskussionsrunden über Entwicklungsländer, grenzüberschreitende und globale Probleme sowie Lernprozesse und transformativen Wandel veranstaltet (siehe detaillierte Programmübersicht). Zur Erreichung des zweiten Hauptziels wurde jeder Sitzungsleiter zu Beginn der jeweiligen Sitzung von einer der Organisatorinnen interviewt. In diesen Interviews haben die Organisatorin und die Teilnehmer Fragen gestellt über den beruflichen Hintergrund des Sitzungsleiters sowie seine Karriere (z.B. Arbeitsstelle, Motivation, Inspirationsquellen), über die Praxis der Personalgewinnung sowie über persönlichere Aspekte (z.B. Vereinbarkeit von Beruf und Familie/Privatleben). Zudem beinhaltete das Programm eine Sitzung über inter- und transdisziplinäre Forschung und Wissenschaftskommunikation, und eine Diskussionsrunde über Karriereentwicklung wurde ergänzt. Zudem hat der Wasserverband Eifel-Rur eine Einführung in die Bewirtschaftung und Governance von Wasserressourcen gegeben und eine Exkursion zu diesem Thema durchgeführt. Während des gesamten Programms (insbesondere während der Pausen, an den Abenden und am Wochenende) hatten die Teilnehmer reichlich Gelegenheit, informell miteinander und mit Sitzungsleitern ins Gespräch zu kommen (siehe Programm).

Am Nachmittag des letzten Tages hat das Organisationskomitee eine Zusammenfassung aller Sitzungen vorgetragen und eine Evaluationssitzung moderiert. In der Plenumsevaluation haben die Teilnehmer betont, dass die Herbstschule bei ihnen zu einem besseren Verständnis von Wassergovernance, Kausalität, vergleichenden Methoden und der Verbindung zwischen verschiedenen Konzepten und Methoden geführt habe. Die Veranstaltung habe ihnen darüber hinaus geholfen, sich besser zu positionieren sowie eine Forschungsfrage zu formulieren und anzugehen (einschließlich der Auswahl eines Ansatzes oder Frameworks). Die Teilnehmer sind auch gebeten worden, einen Evaluationsbogen auszufüllen. Die Auswertung hat ergeben, dass die große Mehrheit der Teilnehmer alle Einzelsitzungen als „sehr gut“ oder „exzellent“ einstuft. Ebenfalls haben die Teilnehmer angegeben, dass die Veranstaltung ihren Erwartungen entsprach, sehr nützlich war, einen angemessenen Schwierigkeitsgrad aufwies, und genügend Möglichkeit zur Interaktion bot (etwa zwei Drittel der Teilnehmer haben die bestmögliche und ein Drittel die zweitbeste Punktzahl vergeben). Am kritischsten waren die Teilnehmer mit Blick auf die Verknüpfungen der einzelnen Sitzungen. Diese hätten besser sein können, beispielsweise durch die Organisation einer Plenardiskussion (unter Einbezug der verschiedenen Sitzungsleiter). Zudem sahen einige Teilnehmer den Veranstaltungsort kritisch, da sie den Standort zu ablegen fanden (der Veranstaltungsort war über öffentliche Verkehrsmittel eher schwierig zu erreichen). Ein positiver Aspekt ist, dass alle Teilnehmer die Planung und Organisation der Veranstaltung sehr geschätzt haben und sich freuen würden, an einer weiteren IUSF-TIAS-Veranstaltung oder Folgeaktivitäten teilzunehmen. Um weiterhin miteinander in Kontakt zu bleiben, haben sich Teilnehmer einer LinkedIn-Gruppe angeschlossen und eine Email-Liste eingerichtet.

## Scientific results and progress achieved

The objectives of this Autumn School were to: (1) stimulate the development of knowledge and insights into comparative water governance research; (2) and support young researchers in developing their careers. As regards the first objective, participants reported in the evaluation session that they learned to better formulate/frame their research questions as well as to select an adequate approach, method or framework. Moreover, they developed a better understanding of causality, specific concepts, comparative methods and frameworks as well as the linkages between concepts and methods. Several participants further reported that they now intend to start using some of the methods or frameworks that were taught (most notably qualitative comparative analysis and the management and transition framework). This aspect was also given high scores in the evaluation forms (the majority of participants gave the highest score). The feedback of participants shows that the event indeed helped participants to deepen their current understanding of the concepts, frameworks and methods that are supportive of comparative analysis in water governance (this aspect was given the highest and second highest values by all participants) and also strengthened their ability to assess and apply key concepts, frameworks and methods in comparative water governance research (this aspect was reported being as being excellent, very good or satisfactory). Obviously, not all sessions were equally relevant to all participants. Some would have liked to learn more on methods, others more on causality and others again would have liked to have more time for applying certain frameworks.

As regards the second objective, various participants explicitly mentioned that the event helped them to better understand their ontological position and also to defend their position among peers. Participants further stated that the session leaders were excellent presenters and inspired them in presentation and self-learning. Overall, the achievement of this objective was rated lower than the first objective (excellent, very good or satisfactory rates). In the evaluation forms, some of the participants reported that they would have liked to have more opportunities for developing abilities and skills. This is reflected in how participants rate the contribution of the event in strengthening their abilities. They were most critical about the extent to which the event strengthened their general ability to execute, communicate and publish socially relevant, interdisciplinary water governance research (lowest overall score, but still rated excellent, very good or satisfactory). Participants were all very positive about the opportunities for establishing network contacts with young and experienced researchers from various disciplinary and socio-cultural backgrounds. Various participants explicitly noted that this aspect was particularly good or excellent.

We did not separately evaluate the informal discussion sessions that were added to the programme. However, in our experience these sessions have been of great value to participants since they were all well-attended by participants and one or two instructors (senior scientists) and highly interactive.

## Self-evaluation

### **Achievement of objectives**

The key substantive objective of the event was *to raise the awareness of and knowledge about comparative water governance research*. We intended to give special attention to the strengthening of participants' theoretical and methodological knowledge and skills. We were able to design a programme that covered both theoretical and methodological elements (see programme). Also, during the sessions, the organizers regularly raised questions that were linked to the themes that had been discussed on previous days. For example, when philosophical underpinnings were presented we raised a question about the underpinning of previously presented frameworks, when a method was presented we raised a question about its philosophical underpinnings and when a framework was presented we asked why this framework was preferred over other previously presented frameworks. In the plenary evaluation, it became clear that the confrontation of diverse perspectives and ideas was highly valued by participants. One of the participants mentioned that this aspect could have been brought more to the foreground when the session leaders had stayed on and engaged in a separately organized plenary discussion session (with multiple session leaders engaging in a discussion).

Our second objective was to support young (doctoral and postdoctoral) researchers in developing their careers. The evaluation forms showed that especially when it comes to the development of general abilities and skills, participants would have liked more feedback, for example on their presentations and exercises (session leaders often lacked the time to do this properly). Also the programme contained many diverse elements implying that we could only give a flavour of various concepts, methods and frameworks and their application. The inclusion of a wide diversity of themes was valued by participants and yet also implied that we had no time to go really in-depth.

### **Date and location**

Our initial plan was to have a nine-day Summer School from Tuesday the 18<sup>th</sup> of August (arrival day) until Friday the 28<sup>th</sup> of August (departure day) in Dresden. This became a nine-day Autumn School from Tuesday the 27<sup>th</sup> of October (arrival day) until Friday the 6<sup>th</sup> of November (departure day) in Jülich. The main reason for adjusting the period was that the funding was confirmed in May so that we otherwise would have had too little time to prepare for the actual event for the summer. We now had circa five months to prepare (period between acceptance of the proposal and the actual event). This turned out to be just sufficient. A potential disadvantage of this change of dates was that the University semester had started. Fortunately, this did not affect the availability of most of the intended lecturers (although we had to make changes to the programme). We did have to make changes to the order of the sessions, which made that more introductory sessions now came later in the programme. This decrease in ‘logical order’ was noticed in the evaluation form by some of the participants.

As regards the change of location, it turned out being difficult to keep the hotel reservation for such a long period of time (there have been circa eight months between reservation and acceptance of proposal). Also, the fact that the location we had in mind (Dresden) was rather far away from the home base of the organizing committee made the organization of an event more complicated in the Autumn as opposed to Summer. Although it was not easy, we were eventually able to find a new venue that was about the same price, closer to the home base of the organizers and matching all our other criteria. As we selected a rather isolated location that was located near a small city in green surroundings, the venue was difficult to reach by public transport (this point was raised by many participants in the evaluation forms). A key advantage of the location was that participants did not really leave the venue (apart from walks or runs in the neighbouring park) creating plenty of opportunities for informal interactions (this was explicitly mentioned as an advantage by some of the participants). The fact that the internet was working well in the lobby but not well in the bedrooms and in the seminar rooms was bothersome to the attendees. Also the meals were not satisfactory to all participants (most notably a lack of variety and vegetarian options – even though we informed the venue about the fact that there were quite some vegetarians).

### **Programme**

As a result of the change of date, two lecturers who were in the proposal had to withdraw (Jens Newig and Carsten Schneider). We decided to replace the session on Participatory governance in a European context (Jens Newig) with an excursion. The reason for this was that we wanted to also include expertise from a practitioner’s perspective and expected that an excursion would be a nice addition to the programme. We were lucky that one of the organizers had good contacts with an English-speaking person who was working at Wasserverband Eifel-Rur and living in Jülich. As the Wasserverband had recently completed a project that involved a water governance assessment, our contact person could provide a nice presentation on the management and governance of water resources in the region. Also, the Wasserverband was willing to cover all costs of the excursion. For the sessions on Qualitative Comparative Analysis, we looked for a replacement. This was not easy but we eventually managed to find a person who was not as senior as the other lecturers but had time and was willing to lecture without compensation. The latter was not self-evident. Two of the lecturers who withdrew were highly surprised that we could not offer an honorarium to the session leaders (they were used to being well-paid for contributing to such events).

In our proposal, we reserved the last day for synthesis and evaluation. However, we also felt that we would probably not need all day for this and that the programme did not pay sufficient attention to the inter- and transdisciplinary nature of water governance research and communication. We therefore

added a session that paid attention to these aspects from a scientific and a practitioner's perspective (see programme). Several participants would have liked to have more time dedicated to these themes.

## Interdisciplinary and international cooperation

The Autumn School was a truly interdisciplinary and international event (see attendee list). We were able to attract 23 participants from thirteen different countries and nationalities from six continents with backgrounds including engineering, political sciences, public administration, geography, economics and agriculture. The socio-cultural backgrounds of the session leaders were less diverse (the majority were German or Dutch) but they also had rather diverse disciplinary backgrounds. Some of the participants did stress though that most examples came from Europe and that this could have been more international. However, as explained above participants were particularly positive about the diversity of the attendees in terms of disciplinary and socio-cultural backgrounds. Also the session on interdisciplinary and transdisciplinary water governance research led to nice discussions (although we could probably have included this aspect even better). Participants nevertheless stressed that the event really helped to better position themselves in the interdisciplinary environments in which they were working.

## Final remarks

In the last session, we discussed potential follow-up activities with the participants. We encouraged participants to become members of TIAS so that they could connect to a larger group of interdisciplinary researchers. Some of them were very enthusiastic to join. One of the participants offered to write an item on the Autumn School for the next TIAS Newsletter. Also, we published all Autumn School presentations on the TIAS website. The presentations of the Autumn School are available on the TIAS website (see: <http://www.tias-web.info/iusf-tias-autumn-school-programme/>). A synthesis of the Autumn School will also be available on the TIAS website in the near future (see: <http://www.tias-web.info/tias-summer-schools/>).

To support future cooperation we established a LinkedIn group of which nearly all participants (and many session leaders) have become a member. Furthermore, one of the participants suggested setting up a mailing list so that participants can continue to exchange calls for paper, projects, open positions, conferences, interesting published papers, and more. This has been put in place and has been used already to exchange job opportunities and announcing events. Many participants further stressed in the evaluation forms that they would like to participate in future IUSF-TIAS events and raised potential themes for the future. They also encouraged us to think about organizing TIAS activities for early career researchers (e.g. webinars or mentoring programme). They further stressed that they would very much like us to organize a follow-up activity in the form of a workshop, conference or network activity. As organisers, we will take these results to the next meeting of the executive board of TIAS and look for ways to accommodate these ideas.