2 Water management solutions

On panaceas and policy transfer

Joanne Vinke-de Kruijf and Gül Özerol

2.1 Introduction

With the increase of communication means, it has become easier than ever for policymakers, water managers, researchers and other actors involved in water management to collaborate. As explained in Chapter 1, this collaborative environment creates opportunities for developing best practices and transferring water management solutions from one context to another. This chapter elaborates on some of the 'universal remedies' and on the concept of policy transfer in a water management context. First, we discuss three concepts that are often promoted as 'the solution' to water management problems: integrated water resources management, good water governance and participatory water management. In addition to reviewing the common definitions and understandings of these concepts, we also reflect on the issue of putting them in practice. This elaboration of the key concepts in modern water management is followed by a discussion about the phenomenon of 'policy transfer'. After discussing the phenomenon itself and explaining what, why and who transfers, we pay specific attention to the outcomes of a transfer process and the role of contextual factors. The chapter closes with some concluding remarks that reflect on how this chapter relates to Chapter 3, which forms together with this chapter the theoretical basis of the empirical chapters of the book. The discussions presented in this chapter are based on a literature review of scholarly articles as well as international reports and policy documents. Where relevant, the review extends beyond water management to the broader literature on policy studies and environmental decision-making. The ideas introduced in this chapter are critically reflected upon in Chapter 15, which is the concluding chapter of this book.

2.2 Key concepts in water management

'Integration' – integrated water resources management

The need to integrate multiple elements into water management has been acknowledged since 1950s (Biswas, 2008; White, 1998). The Dublin

Conference in 1992, however, gave the impetus to integrate the ecological, social and economic pillars of sustainable development in water management (Rahaman and Varis, 2005). At this conference, the so-called 'Dublin Principles', which aim to integrate the ecological, social and economic pillars of sustainable development into water management, were accepted (ICWE, 1992).

The concept of integrated water resources management (IWRM) has been increasingly promoted, mainly by the Global Water Partnership (GWP), which was established in 1996 to support all the interested actors in sustainable water management. According to the common and often-cited definition of the GWP, IWRM is '*a process which promotes the coordinated development and management of water, land and related resources, in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems*' (GWP-TAC, 2000, p. 22).

In the last two decades, attempts to put IWRM into practice have increased with an impetus from international and supranational organizations (Anderson *et al.*, 2008). IWRM gained wide acceptance from international organizations such as the World Water Council, the World Bank, the Organisation for Economic Co-operation and Development (OECD), the United Nations Programmes for Environment and Development (UNEP and UNDP), mainly due to the fact that it builds on the Dublin Principles. At the European Union (EU) level, the Water Framework Directive (WFD) was enacted to unite both the disaggregated water-related legislation and to respond to the concerns about degrading water quality in the EU region (Kallis and Nijkamp, 2000). Social and economic integration are also among the major objectives of the WFD as reflected with the inclusion of provisions about public participation, the polluter-pays principle and full-cost water pricing (European Parliament and Council, 2000).

River basins in IWRM are both literally and conceptually seen as the 'natural' unit of management. This situation makes river basin management a crucial element of IWRM. The EU and the GWP have been the major promoters of river basin management. The WFD has specific provisions to realize the river basins as the management units, whereas the GWP deems river basins as the 'logical planning units for IWRM from a natural system perspective' (GWP-TAC, 2000, p. 24). Using the hydrological boundaries as management units is as a manifestation of the hydrology-based approach of IWRM. This hydrological orientation is well accepted by some scholars (Jaspers, 2003; Mostert *et al.*, 2007), whereas there is also criticism and caution. The major argument is that, as a hydrological concept, the river basin contradicts the integration ideal by putting hydrology as the main discipline of water management and by undervaluing the role of other disciplines (Allan, 2003; Merrey, 2005).

Despite the worldwide attempts to put IWRM into practice, there are arguments that IWRM cannot be fully implemented since integration is impossible due to its high ambitions (Biswas, 2008; Grigg, 2008). Including

other resources in the scope of integration, let alone the inevitable complexity caused by the multitude of policy sectors, scales, uses, users, disciplines and professions, remains a challenge. Biswas (2008) argues that neither the definition nor the operationalization of IWRM incorporates the view of scientific disciplines related to land resources. However, every land use decision is also a water use decision (Bossio *et al.*, 2010). This implies that IWRM cannot be realized without integrating policy decisions about the use of land resources. Furthermore, the inherent complexity of social-ecological systems requires the involvement of policymakers, scientists and practitioners for the integration of knowledge and expertise about water and land resources (Duda and El-Ashry, 2000).

Another point of caution about IWRM is its 'political correctness'. Political issues in water management include the asymmetries in the distribution of power, the access of different actors to water resources and the distribution of benefits as well as costs among the multiple stakeholders. However, these issues are often ignored while integrating the multiple interests and values (Molle, 2008; Mollinga, 2008; Ingram, 2011). Ignoring the inherent political nature of water management processes and professional discourses could make IWRM a 'sanctioned discourse' that is imposed by some hegemonic actors onto other less powerful ones (Allan, 2003).

Regarding the political dimension of river basin management, Moss and Newig (2010) warn that rescaling the management level from administrative units to river basins creates winners and losers by reshaping the power relations. The winners and losers of the rescaling process are not only the actors of water management, but also the other policy sectors, since the misfit between the jurisdictional boundaries and hydrological boundaries can lead to problems in other sectors such as environmental protection (Cohen and Davidson, 2011; Ingram, 2011). Integration of multiple policy sectors is not unique to river basin management, rather an overarching problem for IWRM. In many countries, sectoral approaches dominate the whole policymaking realm. Therefore, supporting the necessary institutional arrangements and ensuring the allocation of resources and authority at multiple levels are identified as relevant issues to tackle (Falkenmark *et al.*, 2007; Imperial, 2009).

The pessimistic views about IWRM relate to the difficulty in overcoming the obstacles required to go from IWRM theory to practice (Jeffrey and Gearey, 2006; Biswas, 2008). Nevertheless, all the criticisms concerning IWRM point out the need to learn from the practical realities of IWRM implementation to create flexible and enabling management approaches (Coenen and Bressers, 2012).

'Good governance' – good water governance

The concept of good governance is derived from 'governance', which closely resembles 'government', but should be understood as a separate

concept. In public management debates, governance has been increasingly articulated to replace 'government', yet still with diverse definitions and uses. With a caution that governance is no more a synonym to government, Rhodes (1996) identifies six uses of the concept: the minimal state; corporate governance; good governance; the new public management; socio-cybernetic systems; and self-organizing networks. In most of these uses, governance implies the increased involvement of non-governmental actors in decision-making processes and the extension of the stakeholder range along the institutional and jurisdictional levels. The concept of good governance is particularly relevant, since it has been applied in all policy sectors, including water resources.

Good governance is promoted largely by the World Bank, which uses the concept and its associated principles as the criteria to improve the effectiveness of development aid in government reforms. According to the World Bank good governance is

> a predictable, open, and enlightened policymaking (that is, transparent processes); a bureaucracy imbued with a professional ethos; an executive arm of government accountable for its actions, and a strong civil society participating in public affairs; and all behaving under the rule of law.
>
> (World Bank, 1994)

The World Bank identifies four interrelated components of assessing governance, namely public sector management; accountability; legal framework for development; and transparency and information (World Bank, 1994). These components form the basis of good governance and have been used by different organizations. Other international organizations such as the OECD, the International Monetary Fund and UNDP also embrace the concept. Furthermore, various new topics such as corruption, public participation and human rights, have been incorporated into development cooperation (Hoebink, 2006). The definition and the components of good governance reflect the normative stance behind the concept through defining how governance should look like. The concept of 'governance' alone does not have such a connotation.

Similar to IWRM, the GWP also promotes the concept of water governance. In their formative report, Rogers and Hall (2003, p. 7) cite the GWP's water governance definition as '*the range of political, social, economic and administrative systems that are in place to develop and manage water resources, and the delivery of water services, at different levels of society*'. This definition is crucial as it clearly addresses how water governance relates to water management. On the one hand, water management is concerned with developing and utilizing the water resources as well as delivering the water services. On the other hand, water governance sets the rules of operation for water management (Rogers and Hall, 2003; WWAP, 2006).

Good water governance combines the notions of good governance and water governance. However, the concept of good water governance also has many definitions with no consensus about its meaning and use (Lautze *et al.*, 2011). One of the fundamental assumptions is that good water governance brings about good outcomes, which reflects the normative element of good governance. What constitutes good water governance and good outcomes, however, remains unclear.

Expectations concerning the application of good governance principles to the water domain vary. These expectations include the establishment of a common understanding about the 'good outcomes' of governance processes and the collaboration of different sectors towards achieving those good outcomes (Rogers and Hall, 2003; Molden *et al.*, 2010). As governance is about the exercise of authority and allocation of rights and resources, the issue of social power becomes difficult to avoid. However, water governance is also subject to criticism when it is considered only as an instrument for achieving IWRM and the application of good water governance remains apolitical by neglecting how the decisions are made by respecting – or disrespecting – the principles (Mollinga, 2008; Lautze *et al.*, 2011).

'Public participation': participatory water management

The participation of lay public members and organized stakeholders is crucial for sustainable development. This perspective is reflected in several international policy documents. In the Rio Declaration, the benefit expected from public participation is expressed in terms of its contribution to dealing with sustainability issues (UNCED, 1992). Agenda 21, which was prepared as the main outcome of the Rio Declaration, addresses the necessity of public participation at all levels for successful implementation. The need for participation in policy formulation, decision-making and implementation is stated in the Johannesburg Declaration as well (UN, 2002). Accepted in 1998, the Aarhus Convention reflects the international consensus for improving participatory mechanisms in the general realm of environmental decision-making (UNECE, 1998). The Aarhus Convention grants citizens and organizations the right to be informed about environmental matters and to participate in environmental decision-making. Thus, an increasing emphasis has been put on designing and implementing participatory mechanisms in the decision-making processes towards sustainable development.

The emphasis put on public participation can be explained by a multitude of expected benefits for participants and governments. Two main arguments, namely normative and instrumental, expound upon these expected benefits (Coenen, 2009). The normative argument asserts that participation is necessary for better functioning democracies, since it serves normative ideals such as equity, representativeness, transparency and

empowerment (Fiorino, 1990; Webler, 1995; Leach, 2006). The instrumental argument, on the other hand, stresses the role of participation as a tool to increase the legitimacy of policy decisions and to improve the effectiveness of policy implementation (Beierle and Cayford, 2002; Coenen, 2009). In line with the instrumental view, a third argument is referred to as the substantive argument (Fiorino, 1990). This argument suggests that the judgements of lay public members are as sound as expert knowledge and therefore should be incorporated to improve the quality of decisions (Beierle and Cayford, 2002).

Participatory mechanisms that incorporate the values, beliefs and knowledge of the public are also regarded as an indispensable element of decision-making processes in water management. This perspective is shared by water scholars (Jaspers, 2003; Delli Priscoli, 2004; Creighton, 2005; Von Korff *et al.*, 2012) as well as the international organizations that promote IWRM (GWP-TAC, 2000) and good water governance (WWAP, 2012).

On the international stage, public participation found wider acclaim in water management starting in the 1990s. At the Dublin Conference, participation was identified as one of the four guiding principles for water management (ICWE, 1992). In line with the Dublin Principles, the GWP, a key promoter of IWRM, denotes public participation as a key principle of IWRM (GWP-TAC, 2000). Being the major legislation of the EU water policy, the WFD also requires the implementation of various participatory mechanisms in all phases of water management (EC, 2002).

Along with the ambitious expected benefits of public participation, several concerns lead to questions about achieving these benefits in water management (Mostert, 2003; Özerol and Newig, 2008; Neef, 2009). For instance, when participants lack competency or knowledge, their involvement can prove futile in making the necessary decisions, cause confusion for the decision makers, or lengthen the decision-making process. Another concern is the utilization of the resources allocated to a participation process. From an instrumental perspective, the use of time, money and human resources would be inefficient if a successful outcome is not reached despite the implementation of participatory mechanisms (Özerol and Newig, 2008; Krywkow, 2009). While public participation can be an appropriate means of empowerment and improved democracy, it can also turn into a bureaucratic exercise to fulfil procedural requirements or a marketing tool to 'sell' government policy (Mostert, 2003). Participation can also become a managerial exercise with which the procedures or techniques from elsewhere are applied without reflecting on the role of different types of actors (Cleaver, 1999).

The obstacles against the achievement of the expected benefits of public participation can be attributed to numerous factors. These include poor planning of participation processes, complexity and vagueness of higher level participation mandates for the local actors, inexperience about participatory mechanisms, differing perceptions about the expected

outcomes and reluctance in putting participation into practice (Steelman and Ascher, 1997; Cooke and Kothari, 2001).

Thus, participation has – like integration and good governance – many potential benefits but these benefits are difficult to achieve in practice. As various empirical chapters of this book show, the implementation of participatory mechanisms does not necessarily lead to the improved management and governance of water resources.

2.3 Towards an interpretation of policy transfer processes

Policy transfer and related concepts

In recent years, an extensive body of literature has been formed around the analysis of processes that involve the 'borrowing of ideas'. As explained in Chapter 1, we use the term 'policy transfer' in this book to point towards the interactive process by which actors use knowledge that was developed in another context. The term policy transfer encompasses a range of related concepts. In some of the literature, the phenomenon is studied from the perspective of policymakers searching for new ideas across borders. These voluntary transfers are also referred to as 'lesson-drawing' (Rose, 1993) or 'systemically pinching ideas' (Schneider and Ingram, 1988). Later publications on policy transfer (Dolowitz and Marsh, 1996, 2000; Stone, 1999) or 'institutional transplantation' (De Jong *et al.*, 2002a) also include less voluntary forms of policy transfer. In this book, the term policy transfer also encompasses the 'translation' of ideas or concepts from the supranational or international level to the national, regional or local level. In its original form, the concept of 'translation' refers to how the spread of anything (e.g. claims, goods or artefacts) – in space and time – is influenced by people (Latour, 1986). In this book, the concept refers to the international spreading of ideas and is associated with 'global discourses' (Fadeeva, 2004; Mukhtarov, 2012). The concept of 'policy transfer' is also closely related to 'policy diffusion' (Walker, 1969). Research on policy diffusion, however, has another focus. It concentrates on the structural factors that explain the adoption of an innovation and is often based on large-*n* quantitative studies. Policy transfer research, on the other hand, concentrates on process-oriented questions including the how, when and why of diffusion and tends to be based on in-depth case studies (Dolowitz and Marsh, 1996; Mossberger and Wolman, 2003). Two other concepts that are closely related to policy transfer are 'policy convergence' (Bennett, 1991) and 'institutional isomorphism' (DiMaggio and Powell, 1983). Convergence and isomorphism both refer to the idea that institutions or policies have the tendency to become alike. Policy transfer is a potential cause of this phenomenon. However, convergence may also occur unintentionally, for example, due to harmonizing macroeconomic forces. Policy transfer, on the other hand, always involves an agent (Evans, 2009).

Transfers are also studied extensively in the domain of organizational sciences. In this domain, the phenomenon is usually referred to as 'knowledge transfer' or 'technology transfer'. Transfer studies in this domain focus on the transfer of knowledge (about technologies or the like) across branches of international firms (Bresman *et al.*, 1999; Reddy and Zhao, 1990), from developed to developing countries, for instance, in a developmental aid setting (Pigram, 2001; Siggel, 1986; Svensson, 2007) or across organizations in relation to innovation (Carlile, 2004; Trott *et al.*, 1995). These studies have proven to provide useful insights for the analysis of transfers in the public domain. For example, the concept of institutional isomorphism was developed by organizational theorists (DiMaggio and Powell, 1983) and later also used to understand policy transfer in the European Union (Radaelli, 2000). Another example is the four stages of a technology transfer (i.e. awareness, association, assimilation and application), which were developed to understand technology transfers between firms (Trott *et al.*, 1995) and recently also applied to the diffusion of innovations in the public sector (Bressers, 2011). Moreover, literature on knowledge management and knowledge sharing has proven to provide a better understanding of how various types of knowledge and interaction mechanisms influence the transfer of knowledge in a water management context (Vinke-de Kruijf *et al.*, 2011). What knowledge is being transferred in a water management context, why and by whom is elaborated further in the next subsections.

Knowledge being transferred

Central in policy transfers are the transfer of policy-relevant *knowledge*. The reason for using the term 'knowledge' is to emphasize that it is not the concepts, methods or technologies themselves that are transferred but rather the knowledge that is associated with or embedded in these objects. Consider, for example, the transfer of a technology from one country to another. On such occasions, it is not the equipment itself but the knowledge that is associated with that equipment that is transferred from one context to another (Bresman *et al.*, 1999; Trott *et al.*, 1995). Objects of policy transfer include: (1) policy aspects (e.g. goals, content or instruments); (2) concrete programmes; (3) institutions; and (4) ideologies, ideas and attitudes (Dolowitz and Marsh, 2000; Rose, 1993; Stone, 1999). Policy aspects include both 'broader statements of intention' regarding the direction policymakers want to take and instruments or administrative techniques used to achieve a certain policy. Programmes are mentioned separately as they are concrete courses of action used to implement a policy (Dolowitz and Marsh, 1996, 2000). The transfer of policies or programmes is not limited to administrative aspects; it also includes the transfer of technical knowledge, for example, in the form of design aspects (Marsden and Stead, 2011). Transfers may further concern institutions, which are the patterns that structure social

interaction. These patterns consist of formal rules specifying what is allowed, obliged and forbidden under what conditions and informal social practices and rituals that are rooted in cultural norms and values. A policymaker may also transfer an ideological rhetoric to justify the adoption or spread of certain policies (Dolowitz and Marsh, 1996). Think tanks can enhance such transfers by legitimizing or underpinning policies with intellectual matter, rhetoric or a scholarly discourse (Stone, 2000). In addition, negative lessons are often mentioned as a separate category (Dolowitz and Marsh, 1996, 2000) to emphasize that lessons can be positive and negative. Policies can be a stimulus for some countries to adopt similar policies and at the same time become a negative example for other countries (Rose, 1993).

The transferability of knowledge is likely to depend on the type of knowledge being transferred. For example, methods and techniques are more transferable than less visible knowledge (e.g. ideas) or more context-specific knowledge (e.g. programmes) (Stead, 2012). Thus, informal practices are more difficult to transfer than formal procedures. The transferability of knowledge also relates to different levels of action at which they occur. These levels of action include the constitutional level (ground rules), the level of policy areas (relations between governmental bodies) and the operational level (daily activities). Transfers are likely to be more demanding for higher levels of action than for lower levels. Accordingly, legal systems are more difficult to transfer than practical procedures (De Jong and Mamadouh, 2002). Transfers occur not only between actors at similar levels but also across levels. Actors at higher levels can take lessons from actors at lower levels, while actors at lower levels can learn from actors at higher levels too (Dolowitz and Marsh, 2000). In theory, policy transfer may take place at and between any of the following levels: transnational, international, national, regional and local. Accordingly, policy transfers may occur along twenty-five different pathways. Of these pathways, the transfers that involve an international dimension are the most interesting ones as they cannot be explained with other frameworks. Hence, this book and much of the relevant literature focus on transfers that involve an international or transnational dimension (Evans and Davies, 1999).

Triggers and causes behind transfer processes

Policy transfers are often understood as processes consisting of several phases. While various scholars identify a different number of phases, they broadly agree that policy transfers start with an exploratory phase (this phase may include the mobilization and emergence of an actor network), which is followed by an assessment phase and potentially results in an application phase (Bressers, 2011; Evans and Davies, 1999; Jeffrey and Seaton, 2004; Mossberger and Wolman, 2003; Rose, 1993; Trott *et al.*, 1995). According to these scholars, a search for knowledge is central in the exploratory phase. However, transfers are not necessarily rooted in a desire

to acquire or import knowledge. They can also be rooted in a desire to spread or export knowledge (Stone, 1999). From an institutional transplantation perspective, the main reason behind any type of transfer is the expectation of bringing improvements to the receiving country. They are seen as ways to speed up developments or to achieve them at lower costs (Mamadouh *et al.*, 2002). Other scholars argue that transfers start with the recognition of a problem (Evans and Davies, 1999) or dissatisfaction with the status quo (Rose, 1993). In recent years, there has been critique on this interpretation of policy transfer. One of these critiques is that transfers are seen as rational policy processes in which policy decisions are the realization of valued goals through structured interventions (James and Lodge, 2003). Another critique is that policy transfers are hardly ever take the form of free and rational responses to emerging problems. Actors face bounded rationality since they do not have the access or the capacity to process all information (Dolowitz and Marsh, 2000). Besides that actors have incomplete knowledge, they are also bounded by organizational choices (James and Lodge, 2003). Policy transfers are also not necessarily based on deliberate choices. They are sometimes also rooted in political choices. Actors may, for example, just introduce 'foreign' ideas to get things on the political agenda or as a 'quick fix' in response to political pressure or a crisis. On such occasions, policy transfers are initiated even though actors have no idea how well the idea will work or what adaptations will be needed (Mossberger and Wolman, 2003).

One of the critiques on 'lesson-drawing' is furthermore that it fails to acknowledge that transfers often involve coercion, i.e. they involve situations in which one actor forces or pushes another actor to adopt a certain policy. Although the direct imposition of policies is rare, transnational institutions, such as the World Bank or the International Monetary Fund, are able to force governments to adopt certain policies. In addition, indirect coercive transfers are quite common. For example, interdependencies or the perception of lagging behind may force or push governments to adopt similar policies (Dolowitz and Marsh, 1996). Consider, for example, the desire of Eastern European countries to catch up with Western countries after communism (Rose, 1993). In reality, policy transfers therefore often involve both voluntary and coercive elements. They are neither based on perfect rationality nor on direct imposition but include aspects of bounded rationality, a perceived necessity or conditionality (Dolowitz and Marsh, 2000).

In voluntary transfers, the power balance is generally more on the side of the receiver. In such cases, transfers can take the form of highly selective borrowing (often from multiple sources), undiluted borrowing (little adaptation to local circumstances) or synthetic innovation (policies are synthesized with other policies to create more advanced innovations). In coercive or imposed transfer, the power balance is more at the side of the source. In such cases, policy transfers take the form of imposition. Such

imposed forms of policy transfers are typical in a colonial or in a repressive communist context. However, authoritarian imposition without any consideration of local conditions does not automatically occur in such contexts. As imposition does not prevent a transfer from being disagreed upon, it is likely to result in contested or negotiated forms of imposition (Ward, 1999).

Policy transfers are often closely related to processes of policy convergence or institutional isomorphism. Policy convergence is based on the recognition that countries face similar problems and tend to solve them in similar ways (Bennett, 1991). One possible cause behind policy convergence is penetration, which is similar to direct coercive transfer and involves the compulsion to conform or the use of power. A second possible cause is emulation or policy bandwagoning, which refers to the borrowing and subsequent adaptation of policies. A third cause is harmonization, which refers to the recognition of interdependence and is promoted and sustained by supranational institutions, such as the European Union. Fourth, policy convergence can be caused by the networking and interaction among 'elite' (e.g. experts or practitioners) (Bennett, 1991; Stone, 2000). Another factor that explains policy transfers is institutional isomorphism, which refers to the idea that organizations have the tendency to become alike. This especially plays a role in transnational structures, such as the European Union. Isomorphism can take the form of coercion and also of mimetism or normative pressure. Mimetism refers to imitation as a way of coping with uncertainty. Normative pressure arises from the fact that professionals tend to have a common cognitive base and a shared legitimization. In a European context, coercion is not likely to dominate but it plays a role via economic mechanisms. Given the level of uncertainty, mimetic isomorphism is necessary in many circumstances. Normative pressure tends to occur in policy processes that are dominated by expert knowledge (Radaelli, 2000). Thus, policy transfers occur for many different reasons and are triggered by different factors. The types of explanations that are provided closely relate to the adopted theoretical lens for studying the phenomenon.

The actors involved

One of the aspects that distinguishes the literature on – both voluntary and coercive – policy transfers from the other related literature streams, such as policy diffusion or policy convergence, is that it sees transfers as intentional activities. Thus, as processes that occur through the actions of certain agents. These agents may work at different levels (i.e. the international, transnational, national, regional or local level) and at different points in the process (Evans and Davies, 1999). To understand the type of actors involved in policy transfer, we distinguish four categories of actors: (1) supranational and international actors; (2) governmental actors; (3) non-governmental actors; and (4) private actors. These categories are not

mutually exclusive and are partly overlapping. For example, the last three categories are likely to include both national and international actors (cf. Stone, 2004).

The first category of actors involves representatives of supranational or international organizations (Dolowitz and Marsh, 1996, 2000). The terms international and supranational refer here to structures and processes that involve two or more countries. International actors play an important role in the diffusion of ideas, both informally and formally (Mossberger and Wolman, 2003). This category therefore includes actors with formal power, such as the EU or the UN, and actors with informal power, such as the GWP, the World Water Council or the Stockholm International Water Institute. It also includes funding agencies, such as the International Monetary Fund and regional and international development banks. Other examples of actors in this category are international non-governmental organizations such as the World Wildlife Fund and Greenpeace or international social movements like Occupy. The importance of these non-state transnational organizations in policymaking is argued to be on the increase (Evans and Davies, 1999).

The category of governmental actors includes elected officials, political parties and civil servants (Dolowitz and Marsh, 1996, 2000). Civil servants (bureaucrats or non-elected officials) can play a significant role in policy transfers, as they are usually part of informal communities of experts that share ideas, information and values through publications, conferences or organizations. The membership of these communities often cuts across boundaries of organizations, sectors and countries (Rose, 1993).

Further, policy transfers often engage non-governmental or semi-public organizations. These actors represent non-profit organizations and usually have no role in formal decision-making or in administration or government policies (Stone, 2000). Examples of actors in this category are think tanks, research institutes, universities, pressure groups and voluntary organizations (Stone, 1999, 2000) as well as lobby or interest groups (Marsden and Stead, 2011). These actors may either be focused more on research or engaged in advocacy and marketing of ideas. What they have in common is that they have a significant degree of autonomy and are intellectually independent. Because of their information, involvement, extensive network and expertise, they can play an important role in the diffusion of ideas. However, the actual influence of non-state actors, such as think tanks, on policy transfer is often limited. They can construct legitimacy, develop knowledge, assess policy options and draw attention but are dependent on formal political actors for policy transfers to occur (Stone, 2000). This does not apply to policy transfer networks (i.e. collaborative structures of state and non-state actors). These networks are often key instruments in policy learning and can fulfil an important function in knowledge dissemination (Evans, 2009).

Private actors also often contribute to the transfer of policies. Policymakers often depend on the advice of consultants who act as experts in the

development of new policies or programmes (Dolowitz and Marsh, 2000). What also plays a role is that society is increasingly shaped by the interaction between various actors, both public and private (Bressers and Kuks, 2003; Peters and Pierre, 1998). In particular in the management of urban water resources, the private sector becomes increasingly important due to the privatization of water services (Swyngedouw, 2005).

Transfer studies are often based on the idea that policy transfers basically involve two actors: a source that is transferring knowledge to a receiver. In reality, policy transfers occur in a much more networked setting (De Jong and Edelenbos, 2007) and are realized through the interaction between various actors (Evans and Davies, 1999). One of the underlying reasons is that the solving of public problems usually requires a combination of various resources owned by different actors. Problems are therefore dealt with by mutually dependent actors that have their own, often diverging, interests, problem perceptions and strategies (Koppenjan and Klijn, 2004). Policy transfers are therefore more likely to be shaped by multiple actors who either fulfil the role of source (donor or exporting actor), receiver (host or importing actor) (De Jong and Mamadouh, 2002; Vinke-de Kruijf *et al.*, 2011), facilitator (bringing various actors together) or producer (supporting the transfer process by developing knowledge). Every actor can fulfil multiple roles (Wolman and Page, 2002) at various points in time (Ward, 1999).

2.4 The outcomes and context of policy transfers

Assessment of a policy transfer

Among the central questions that guide the empirical chapters of this book is a question concerning the success of the transfer under study (see Chapter 1). This question becomes of particular relevance when ‘policy transfer’ is seen not only as a lens to study the travel of ideas (as is often done in diffusion studies) but also as an intentional activity. Depending on what one defines as the purpose of a policy transfer, one may adopt different evaluation criteria to assess a transfer. Marsden and Stead (2011) argue that there are very few studies that demonstrate an actual transfer. In their opinion, this would involve an evaluation of the extent to which a search for external knowledge resulted in new policies or changes to proposed policies. From a policy implementation perspective, the demonstration of an actual transfer lies in the actual application of knowledge and thus in the implementation phase. In analysing the actual outcomes of a policy transfer, a distinction can be made between four gradations of policy transfer: copying, emulation, combination and inspiration. Copying involves an actor adopting an object (i.e. a policy, programme or institution) without modifying anything. Such transfers are rather rare but may occur if, for example, a politician is looking for a ‘quick fix’. In an international setting,

copying is nearly impossible as differences in language and legal procedures can hardly be ignored. Emulation means that an object is seen as the 'best standard'. It does not involve the transfer of the object itself but the transfer of the ideas behind an object. Combination (or hybridization) is one of the most typical forms of policy transfer. It means that actors combine elements found in various settings or objects to develop an object that fits the local context. It thus involves adjustment for contextual differences as well as combining elements from different places. Inspiration means that foreign objects inspire fresh thinking and policy change. However, the final outcome does not draw directly upon the original object (Dolowitz and Marsh, 2000; Evans, 2009; Rose, 1993). In various phases of a transfer, obstacles may arise preventing the actual transfer of knowledge. Problems may already arise in the pre-decision phase. For example, actors may fail to define or recognize a problem or are not receptive to alternatives. Also during the transfer process, actors may experience obstacles such as a lack of support, structural constraints or technical problems (Evans, 2009).

The evaluation of policy transfers in terms of policy implementation can be problematic. The ultimate outcomes of a transfer process (i.e. concrete changes in the environmental or societal context) often only become visible over the long term. Hence, it is of added value to also analyse the degree to which a process changed the characteristics of actors involved (Vinke-de Kruijf *et al.*, 2012). Such changes are reflected, for example, in conceptual replication. Transfers are interactive processes in which knowledge, ideas and information are transferred from one individual to another. Conceptual replication is indicated through the increasing number of known concepts and the adaptation of existing concepts, which can be used eventually in the policy process (De Jong and Edelenbos, 2007). Similar evaluation criteria are central in the literature in which policy transfers are seen as learning processes that result in an increase in policy-relevant knowledge. In analysing the effects of learning, a distinction can be made between: (1) governmental actors learning about processes resulting in organizational change; (2) policy networks learning about instruments resulting in programme change; and (3) policy communities learning about ideas resulting in paradigm shifts (Bennett and Howlett, 1992). Real policy learning involves knowledge also being taken into account in the policy process. This implies that, for example, organizational learning can only occur if the transfer process involves actors who are in the position to shape organizational behaviour (Wolman and Page, 2002). The realization of an actual transfer is not necessarily an indication of success. An exploratory phase may also teach actors what not to do (negative lessons) or bring actors to the conclusion that there are – at least at that moment – too many obstacles (Rose, 1993).

In general, caution is needed when assuming a causal relation between policy learning and policy change (e.g. modification of policies or adoption of new policies). Policy change may result from many factors other than policy learning and policy learning may not be expressed in and not even be

intended for policy change. If policy transfer processes are perceived as learning processes, effects can also become visible in other factors, such as the acquisition of new factual knowledge, changes in norms, values and belief systems or in enhanced trust and improved understanding of other actors' mindsets (Huitema *et al.*, 2010). To avoid the problems associated with the evaluation of policy change, one could choose to limit an evaluation to the process itself, for example, by evaluating 'collaboration' (as is done in Chapter 5). Another alternative approach is to evaluate transfers in actor-specific terms. Such an evaluation questions, for example, the degree to which the transfer contributed to the realization of the initial objectives of the receiving or the transferring actor or the degree to which the transfer is perceived as a success (Dolowitz and Marsh, 2000).

On the role of contextual factors

As explained in Chapter 1, this book concentrates on policy transfers with an international dimension. Such transfers often involve actors from different contexts. This characteristic of international policy transfers has received little attention in policy studies. It is, however, important to recognize that the transfer of knowledge tends to already be problematic between actors of the same country and to increase with geographic and cultural distance (Bresman *et al.*, 1999). The opportunity for knowledge transfer is higher in cases where actors have a more common background in terms of socio-cultural inheritance, organizational belonging and profession (Stenmark, 2002). Because of their diverging backgrounds, actors involved in policy transfers often have difficulties in arriving at mutual understanding through communication. This may not only exert a negative influence on the process itself but also contribute to the failure of intended policy transfers (Vinke-de Kruijf *et al.*, 2011, 2012).

Another characteristic of international transfers is that they involve the transfer of knowledge from one context to another. Compared to transfers within the same country, such transfers are rather challenging as differences in political systems and policy environment are likely to be more pronounced (Mossberger and Wolman, 2003). What also plays a role is that countries differ greatly in terms of resources and socio-economic development, political values and also in terms of their awareness of foreign nations and cultures (Rose, 1993). Thus, given the differences in both natural and social contexts, it is rather unlikely that concepts such as IWRM are equally valid and applicable for different countries (Biswas, 2004). Scholars therefore widely acknowledge that policy transfer should be done with care and only after a careful consideration of the context-specific conditions and circumstances in which it was developed (e.g. Ingram, 2011; Mossberger and Wolman, 2003; Swainson and de Loe, 2011).

When focusing on structural constraints, one may argue that transfers tend to be easier between countries that are more similar in political, legal

and cultural terms. This assumption seems plausible but has not been confirmed in comparative studies. In fact, transfers between dissimilar countries often appear to be much easier than transfers between countries that belong to the same 'family of nations' (De Jong *et al.*, 2002a). The underlying reason is that transfers between similar countries are subject to the same pitfalls as transfers between dissimilar countries. In spite of common legal, cultural and political characteristics they often also face different practical and institutional issues. Therefore even transfers between similar contexts should consider and adapt policy-relevant knowledge to national, regional and local factors and needs (De Jong, 2004). Thus, transfers require the modification of knowledge and involve learning processes (Stead, 2012). From a policy translation perspective, modification is not only necessary but also an inevitable component of policy change. It emphasizes that any type of policy change involves translation, i.e. the modification of meaning in the travel of knowledge (Mukhtarov, 2012).

The contextual nature of policy was confirmed in various studies. For example, comparative research shows that participatory approaches in water management are much more effective in some countries than in others. Context-specific institutional factors, such as a lack of experience with multi-actor approaches, fear of losing control, the distribution of water rights or controversies between authorities, partly explain this (Mostert *et al.*, 2007). Research on water governance reforms in the former Soviet Union sketch a similar picture. While reforms were implemented, legacies of old structures (such as a hierarchical culture, strong fragmentation and a lack of horizontal coordination) remained. Actors only implemented those reforms that were socially appropriate or economically attractive while neglecting reforms that were incompatible (e.g. more public participation) (Sehring, 2009). Thus, transfers are influenced by the rather stable cultural, institutional and historical configurations of a country. Historical developments determine what is currently possible and existing political cultures cannot be abandoned easily (Rose, 1993). Similar arguments are used, for example, to explain why policy transfers from Western to Eastern Europe often failed. The underlying problem was that changes in institutional 'hardware' (i.e. the formal structure of rules, rights procedures and principles) were not supported by institutional 'software' (i.e. prevailing discourses) (Dryzek, 1996).

On the role of the specific context and actors

There has been little systemic research on the actual effectiveness of policy transfers. On the basis of their experiences, Dolowitz and Marsh (2000) observe three broad reasons for policy failure: (1) insufficient information about the object (uninformed transfer); (2) non-transfer of crucial elements (incomplete transfer); and (3) insufficient attention to contextual differences (inappropriate transfer) (Dolowitz and Marsh, 2000). A study in

which policy transfer is analysed as a form of prospective evaluation highlights similar aspects. The study is based on the recognition that the quality of a transfer crucially depends on the possibility to assess the potential applicability of the object in another setting. Such an assessment depends first and foremost on the quality of information. Is there accurate information about the policy to be transferred and about the relative success of that policy at various locations? It further involves that the actors involved reflect on the similarities and differences between different settings. To what extent is the policy addressing similar problems and goals and is it applied in a similar setting? (Mossberger and Wolman, 2003).

As explained in the previous section, literature highlights that the success of a transfer depends in particular on whether knowledge is modified to fit local conditions. One would therefore expect that voluntary transfers are more effective than coercive transfers. Comparative research does not confirm this expectation. What is relatively more important is that powerful actors support a transfer (De Jong *et al.*, 2002b). The relative importance of individual actors was confirmed in other studies. Transfers between dissimilar settings do not have to fail and transfers between similar settings are more effective when they engage powerful receivers who are convinced that the transfer is useful and have a strong desire to change things. Transfers tend to fail if local actors are not in favour, are hardly involved, have no opportunity to adjust the model or if the transfer is imposed (i.e. the model is only accepted because of the funds associated with engaging in the process) (Kroesen *et al.*, 2007). Furthermore, flexible approaches that consider loosely defined or multiple models are more successful than approaches that involve the copying of a model. The latter approaches tend to invoke local resistance and/or low levels of compliance (De Jong *et al.*, 2002b). Along similar lines, De Jong (2004) found that the effectiveness of a transfer depends on whether actors consider and – if necessary – synthesize multiple models and are able to create a sense of urgency and strong coalition that pushes the initiative. Thus, the actors involved and the specific context of a transfer exert a strong influence on the effectiveness of a policy transfer.

2.5 Concluding remarks

Policy transfer can take many forms and manifests itself in many ways. In a water management context, transfers are manifested not only in the transfer of knowledge from one country to another but also in the spreading of ‘universal remedies’. Earlier in this chapter, we have discussed some of these remedies in water management. We have also discussed how these concepts are promoted by international organizations, the meanings that are attached to them and the difficulty of putting them into practice. Relying on any policy concept as a panacea can prove to be a hopeless effort towards solving the water management problems, since panaceas are like

the 'optimum solutions' that are impossible to reach with multiple and conflicting objectives. Maybe, as Ingram (2011) suggests, we need 'clumsy solutions' that embrace multiple types of knowledge and appeal to different values. In search for such solutions, sharing of knowledge and experiences can be particularly promising but should be done with care. The concept of policy transfer and related concepts have been reflected on in the previous sections to better understand the benefits and limitations of transfers. We show that they may concern different types of knowledge, result from different factors and involve various actors. We also touched upon the evaluation of policy transfer and the role of structural and specific factors. What becomes clear is that context matters but that contextual differences or constraints in itself do not explain the success or failure of a transfer – assuming that one can demonstrate such 'success'. Policy transfer is unlikely to be successful without some form of translation, i.e. modification or adaptation of knowledge to fit the context in which knowledge is being applied.

Understanding the differences and similarities of context is thus essential when studying policy transfers. It is also essential to understand how the specific policy intervention will and can be absorbed into the receiving context. For such an understanding, the interaction processes between the different levels and scales of governance as well as the implementation processes that will be associated with the final stage of the policy transfer need to be explored. The next chapter provides a basis for understanding these interaction processes. The Contextual Interaction Theory is elaborated as a way of understanding the important characteristics of actors and how they influence an interactive process, including the planning and implementation of a transfer. In discussing contextual factors attention is paid not only to the wider context of such processes but also to the governance context in which these transfers occur. The importance of the qualities of the governance regime for the receiving context are also highlighted, which provides some opportunities to assess the likelihood of the path of implementation solely based on the receiving end, as no matter how similar or different the contexts are, some are just more receptive to incoming ideas and changes than are others.

References

Allan, T. (2003) 'IWRM/IWRAM: A new sanctioned discourse?' Occasional Paper 50, School of Oriental and African Studies, London, pp. 1–27.

Anderson, A, Karar, E. and Farolfi, S. (2008) 'Synthesis: IWRM lessons for implementation', *Water SA*, vol. 34, no. 6, pp. 665–669.

Beierle, T.C. and Cayford, J. (2002) *Democracy in Practice: Public Participation in Environmental Decisions,* Resources for the Future, Washington, DC.

Bennett, C.J. (1991) 'What is policy convergence and what causes It?', *British Journal of Political Science*, vol. 21, no. 2, pp. 215–233.

Bennett, C.J. and Howlett, M. (1992) 'The lessons of learning: Reconciling theories of policy learning and policy change', *Policy Sciences*, vol. 25, no. 3, pp. 275–294.

Biswas, A.K. (2004) 'Integrated water resources management: A reassessment', *Water International*, vol. 29, no. 2, pp. 248–256.

Biswas, A.K. (2008) 'Integrated water resources management: Is it working?' *Water Resources Development*, vol. 24, no. 1, pp. 5–22.

Bossio, D., Geheb, K. and Critchley, W. (2010) 'Managing water by managing land: Addressing land degradation to improve water productivity and rural livelihoods', *Agricultural Water Management*, vol. 97, no. 4, pp. 536–542

Bresman, H., Birkinshaw, J. and Nobel, R. (1999) 'Knowledge transfer in international acquisitions', *Journal of International Business Studies*, vol. 30, no. 3, pp. 439–462.

Bressers, H.T.A. and Kuks, S.M.M. (2003) 'What does "governance" mean? From conception to elaboration', in H. Bressers and W.A. Rosenbaum (eds) *Achieving Sustainable Development: The Challenge of Governance across Social Scales*, Praeger Publishers, Westport, CT.

Bressers, N. (2011) 'Co-creating innovation: A systemic learning evaluation of knowledge and innovation programmes', PhD thesis, Erasmus University, Rotterdam.

Carlile, P.R. (2004) 'Transferring, translating, and transforming: An integrative framework for managing knowledge across boundaries', *Organization Science*, vol. 15, no. 5, pp. 555–568.

Cleaver, F. (1999) 'Paradoxes of participation: questioning participatory approaches to development', *Journal of International Development*, vol. 11, no. 4, pp. 597–612.

Coenen, F.H.J.M. (ed.) (2009) *Public Participation and Better Environmental Decisions*, Springer, Dordrecht.

Coenen, F.H.J.M. and Bressers, H.T.A. (2012) 'Trends, drivers and dilemmas in the transition towards sustainable water management', in J. Meadowcroft, O. Langhelle and A. Ruud (eds) *Governance, Democracy and Sustainable Development: Moving Beyond the Impasse*, Edward Elgar Publishing, Cheltenham/Northampton, MA.

Cohen, A. and Davidson, S. (2011) 'An examination of the watershed approach: Challenges, antecedents, and the transition from technical tool to governance unit', *Water Alternatives*, vol. 4, no. 1, pp. 1–14.

Cooke, B. and Kothari, U. (eds) (2001) *Participation: The New Tyranny?* Zed Books, New York.

Creighton, J.L. (2005) 'What water managers need to know about public participation: One US practitioner's perspective', *Water Policy*, vol. 7, no. 3, pp. 269–278.

De Jong, M. (2004) 'The pitfalls of family resemblance', *European Planning Studies*, vol. 12, no. 7, pp. 1055–1068.

De Jong, M. and Edelenbos, J. (2007) 'An insider's look into policy transfer in transnational expert networks', *European Planning Studies*, vol. 15, no. 5, pp. 687–706.

De Jong, M. and Mamadouh, V. (2002) 'Two contrasting perspectives on institutional transplantation', in M. de Jong, K. Lalenis and V. Mamadouh (eds) *The Theory and Practice of Institutional Transplantation: Experiences with the Transfer of Policy Institutions*, Kluwer Academic Publishers, Dordrecht.

De Jong, M., Lalenis, K. and Mamadouh, V. (eds) (2002a) *The Theory and Practice of Institutional Transplantation: Experiences with the Transfer of Policy Institutions*, Kluwer Academic Publishers, Dordrecht.

De Jong, M., Mamadouh, V. and Lalenis, K. (2002b) 'Drawing lessons about lesson drawing: What the case reports tell us about institutional transplantation', in M. de Jong, K. Lalenis and V. Mamadouh (eds) *The Theory and Practice of Institutional Transplantation: Experiences with the Transfer of Policy Institutions*, Kluwer Academic Publishers, Dordrecht.

Delli Priscoli, J. (2004) 'What is public participation in water resources management and why is it important?' *Water International*, vol. 29, no. 2, pp. 221–227.

DiMaggio, P.J. and Powell, W.W. (1983) 'The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields', *American Sociological Review*, vol. 48, no. 2, pp. 147–160.

Dolowitz, D.P. and Marsh, D. (1996) 'Who learns what from whom: A review of the policy transfer literature', *Political Studies*, vol. 44, no. 2, pp. 343–357.

Dolowitz, D.P. and Marsh, D. (2000) 'Learning from abroad: The role of policy transfer in contemporary policy making', *Governance*, vol. 13, no. 1, pp. 5–23.

Dryzek, J.S. (1996) 'The informal logic of institutional design', in R.E. Goodin (ed.) *The Theory of Institutional Design*, Cambridge University Press, Cambridge.

Duda, A.M. and El-Ashry, M.T. (2000) 'Addressing the global water and environment crises through integrated approaches to the management of land, water and ecological resources', *Water International*, vol. 25, no. 1, pp. 115–126.

EC (European Commission) (2002) *Guidance on Public Participation in Relation to the Water Framework Directive. Active Involvement, Consultation, and Public Access to Information, Common Implementation Strategy Guidance Document No. 8*, European Commission, Luxembourg.

European Parliament and Council (2000) Water Framework Directive: Directive 2000/60/EC, *Official Journal of the European Communities*, Brussels.

Evans, M. (2009) 'Policy transfer in critical perspective', *Policy Studies*, vol. 30, no. 3, pp. 243–268.

Evans, M. and Davies, J. (1999) 'Understanding policy transfer: A multi-level, multi-disciplinary perspective', *Public Administration*, vol. 77, no. 2, pp. 361–385.

Fadeeva, Z. (2004) 'Translation of sustainability ideas in tourism networks: Some roles of cross-sectoral networks in change towards sustainable development', *Journal of Cleaner Production*, vol. 13, no. 2, pp. 175–189.

Falkenmark, M., Finlayson, C.M. and Gordon, L.J. (2007) 'Agriculture, water, and ecosystems: Avoiding the costs of going too far', in D. Molden (ed.) *Water for Food, Water for Life: A Comprehensive Assessment of Water Management in Agriculture*, Earthscan, London and International Water Management Institute, Colombo, pp. 233–277.

Fiorino, D.J. (1990) 'Citizen participation and environmental risk: A survey of institutional mechanisms', *Science, Technology, and Human Values*, vol. 15, no. 2, pp. 226–243.

Grigg, N.S. (2008) 'Integrated water resources management: Balancing views and improving practice', *Water International*, vol. 33, no. 3, pp. 279–292.

GWP-TAC (Global Water Partnership – Technical Advisory Committee) (2000) *Integrated Water Resources Management, TAC Background Papers No. 4*, Global Water Partnership, Stockholm.

Hoebink, P. (2006) 'European donors and "good governance": Condition or goal?' *The European Journal of Development Research*, vol. 18, no. 1, pp. 131–161.
Huitema, D., Cornelisse, C. and Ottow, B. (2010) 'Is the jury still out? Toward greater insight in policy learning in participatory decision processes – the case of Dutch citizens' juries on water management in the Rhine Basin', *Ecology and Society*, vol. 15, no. 1, art. 16.
ICWE (International Conference on Water and the Environment) (1992) *The Dublin Statement on Water and Sustainable Development*, Dublin.
Imperial, M.T. (2009) Paradoxes, possibilities, and the obstacles to integrated water resources management: Lessons from the institutional rational choice literature, International Symposium on Society and Resource Management, 5–8 July 2009, Vienna.
Ingram, H. (2011) 'Beyond universal remedies for good water governance: A political and contextual approach', in A. Garrido and H. Ingram (eds) *Water for Food in a Changing World*, Routledge, Abingdon.
James, O. and Lodge, M. (2003) 'The limitations of "policy transfer" and "lesson drawing" for public policy research', *Political Studies Review*, vol. 1, no. 2, pp. 179–193.
Jaspers, F.G.W. (2003) 'Institutional arrangements for integrated river basin management', *Water Policy*, vol. 5, no. 1, pp. 77–90.
Jeffrey, P. and Gearey, M. (2006) 'Integrated water resources management: Lost on the road from ambition to realisation?' *Water Science and Technology*, vol. 53, no. 1, pp. 1–8.
Jeffrey, P. and Seaton, R.A.F. (2004) 'A conceptual model of "receptivity" applied to the design and deployment of water policy mechanisms', *Environmental Sciences*, vol. 1, no. 3, pp. 277–300.
Kallis, G. and Nijkamp, P. (2000) 'Evolution of EU water policy: A critical assessment and a hopeful perspective', *Zeitschrift für Umweltpolitik and Umweltrecht*, vol. 23, no. 3, pp. 301–335.
Koppenjan, J.F.M. and Klijn, E. (2004) *Managing Uncertainties in Networks: A Network Approach to Problem Solving and Decision Making*, Routledge, London.
Kroesen, O., De Jong, M. and Waaub, J.P. (2007) 'Cross-national transfer of policy models to developing countries: Epilogue', *Knowledge, Technology and Policy*, vol. 19, no. 4, pp. 137–142.
Krywkow, J. (2009) 'A methodological framework for participatory processes in water resources management', PhD thesis, University of Twente, Enschede.
Latour, B. (1986) 'The powers of association', in J. Law (ed.) *Power, Action and Belief: A New Sociology of Knowledge*, Routledge, London.
Lautze, J., De Silva, S., Giordano, M. and Sanford, L. (2011) 'Putting the cart before the horse: Water governance and IWRM', *Natural Resources Forum*, vol. 35, no. 1, pp. 1–8.
Leach, W.D. (2006) 'Collaborative public management and democracy: Evidence from western watershed partnerships', *Public Administration Review*, vol. 66, no. 1, pp. 100–110.
Mamadouh, V., De Jong, M. and Lalenis, K. (2002) 'An introduction to institutional transplantation', in M. de Jong, K. Lalenis and V. Mamadouh (eds) *The Theory and Practice of Institutional Transplantation: Experiences with the Transfer of Policy Institutions*, Kluwer Academic Publishers, Dordrecht.

Marsden, G. and Stead, D. (2011) 'Policy transfer and learning in the field of transport: A review of concepts and evidence', *Transport Policy*, vol. 18, no. 3, pp. 492–500.

Merrey, D.J. (2005) 'Integrating "livelihoods" into integrated water resources management: Taking the integration paradigm to its logical next step for developing countries', *Regional Environmental Change*, vol. 5, no. 4, pp. 197–204.

Molden, D., Lautze, J., Shah, T., Bin, D., Giordano, M. and Sanford, L. (2010) 'Governing to grow enough food without enough water: Second best solutions show the way', *International Journal of Water Resources Development*, vol. 26, no. 2, pp. 249–263.

Molle, F. (2008) 'Nirvana concepts, narratives and policy models: Insights from the water sector', *Water Alternatives*, vol. 1, no. 1, pp. 131–156.

Mollinga, P.P. (2008) 'Water policy – water politics: Social engineering and strategic action in water sector reform', in W. Scheumann, S. Neubert and M. Kipping (eds) *Water Politics and Development Cooperation: Local Power Plays and Global Governance*, Springer, Berlin/Heidelberg, pp. 1–29.

Moss, T. and Newig, J. (2010) 'Multilevel water governance and problems of scale: setting the stage for a broader debate', *Environmental Management*, vol. 46, no. 1, pp. 1–6.

Mossberger, K. and Wolman, H. (2003) 'Policy transfer as a form of prospective policy evaluation: Challenges and recommendations', *Public Administration Review*, vol. 63, no. 4, pp. 428–440.

Mostert, E. (2003) 'The challenge of public participation', *Water Policy*, vol. 5, no. 2, pp. 179–197.

Mostert, E., Pahl-Wostl, C., Rees, Y., Searle, B., Tàbara, D. and Tippett, J. (2007) 'Social learning in European river-basin management: Barriers and fostering mechanisms from 10 river basins', *Ecology and Society*, vol. 12, no. 1, art. 19.

Mukhtarov, F. (2012) 'Rethinking the travel of policy ideas: Policy translation in the water sector', *Policy and Politics*, online, available as a pre-press fast track article at: www.ingentaconnect.com/content/tpp/pap/pre-prints/15799;jsessionid=1frvpse9zxz69.alice.

Neef, A. (2009) 'Transforming rural water governance: Towards deliberative and polycentric models?', *Water Alternatives*, vol. 2, no. 1, pp. 53–60.

Özerol, G. and Newig, J. (2008) 'Evaluating the success of public participation in water resources management: Five key constituents', *Water Policy*, vol. 10, no. 6, pp. 639–655.

Peters, B.G. and Pierre, J. (1998) 'Governance without government? Rethinking public administration', *Journal of Public Administration Research and Theory*, vol. 8, no. 2, pp. 223–243.

Pigram, J.J. (2001) 'Opportunities and constraints in the transfer of water technology and experience between countries and regions', *International Journal of Water Resources Development*, vol. 17, no. 4, pp. 563–579.

Radaelli, C.M. (2000) 'Policy transfer in the European Union: Institutional isomorphism as a source of legitimacy', *Governance*, vol. 13, no. 1, pp. 25–43.

Rahaman, M.M. and Varis, O. (2005) 'Integrated water resources management: Evolution, prospects and future challenges', *Sustainability: Science, Practice and Policy*, vol. 1, no. 1, pp. 15–21.

Reddy, N.M. and Zhao, L. (1990) 'International technology transfer: A review', *Research Policy*, vol. 19, no. 4, pp. 285–307.

Rhodes, R.A.W. (1996) 'The new governance: Governing without government', *Political Studies*, vol. 44, no. 4, pp. 652–667.

Rogers, P. and Hall, A.W. (2003) 'Effective water governance', Technical Committee Background Papers No.7, Global Water Partnership Technical Committee, Stockholm.

Rose, R. (1993) *Lesson-Drawing in Public Policy: A Guide to Learning Across Space and Time*, Chatham House Publishers, Chatham, NJ.

Schneider, A. and Ingram, H. (1988) 'Systematically pinching ideas: A comparative approach to policy design', *Journal of Public Policy*, vol. 8, no. 1, pp. 61–80.

Sehring, J. (2009) 'Path dependencies and institutional bricolage in post-Soviet water governance', *Water Alternatives*, vol. 2, no. 1, pp. 61–81.

Siggel, E. (1986) 'Technology transfers to developing countries through consulting engineers: A model and empirical observations from Canada', *The Developing Economies*, vol. 24, no. 3, pp. 229–250.

Stead, D. (2012) 'Best practices and policy transfer in spatial planning', *Planning Practice and Research*, vol. 27, no. 1, pp. 103–116.

Steelman, T.A. and Ascher, W. (1997) 'Public involvement methods in natural resource policy making: Advantages, disadvantages and trade-offs', *Policy Sciences*, vol. 30, no. 2, pp. 71–90.

Stenmark, D. (2002) Information vs. knowledge: The role of intranets in knowledge management, Proceedings of the 35th Hawaii International Conference on System Sciences, 7–10 January 2002, IEEE Press, Hawaii.

Stone, D. (1999) 'Learning lessons and transferring policy across time, space and disciplines', *Politics*, vol. 19, no. 1, pp. 51–59.

Stone, D. (2000) 'Non-governmental policy transfer: The strategies of independent policy institutes', *Governance*, vol. 13, no. 1, pp. 45–70.

Stone, D. (2004) 'Transfer agents and global networks in the 'transnationalization' of policy', *Journal of European Public Policy*, vol. 11, no. 3, pp. 545–566.

Svensson, R. (2007) 'Knowledge transfer to emerging markets via consulting projects', *The Journal of Technology Transfer*, vol. 32, no. 5, pp. 545–559.

Swainson, R. and de Loe, R.C. (2011) 'The importance of context in relation to policy transfer: A case study of environmental water allocation in Australia', *Environmental Policy and Governance*, vol. 21, no. 1, pp. 58–69.

Swyngedouw, E. (2005) 'Dispossessing H_2O: The contested terrain of water privatization', *Capitalism Nature Socialism*, vol. 16, no. 1, pp. 81–98.

Trott, P., Cordey-Hayes, M. and Seaton, R.A.F. (1995) 'Inward technology transfer as an interactive process', *Technovation*, vol. 15, no. 1, pp. 25–43.

UN (United Nations) (2002) Johannesburg Declaration on Sustainable Development, United Nations, New York.

UNCED (United Nations Conference on Environment and Development) (1992) Rio Declaration on Environment and Development, United Nations, New York.

UNECE (United Nations Economic Commission for Europe) (1998) Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, UNECE, Aarhus.

Vinke-de Kruijf, J., Augustijn, D.C.M. and Bressers, J.T.A. (2012) 'Evaluation of policy transfer interventions: Lessons from a Dutch–Romanian planning project', *Journal of Environmental Policy and Planning*, vol. 14, no. 2, pp. 139–160.

Vinke-de Kruijf, J., Hulscher, S.J.M.H. and Bressers, J.T.A. (2011) Knowledge transfer in international cooperation projects: Experiences from a

Dutch-Romanian project, Conference Paper, 5th International Conference on Flood Risk Management (ICFM5), 27–29 September 2011, Tokyo.

Von Korff, Y., Daniell, K.A., Moellenkamp, S., Bots, P. and Bijlsma, R.M. (2012) 'Implementing participatory water management: Recent advances in theory, practice, and evaluation', *Ecology and Society*, vol. 17, no. 1, art. 30.

Walker, J.L. (1969) 'The diffusion of innovations among the American states', *The American Political Science Review*, vol. 63, no. 3, pp. 880–899.

Ward, S.V. (1999) 'The international diffusion of planning: A review and a Canadian case study', *International Planning Studies*, vol. 4, no. 1, pp. 53–77.

Webler, T. (1995) '"Right" discourse in citizen participation: An evaluative yardstick', in O. Renn, T. Webler and P. Wiedemann (eds) *Fairness and Competence in Citizen Participation: Evaluating Models for Environmental Discourse*, Kluwer Academic Publishers, Dordrecht.

White, G.F. (1998) 'Reflections on the 50-year international search for integrated water management', *Water Policy*, vol. 1, no. 1, pp. 21–27.

Wolman, H. and Page, E. (2002) 'Policy transfer among local governments: An information–theory approach', *Governance*, vol. 15, no. 4, pp. 477–501.

World Bank (1994) *Governance, The World Bank's Experience*, The World Bank, Washington, DC.

WWAP (World Water Assessment Programme) (2006) *The United Nations World Water Development Report 2: Water, A Shared Responsibility*, UNESCO, Paris and Berghahn Books, New York.

WWAP (World Water Assessment Programme) (2012) *The United Nations World Water Development Report 4: Managing Water under Uncertainty and Risk*, UNESCO, Paris.