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OECD water governance principles on the local scale – an exploration in Dutch water management

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ABSTRACT

The past two decades have witnessed increasing global concern about the need for sustainable water and land management in an era of rapid change, and persistent water insecurity. Good water governance is a prerequisite to improve water management all over the world. The OECD Water Governance Initiative developed Water Governance Principles to enhance the process from water policy design to implementation. This contribution aims to examine how the OECD Water Governance Principles fit actual water governance on the local scale. Therefore a Dutch case is employed here to almost serve as a benchmark test for the framework of the OECD water governance principles.

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1. Introduction

Water is a resource that is of direct interest to the society as a whole (Biswas 2008). Many different types and levels of stakeholders influence the management of water resources. Water is a cross-sectoral issue and its management increasingly depends on policies in other sectors (Tortajada 2010a). There is need for a broader approach that cannot only be provided by engineers alone because of the increasing complexities of problems associated with efficient water governance and growing societal interests in water-related issues (Tortajada 2010a). This approach has often been denoted as Integrated Water Resource Management (IWRM), whereas it remains somewhat vague how integrated water resource management exactly shall be implemented (Biswas 2004). Nowadays, implementation of this approach is still a challenge, especially with regard to the institutional arrangements that have to be put in place at different scales, and the need for coordination across scales and institutions (Bahri *et al.* 2011). It is often the case that IWRM implementation is used to justify business as usual or mask other agendas (Giordano and Shah 2014). Molle (2008) argued that IWRM precepts such as equity and efficiency are often incompatible. For dealing with future water challenges there is need for water governance schemes (Calder 2005). ‘Governance implies the involvement of various actors that are independent of a central power and operate at different levels of decision-making’ (Klůvanková-Oravská 2010). Good water governance can be considered a prerequisite to improve water management all over the world (Calder 2005, Broekhuizen *et al.* 2008, Pahl-Wostl and Kranz 2010, Edelenbos *et al.* 2013).

It is only very recently that governance has picked up significant meaning in the water sector (Tropp 2007). The emergence of water governance has led to a transformation from state-centered to more inclusive and pluralistic ways of making decisions within the water sector (Tropp 2007). The concept of governance can explain developments of

decentralization, privatization, ideas of integrated approaches, etc. in the water sector (Tropp 2007, Driessen *et al.* 2012). The concept of governance should not be seen as an end in itself. It is a means to formulate and implement water policies that are seen as fair by those people to whom they are intended and by society in general (Akhmouch and Correia 2016).

Many different definitions of water governance are developed and being used (Rogers and Hall 2003, p. 7, Tortajada 2010b, p. 299, OECD 2017, p. 1). In the end, all definitions are based on the same fundamental ideas and more or less contain the same features: All definitions describe water governance as a system, process or a mechanism to manage and develop water resources. While a lot of research has been carried out on water governance (Rogers and Hall 2003, Tropp, 2007, Pahl-Wostl *et al.* 2010, 2013, Tortajada 2010a, 2010b, Lautze *et al.* 2011, Hartmann and Spit 2014), water governance in the Netherlands (van Buuren *et al.* 2010; OECD 2014) and on the Principles on Water Governance (Akhmouch and Clavreul 2016, Akhmouch and Correia 2016). The question remains what good water governance entails. This question has been answered by the OECD in 2015. In a unique bottom up process involving a huge variety of stakeholders in a water governance initiative, OECD developed twelve principles on water governance (see Figure 1).

2. The OECD principles on water governance

The OECD Principles on Water Governance (see Figure 1) are developed on the premise that there is no one-size-fits-all solution to water challenges worldwide, but a menu of options building on the diversity of legal, administrative and organizational systems within and across countries (OECD 2015).

The twelve principles intend to contribute to tangible and outcome-oriented public policies, based on three mutually

Overview of OECD Principles on Water Governance

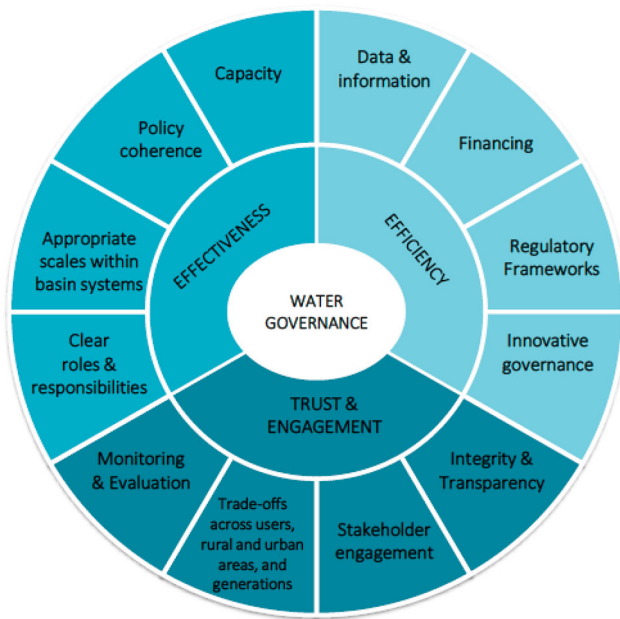


Figure 1. Overview of OECD principles on water governance (OECD 2015).

reinforcing and complementary dimensions of water governance: effectiveness, efficiency and trust and engagement. The twelve governance principles are meant to catalyze efforts for making good practices more visible, learning from international experience, and setting reform processes into motion at all levels of government to facilitate change where and when needed (Akhmouch and Correia 2016). These OECD principles aim to set standards for governments to reap the economic, social and environmental benefits of good water governance through effective, efficient and inclusive design and implementation of water policies. The principles ought to provide a framework to understand whether water governance systems are performing optimally and help to adjust them where necessary. They shall help avoid traps and pitfalls, learning from international experience (Akhmouch and Correia 2016). The principles consider that water governance systems should be designed according to the challenges they are required to address (Akhmouch and Correia 2016).

The principles are relevant for all levels of government. They apply to the overarching water policy cycle (see Figure 2) and should be implemented in a systemic and inclusive manner. (Akhmouch *et al.* 2018)

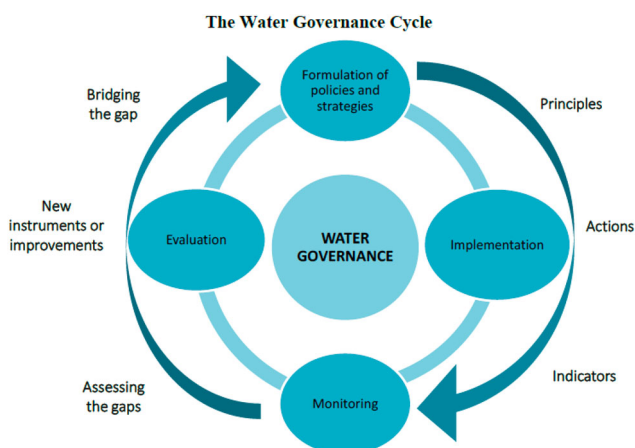


Figure 2. The water governance cycle (OECD 2015).

The OECD principles have been adopted by the OECD Regional Development Policy Committee in May 2015. From this moment, the OECD Principles on Water Governance have been used by all 34 member states and other stakeholders as a framework to appraise water governance efficiency, effectiveness and inclusiveness through dialogues in a given water governance context (Akhmouch *et al.* 2018). The OECD principles can become an effective instrument to enhance policy coordination and can contribute to good water governance (Seijger *et al.* 2018). However, this means they need to be translated to the local scale, where water governance is implemented. In other words, there is a need for operationalization frameworks that consider the short, medium and the long term of water governance in a consistent and a sustainable way (OECD 2015).

2.1. The organization of water management in the Netherlands

In the Netherlands four governmental layers are responsible for water management. Besides the three general layers, the national government, provinces and municipalities, there is a fourth, relatively autonomous layer of specialised public administrations, the regionally operating water boards. (Wiering and Crabbé 2006, p. 96)

The Dutch Directorate-General on water issues, or the 'Rijkswaterstaat', which is part of the Ministry of Transport, Public Works and Water Management) is the most important central institution for water engineering in the Netherlands (Wesselink *et al.* 2013). It has a long-lasting tradition of centrally governing and initiating all water-related issues with a 'hegemony of the state' (Wiering and Crabbé 2006, p. 99). Also, at the local level, strong water boards are responsible for regional water issues (de Heer *et al.* 2004). These bottom-up initiatives have existed since the thirteenth century (van Steen and Pellenburg 2004), and they are considered to be the oldest democratically elected bodies in the Netherlands (de Heer *et al.* 2004).

The water boards operate in a complex arena of national, regional and local entities (van Steen and Pellenburg 2004). 'In general, the activities of the Directorate-General concern the main state water system of large rivers, canals, coastal waters and estuaries (and its infrastructure), while the powers of the water boards are geared towards the regional water management, both water quantity (such as maintenance and enforcement of dikes, dunes and embankments) and water quality (surface water pollution; waste water treatment)' (Wiering and Crabbé 2006, p. 96). Local and regional waters fall under the jurisdiction of the provinces and municipalities. Municipalities are responsible for urban water management (Wiering and Crabbé 2006, p. 97). Part of this urban water management is collecting waste water in municipal sewerage systems (de Heer *et al.* 2004, p. 10).

In the Netherlands, the concept of the water system approach since 1985 has clarified the connection between the different aspects of water management. This concerns both the connection between the different components of water management and the connection between water management and flood defence. Integrated water management which is based on the water system approach also requires a connection with other policy areas on a strategic level, like environmental policy, spatial planning (spatial planning

Notes and key planning decisions, structure plans, regional plans, structure maps, zoning plans, spatial opinions, often based on the Spatial Planning Act), sewerage plans, nature conservation, agricultural policy and traffic and transport policy (de Heer *et al.* 2004, p. 7).

2.2. Water governance in the Netherlands

In practice, though, water management has not yet fully adopted the notion that managing water is a cross-sectoral issue (van den Brink 2009, Tortajada 2010a) and that water management embraces also the management of land (Gober 2013). Water governance in the Netherlands and thus water governance on the local scale is changing to a more integrated form. This paradigm shift from a strict and top down form of water management to a more open and integrated attitude of water managers causes new challenges beside the already existing challenges described in the literature (van den Brink 2009). The most striking water governance challenge at local scale is that water is for many small municipalities not a priority task, while for the local water authority water is the most important task. This causes a mismatch in coordination between these institutions.

At this moment, there is an ongoing process in the water sector where water management is interfering with spatial planning and water policy is increasingly involving in social matters (van Buuren *et al.* 2010). Traditional sector-planning institutions are increasingly challenged by EU politics; they demand a more comprehensive and integrative planning with broader spatial and other sectoral contexts (Hartmann and Driessen 2013). With regard to this change, also stakeholder involvement is becoming increasingly important. Akhmouch and Clavreul (2016, p. 1) state that ‘the traditional role of “governments” as the single decision-making authority in many instances has been replaced by multi-level, poly-centric governance’ In particular in the Netherlands the tendency towards integrated water management with governance is underlined by the development in water law – in 2010, eight Dutch water laws have been integrated into one act, asking for more stakeholder collaboration (Hartmann and Spit 2015), and shortly the Planning and Environmental Act goes even a step further, by merging all environmental laws into one integrative act. This creates new governance challenges for water managers in the Netherlands.

Next to these specific reasons, Rogers and Hall (2003) point out that there is a need for more effective water governance regimes to be designed, because water is not a simple economic good. Sometimes it is a public good, sometimes a private good and it often lies somewhere in between. Besides, there is a need for more systematic approaches of how governance can be more easily understood and applied by water managers and decision-makers (Tropp 2007).

It is of importance to examine how the principles are received at the local scale, because the OECD claims that the principles enhance water governance systems and can be applied to all levels of government (Akhmouch and Correia 2016). However, it is not clear how to apply these principles at the local scale and how these principles enhance water governance on this level. The major objective of this contribution is therefore to review how the OECD Principles on Water Governance are received in practice on the local scale, and add a valuable field analysis to the existing body

of literature. The main focus of this research lies on the Netherlands because water governance is considered advanced here and the findings can serve as a benchmark test for the viability of the OECD principles. The focus on the local level is chosen because on this level the regional water authorities are in charge when it comes to implementing water policy.

In terms of water governance, follows a model of strong sector-based institutions. The Dutch Directorate-General ‘Rijkswaterstaat’ is the most important and central institution for water management in the Netherlands. It is mainly responsible for national policy implementation. For local and regional water issues, water boards are the relevant authorities (de Heer *et al.* 2004). The water boards in the Netherlands are government bodies of functional decentralized administration with its own governing body and financing structure, and it is solely concerned with the execution of tasks in the field of water governance (Unie van Waterschappen [UVW] 2017).

According to Biswas and Tortajada (2010), improving the water governance of any water use sector is hampered by the unavailability of good, objective, unbiased and independent analyses of good and replicable case studies. In this research, a case study about a small river in the Netherlands is used to qualitatively examine the OECD Principles on Water Governance in order to explore how the OECD Principles on Water Governance fit the water governance context on the local scale.

2.3. Research methods

This research produces a qualitative example of how the principles are received on the local scale and also offers knowledge about how to cope with the (mis)fit of the principles to the local scale. As part of these qualitative research methods, a case study about a small river in the Netherlands is used to examine the OECD Principles on Water Governance closely both at a surface and deep level in order to explain how the OECD Principles on Water Governance fit the water governance context on the local scale. The case study in this research can function as an example of how the principles are received in practice and how they work out at the local scale in the phase between formulating a strategy and implement it.

The case study used in this research is about the Linge river. This river lies in the management area of the local water board Rivierenland and was chosen because of the Focus area Linge project. This project is in the middle of the phase between formulating a new strategy or policy and implementing it (see Figure 2). The OECD proclaims that *this is the phase where the OECD Principles on Water Governance are expected to improve water governance systems* (OECD 2015, p. 4; Akhmouch *et al.* 2018). With the Focus area Linge project, Waterschap Rivierenland is trying to implement a more open (horizontal) way of managing their water (Waterschap Rivierenland 2015a). In the project Focus area Linge the water authority is looking for the best possible alignment of features and usage (Waterschap Rivierenland 2015b). Stakeholder involvement and the coherence between water, land use and spatial planning plays an important role in this case (Waterschap Rivierenland 2015a).

In this case study semi-structured interviews will provide information from a variety of perspectives about the OECD

governance principles and their usefulness in practice. Employees of six municipalities, three employees of the local water board and an expert on the OECD principles on Water Governance were being interviewed. Interviewees were selected based on the case about the Focus Area Linge project and based on their (water) tasks in the Linge project area. All the interviews were conducted face-to-face and lasted approximately one hour. Prior to the interview, the OECD governance principles report and the list with interview questions were sent to the interviewees, so that the interviewees were prepared for the interview.

The type of questions asked were divided into three themes: water management challenges on the local scale, the influence of the Principles on Water Governance on the local scale and how to cope with the (mis)fit of the OECD Principles on Water Governance to water governance on the local scale. For the first two themes members of the water board and municipalities around the Linge river were interviewed because Waterschap Rivierenland was involving them in their Focus Area Linge project and because of the relation between water management and spatial planning. The audio recordings of the interviews have been transcribed and after that, the transcriptions have been analysed by identifying common views of interviewees on certain topics or frequently named topics. This was done by hand by colouring common categories or themes.

In-depth interviewing offers the possibility to discover how water governance is interpreted on a local scale and which principles do work through at a local level and why others do not. To find out how to cope with a (mis)fit of the OECD Principles on Water Governance, the research results were shown to someone with expert knowledge about the OECD Principles on Water Governance and about water governance in the Netherlands.

3. Results

This result section is divided into two sub themes to discover how the OECD Principles on Water Governance fit the local scale. The first sub theme is about usefulness of each of the principles to the local scale. During the case study all interviewees were asked about all of the principles and how the interviewees thought the principles fit their water tasks. The second theme is about how to cope with the fit or misfit of the OECD Principles on Water Governance to the local scale.

3.1. *Mirroring the usefulness of the principles to the local scale*

To find out how the twelve Principles on Water Governance fit water governance on the local scale, first water governance on the local scale and the existing water governance challenges on this level in the Netherlands will be described. The reason for this is that water governance challenges can hinder the fit of the principles to the local scale. The Linge case shows that one of the most outstanding challenges on the local scale is that water is not a priority task of the municipalities, because municipalities have many other tasks that need their attention.

As small municipality we have less intention to actively participate in such a project, we work on a very small scale and we

are very busy with our own tasks. (Policy employee municipality of Leerdam, 2017)

I think the principles are too abstract for this scale. Some of these principles even can't be applied to this level. (Policy employee municipality of Leerdam, 2017).

Besides, most municipalities had the view that the principles in their current form are too abstract to apply to their water tasks on the local scale. Municipalities see the OECD governance principles as a report they would read, however they would not really use it, because they don't understand how these principles can be applied to their tasks.

This often causes a mismatch between the wish of the regional water authorities for a more horizontal relation and cooperation and the capability of municipalities to respond to this wish. This is also the reason that municipalities remain critically against the OECD governance principles. When examining the influence of the principles separately in this case, it seems that some of them are already used, however on an unconscious way because no one of the interviewees was aware of the existence of the principles. A distinction can be seen in the willingness to understand the principles. The water managers tend to have barely any knowledge of the principles, but they have at least some understanding for the principles.

I think these principles can be useful because everybody at Waterschap Rivierenland think in a too operational way. These principles can help us to create a broader view. I find this kind of schemes very useful to see where we stand. (Policy advisor Waterschap Rivierenland, 2017)

Municipalities on the other hand have not yet explored how they can use the principles and they don't have the willingness to understand the principles either. So, even in the Netherlands, at least in this case study, the Principles on Water Governance are implemented in a fragmented way on the local scale.

Most of the interviewees were not familiar with the existence of the OECD Principles on Water Governance. Nevertheless they had the common view that a lot of the principles are already factors which are taken into account in a water governance system or a policy implementing process, despite the fact that (governmental) organizations are not aware of the existence of the OECD Principles on Water Governance. However, opinions about the usefulness of the OECD Principles on Water Governance differ.

I can't say anything against the principles, it seems logic to me. However, I would not act upon these principles, I would read it if I have to, shrug my shoulders, and continue with what I was doing. (Policy employee municipality of Leerdam).

Most municipalities find that the principles in their current form are too abstract or too vague to apply to their water tasks on the local scale. Municipalities see the OECD governance principles as a report they would read, however they would not really start to use it, because they don't see the added value of insight in them, beside the fact that they don't actually know the principles. Most of the municipalities in this case study are therefore not interested in the principles. In this case, the municipalities are relatively small and there is often not a separate function for water, it is not a priority task. Water managers were far more positive about the usefulness of the principles. Water is their priority task and they want to

govern water in the best way possible. Water managers are therefore very open for new knowledge and new frameworks that can help govern their water in a better way. From the qualitative analysis of this case study one conclusion that can be drawn is that there is a partly misfit of scale and sectors. The principles do fit the water governance of the water authority, however, they do not (yet) fit the way of working of municipalities.

3.2. Coping with the (mis)fit of the OECD water governance principles to the local scale

Since the adoption of the OECD principles, the OECD started developing an implementation strategy based on the bottom-up and multi-stakeholder development of an indicator framework and the collection of water governance stories addressing some or all of the principles (Akhmouch *et al.* 2018).

The indicators are conceived as a self-assessment framework for governments and stakeholders to carry out a dialogue on their water governance systems, to track progress over time and to map the concrete actions needed to bridge identified gaps. (Akhmouch *et al.* 2018, p. 11)

However, to cope with the misfit in this case there are two options. The first option is to reconsider the generality of this framework, because in their current form the principles are not applicable for municipalities on the local scale. This misfit of the OECD Principles on Water Governance to the local scale stresses the need for a further translation of the principles from their abstract level to the locational specific context, so they are applicable to the local scale.

The second option is to only focus on the regional water authorities when implementing the principles, so that the water authorities can translate them in an appropriate way to the municipalities and other actors involved in water governance at the local scale.

Overall, this research strengthens the idea that the Principles on Water Governance in theory are a useful, fine robust framework to hold on to when implementing new policies or strategies. However, the OECD principles are still very new, so there is a need for more practical examples to discover how these principles do work out in practice.

4. Conclusion

This contribution explores how the Principles on Water Governance of the OECD fit water governance on the local scale. In the case of the Linge, interviewees had the common view that a lot of the principles are already factors which are taken into account in a water governance system or a policy implementing process, despite the fact that people are not aware of the existence of the principles. This fits the conclusion of the OECD that water governance is advanced in the Netherlands. A second result, though, is that the principles can bring some awareness among (governmental) stakeholders for dealing with water governance process. Despite the fact that the water managers tend to have barely any knowledge of the principles, they have at least some understanding for the principles. Water is the priority task of water managers and they want to govern water in the best way possible. Water managers are therefore very open for new knowledge and new frameworks that can help govern their water in a better way. For municipalities the principles

in their current form are too abstract or too vague to apply to their water tasks on the local scale. Beside the fact that municipalities don't understand the principles, at most of the municipalities in this case there is no willingness to understand the principles. In this research case, the municipalities are relatively small and there is often not a separate department for water. This causes a mismatch between the wish of the regional water authorities for this more horizontal relation and cooperation and the capability of municipalities to respond to this wish. So, even in the Netherlands, a country that scores excellent on water governance (OECD 2014), at least in this case study, the OECD principles on water governance are kind of a fragmented picture on the local scale.

Overall, this research strengthens the idea that the Principles on Water Governance are a useful framework to hold on to when implementing new policies or strategies. The principles put together all important factors to pay attention to in a strategy or policy implementation process and increase the awareness about these twelve principles. The case of implementing the OECD Principles on Water Governance on the local scale fits in the broader context of the policy-practice gap, however, the principles don't entirely fit to the local scale in the current situation. An important factor for this is the fact that not every governmental level is the same or has to deal with the same water governance issues. One recipe or template does not always work for every situation. To make the OECD Principles on Water Governance relevant for the local scale of water governance, there is a need for a contextual and tailored translation of the principles.

Although broad and quantitative research in this respect is desirable, more qualitative research is necessary to reveal the rationalities and motivations of local stakeholders in water governance. It can be concluded that – at least for the Dutch case – the OECD water governance principles did not necessarily innovate local water governance nor stimulate it in certain directions, but it justifies and fosters dialogue on the ongoing processes from water management to water governance. Future in-depth research is needed on the implementation of the OECD principles also in other contexts, because this kind of format possibly can serve as a framework to hold on to for implementing policies also in other sectors.

Disclosure statement

No potential conflict of interest was reported by the authors.

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