

## Policy Brief n°1

February 2015

Bolognesi T., Bréthaut C., Kluser S.

# Multilevel Governance: International Geneva as a Hub for Water Governance

### Teaser

Geneva is one of the world's major hubs for world governance and multilateral diplomacy. With its high concentration of international organisations, non-governmental organisation and permanent missions, Geneva plays a leading role in the active governance of the world's most pressing issues and challenges. This is represented across all sectors and water governance is no exception. Many of the principal actors who are engaged on water governance policy and cooperation, those both locally and globally focused, are situated in the Geneva area.

This policy brief considers this outstanding situation. The intention is to reveal and examine the impact of this hub on the way in which these actors interrelate. The brief will also seek to uncover and define the key characteristics of each actors' goals and objectives within the realm of water governance.

See also Monthly Water Map n°1 for illustrations on the same subject.

### Introduction

Geneva is one of the world's major hubs for world governance and cooperation. Geneva is also a significant centre for multilateral diplomacy. In addition to numerous United Nations (UN) organizations, Geneva is the traditional backdrop for international negotiations such as those that take place at the World Trade Organisation (WTO) or the International Labour Office (ILO). International Non Governmental Organisations (NGO) are also located in Geneva and the surrounding area: World Economic Forum (WEF), International Union for Conservation of Nature (IUCN), etc. As a result of such a strong international presence, Geneva and its surrounding area has been dubbed "International Geneva": a deeply interconnected network of organisations that lead or coordinate projects that are designed to influence social, environmental or economic issues.

The water sector is especially well represented within International Geneva. This can be seen in the presence of major international actors - the World Meteorological Organisation (WMO), UN-Water, OECD or the World Bank - to name a few. It is only inevitable therefore that Geneva is the location from which a multitude of water management initiatives are kick-started. The multitude of forums for deliberation and negotiation have and continue to witness the launch of many proposals and the development of policies. This high-concentration of water focused organisations speaks volumes for the range and diversity of the actors who influence modern governance processes. Though water services and their governance stay locally grounded, in reality it is important to acknowledge that they are framed by decisions and institutions introduced at other levels, especially on an international level.

This unusually high concentration of actors actively engaged in international water governance means that International Geneva is a rich hotbed for undertaking the research necessary for this brief. This privileged situation

enables us to uncover the configuration of actors influential in water program management or in elaborating guidelines about water governance. With our focus firmly placed on International Geneva, we will be able to identify and explain connections between individual actors and draw informed conclusions on the similarities, synergies and rivalries that are at present in the water governance process at large.

To this end, we can consider International Geneva to be the laboratory in which we will undertake our research – its specificity is to gather numerous key actors entered in symptomatic water governance processes (Grafmeyer & Joseph 1979). This laboratory will be used to study, in particular, the international and global aspect of water governance.

The case of International Geneva calls for multi-level governance analysis (Ostrom 2010) of water resources. The research is based on the analysis of links between governance components that act from different institutional levels and that support a specific development strategy (Adger et al. 2005). International Geneva embodies a complex system with a web of interconnections and interactions between organisations. Inevitably, this vast number of interactions is further multiplied when institutional levels take action within different geographical areas.

This policy brief is the first phase of a research program focussed on the international water governance mechanisms precisely as they are carried out in this Geneva setting. In order to generate relevant conclusions, the complexity of the case will be approached gradually. At this initial stage, we will describe the system. This will be composed of the identification of certain actors and the capturing of their status, skills, mandates and opinions. Then we will work to identify the main water issues that actors are involved in.

The policy brief is divided into three parts. The first part (1) presents the theoretical and empirical goals that our multi-level water governance analysis in International Geneva is directed at. The second part (2) outlines our methodology, which is based on the construction of an original database detailing the main organisations. The third part (3) submits a number of hypotheses. These will be formulated within our “laboratory” and they are intended to provide an original perspective on the multi-level governance of water resource.

## Objectives

Firstly our approach, for which this policy brief summarizes preliminary outputs, follows empirical objectives by describing the actors’ configuration. It gives valuable insights since complex systems and multi-level processes seem usually very fragmented and opaque. We will determine the role of each actor within a dense and heterogeneous network and, in turn, the existing interrelations of the system. Finally, this analysis will enable a deeper understanding of the structure of the network and the identification of the actors with major influence who are able to impose their agenda to others.

Through this analysis of the various organizations and range of institutional levels, we are pushed to consider the concept of multi-level governance. We are especially attentive to the nature of the links and the structure of the network at an international level. At first glance, the network looks strongly polycentric (Ostrom et al. 1961), there are several independent and interlinked decision hubs. Thus, through the case of the “International Geneva” we may discuss the concept of “nested enterprises” (Ostrom 1990), a system that is characterized by institutional embeddedness and the overlapping of governance components.

## Methodology and main results

### Data Collection: What and How?

To achieve these analytical objectives, a database was constructed. Initially used in an exploratory manner, the database fuels a mapping exercise to determine a clear picture of the influential water governance actors located in International Geneva. Among several other outputs, the characterization of these actors is of significance to this study.

Data compilation is based on three information sources, and their comparison: web queries, semi-structured interviews and informal meetings with many different actors. This standard collection protocol helps in standardizing database and controlling data truth. Moreover, cross-reference data and interviews favour the identification of key-actors.

Finally, we identified 52 actors based in International Geneva who are actively involved in multi-level water governance. They represent a sample of a much broader number of existing actors but it is important to underline that they have been identified as among the most influential in this field. Most of the selected actors are

representatives from NGOs (44%) and Intergovernmental Organisations (40%). Data collection is done through 88 numeric and alphanumeric variables. These variables are gathered as a result of four separate focus groups which were created specifically to reveal more about their nature, their geographical influence reach, their positioning on hot-topics and the focus of their publications.

These variables as a whole are qualitative. To balance this quantitatively we decided to add a binary code. There are a very few of missing values from this research. The largest number of missing values concerns the actors' intervention area and rises to 15%.

### Results: Main Trends of Water Governance in International Geneva

Two cluster analyses were undertaken, supported with the information gathered for our database. They reveal the principal characteristics of the key actors within the water sector of International Geneva. The first cluster analysis focused on the issues which motivate these actors and the second is about the nature of the actors themselves.

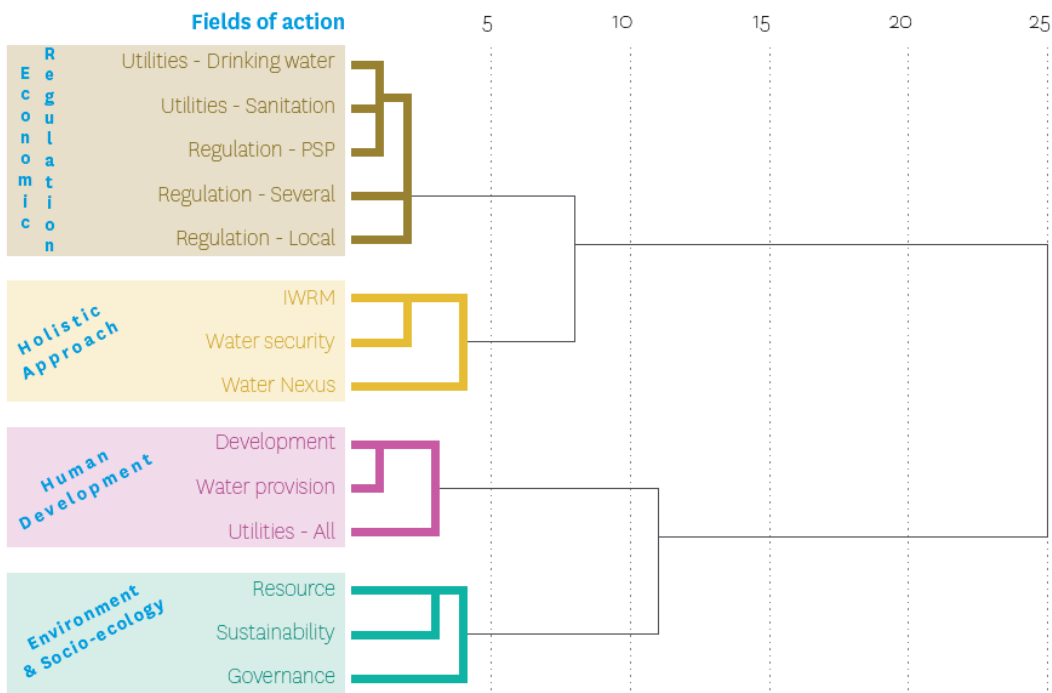
The first cluster analysis gathers variables that characterise the way of participating in water governance. The second cluster analysis gathers observations (actors) according to their level of proximity (Han & Kamber, 2001). Each cluster gathers items combining the most similar characteristics. A dendrogram shows how clusters are made and how they are structured. The X-axis of the figure 1 indicates distance between items and the level of proximity between the grouped items.

Dendrogram reading starts from the left where each item is a group to end on the right where there is one cluster gathering all the items. In-between, we understand how clusters are composed, e.g. proximity and components. We process the data by following the classical methodology of measuring the intervals of squared Euclidean distance, and then we cluster items following the Ward distance (Saporta, 2006).

In order to obtain four homogeneous clusters: economic regulation, approach of water service, human development, environment and socio-ecology, the calculations were optimized. The following dendrogram shows the proximity between themes, e.g. how closely themes are linked. 11.5% of observations have missing values.

In the first cluster, variables are compiled which focus on the type of services and the actors' position in the public/private debate. In the second cluster, gathered variables delimitate the water system in terms of governance (watershed management, nexus, water security). The third cluster gives information about the perspective of the actor on connections between water and human development. The fourth cluster concentrates on the actors' positioning toward the environment.

Figure 1. Dendrogram of thematic clusters



Around 80% of actors proclaimed themselves to be actively involved in the “hot topics” of water governance<sup>1</sup>. This positioning in the hot topics keeps mostly generic and is neither very clear nor sharp. By means of illustration, only 35.4% of the organizations analysed clearly reveal their perception of governance on Integrated Water Resource Management (IWRM) and scarcely 20% take position on contractual forms (private, public or public-private partnership).

The collected data can be used to draw a profile of the organisations and this in turn gives us greater insight into them and how they interact. The water sector in International Geneva appears greatly fragmented. To demonstrate this point, we can turn to the second cluster analysis that identifies six groups of actors. It should be noted that the more important group of actors puts together intergovernmental organisations. It is counterintuitive to regard these major actors within water governance as a limited workforce dedicated to water issues. Usually, the actors employ around ten persons to work specific water-related issues. Probably because of this limited workforce, analysis show that actors stand up for generic stances on global water issues such as IWRM but affirm no precise opinion on more contentious and specific issues, such as pricing. There is therefore a strong risk that dissonant or empty messages are conveyed. To reduce this kind of risk, UN-Water is a lead actor working toward coordinating water related actors, mostly UN members, within International Geneva and at the international level of water governance.

In addition, let's imagine multilevel governance is made up of a variety of polycentric hubs and spokes. The six identified groups of actors are hubs within this polycentric network of actors. If these hubs are centrally placed, then, spokes (their actions and projects) are going close to local reality overlapping the different networks. Take the example of the Congo: NGO, Intergovernmental, regional and national organizations play a crucial role in water governance but there is no coordination among the different projects (UNEP, 2011). Actions are financial or technical and strongly contribute to determine local governance structure. Beside these overlaps, it remains important to keep in mind the huge number of projects that International Geneva's actors are involved in. A very specialized agency as the *Environment and Security Initiative*, supported by the *United Nations Environment Programme*, is included in more than 50 projects globally<sup>2</sup>. More generally, even if they are located in Geneva, 42% of the actors

<sup>1</sup> These “hot topics” are mainly quoted as water sustainability, water regulation or water governance.

<sup>2</sup> List of projects available at [http://envsec.org/index.php?option=com\\_content&view=article&id=76&lang=en](http://envsec.org/index.php?option=com_content&view=article&id=76&lang=en), visited on the 2 December 2014.

intervene within all five continents. Several are regionally specialized, mostly in Asia (23%) and Africa (21%). With an inside point of view, Gupta et al. (2013) shows the way these different global actors act on water governance.

Our observations confirm intuition. International Geneva lends itself to be a very unique laboratory for analysing the international/global level of the multi-level water governance. We are able to conclude that this level looks fragmented, especially when considering positioning on topic or likeness between actors characteristics. By contrasting the relatively small size of organizations compared to their significance in terms of policy making, we can assume that there are numerous interrelations within International Geneva and with actors far from the area. These interrelations might also present a means toward enabling the coordination necessary to make this fragmented level of governance efficient.

In order to complete an in-depth understanding of the multi-level governance process, the next steps of our research agenda will focus on interrelations between actors, as well as on their number and their quality.

## References

- Adger, W., Brown, K. and E.L. Tompkins. (2005). The Political Economy of Cross-scale Networks in Resource Co-management. *Ecology and Society*. (10)2:9. [www.ecologyandsociety.org/vol10/iss2/art9](http://www.ecologyandsociety.org/vol10/iss2/art9).
- Gupta, J., A. Akhmouch, W. Cosgrove, Z. Hurwitz, J. Maestu, and O. Unver. 2013. Policymakers' reflections on water governance issues. *Ecology and Society* 18(1): 35. [www.ecologyandsociety.org/vol18/iss1/art35](http://www.ecologyandsociety.org/vol18/iss1/art35).
- Grafmeyer, Y. J., & Joseph, I. I. (1979). « L'école de Chicago. Naissance de l'écologie urbaine ». Aubier. RES Champ urbain. 378p.
- Han, J. & Kamber, M., 2001. *Data Mining : Concepts and Techniques*. Morgan Kauffmann Publishers, San Francisco.
- Ostrom V., Tiebout C.M., Warren R. (1961). The Organization of Government in Metropolitan Areas: A Theoretical Inquiry. *American Political Science Review*, 55(4) : 831-842.
- Ostrom, E. (1990). *Governing the commons, the evolution of institutions for collective action*. Cambridge : Cambridge University Press.
- Ostrom, E. (2010). Beyond Markets and States : Polycentric governance of complex economic systems. *The American Economic Review*, 100(3).
- UNEP, 2011. *Water Issues in the Democratic Republic of the Congo: Challenges and Opportunities*. UNEP Technical Report.
- Saporta, G., 2006. *Probabilités, Analyse des données et Statistiques*. Editions Technip, Paris.