

# THE CHALLENGES AND PITFALLS OF DECENTRALISATION IN WATER RESOURCES MANAGEMENT

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■ Decentralisation is an important element of the discourse on integrated water resources management. A key assumption is that the organisation of water resources management on the level of (sub-) basins offers good possibilities to involve stakeholders and to coordinate their interests. Although there are ample examples of decentralisation in water resources management, most notably of the establishment of river basin organisations, the practice of implementation remains difficult. Drawing on the results of two international research projects, on transitions in water resources management and on the foundation of river basin organisations, we discuss six potential explanations for the troublesome implementation of decentralisation in water resources management: (1) the path-dependent development of institutions, (2) the two-level game of decentralisation, (3) institutional competition, (4) poor interplay between newly established and pre-existing institutions, (5) the risk of a pendular movement in which absence of short term successes leads to centralisation again, and (6) the lack of institutional capacity on local and/or regional levels. Finally, recommendations are made for those involved in decentralisation processes.

■ According to Richardson (2000) policy ideas have much in common with viruses: they are contagious, their spreading is unseen, and when effective, they potentially affect the entire globe. This certainly applies to the concept and principles of Integrated Water Resources Management (IWRM) (Molle 2008). Water management experts who operate internationally, along with international organisations such as the World Bank, the International Water Association and the International Network of Basin Organisations, have played an important role in this dissemination process. IWRM emphasizes the need to address relationships within a water system, such as those between ground

water and surface water, water quality and quantity, upstream and downstream water uses, and connections between water and land-systems. IWRM aims to balance and integrate different water uses, such as water for households, industry, agriculture and nature.

Decentralisation is an important element of the discourse of IWRM. In many countries, national water management competencies have been transferred to the regional and local levels, to river basin organisations (RBOs) specifically. The establishment of RBOs is an important prescription in modern water resources management (Schlager and Blomquist 2008). Often

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used arguments in favour of decentralising water resources management, and the founding of RBOs, are that water problems can be addressed most effectively at the level of river (sub-)basins, that decentralisation of water resources management generates better opportunities for involving stakeholders, and that such stakeholder involvement leads to better informed, more legitimate and more effective water policies (Rondinelli et al. 1984; Conca 2006).

In practice, however, decentralisation turns out to be a highly complicated and political process, with many challenges and pitfalls, and decentralisation processes are often reversed or they get stuck, which means that the expected benefits are often not realized or realized later than originally envisaged. As a consequence, the high (and perhaps somewhat impatient) expectations which parties have beforehand often are not met. This article aims to contribute to a better understanding of the complexity of decentralisation processes in water resources management, more specifically the founding of RBOs. It is inspired by two research projects in which water reform processes were studied and compared. The first project entailed research into the role of policy entrepreneurs in realizing water transitions (Huitema and Meijerink 2009), the second focused on the establishment of river basin organisations (Huitema and Meijerink 2014). In total, 27 cases of water reform, in no less than 23 different countries, were studied. One of the cross-cutting issues in these case studies is decentralisation. In this paper we take a step back to reflect and propose six, interrelated, explanations for the (perceived) failure of decentralisation processes, and illustrate these with concrete examples of decentralisation in water resources management. We conclude with some recommendations for those involved in decentralisation processes.

### **Institutional inertia and path-dependency**

A first explanation for the failure of decentralisation processes, which we would like to discuss here, is the path-dependent development of institutions. Institutions can be defined as formal and informal rules guiding behaviour. Examples of formal rules are the constitution, laws and regulations. Such formal rules, amongst others, define the division of tasks, competencies, and responsibilities amongst levels of government. Informal rules are culturally defined patterns of behaviour. As an example, decision-making in France tends to be more hierarchical than decision making in the Netherlands. Not only countries, but also policy sectors have specific cultures and related informal rules. In most countries the water sector is tied to an engineering community with a specific worldview, way of working, and routine, and this culture differs from that of, for example, the urban planning community.

Both formal and informal institutions tend to be relatively stable under normal circumstances (North 1990; Kay 2005). Reasons for this are that parties have learned to work within a specific institutional setting, which is characterized by both formal and informal rules, and that they would need to invest in new knowledge and skills to be able to work within a new institutional setting. Institutional change also implies that existing working arrangements or contracts between organisations have to be re-negotiated, which usually involves high transaction costs. In a decentralisation process the national government and existing or newly established institutions on the regional or local level have to negotiate tasks, competencies, terms and conditions. Such negotiations are time consuming hence costly. An implicit trade-off between costs and benefits therefore often leads to the conclusion that a continuation of a policy-path taken in the past is preferred to radical institutional change. In addition to the cost-related explanation, there are interest and power related factors at work too. Organisations and individuals, which benefit from the institutional structure in place, such as national bureaucracies, usually are not interested in shifting power to regional or local levels. These factors may explain why under normal circumstances decentralisation processes are difficult to realize. As institutions are layered from the operational to the constitutional levels (see Kiser and Ostrom 1982), some institutions are more amenable to change than others. An implementation arrangement can be changed more easily than a constitution. Although not all decentralisation processes require a constitutional change, most require new legislation redefining tasks and responsibilities of national and decentralised governmental organisations.

It has often been argued that only extraordinary circumstances or crises may cause critical junctures, and change institutions fundamentally (North 1990). In other words, as long as parties do not perceive a deep crisis, it is unlikely that institutions will be transformed. Examples of such crises are economic crises, such as the Asian financial crisis of 1997 and 1998, political crises or regime shifts, such as the abolition of the Apartheid regime in South-Africa, or disasters, such as a flood event, a serious drought or accidental water pollution. Such developments open a ‘window of opportunity’ (Kingdon 1984), which can be exploited to launch and get accepted new ideas, such as decentralisation of water resources management. The Asian financial crisis weakened the power of the Indonesian central government and was an important stimulus to decentralisation in Indonesia, including in the field of water resources management (Bhat and Mollinga 2009). Due to this crisis several Asian countries also became more dependent on donor organisations, and these organisations, subscribing to the principles of Integrated Water Resources Development, formulated conditions to new loans,

amongst which the privatisation and decentralisation of water resources management. Ambitions to decentralise water resources management in South-Africa fitted well with the ambitions to democratise South-African politics after the abolishment of the Apartheid regime.

### **Decentralisation is a two-level game**

Decentralisation can be conceptualized as a two-level game (Putnam 1988). The first game is being played on the (inter)national level. In this game parties decide on a decentralisation process, the planning and organisation of this process and related terms and conditions. As mentioned before, donor organisation, such as the World Bank or the Asian Development Bank, often play a key role here. These organisations formulate principles of good governance, privatisation and/or decentralisation as conditions to new loans, and as donors come with big money their terms and conditions are usually accepted. As a consequence ‘policies on paper’ change. These policies, however, still need to be implemented, which is the second (implementation) game that needs to be played. Some actors, such as members of the national bureaucracy, may not agree with the newly adopted decentralisation policies, and start to use their power to prevent their implementation. Their strategies may vary from communicating arguments against decentralisation to withholding crucial resources or even the use of violence to threaten parties executing the decentralisation process. This partly explains why there often is a gap between decentralisation policies (the ‘policies on paper’) and the actual decentralisation process (the ‘policies in practice’). South-Africa is a good example here. According to Meissner and Funke (2014), 14 years after the formal decentralisation process had started, two out of the 19 projected Catchment Management Agencies (CMAs) were actually founded. According to them this should be explained by the lack of resources as well as the strategies of opponents to the decentralisation process, which in this case were individual technocrats of the Department of Water Affairs and Forestry. Another telling example of the difference between ‘policies on paper’ and ‘policies in practice’ is decentralisation of water resources management in the Ukraine. Hagemann and Leidel (2014, p. 228) conclude that “[...] the old governance structures are still part of the overall political and legal system and are challenged by new ones, and therefore democracy, democratic institutions and procedures are not yet fully accepted and integrated”. Although decentralisation was agreed upon and officially arranged in the law, the old, informal institutions from Soviet times continue to influence daily working routines. Similar observations were made by Dombrowsky et al. (2014) in their account of the establishment of river basin organisations in Mongolia. In both cases, the persistence of old (informal) institutions hinders the decentralisation process. These

examples illustrate the more general pattern that decentralisation in water resources management has not been very successful so far (OECD 2011).

### **Institutional competition between general purpose and special purpose governments**

Decentralisation can basically have two forms. First, the national government may transfer power to existing governmental organisations on the regional and local levels. Secondly, the national government may found new regional or local governmental organisations. Decentralisation in water resources management often entails the establishment of new organisations on a basin scale. Such RBOs may have different institutional design features. Huitema and Meijerink (2014) distinguish four ideal types of RBOs: autonomous river basin organisations, agencies, coordinating river basin organisations, and partnerships. Autonomous organisations are relatively independent from other government organisations and do have their own tax base. The Dutch water authorities (‘waterschappen’) are a good example of this type of RBO. Agencies have a mandate, which is derived from another body, for example a ministry. Coordinating RBOs have no specific authorities of their own, but facilitate and coordinate between other organisations within a basin. Finally, partnerships are bottom-up initiatives, mostly on the scale of small watersheds. These are ideal types, which implies that real life river basin organisations usually deviate from these types, and have characteristics of two or more of these types. Whereas the relatively light structures of coordinating or partnership types of RBOs usually do not pose a serious threat to pre-existing organisations, the foundation of agencies or autonomous RBOs often is more sensitive. As these special purpose organisations are given specific water management tasks, their foundation often comes at the cost of general-purpose organisations, such as regions or provinces, which used to fulfil these tasks. This may easily lead to institutional competition, a process in which organisations, which have lost their competencies, try to regain these. In Portugal, for example, the establishment of river basin district authorities induced a power struggle between the regional and national level as well as between the regions and the river basin district authorities (Thiel and de Brito 2014). The case of the Netherlands also offers an interesting example of such institutional competition. In spite of their long history, relative success, and their ability to adapt to changing circumstances, the Dutch water authorities still are regularly under attack (Havekes 2008). If this is true for a well-established system, such as the Dutch water authorities, we may definitely expect controversies over the establishment of new river basin organisations within other institutional contexts. Decentralised water management organisations are not and probably will never be undisputed.

## Poor institutional interplay

In addition to institutional competition between general purpose and special purpose organisations, there is an issue of interplay between these organisations. In the countries where RBOs are founded, these special purpose organisations remain highly dependent on the cooperation of other (mostly general purpose) organisations for realizing their objectives. This is often referred to as the dilemma of fit and interplay (Moss 2004). The newly established RBOs usually have a good institutional fit with the scale at which most water problems manifest themselves (the scale of the (sub-) basin). Their success, however, largely depends on the interplay with other organisations, which often control relevant resources (funding, information) and have legal jurisdiction in highly important neighbouring fields, such as land use planning, agricultural policy or fisheries, and usually operate on different scales. The need for cross-sector coordination was also recognized in an OECD-study on water governance (OECD 2011). A key finding of research by Huitema and Meijerink (2014) on the institutional design and effectiveness of RBOs is that although these organisations enhance institutional fit, they are often largely ineffective due to poor institutional interplay. The relationship between newly established RBOs and pre-existing institutions is not given sufficient attention to. The institutional competition between special purpose and general-purpose organisations discussed above may have ramifications for their institutional interplay. Whereas some degree of institutional competition does not need to be problematic, the necessary coordination can hardly be achieved with a high level of conflict.

## The risk of a pendular movement

Like other institutional change processes, decentralisation processes are time consuming, and those involved need stamina to yield results. Most examples of decentralisation in water resources are examples of what Thelen (2004) calls institutional layering. This means that newly established water management institutions, such as RBOs, do not replace existing institutions, such as regions or provinces, but are layered on top of existing institutions. As existing institutions usually do not want to share power, it takes time until the newly established institutions can become effective. New ways of working and contracts need to be negotiated, effective institutional interplay needs to be organized, and a certain degree of institutional competition has to be dealt with. For these reasons one cannot expect newly established river basin organisations to be effective from their very foundation. They need time to establish their position within the pre-existing institutional landscape. Only in the long run, they may partly replace existing organisations (institutional displacement, Thelen 2004). In practice, however, organisations are not always granted the time they need to become successful. A short-term evaluation may easily lead to a conclusion that decentralisation

has not been effective hence state control needs to be restored. Of course, this process may also be fuelled by state officials who have an interest in regaining power. Such dynamics may easily cause a pendular movement between processes of centralisation and decentralisation. The recent developments in the Australian Murray-Darling basin, where the Murray-Darling Commission was changed into a Murray Darling Basin Authority, increasing the competencies of the federal government (Ross and Connell 2014), and the latest developments in Portugal (Thiel and de Britto 2014) and South-Africa (Meissner and Funke 2014) also reveal that after a process of decentralisation the national government tries to regain influence again (Meijerink and Huitema 2014).

## A lack of institutional capacity

A final explanation, which we would like to discuss, is a lack of institutional capacity. This can be a lack of human resources and skills, but also a lack of financial or legal resources to achieve specific water management objectives. Although this probably is the most frequently used explanation for failed decentralisation processes, we deliberately discuss it last here. The reason for this is that lacking institutional capacity more often than not relates to either one or more of the other explanations discussed above. As an example, one may argue that the newly established decentralised water management organisations need new policy instruments to generate resources, for example competencies to impose water user fees, but this usually implies institutional competition with pre-existing institutions which may not be interested in a new, competing, tax system. Therefore, when discussing institutional capacity building the broader political and institutional context need to be taken into account.

A lack of human, financial or legal resources may also result from a process in which the central government decided on decentralisation partly to shift the financial burden of specific tasks to the regional and local levels level. As Wilder (2009 p. 91) stated about the Mexican water transitions of the last decades "Decentralization resulted in a transfer of the huge financial burden of urban water services and irrigation management to local municipalities and water users, and an easing of the financial responsibility of the federal government as it retrenched". One of the key factors explaining the failure of many decentralization processes is that the national government transfers tasks to the regional and local levels without providing the necessary resources or tax competencies needed for the implementation or these tasks.

## Conclusions and recommendations

Building on the experiences, which we have gained during two research projects in which we studied water reform processes, we discussed six key-factors, which may explain why decentralisation processes often fail. We argued that path-dependent institutional

development, the two-level game of decentralisation, institutional competition, poor institutional interplay, pendular movements, and lacking institutional capacity may all play a role here. What are the implications of these findings? We may formulate the following lessons for those involved in decentralisation processes.

**FIRST**, decentralisation of water resources management is not only a legal and administrative undertaking, but also a highly political process in which actors who stand to lose their power will try to hinder the decentralisation process. This applies specifically to situations in which new RBOs are being founded. As members of the national bureaucracy or of general-purpose organisations, such as regions or provinces, may not be interested in transferring power to these organisations, those involved in water reform processes should have the skills to manoeuvre and act within sensitive, political processes.

**SECONDLY**, the relationship between newly established water management organisations on the regional level and pre-existing institutions should be given more attention to. International donor organisations, particularly, often have specific models of RBOs in mind, based on what they have seen in other countries. Although such models may be a useful source of inspiration, they should not be copied without a proper analysis of the pre-existing institutions, and without defining their relationship with these pre-existing institutions.

**THIRDLY**, although in theory transferring more competencies to decentralised water management organisations may reduce their dependency on general-purpose governments, in most situations this is unlikely to happen, and a careful management of interdependencies is a more feasible strategy. Therefore, capacity building should not only focus on technical capacities to fulfil specific water management tasks, but also on how to organize effective cooperation with other (pre-existing) institutions. Only then, decentralized RBOs can become effective.

**FINALLY**, newly established organisations on the regional level should be given sufficient time to prove successful. As these organisations usually do not replace but are layered on top of existing institutions, they need to learn how to effectively cooperate with these other institutions. Short-term evaluation studies may easily lead to a conclusion that the new decentralized system is not effective hence state control needs to be restored. Such pendular movements would better be prevented.

Implementing these recommendations will not solve all issues because decentralisation in water resources management as well as in other sectors is a complex and delicate undertaking. It may, however, prevent that models, which have proven successful elsewhere, are copied uncritically without taking into account pre-existing institutions.

## SAMENVATTING

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Decentralisatie is een belangrijke component van het invloedrijke discours van integraal waterbeheer. De algemene gedachte is dat de vormgeving van het waterbeheer op het niveau van (deel)stroomgebieden goede mogelijkheden biedt om belanghebbenden te betrekken en belangen op een goede manier op elkaar af te stemmen. Hoewel er internationaal veel voorbeelden zijn van decentralisatie in het waterbeheer, vooral van de oprichting van nieuwe stroomgebiedsorganisaties, blijkt dat de praktijk van de implementatie weerbarstig is. Op basis van de resultaten van twee internationaal vergelijkende onderzoeken, naar transities in het waterbeheer en naar de oprichting van stroomgebiedsorganisaties, bespreken we in dit artikel zes mogelijke verklaringen voor de moeizame implementatie van gedecentraliseerd waterbeheer. Tenslotte formuleren we enkele aanbevelingen voor diegenen die zijn betrokken bij decentralisatie processen.

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## REFERENCES

- Bhat, A., and P. Mollinga (2009) Transitions in Indonesian water policy: policy windows through crisis, response through implementation. In: D. Huitema and S. Meijerink (eds) *Water policy entrepreneurs: a research companion to water transitions around the globe*. Edward Elgar Publishing, Cheltenham, UK, 158–174.
- Conca, K. (2006) *Governing Water: Contentious Transnational Politics and Global Institution Building*. Mit Press, Cambridge, MA.
- Dombrowsky, I., A. Houdret, L. Horlemann (2014) Evolving river basin management in Mongolia. In: Huitema, D., S. Meijerink (eds) *The Politics of River Basin Organisations. Coalitions, Institutional Design Choices and Consequences*. Edward Elgar Publishing, Cheltenham, UK, 265–297.
- Hagemann, N., M. Leidel (2014) Introducing river basin management in a transitional context: a case study about Ukraine. In: Huitema, D., S. Meijerink (eds) *The Politics of River Basin Organisations. Coalitions, Institutional Design Choices and Consequences*. Edward Elgar Publishing, Cheltenham, UK, 210–233.
- Havekes, H. (2008) *Functieel decentraal waterbestuur: borging, bescherming en beweging. De institutionele omwenteling van het waterschap in de afgelopen vijftig jaar*. Proefschrift Universiteit Utrecht.
- Huitema, D., S. Meijerink (eds) (2009), *Water Policy Entrepreneurs. A Research Companion to Water Transitions around the Globe*. Edward Elgar Publishing, Cheltenham, UK.
- Huitema, D., S. Meijerink (eds) (2014), *The Politics of River Basin Organisations. Coalitions, Institutional Design Choices and Consequences*. Edward Elgar Publishing, Cheltenham, UK.
- Kay, A. (2005) A Critique of the use of path dependency in policy studies. *Public Administration*, 83(3): 553–571.
- Kingdon, J. W. (1984) *Agendas, alternatives and public policies*. Harper Collins, New York, USA.
- Kiser, L. L., E. Ostrom (1982) The Three Worlds of Action: A Metatheoretical Synthesis of Institutional Approaches. In: E. Ostrom (ed.) *Strategies of Political Inquiry*. Sage, Beverly Hills, CA, 179–222.
- Meijerink, S., D. Huitema (2014) Institutional design, politics and performance of river basin organisations. In: Huitema, D., S. Meijerink (eds) *The Politics of River Basin Organisations. Coalitions, Institutional Design Choices and Consequences*. Edward Elgar Publishing, Cheltenham, UK, 356–391.
- Meissner, R., N. Funke (2004) The politics of establishing catchment management agencies in South Africa: the case of the Breede-Overberg Catchment Management Agency. In: Huitema, D., S. Meijerink (eds) *The Politics of River Basin Organisations. Coalitions, Institutional Design Choices and Consequences*. Edward Elgar Publishing, Cheltenham, UK, 184–209.
- Molle, F. (2008) Nirvana concepts, narratives and policy models: Insight from the water sector. *Water Alternatives* 1(1): 131–156.
- Moss, T. (2004) The governance of land use in river basins: prospects for overcoming problems of institutional interplay with the EU Water Framework Directive. *Land Use Policy* 21(1): 85–94.
- North, D.C. (1990) *Institutions, Institutional Change and Economic Performance*. Cambridge University Press, Cambridge.
- OECD (2011) *Water Governance in OECD Countries: a Multi-level Approach*. OECD Studies on Water, OECD publishers.
- Putnam, R. (1988) Diplomacy and Domestic Politics: The Logic of Two-Level Games. *International Organization* 42: 427–460.
- Richardson, J. (2000) Government, Interest Groups and Policy Change. *Political Studies*. 48: 1006–1025.
- Rondinelli, D., J. Nethis and S. Chemma (1984) *Decentralization in Developing Countries: A Review of Current Experience*, World Bank, Washington.
- Ross, A., D. Connell (2014) The evolution of river basin management in the Murray-Darling basin. In: Huitema, D., S. Meijerink (eds) *The Politics of River Basin Organisations. Coalitions, Institutional Design Choices and Consequences*. Edward Elgar Publishing, Cheltenham, UK, 326–355.
- Schlager, E., W. Blomquist (2008) *Embracing watershed politics*. University Press of Colorado, Boulder, CO.
- Thelen, K. (2004) *How institutions evolve. The political economy of skills in Germany, Britain, the United States, and Japan*. Cambridge University Press, Cambridge.
- Thiel, A., A. G. de Brito (2014) Emergence, performance and transformation of Portuguese water institutions in the age of river basin organisations. In: Huitema, D., S. Meijerink (eds) *The Politics of River Basin Organisations. Coalitions, Institutional Design Choices and Consequences*. Edward Elgar Publishing, Cheltenham, UK, 162–183.
- Wilder, M. (2009) Political and economic apertures and the shifting state-citizen relationship: reforming Mexico's national water policy. In: Huitema, D., S. Meijerink (eds) *Water Policy Entrepreneurs. A Research Companion to Water Transitions around the Globe*. Edward Elgar Publishing, Cheltenham, UK, 79–96.