



Research, part of a Special Feature on [Global Water Governance: Challenges and Future Scope](#)

UN–Water and its Role in Global Water Governance

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ABSTRACT. UN–Water was established in 2003 to coordinate United Nations activities on water. There have been no scientific assessments about this coordination mechanism and, hence, we focus on the role of UN–Water in global water governance. We use an analytical framework to conceptualize relevant natural and social phenomena, actors, and institutions in the field of global water governance. This framework ultimately allows an assessment of UN–Water’s role in this field. Our work draws upon official UN–Water documents, a formal external review of UN–Water, and semistructured expert interviews to assess UN–Water’s influence on global water discourses, particularly on the discourses of water and climate change, and integrated water resources management. This helps to identify UN–Water’s specific functions in the field of global water governance. The mechanism acts as a bridge between the expert-centered background and the political foreground of global water governance.

Key Words: *global water governance (GWG); integrated water resources management (IWRM); UN–Water; water and climate change*

INTRODUCTION

Governance, in a broad sense, can be understood as “the art of governing” and embraces the full complexity of regulatory processes and their interaction. This is reflected in the United Nations Development Programme (UNDP) definition of water governance: “Water governance refers to the range of political, social, economic and administrative systems that are in place to regulate development and management of water resources and provisions of water services at different levels of society (United Nations Development Programme 2000).” At the global level, outputs of these systems include framing policy, setting standards, and mobilizing, allocating, and coordinating resources and responsibilities (Conca 2005). It is important to keep in mind that the intrinsic multilevel character of governance implies that the global level does not act independently and cannot be studied separately from the “lower” levels, as it is enacted through the interplay of actors working on all levels across the local–global spectrum (Urueña 2009, Varady et al. 2009). Also, the scope of the global governance of water cannot be limited to water in a narrow sense. Global water governance (GWG) frameworks must be adaptive and create links across policy fields such as energy, trade, and agriculture, given that water challenges cannot be addressed by remaining within the “water box” (United Nations Educational, Scientific, and Cultural Organization 2006).

Pahl-Wostl et al. (2008) concluded from their analysis that:

GWG is currently diffuse and mobius web-like in character. A lack of strong motivation on the part of UN agencies and states to push water management has encouraged the rise of pluralistic bodies that try to deal with these issues. However, it is not clear that these polycentric governance frameworks can be

more successful in generating the necessary political will for global action.

Findings of Pahl-Wostl et al. (2013) confirm these concerns. They conclude from their analysis on missing links in policy trajectories in major GWG fields that there are:

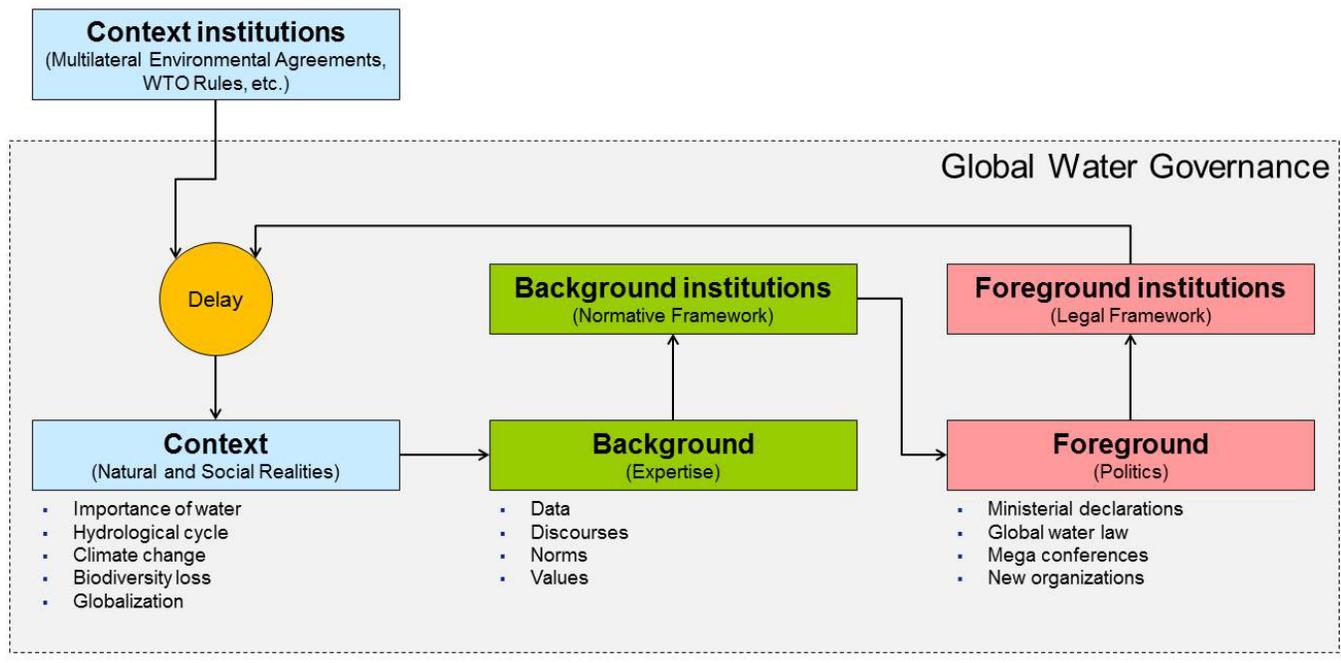
...major missing links between knowledge generation and policy framing and between knowledge generation and rulemaking. There seems to be a clear role for flexible global multiactor networks for issue integration, agenda setting, and open (re)framing processes. But for rulemaking in governance settings, it is important to move from mobilizing action to formalizing commitments.

UN–Water, a coordination body in the United Nations (UN) system, might be a step toward closing such gaps.

Within the UN system, the responsibilities and competencies relating to freshwater governance are highly fragmented among different organizations, programs, and funds. Consequently, coordination among the different actors is difficult, but all the more essential. Other articles of this special feature have focused on the different challenges of GWG and possible institutional responses, including UN interagency coordination mechanisms (see Schubert and Gupta 2013). In 2003, UN–Water was established as such a mechanism, to coordinate UN action for achieving the water-related targets set by the Millennium Declaration, and to implement decisions concerning water that were made at the 2002 World Summit on Sustainable Development in Johannesburg. The mechanism is mandated to provide “coordination on technical issues at the expert level” (United Nations Chief Executives Board for Coordination 2003:7) and promote greater system-wide coherence. However, it has no formal decision-making

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Fig. 1. Interactions among the different GWG domains and their institutions.



power to achieve these ends. Even though UN–Water has been operational since 2003, it has attracted very little, if any, serious scientific interest thus far. The only study conducted about this mechanism is an external review commissioned by UN–Water itself (Keen and Ratynska 2009). It assesses the performance of UN–Water in terms of fulfillment of its mandate, but it does not inquire about its role as a mechanism in the wider context of the UN system or GWG. Yet, the time is ripe to reflect on the performance of UN–Water and its role in the UN system and GWG. Given the need for improved GWG mechanisms, an assessment of UN–Water’s role in GWG is also necessary.

The purpose of our work is to develop an understanding of UN–Water’s role in, and influence on, GWG. This understanding is obtained through qualitative research procedures, and draws on a thorough analysis of scientific literature, a careful examination of UN–Water documents, and inputs provided by UN–Water and GWG experts. The results of this research contribute valuable insights to the reform of UN–Water’s mandate, and provide food for thought about restructuring the entire field of GWG.

FRAMEWORK OF ANALYSIS

Global water governance has been defined as “the development and implementation of norms, principles, rules, incentives, informative tools, and infrastructure to promote a change in the behavior of actors at the global level in the area

of water governance” (Pahl–Wostl et al. 2008:422). To understand the interactions among the different actors and institutions in the field of GWG, it is useful to refer to an analytical framework for global governance first proposed by Kennedy (2005) and later applied to the context of water by Urueña (2009). It makes a distinction between the domains of context, foreground, and background of global (water) governance. Context refers to the facts on the ground, and the operation of impersonal social and environmental forces. The foreground is the “stage” of global governance where highly visible events and tangible politics take place. The background is the natural habitat of expertise, or the “back stage” of GWG.

From a systemic perspective, this analytical distinction between the context, foreground, and background is, to a certain degree, analogous to the idea of input, process, and output of a social system. Global governance systems have to deal with water issues that are created by the GWG context. This “input” is then interpreted and processed, and knowledge is generated by experts to form background norms. Finally, these shape policy decisions and eventually produce, as outputs, foreground institutions that feed back to the context with significant temporal delays (see Fig. 1). Using this framework, one can characterize the missing links identified by Pahl–Wostl et al. 2013, between knowledge generation and policy framing and between knowledge generation and rulemaking, as missing links between background and foreground, and between expertise and politics.

It is important to note that the distinction between these GWG domains is artificial and rather fluid; it serves for analytical purposes only. However, the introduction of this framework is very useful in that it allows an analysis of all elements of GWG individually, without losing the sense of the bigger picture, that is, the idea of how all these strands fit together.

The context of GWG is set by natural and social realities that water governance mechanisms on all levels have to adapt to. As Kennedy noted, context is “driven by facts on the ground, by natural forces [...] or by invisible hands” (2005:8). Global and interconnected phenomena such as the importance of water for all life; the functioning of the global hydrological cycle; and the effects of climate change, biodiversity loss, globalization, population growth, and economic development make up the context of GWG. Although there are a number of global institutions that try to deal with these phenomena and minimize their negative effects on GWG, they are unlikely to produce significant results in the short to medium term, and are clearly beyond the scope of any global mechanism focusing on water governance. Institutions in the context domain take the form of multilateral environmental agreements (e.g., the [United Nations Framework Convention on Climate Change](#), the [United Nations Convention to Combat Desertification](#), the [Convention on Biodiversity](#), the [Ramsar Convention](#), etc.) or World Trade Organization rules. They do not deal with water explicitly, but imply certain policy measures that directly affect the water sector and indirectly affect GWG.

The foreground domain of GWG comprises what is commonly perceived as the outputs of the GWG system. This includes phenomena such as global water events (UN megaconferences and plenary sessions, [World Water Forums](#), etc.), the establishment of new organizations and organizational structures, and the definition of international water law and policies (see Varady et al. 2009). The foreground is the stage that gives publicity and visibility to the field of GWG and to “those who seem to be in charge” (Kennedy 2005:4), like ministers and heads of states. It lies in the spotlight of our attention, provides stories for international front-page news and marks the milestones in the history of GWG. Notwithstanding the abundance of regional cooperation and regulation efforts (Wolf 2001), they have not yet led to the emergence of a comprehensive foreground institutional framework in the form of an international water regime providing rules for treaty making, interpretation, and dispute resolution at the global level (Dellapenna and Gupta 2008). However, advancements in the institutional foreground are deemed essential for successful GWG (Schnurr 2008).

However, limiting GWG analysis to the context and foreground domains would reveal a picture that does not allow us to make much sense of what is actually happening in the field of GWG. Indeed, it is clear that treating the field of GWG as a purely formal, political, and event-centered field misses

the point. Are the presidents and ministers really the ones controlling the field of GWG? Aren't the decisions that purport to be the result of foreground deliberations actually the product of less visible forces? To account for these “hidden forces,” Kennedy introduced the background domain, which refers to the work of people other than those who seem to be in charge for visible foreground decisions. The background is the natural habitat of expertise, comprising global networks of epistemic communities of scientists, policy advisers, pollsters, lawyers, managers, activists, journalists, administrators, government officials, etc. Whereas the output of foreground politics are regimes, policies, laws, events, and new organizational structures, the output of background expertise is data, information, discourses, paradigms, ideas, norms, and values that feed into the political decision-making processes and considerably influence GWG foreground outcomes. Contrary to the foreground domain, where power is exercised with legal legitimacy, background influence is exerted in a manner that lacks transparency, legitimacy, and accountability. Nevertheless, we depend increasingly on experts and the notion of expertise for making governance decisions, especially in GWG (Urueña 2009).

Using the Kennedy framework to analyze the field of GWG, it becomes clear that the GWG foreground domain is rather weakly institutionalized, with many disconnected treaties on the subglobal level, but no integrative global water regime. Regulation efforts in the context domain are more developed, but exogenous to the field of GWG, confirming the widespread concern that important decisions impacting water are being made in other governance areas (see Ünver 2009). Within GWG, the most promising impulses of institutionalization emerge from the background domain. The normative work of experts (e.g., on the [integrated water resources management \(IWRM\)](#) principle) has gone a long way toward influencing foreground institutions and water governance practices on a global scale.

It is clear that UN–Water, as an interagency coordination mechanism that lacks direct control by an intergovernmental governing body and, thus, lacks formal decision-making power, is constrained to operate in the background of GWG. It has been mentioned above that whereas the output of foreground politics are regimes, laws, ministerial events, and new organizations, the background mainly produces discourses, norms, and values that influence foreground decisions.

Given our previous considerations about missing links and the hypothesis that UN–Water might act like a kind of “bridging organization” between background and foreground, it is useful to give more consideration to network governance. Here, a theoretical framework is introduced that captures the essence of such a role in GWG, and builds upon the work of Burris et al. (2005). These scholars have introduced a model of nodal

governance which they describe as “an elaboration of contemporary network theory that explains how a variety of actors operating within social systems interact along networks to govern the systems they inhabit” (Burriss et al. 2005:33). Burriss et al. visualize networks as systems composed of nodes and connections. The theory of nodal governance puts the focus on the transformation of intra- and internetwork resource flows into action. This transformation takes place in nodes which are conceived as governance sites where knowledge, capacity, and resources are mobilized to manage the course of events. Nodes are not just virtual points on the conjunction of resource flows, but real, interdependent entities operating simultaneously in a number of different networks.

The theory of nodal governance lies somewhere between the structural determinism of Castells’ (2000) theory of information networks and the randomness suggested by Hayek’s (2001) theory of spontaneous order, in the sense that nodes and networks are constantly reconstituting themselves to form new nodal structures but, at the same time, do too much planning for their governing activities to be considered purely spontaneous. As such, nodal governance helps to explain the emergence of governing order and the circulation of power in highly complex social systems and can provide a conceptualization of UN–Water and the field of GWG that allows to place all GWG relevant actors and institutions in a framework that accounts for all interactions taking place within and among the various networks and nodes. The mutual interconnections and interdependencies can create “superstructural nodes” that “bring together representatives of different nodal organizations [...] to concentrate the members’ resources and technologies for a common purpose but without integrating the various networks” (Burriss et al. 2005). These superstructural nodes are seen as “the command centers of networked governance” (Burriss et al. 2005).

The analysis of the role of UN–Water in GWG explores whether UN–Water can be described as a superstructural node in the overall architecture of GWG. The influence of UN–Water on GWG is conceptualized by analyzing its influence on global water discourses. To conduct this analysis, this article will focus more in detail on two dominant global discourses; namely, water and climate change, and IWRM.

METHODOLOGY

Apart from official documents such as terms of reference, annual reports, work plans, web page, etc., that provide insights into UN–Water’s history and mandate, almost no other literature on UN–Water exists to date. An extensive literature review has yielded only one publication that explicitly deals with UN–Water, namely a book section by Schnurr (2008); however, his analysis is very superficial and remains on purely prescriptive grounds. Although UN–Water’s [Operational Guidelines](#) state that its activities are guided by transparency, the application of this principle of good governance seems to

be limited to participating member and partner organizations. It is very difficult for “outsiders” to gain insight into the workings and decision-making procedures of this organization. Many documents, such as meeting protocols, strategic papers, and the recently completed external review, are not made public. Therefore, our document analysis of the history and mandate of UN–Water is based on the limited “official” material available, and on some scientific literature that provides context descriptions for the historical background.

Given the limited amount of accessible written documentation, another approach was chosen for analyzing the functioning of UN–Water and its role in GWG. The empirical basis for addressing these issues is provided by a number of semistructured interviews with renowned experts of UN–Water and in the field of GWG. For our purposes, these experts were grouped in four categories: experts of UN–Water member organizations (members); experts of UN–Water partner organizations (partners); experts working for UN–Water or one of the affiliated programs (affiliates); and GWG experts with no direct organizational link to UN–Water (observers). The sampling strategy aimed to achieve a good balance among these different perspectives. Over a period of four weeks, 17 interview requests were sent out to various experts, and a total of 11 interviews with an average duration of 44 minutes were then conducted over a period of seven weeks. For the data analysis, interviews were transcribed, proofread, and broken down into codes and themes to facilitate the interpretation. Below, we present a summary of the results of these interviews. Appendix 1 provides more information on the sampling strategy and coding scheme.

THE ROLE OF UN–WATER IN GLOBAL WATER GOVERNANCE

UN–Water’s history and mandate

UN–Water was formally established by the UN High Level Committee of Programs (HLCP) and officially endorsed by the United Nations System Chief Executives Board for Coordination (CEB) in 2003. It was conceived of as an interagency mechanism to coordinate action for achieving water-related targets set by the UN Millennium Declaration; specifically, Target 7.C of the Millennium Development Goals is to: “Halve by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation.” It was also to be a mechanism for implementing decisions concerning water from the 2002 [World Summit on Sustainable Development](#) (WSSD) in Johannesburg (United Nations Chief Executives Board for Coordination 2003:51); in particular concerning four major objectives contained in the Johannesburg Plan of Implementation (JPI):

- halve, by the year 2015, the proportion of people who are unable to reach or to afford safe drinking water and the

proportion of people who do not have access to basic sanitation,

- develop integrated water resources management and water efficiency plans by 2005,
- develop programs for mitigating the effects of extreme water-related events, and
- establish and/or develop national monitoring networks and water-related databases.

In relation to these, UN–Water was to provide “coordination on technical issues at the expert level” (United Nations Chief Executives Board for Coordination 2003:7). Thus, UN–Water was explicitly conceived of as an organization operating primarily in the GWG background.

Before the creation of UN–Water, coordinating water-related agendas was the responsibility of the Administrative Committee on Coordination (ACC), now the CEB, through its Subcommittee on Water Resources. After the subcommittee was disbanded at the turn of the millennium, the former members continued to coordinate their activities on an informal basis. This informal arrangement became known as “UN–Water” and, even before the mechanism was officially endorsed in the fall of 2003, it was responsible for the coordination of the first [World Water Development Report](#), now the UN’s flagship report on water.

The creation of UN–Water reflects a kind of paradigm shift in global water governance. A decade after the 1992 Rio Earth Summit, there was wide recognition that governments had largely failed to make progress in fulfilling international obligations to sustainable development (Andonova and Levy 2003, Seyfang 2003, Scherr and Gregg 2005). This recognition, coupled with a new emphasis on effective implementation and concrete actions, led to the adoption of a new approach that was later formalized under the term “Type II Partnerships” in the [Johannesburg Declaration on Sustainable Development](#). Governance through transnational, multistakeholder partnerships, bringing together public, private, and societal actors, was deemed to be more effective for dealing with regional and global sustainability challenges than the state-centric, top-down implementation plans for Agenda 21 resulting from the Rio Summit.

Although similar partnerships existed already prior to the WSSD, the Johannesburg conference brought a new form of recognition and attention to this commitment (Scherr and Gregg 2005). This paradigm shift, which took place at the beginning of the new millennium and which became apparent more explicitly at the WSSD, was at the root of a subtle but profound change in governance. At the operational level, it brought the private sector into the spotlight of global environmental governance; at a strategic level, it triggered some important reform processes within the UN.

The partnership approach was seen by many as a blueprint solution for addressing duplication issues resulting from institutional and organizational overlap within the multilateral system. They advocated heavily for the establishment of UN–internal partnerships, which also inspired the setup of several interagency coordination mechanisms, including UN–Water, UN–Oceans, UN–Energy, the UN Environment Management Group (EMG), and the UN Development Group (UNDG).

The [Terms of Reference](#) (TOR) produced for UN–Water define it as: “the interagency mechanism that promotes coherence in, and coordination of, UN system actions aimed at the implementation of the agenda defined by the Millennium Declaration and the World Summit on Sustainable Development as it relates to its scope of work.” The TOR also outline the form and content of UN–Water’s partnership with non-UN actors. It states that “UN–Water will encourage the contribution of non-UN system actors in its thematic initiatives, including participation in relevant time-bound task forces, and in discussions at UN–Water meetings to monitor progress in relation to such initiatives.”

UN–Water’s nodal characteristics

Our analysis of UN–Water’s role in the GWG architecture focuses on nodal characteristics, as defined in the concept of nodal governance structures, mentalities, resources, and technologies.

“Structures” refer to formal rules and procedures through which the nodes’ mentalities, technologies, and resources can be mobilized. UN–Water is not a legal entity within the UN system but, rather, a loosely institutionalized coordination mechanism without its own legal personality. However, our document analysis did not reveal the logic behind this format and did not result in a sense of how this somewhat particular status within the UN affects UN–Water’s agency. It seems that “UN–Water [still] struggles with what its mandate really ought to be,” in particular given that it attracted an increasing number of non-UN partners. Although some experts would like to “extend the mandate of UN–Water,” to give it “a bit of a coordination function also toward non-UN actors,” and see the mechanism become “more ambitious about what it’s trying to achieve,” others are “taken aback by what it [has] become” and think that UN–Water should rather slow down and revert to its initial, “introverted” mandate. Notwithstanding these different expectations about the future development of UN–Water, the overwhelming majority of participants agreed on the fact that there is an urgent need to “redefine” the role of partner organizations within the mechanism, not only because many partners are “frustrated” with their currently “unclear role,” but also because different assumptions about the substance and intensity of partner involvement to a large degree underpin opposing views about the future development of the coordination mechanism.

“Mentalities” refer to the ideals and paradigms around which individuals and organizations gather to form intellectual and social capital. The interview data suggests that a collaborative mentality seems to have developed from the bottom up, through conviction and persuasion, rather than coerced collaboration prescribed from the CEB and UN–Water’s TOR in a top-down manner. However, two major deficits have been noted. One is a lack of discussion of controversial issues in the quest for common positions, and the second is a personal, interorganizational, and sectoral rivalry, mainly among UN–Water member organizations and their representatives. Further, it is obvious that the lack of a clearly defined institutional role for UN–Water’s partners has significant adverse effects of the member–partner relationships, and unless this situation is amended, most participants believe that the mechanism runs the risk of having its partners lose interest in participating in its meetings and contributing to its work.

“Resources” refer to human and financial resources that are necessary to support the operation of nodes. When UN–Water was established in 2003, it was equipped with a “very strong mandate to coordinate” but very limited resources. All financial and human resources were provided exclusively by UN–Water member organizations. It was not until 2007 that, through the establishment of the Multi-Donor Trust Fund (MDTF), UN–Water was structurally enabled to receive additional funding from external donors. Despite this improvement in funding, UN–Water’s financial resources are judged to be unsatisfactory even for fulfilling its original mandate; it also concurrently gave rise to problems regarding UN–Water’s identity.

Finally, “technologies” refer to the set of methods that a node can dispose of for exerting power and influencing the course of events. UN–Water does not have any formal decision-making power, but instead it tries to exert influence primarily in the background of GWG. The interview data reveal that UN–Water’s technologies are basically limited to procedural and outreach methods of influence, where the former relate more to the discursive processes within the coordination mechanism and the latter to publications resulting from these discussions and deliberations. The scope of UN–Water’s procedural influence is mostly confined to its members who discuss the different issues of coordination in the “in camera” meetings. Many experts’ comments imply that UN–Water has been relatively successful in pushing its publications to its member and partner organizations through background channels, but it needs to improve its active distribution through foreground channels to reach donors and member states.

UN–Water’s influence on global water governance

The influence of UN–Water on GWG is assessed by analyzing its impact on two major policy discourses; (1) water and climate change, and (2) IWRM.

All the experts we interviewed expressed some level of concern that the climate change discourse and the water discourse “are not linked enough,” and there is “a general feeling by water people that they are under-represented in the [climate change] debate.” Although there is clearly a need for coordinated action under the umbrella of UN–Water, there are a number of internal and external factors preventing the mechanism from acting promptly and coherently on water and climate change. This can be linked to the fact that the people who are discussing water issues inside the UN–Water meetings are not necessarily the same as those who are dealing with climate change issues in the member organizations. This means that UN–Water members “are spending a lot of time and effort internally” agreeing upon common positions and defining how the water and climate change discourse should be addressed by UN–Water. Another internal issue arises through the fact that neither UN–Water nor its individual member organizations have been given a clear mandate to advocate for an increased consideration of water issues in the global climate change policy processes.

Notwithstanding these challenges, in several instances, UN–Water attempted to actively influence the global discourse and policy process. For example, at the COP-15 conference in Copenhagen, the mechanism presented a “statement on the prime role of water in the adaptation process” which all member organizations have previously agreed upon. This means that “27 UN agencies are standing behind it,” something that “hasn’t happened before.” UN–Water released a policy brief on climate change and water in which “different aspects are addressed and different emphases get made.” Although the process of producing this document was “difficult” and required “a lot of time and effort,” it was also UN–Water’s “first real policy brief.”

Despite these various outreach efforts, “UN–Water has just started to scratch on the surface of the issue” and its direct influence on the discourse is still minimal. The interview data suggest that this very limited direct influence is actually outweighed by the more subtle, indirect influence the mechanism exerts through its member organizations. Experts feel that “clearly some of the individual member organizations” do have a direct influence on global and national climate-policy processes “and in that way, UN–Water is indirectly influencing this discourse.” The most important processes here are the discussions taking place through the climate change task force and the core group, especially around joint publications such as policy briefs and the World Water Development Reports. These activities are “the necessary first steps in starting to create coherence, but it is a long way from that to actually being able to act effectively” upon the discourse. All in all, “UN–Water has played a significant role in identifying impacts of climate on water and

highlighting a need for action to address the impact of climate on water,” but the mechanism is not an influential actor in the global climate policy-making processes.

The discourse on water and climate change is intimately linked to the discourse on IWRM, in the sense that climate change adaptation “is really about how to manage water,” and that the current paradigm of water management puts a strong focus on integration, as well on climate change adaptation.

Although all experts in principle approve of an integrated-management approach, some have also pointed out that “there are a lot of people challenging the whole concept of IWRM” and questioning its practicability. This stems from a general confusion about the plurality of definitions and understandings of the concept. Thus, there is great need for clarification, and many participants expect UN–Water “to be providing some leadership and helping to create coherence and build understanding” around this discourse. However, once again the mechanism’s direct influence is limited by a number of internal and external barriers.

From the outside, UN–Water faces two gaps that need to be bridged in order to move the discourse forward. The current discourse on IWRM has created a “gap between essentially northern environmentally focused interests and southern developmentally focused interests.” Many developing countries see IWRM as an “advocacy struggle by environmental advocates,” where “social voices get very little play and economic voices are regarded often as the enemy.”

The IWRM discourse seems to be polarized, with theoreticians and donors on one side promoting and requesting IWRM definitions, plans, and monitoring procedures, and practitioners on the other side who are torn between living up to the expectations of donors and simply trying to “get on with their job.” The Johannesburg Declaration required all countries to create IWRM plans “without clearly defining exactly what they are supposed to be.” This target was set in 2002 and “should have been achieved by 2005, which is not the case.” Many participants feel that the meeting in Johannesburg “got things off at the wrong track.” Developing IWRM plans became an official objective of the [Commission on Sustainable Development](#) and, therefore, the whole UN system. Many member states “put a lot of attention and a significant amount of money into developing a plan and neglected implementation.” Many experts feel that “a new start is needed,” but are rather pessimistic about the capacity of UN–Water to trigger this new start, not least because it is also faces internal barriers: inside UN–Water, it is difficult to address the conflicting and politically sensitive aspects of IWRM. “If you have a political divide, it’s unlikely that UN–Water, which is dependent on consensus between North and South, is going to take a particularly leading role.” Moreover, UN–Water has not explicitly been given the mandate to act upon the IWRM discourse, whereas one of its major partner

organizations, the [Global Water Partnership](#) (GWP) has taken up this particular mission. Given that “there are UN agencies represented in various governing bodies of the GWP,” UN–Water has to be very “cautious about taking on activities in IWRM explicitly” and make sure it does not “step on the toes of GWP” or any other member organization.

Notwithstanding these internal and external barriers, UN–Water has carried out some activities relating to IWRM. The strongest attempt to influence this discourse was made with the [Status Report on IWRM and Water Efficiency Plans](#) (UN–Water 2008) and [Status Report on the Application of Integrated Approaches to Water Resources Management](#) (UN–Water 2012) prepared for CSD16 and Rio+20, respectively. However, after the first report there was no constructive, internal follow-up discussion and “there seems to have been very little advance in UN–Water apart from that report.” Although some interviewees are frustrated with UN–Water’s reluctance to take a more active role in the advancement of the IWRM discourse, most experts approve of its restrained activities and stress the fact that UN–Water should not “initiate entirely new activities,” “start to be operational on a country level,” or “act like one of the UN agencies” but, rather, that it should rather play a strong facilitating role by synthesizing and confirming the existing IWRM discourse and making it further accepted in the wider community.

Overall, there is widespread dissatisfaction with the insufficient implementation of IWRM practices worldwide. Interestingly enough, UN–Water’s most valuable contribution to the advancement of IWRM may be the fact of its own existence. In a sense, the coordination mechanism is based on the idea of integration and, by establishing UN–Water, the UN system moved beyond talking and actually “put things in place” that allow it to integrate its work on freshwater issues. Therefore, UN–Water can be seen as IWRM put into practice at the UN level. This perspective also sheds a different light on the enormous challenges the mechanism is facing from within (see Keen and Ratynska 2009). Instead of dismissing the internal structural, procedural, and political difficulties as factors that are simply preventing UN–Water from working effectively, they should be seen as practical realities that every integrator has to cope with. Just as “it is unlikely that you would ever reach complete integration with IWRM,” it would also be unreasonable to expect UN–Water to work in complete harmony.

Once again, UN–Water’s direct influence on the discourse is rather insignificant, but the mere existence of the mechanism along with its internal procedures exerts some indirect influence on the IWRM discourse through its member and partner organizations. In that sense, UN–Water is also taking a more “reactive” stance toward global water discourses in general. Instead of developing new discourses, UN–Water helps distill and clarify existing discourses.

Our analysis of UN–Water's influence on global water discourses provides interesting insights into the assessment of UN–Water's role in the field of GWG. Although the expert interviews clearly revealed that the mechanism is not a major driving force behind global water discourses, they did point to some other important functions that UN–Water is performing in the field of GWG.

First, UN–Water is clearly a background actor. In the field of GWG, all multistakeholder platforms, such as the Global Water Partnership, [World Water Council](#) (WWC) and the [International Union for Conservation of Nature](#) (IUCN) are operating primarily in the background, and UN–Water's role as a “talking shop” for senior administrators of the various UN freshwater programs does not differ in this regard. However, it is unique in the sense that it is constrained by its institutional setup to disproportionately account for foreground concerns of diplomacy and political correctness. The analysis of UN–Water's influence on the IWRM discourse has effectively demonstrated that UN–Water, unlike other organizations in the GWG background, cannot just “paper over” political divides but that it is instead compelled to deal with them. Even though this often proves to be extremely complicated, frustrating, and time consuming, and usually results in toothless and seemingly trivial documents and statements—such as the [UN–Water policy brief on water and climate change](#)—this feature is quite unique in the background of GWG and clearly distinguishes UN–Water's role from that of other major GWG actors. As with many other organizations, UN–Water cannot unilaterally address controversial issues; instead, it has to embrace the whole political and scientific complexity of global water challenges, find solutions that are acceptable to all of its member organizations, and ultimately ones that are acceptable to all member states.

Second, the fact that UN–Water is often seen to perform weakly is, to a large degree, a mirror of the fact that the United Nations represent a divided world. UN–Water's role, unlike the role of most other organizations, is precisely to account for these divisions and find solutions that are adapted to the global political realities and, thus, are more widely acceptable and applicable. In that sense, UN–Water is a mechanism that can effectively bridge the gap between theoreticians and practitioners of GWG. Compared to other actors that are prone to cherish illusions of a rational, united world, UN–Water is, through its institutional setup, much more down-to-earth with regard to political realities. On the one hand, this prevents the mechanism from becoming a visionary and from proactively driving global water discourses, much to the regret of many experts. On the other hand, it allows the mechanism to bring the pipe dreams of other GWG actors to a practical and politically acceptable level, or, as one interviewee put it, to help them to “start getting positions which are more realistic.” This role is unique in the field of GWG and

extremely important if global governance activities are to percolate to the national, regional, and local levels to ultimately facilitate and support work on the ground.

Finally, this bridging function between the background and the foreground also brings some structural and normative improvements to the field of GWG by enhancing coordination among its member organizations, bringing higher accountability, legitimacy, and some legitimate leadership to the global governance of water. This slightly increases the overall efficiency of the system and raises political awareness about global water issues. Moreover, UN–Water brings together a unique constellation of a large variety of actors and institutions in a relatively light and flexible organizational structure. This presents a great policy innovation potential and adds to the diversity and the resilience of the entire field of GWG. Nevertheless, the mechanism has thus far not been able to significantly improve some of the most serious and most pressing structural deficiencies in the field of GWG. It has not reduced the system's overall ineffectiveness in providing enforceable foreground institutions and sufficient financial resources to achieve the various water-related targets in a timely way.

CONCLUSIONS

These observations confirm that UN–Water does not play a powerful role as a leader and reformer of the GWG system but, rather, that it operates in the background where it exerts indirect influence, mainly through its member organizations and their member states. UN–Water does not shape the substance of GWG so much as the procedures of the GWG system. The analytical distinctions between the context, background, and foreground are, from a systemic perspective, analogous to the idea of input, process, and output. The above considerations clearly show that the mechanism primarily influences the procedural aspects of GWG; that is, legitimacy, accountability, efficiency, awareness, etc., but it largely fails to improve the output of the GWG system; that is, foreground institutions, financial resources, etc. UN–Water has improved the often missing or weak link between knowledge production and politics. However, this has not yet led to an increase in the effectiveness of policy processes.

Responses to this article can be read online at:
<http://www.ecologyandsociety.org/issues/responses.php/5564>

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LITERATURE CITED

- Andonova, L. B., and M. A. Levy. 2003. Franchising global governance: making sense of the Johannesburg Type II partnerships. Pages 19–31 in S. O. Schram and Ø. B. Thommessen, editors. *Yearbook of international co-operation on environment and development*. Earthscan, London, UK.
- Burris, S., P. Drahos, and C. Shearing. 2005. Nodal governance. *Australian Journal of Legal Philosophy* 30 (5):30–58.
- Castells, M. 2000. *The rise of the network society: the information age: economy, society and culture*. Wiley, New York, New York, USA.
- Conca, K. 2005. *Governing water: contentious transnational politics and global institution building*. MIT Press, Cambridge, Massachusetts, USA.
- Conca, K., F. Wu, and C. Mei. 2006. Global regime formation or complex institution building? The principled content of international river agreements. *International Studies Quarterly* 50:263–285. <http://dx.doi.org/10.1111/j.1468-2478.2006.00402.x>
- Dellapenna, J., and J. Gupta. 2008. Toward global law on water. *Global Governance* 14:437–453.
- Hayek, F. A. 1991. *The fatal conceit: the errors of socialism*. The University of Chicago Press, Chicago, Illinois, USA.
- Keen, M., and A. Ratynska. 2009. *External review of UN–Water: final report*. International Organisation Development (IOD) Ltd., Sheffield, UK.
- Kennedy, D. 2005. Challenging expert rule: the politics of global governance. *Sydney Law Review* 27:5–28.
- Pahl-Wostl, C., J. Gupta, and D. Petry. 2008. Governance and the global water system: a theoretical exploration. *Global Governance* 14:419–435.
- Pahl-Wostl, C., K. Conca, A. Kramer, J. Maestu, and F. Schmidt. 2013. Missing links in global water governance: a processes-oriented analysis. *Ecology and Society* 18(2): 33. <http://dx.doi.org/10.5751/ES-05554-180233>
- Rogers, P., and A. W. Hall. 2003. *Effective water governance*. TEC Background Papers No. 7, Global Water Partnership, Technical Committee, Stockholm, Sweden.
- Scherr, J. S., and J. R. Gregg. 2005. Johannesburg and beyond: the 2002 World Summit on Sustainable Development and the rise of partnership. *Georgetown International Environmental Law Review* 18(1):425–463.
- Schnurr, M. 2008. Global water governance: managing complexity on a global scale. Pages 107–120 in W. Scheumann, S. Neubert, and M. Kipping, editors. *Water Politics and Development Cooperation*. Springer, Berlin, Germany. http://dx.doi.org/10.1007/978-3-540-76707-7_5
- Schubert, S., and J. Gupta. 2013. Comparing global coordination mechanisms on energy, environment, and water. *Ecology and Society* 18(2): 22. <http://dx.doi.org/10.5751/ES-05440-180222>
- Seyfang, G. 2003. Environmental mega-conferences: from Stockholm to Johannesburg and beyond. *Global Environmental Change* 13(3):223–228.
- United Nations Chief Executives Board for Coordination (UNSCEB). 2003. *Report of the high-level committee on programmes on its fifth session*. United Nations, New York, New York, USA.
- United Nations Educational, Scientific and Cultural Organization (UNESCO). 2006. Water: a shared responsibility. The United Nations World Water Development Report 2 (WWDR2). World Water Assessment Programme (WWAP), UNESCO, Paris, France. <http://www.unesco.org/new/en/natural-sciences/environment/water/wwap/wwdr/wwdr2-2006/>
- Ünver, O. 2008. Global governance of water: a practitioner's perspective. *Global Governance* 14:409–417.
- UN–Water. 2008. *Status report on integrated water resources management and water efficiency plans for CSD16*. United Nations, New York, New York, USA. http://www.unwater.org/downloads/UNW_Status_Report_IWRM.pdf
- UN–Water. 2012. *Status report on the application of integrated approaches to water resources management*. United Nations, New York, New York, USA. http://www.unwater.org/downloads/UNW_status_report_Rio2012.pdf
- Urueña, R. 2009. Expertise and global water governance: how to start thinking about power over water resources? *Anuario Mexicano de Derecho Internacional* 9:117–152.
- Varady, R., K. Meehan, and E. McGovern. 2009. Charting the emergence of ‘global water initiatives’ in world water governance. *Physics and Chemistry of the Earth* 34:150–155. <http://dx.doi.org/10.1016/j.pce.2008.06.004>
- Wolf, A. T. 2001. Water and human security. *Water Resources Update* 118:29–37.

Appendix 1: Methodology Interviews

A1 Sampling Strategy

Creswell noted that in qualitative research, “the intent is not to generalize to a population, but to develop an in-depth exploration of a central phenomenon”, which is best achieved by using purposeful sampling strategies (2005:203). A random sampling strategy would be inappropriate for the exploration of the central phenomenon of this study because the purpose here is not to generate a representative sample and then generalize the results to other coordination mechanisms or other contexts, but rather to learn from people who are 'information rich' and can best help to understand the specific interest of this research, UN-Water and its role in GWG.

For the expert interviews, a sampling strategy has been chosen that combines elements of the maximal variation and snowball sampling procedures. The snowball strategy is a form of purposeful sampling in qualitative research that “typically proceeds after a study begins and occurs when the researcher asks participants to recommend other individuals to study” (Creswell 2005:206). The researchers' initial unfamiliarity with the topic and the complexity of the central phenomenon at hand were the decisive factors behind the choice for the snowball approach. The sampling process was initiated by an independent expert who was not interviewed, but exclusively served as 'trigger' to get the different snowballs rolling (c.f. Figure A1).

However, once this process was underway, it needed to be steered in certain directions in order to give voice to experts from different backgrounds who might have different perspectives on the central phenomenon. The maximal variation approach allows for obtaining this diversity and thereby accounting for the complexity of the problem at hand. It is “a purposeful sampling strategy in which the researcher samples cases or individuals that differ on some characteristic or trait” (Creswell 2005:204). The characteristic of interest here is the expert's perspective(s) on UN-Water, which can basically fall in one or several of the four categories listed below¹:

- *Members*: experts of UN-Water member organizations.
- *Partners*: experts of UN-Water partner organizations.
- *Affiliates*: experts working for UN-Water or one of the affiliated programs.
- *Observers*: GWG experts with no direct organizational link to UN-Water.

After consideration of the limited time availability for the research process of this MSc thesis and the relative weight of the expert interviews in relation to the literature and document review, a sample size of a total of ten interviews, each between 30 and 45 minutes, has been deemed appropriate.

¹This categorization is of course not mutually exclusive but it is exhaustive for the experts under consideration (people who are unfamiliar with UN-Water are not considered as experts here).

A2 Data Collection and Sample Size

Several data collection methods exist in qualitative research and interviews are among the best suited and most commonly used instruments (Kumar 2005; Nohl 2009). Kumar noted that “[o]n one hand, interviewing can be very flexible, when the interviewer has the freedom to formulate questions as they come to mind around the issue being investigated; on the other hand, it can be inflexible, when the investigator has to keep strictly to the questions decided beforehand” (2005:123). A number of approaches can be distinguished on the spectrum between the two extremes of improvisation and determination but the one thing they all have in common is the fact that they do not give any specifications or limit the participants' freedom in answering the various interview questions.

For the exploration of the central phenomenon of this research, a semi-structured anonymous interview design with open-ended questions was deemed most appropriate. This choice was based on the following considerations:

- The semi-structured design gives the participants ample time and scope to express their diverse views and allows the researcher to react to and follow up on emerging ideas and unfolding events (Nohl 2009).
- Results obtained through semi-structured interviews can be compared among each other since all participants are required to express their views about the same general themes (Nohl 2009).
- Semi-structured interviews allow not only for assessing the participants' opinions, statements and convictions, they also allow to elicit narratives about their personal experiences (Nohl 2009).
- Open-ended questions allow the participants to freely voice their experiences and minimize the influence of the researcher's attitudes and previous findings (Creswell 2005).
- Anonymity was guaranteed in order to give the participants the opportunity to freely express their views and encourage them to also address politically delicate issues.

A list of guiding questions was compiled and used to guide the expert interviews in order to make sure that all respondents address in the interview process the issues that are of interest for this study. However, this list was not used for standardizing the data collection procedure, it merely provided a frame for the discussions and was intended to trigger and guide the experts' narratives.

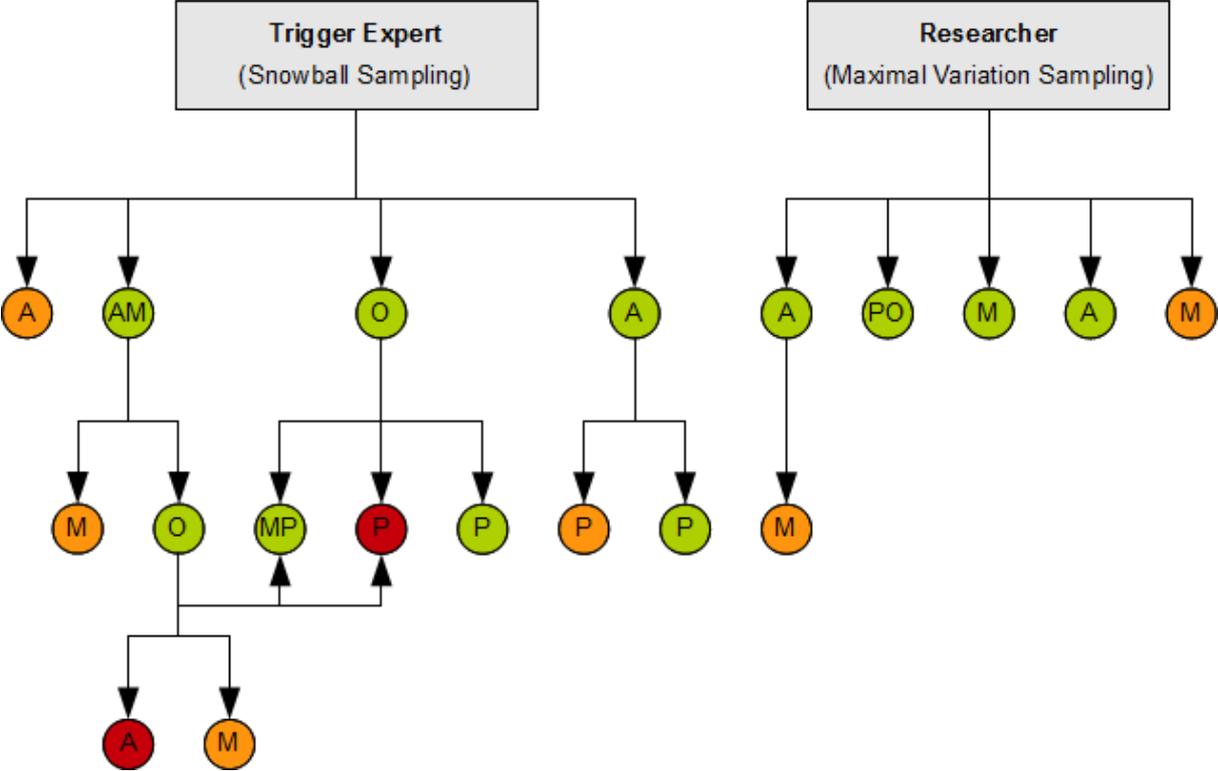
Contact to experts was initiated with a personalized email request for a recorded, anonymous phone interview with a short description of the research purpose and central phenomenon attached. Interviews were then conducted individually over the phone².

While phone interviews allow for a great flexibility in scheduling the different conversations, a drawback of this technique is that the researcher cannot get in direct contact with the participants. Creswell noted that this can cause “limited communication that may affect the researcher's ability to understand the

²The researcher's approach to the semi-structured interviews was inspired by and largely consistent with the procedures described and recommended by Nohl (2009).

interviewee's perceptions of the phenomenon” (Creswell 2005:216). The geographical dispersion of the participants and their tight schedules, however, rendered a more intimate, face-to-face setting impossible. In order to minimize the costs and facilitate the recording of the conversations, the researcher used 'Voice over IP' (VoIP) technologies for the interviews. The quality of the recorded conversations was generally good, only in one instance did minor connection issues arise which slightly exacerbated the transcription process but did not adversely affect the quality of the transcribed data.

Figure A1 Snowball and maximum variation sampling process.



The letters correspond to the different expert perspectives (O = Observer; M = Member; P = Partner; A = Affiliate). Green dots represent experts who have been interviewed, orange dots stand for experts who were contacted but did not respond to the interview request and red dots represent experts who were recommended by interviewees but not contacted by the researcher because of an over-representation of their respective perspectives.

Over a period of four weeks, a total of 17 interview requests have been sent out to various experts, using the sampling technique described in the previous section and illustrated in Figure A1. A total of 11 interviews with an average duration of 44 minutes and median length of 36 minutes were then conducted over a period of seven weeks. This corresponds to a relatively high response rate of 65 percent. Out of the 6 experts who did not respond, 4 were working for UN-Water member organizations. Consequently, the researcher had to intervene in the snowball

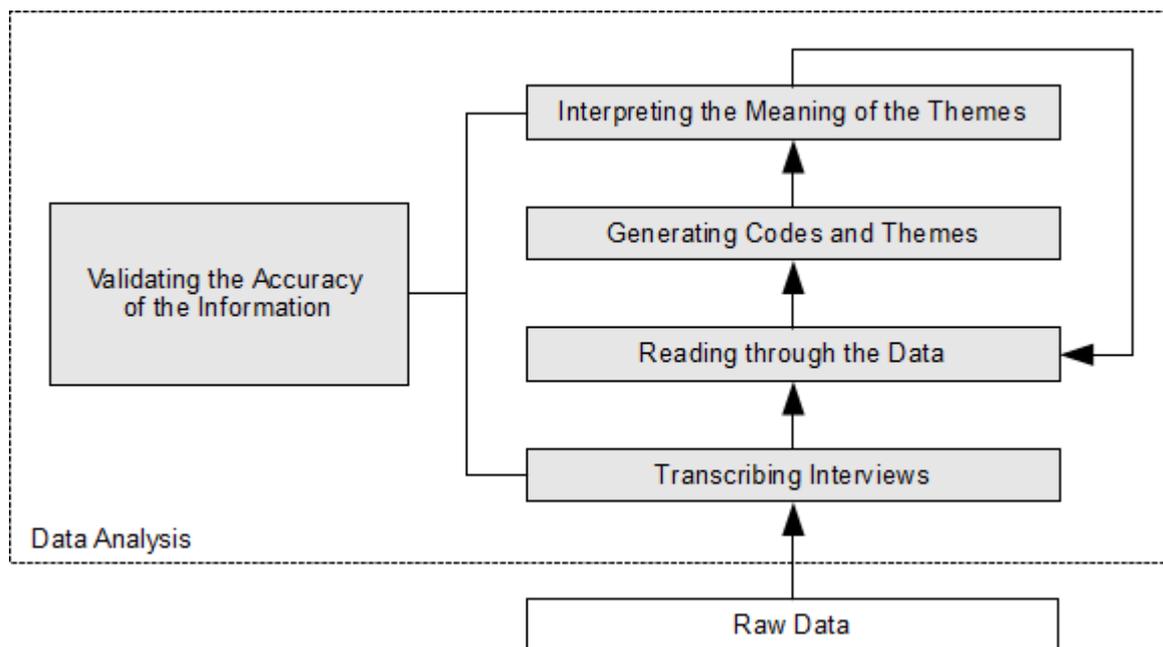
sampling process on several instances in order to assure a certain balance of observer, member, partner and affiliate perspectives. Considering the fact that some experts were able to provide different perspectives, the final ratio of observer: member : partner : affiliate perspectives was 3:3:4:4. It can thus be said that a reasonably good balance between the four perspectives has been achieved. The ratio of female to male participants is 3:8 which mirrors the unfortunate underrepresentation of women in senior UN and other GWI positions.

Figure A1 illustrates the two strands of the sampling procedure, the number of experts contacted and interviewed and their respective perspective(s) on UN-Water.

A3 Data Analysis and Interpretation

The analysis of the interview data followed a simplified version of the general steps of qualitative data analysis described by Creswell (2009). This generic procedure is illustrated in Figure A2.

Figure A2: Steps of qualitative data analysis (adapted from Creswell 2009:185)



The individual steps of this procedure are listed and described below:

1. *Transcribing Interviews*: all relevant parts of the recorded interview data were transcribed from an audio to a text format.
2. *Reading through the Data*: in order to get a general sense of the overall meaning of the data, all transcribed interviews were read through. This in-depth lecture provided the cornerstones for the identification of relevant codes and themes.
3. *Generating Codes and Themes*: coding can be defined as “the process of organizing the material into chunks or segments of text before bringing meaning to information” (Rossman & Rallis in Creswell 2009:186). These segments are then labeled with terms that describe the data on different levels of abstraction. Three

such levels have been defined in the course of this data analysis, namely sub-codes, codes and themes (see Table A1. The coding process of this study was facilitated through the assistance of specialized computer software for qualitative research³.

Creswell notes that while “the traditional approach in social sciences is to allow the codes to emerge during the data analysis”, it is often helpful to use predefined codes “that address a larger theoretical perspective in the research” (2009:187). The coding procedure for this thesis used a combination of predefined and emerging categories and accordingly, the process of coding was iterating and non-linear. Categories at the highest level of abstraction, called themes, were deduced from the central phenomenon and the research questions. The intermediate level of abstraction contains codes which were derived both from the research questions and the theory of nodal governance. The sub-codes at the lowest level, finally, emerged during the process of data analysis. Table A1 shows the final coding structure and hierarchy.

4. *Interpreting the meaning of the themes:* According to Creswell, “qualitative research is interpretative research” (2009:177). After having structured and presented the interview data, the researcher interprets the meanings of the coded data against the backdrop of “her or his own culture, history and experiences” and compares these findings “with information gleaned from the literature or theories” (Creswell 2009:189).

The four steps of data analysis described here represent ideal abstractions. In practice, qualitative research procedures do not always follow this strict hierarchy as there is considerable iteration between the different stages throughout the research process (Creswell 2009).

The validation of the accuracy of the research findings, finally, occurs throughout the different steps of the research process (see Figure A2).

³A 30-day trial version of MAXQDA was used for this study.

Table A1: Coding structure with themes, codes and sub-codes. The right column shows the number of text passages assigned to each sub-code.

Themes	Codes	Sub-Codes	Total
UN-Water	Mentalities	Participation	21
		Cooperation and Communication	30
		Inter-org. and Personal Relationships	22
		Conflict and Controversies	13
	Resources	General	15
		Financial	20
		Human	4
	Technologies	Tools	21
		Channels	11
		Scope	15
	Structures	Status in the UN	31
		Governance Structures	38
		Mandate	24
Discourses	General	Influence	37
	Water and Climate Change	Necessity to Act	13
		Problems	14
		Activities	27
		Recommendations	6
	IWRM	Necessity to Act	12
		Problems	20
		Activities	18
		Recommendations	24
	UN-Water in GWG	Role	Role Model

References:

- Baumgartner, T. 2010. *UN-Water and its Role in Global Water Governance*. Thesis. University of Freiburg, Freiburg, Germany.
- Creswell, J.W. 2004. *Educational Research. Planning, Conducting, and Evaluating Quantitative and Qualitative Research* (2 ed.). Pearson Education, Upper Saddle River, USA.
- Creswell, J.W. 2009. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (3 ed.). Sage Publications, Thousand Oaks, USA.
- Nohl, A.-M. 2009. *Interview und Dokumentarische Methode: Anleitungen für die Forschungspraxis* (3 ed.). Verlag für Sozialwissenschaften, Wiesbaden, Germany.