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How context affects international projects: the case of Dutch-Romanian cooperation on flood risk management

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Abstract

Many countries around the world are confronted with a considerable increase of floods and flood risks. The exchange of knowledge may be beneficial but requires careful consideration of contextual factors. This paper explores the relation between contextual factors and the effectiveness of international knowledge transfers. It is based on the assumption that wider, structural and project-specific contexts are only influential in as far as they influence the characteristics of actors involved. These characteristics are their motivations, cognitions and resources. Empirically, it builds upon the analysis of three Dutch-funded projects that involve the transfer of knowledge about flood risk management from the Netherlands to Romania. Analysis of these case studies highlights that contextual differences contribute to asymmetrical relations and may both enhance and hinder the effectiveness of such projects. It further confirms the crucial importance of institutional embedding, as a basis for the creation of political support and the mobilization of resources.

Keywords

Policy transfer, international assistance, Contextual Interaction Theory, effectiveness, Romania

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1 Introduction

River floods are one of the most threatening natural risks and have many negative consequences for humans and human society (Samuels et al., 2006). In Europe, floods are the most common natural disasters. Especially during the last decades, the reported number of floods has been increasing due to better reporting and land use changes (EEA 2008). In many countries, the frequency and intensity of floods are expected to grow further due to climate variability and change and also due to the increase of population and economic activities in flood prone areas (WMO 2009). In reaction to this, we also observe an increase of international efforts to reduce flood risks. The Global Water Partnership, for example, endorsed a program that promotes integrated flood management. At the European level, a framework for the assessment and management of floods was adopted in order to reduce their adverse consequences. Although floods are common problems, their causes and the capacity to deal with them differ between countries (Van Alphen and Lodder, 2006). These similarities and differences make co-operation and the transfer of knowledge beneficial. However, it is also challenging as universal remedies or blueprints for effective management of natural resources do not exist. This means that the transfer of knowledge about certain concepts, methods or technologies should be done with care and only after adequate consideration of the context-specific conditions and circumstances in which it was developed (e.g. Biswas, 2004, Ingram, 2008, Swainson and de Loe, 2011, Rose, 1993).

Although many researchers acknowledge the context-specific nature of water management solutions, there has been little attention for the actual influence of contextual factors. This paper aims to address this knowledge gap. It focuses on how contextual factors influence the effectiveness of projects that involve an international knowledge transfer. Our analysis especially draws upon the experiences of three Dutch-funded funded projects that involved the transfer of knowledge about flood risk management from the Netherlands to Romania. Knowledge transfer refers here to an interactive process that includes the sharing, acquisition and application of knowledge (Vinke-de Kruijf et al., 2011). Its effectiveness is defined as the extent to which a project contributes to the solving of flood-related problems in Romania and generates follow-up projects for the Dutch water sector (Vinke-de Kruijf et al., submitted).

This contribution is structured as follows. Section 2 presents the main theoretical concepts that form the basis for our empirical research. Section 3 introduces the case study methodology and the setting of the case study projects. Section 4 shortly describes the case studies and the characteristics of the actors involved. Section 5 presents and discusses the influence of contextual factors on these case studies. The resulting conclusions are presented in section 6.

2 Theoretical concepts

This section first presents a basic conceptual framework that describes the relation between contextual factors and effective knowledge transfer. It than elaborates the mechanisms through which contextual factors influence international knowledge transfers.

2.1 Contextual Interaction Theory as conceptual framework

The main objective of knowledge transfer projects if often similar to the objective of regular policy processes, this is to solve or process a multi-actor problematic situation (Vinke-de Kruijf et al., submitted). The course and outcomes of such processes can be understood by using the 'Contextual Interaction Theory' (Bressers and Kuks, 2004, Bressers, 2009, De Boer and Bressers, 2011). This theory conceptualizes policy implementation as actor-interaction processes

and is based on the assumption that their course and outcomes basically result from the dynamic interaction between the characteristics of actors involved (see Figure 1). These characteristics are: (1) motivations, i.e. what drives an actors' actions; (2) cognitions, i.e. the information an actor holds to be true; and (3) resources, i.e. an actors' capacity to act and sources of power (Bressers, 2004, De Boer and Bressers, 2011). Central questions for the analysis of such processes are therefore: What are the substantive or procedural reasons (motivations) of actors involved for taking certain actions? What are the perceptions (cognitions) of actors about the relevance of project and the urgency, nature and meaning of the problem at stake? What is the capacity of actors to act (finances, manpower and knowledge) and their power to get things (institutional resources)? (Bressers and Kuks, 2004, Owens, 2008, Vinke-de Kruijf, 2011b). On the basis of such analysis, it is also possible to predict the outcomes, and thus the effectiveness, of policy processes. The reason for this is that projects are only implementable when actors arrive at a joint motivating goal, create an agreed upon and valid (negotiated) knowledge base and mobilize required resources (Bressers, 2004, Vinke-de Kruijf et al., submitted).

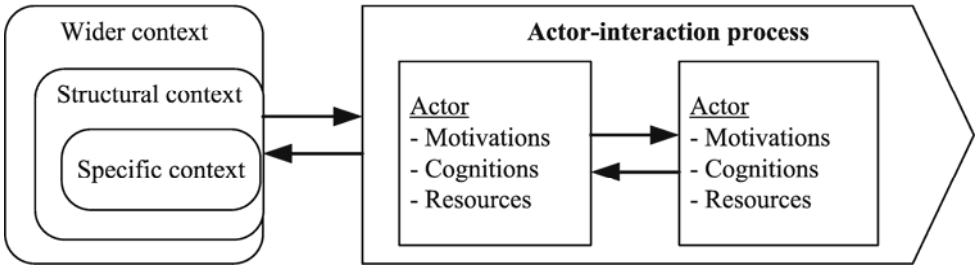

Figure 1 – Conceptual model of a multi-actor process that is driven by the motivations, cognitions and resources of actors involved, which are influenced by a wider, structural and specific context (Bressers, 2004)

Project objectives are not realized in isolation; they influence and are influenced by a dynamic project context (Vinke-de Kruijf et al., 2010). Although contextual factors do not determine the course and outcomes of an interactive process, they are still important as they tend to influence the characteristics of actors involved. Firstly, actor characteristics are affected by a project-specific context, which includes the history of a case (e.g. previous decisions and choices) and specific circumstances (e.g. geographic setting). This specific context is embedded in a more encompassing structural or institutional context. Projects in the public domain, especially flood risk projects, are often embedded in a complex multi-actor setting. While public authorities play a key role in such projects, they cannot implement flood risk management policies on their own. Due to the fragmentation of resources, they usually need to collaborate with a wide range of actors, both public and private, at different levels of society (Bressers, 2009). As a result, flood risk projects usually require that the inclusion of multiple actors who operate at various levels and scales, have different perceptions and objectives, employ different strategies and instruments and have different responsibilities and resources. Hence, the structural context consists of a multiplicity of: (1) problem perceptions and policy objectives; (2) levels and scales of governance; (3) actors in the policy network; (4) strategies and instruments; (5) responsibilities and resources for implementation (Bressers and Kuks, 2003, Kuks, 2004). In addition to these specific and structural contexts, projects are also embedded in more encompassing wider context. This contextual layer consists of political, economic, socio-cultural, technological and problem contexts (Bressers, 2009).

The influence of contexts on knowledge transfer projects is the subject of this paper. In theory, this relation is also inverse: actions stemming from the interactive process can also change the project context. Actors can, for example, change the specific context by introducing new actors, new arenas or new motivations, cognitions and resources. This can also change the structural setting of a project, for example, when a project is shifted to another governance level (Bressers and Lulofs, 2010). However, the more encompassing the context, the smaller the chance that it is changeable by a single actor-interaction process. Any changes in the wider and structural contexts rather emerge from many actors and factors (De Boer and Bressers, 2011). This inverse relation is important to mention but not elaborated further in this contribution.

2.2 Context of international actor-interaction processes

The transfer of knowledge, even between actors of the same country, is often problematic and associated problems tend to increase with geographic and cultural distance (Bresman et al., 1999). The more overlapping the background of actors in terms of socio-cultural inheritance, organizational belonging and profession, the better from a knowledge transfer perspective (Stenmark, 2002). Similar arguments apply to the international transfer of policies or institutions. Such transfers tend to be more effective between countries that are similar in terms of public resources (e.g. economic resources, expertise of civil servants and bureaucratic efficiency) (Rose, 1993) and between countries that have a 'goodness of fit' in terms of legal, cultural and political conditions (de Jong et al., 2002). Comparative research shows, for example, that participatory approaches 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 to lose 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). This confirms the importance and stable nature of the cultural, institutional and historical configuration of a country. It shows that historical developments determine what is currently possible and that existing political cultures cannot be abandoned easily (Rose, 1993). In line with this, it is argued that policy transfers from Western to Eastern Europe often failed as 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).

Although contextual factors are important and should not be underestimated, they should also not be overestimated. Comparative research shows that transfers between similar countries are not necessarily effective and that although transfers between dissimilar countries tend to be more difficult, they do not have to fail (de Jong et al., 2002). The effectiveness of a transfer also largely depends on whether it involves powerful players who are convinced that the transfer is useful and have a strong desire to change things. Research shows that if a transfer is supported by 'actors-pulling-in' transfers between similar countries are more effective and transfers between dissimilar countries do not have to fail (Kroesen et al., 2007). In this sense, policy transfers are similar to regular policy implementation for which the likelihood of implementation also depends on whether resourceful actors agree upon a motivating goal and knowledge base (Owens, 2008). We therefore assume that the effectiveness of a transfer can be understood from the motivations, cognitions and resources of actors involved. An analysis of contextual

conditions, circumstances and differences is still valuable as these factors explain why actors have certain characteristics. Without pretending to be complete, we will just present a few ways in which contexts affect actor characteristics and thus international projects.

In an international setting, differences between cultural contexts often play a role. A lack of cultural consideration is argued to be one of the main reasons why the transfer of water management solutions often fails (Scheldwald-van der Kley and Reijerkerk, 2009). An actor can, depending on its cultural background, perceive flood risk management, for example, through the lens of context-specific risk levels, equal risk principles, economic trade-offs or risk acceptance (Hoekstra, 1998). Cultural differences thus manifest themselves, among others, in diverging cognitions. Contextual factors also influence the motivations of actors involved. Contextual factors that be a source of motivation for targeting actors are, for example, a desire to deal with an emerging problem, dissatisfaction, a perceived need to catch up for international acceptance or compulsory implementation of international directives. This shows that context may create motivations that are rooted in voluntary elements (realization of own objectives) as well as coercive elements (external pressure or imposition) (Dolowitz and Marsh, 2000). For transferring actors, context can contribute to an actor being proactive in exporting programs and policies as examples of 'best practice'. Such transfers do not need to be coercive but involve both elements of persuasion and learning (Stone, 1999).

As public institutions are the means through which policies are usually transferred, they are also affected by governance structures. Research has proven a strong correlation between the coherence of a governance structure and the status and use of natural resources (Bressers and Kuks, 2004). A lack of coherence is also likely to have a negative effect on actor characteristics and thus on policy implementation. A fragmented setting tends to lead to: (1) more discord between actors due to failing capacity to recognize win-win solutions (motivations); (2) more uncertainty due to a lack of information exchange and distrust (cognitions); and (3) more stalemates due to the possibility to play implementers of against each other and a lack of capacity to solve conflicts (De Boer and Bressers, 2011). Fragmentation especially forms a problem when a project cuts across institutional borders. This means that projects involve actors of various institutions that are often not used to interact or cooperate with each other and therefore lack 'mutual institutions' (i.e. shared perceptions, language, rules and trust). Collaboration becomes even more problematic when there are strong patterns of distrust or when institutional orientations, language or rules are incompatible (Koppenjan and Klijn, 2004).

Wider and structural contexts tend to change due to external developments (that are not related to or initiated by the process) (Bressers and Kuks, 2003, De Boer and Bressers, 2011). Such changes can also affect the characteristics of actors involved. Consider, for example, changes in the economic situation, the availability of new technologies or the political composition of the government. These are all developments that may enhance a process by providing new opportunities for mutual solutions and cooperation or hamper a process when they eliminate support (Koppenjan and Klijn, 2004). In other words, time can turn policy transfer obstacles into variables and vice versa. Changing circumstances may, for example, imply that a policy no longer has its intended effect and that policy makers start to search for lessons abroad (Rose, 1993). On the other hand, it may also happen that policy makers initially enhance the implementation of an innovation at pilot scale but that this support disappeared by the time a pilot is finished (Vreugdenhil et al., 2010).

Based on the above, we conclude that contextual factors have an influence through the following mechanisms: (1) the diverging contexts of the targeting versus the receiving country lead to

asymmetric and diverging motivations, cognitions and resources; (2) contextual characteristics and circumstances of the receiving country may form an obstacle towards implementation and also lead to unexpected changes in cognitions, motivations and resources.

3 Case study setting and methods

This section starts with an introduction of the methods that were used to collect and analyze data. The second subsection provides some background information about the setting of the case study projects.

3.1 Case study methodology

This paper builds upon qualitative case study research as the main research method. This method was chosen as it allows a researcher to describe and to understand contemporary phenomena within their proper contexts. To arrive at such understanding, we chose to analyze multiple projects that were all embedded in a similar context (Yin, 2009). This contribution builds upon the in-depth analysis of three Dutch-Romanian knowledge transfer projects. Most data were collected during the full-time stay of one of the Dutch authors in Romania (period 2008 – 2011) by means of observation, interviews and document analysis. The researcher observed all major project activities (i.e. plenary meetings, workshops and field visits) and some of the project team meetings. Observational evidence was mostly derived from direct observations: the researcher did not have a formal role in the design or implementation of the projects. To increase the reliability of the observations, the researcher often cooperated with a Romanian co-observer and also discussed the observations with Romanian project team members. During the projects, the observers sometimes conducted informal interviews with project participants. After a project was completed, the researcher conducted semi-structured interviews with the main project team members. Observational and interview data were complemented with written data which was retrieved, for example, from project reports, policy documents, websites and newspapers. The collection and analysis of data concentrated on the actor-interaction process and was guided by the insights of the Contextual Interaction Theory. For each project, a 'thick' description was prepared and published in the form of a case study report (Vinke-de Kruijf, 2011b, Vinke-de Kruijf, 2011a, Vinke-de Kruijf, forthcoming-b). These case study reports include a detailed narrative of the case-specific context, the actor-interaction process and the characteristics of actors involved. In addition, data were collected about the wider and structural context of Romania. Data was collected by means of: (1) analysis of relevant documentation (including literature, newspaper articles, legislation and policies); (2) participant and direct observation during various meetings; (3) a survey among operational flood risk managers; and (4) interviews with policy makers and experts (see also Vinke-de Kruijf, forthcoming-a).

3.2 Dutch-Romanian cooperation setting

All case study projects are executed within the context of the Dutch-Romanian collaboration on water and environment that started in 1995. This collaboration was initially based on a Memorandum of Understanding between Environmental Ministries of both countries. Within this context, the Dutch government funded some projects in Romania. The number of Dutch-funded projects gradually increased after the signing of a bilateral agreement between both countries in 1998. This agreement formed the basis for the financial support of a wide variety of Dutch-Romanian projects through programs like Matra (Social Transformation Program) and PSO/PSOM (an Emerging Markets Cooperation Program). Between 1995 and 2007, about 140

projects in the field of environment and water (costing over 20 million euro) were implemented with the support of these and other financing instruments. Since 2007 – when Romania also became a member state of the European Union (EU), the Netherlands started to phase out its bilateral assistance. However, projects are also still implemented with financial support of the Dutch government. Most of these projects, including two of the case studies described in this paper, are implemented with financial support of Partners for Water. This programme aims to stimulate the implementation of innovative projects of the Dutch water sector abroad. The third case study was funded by the Netherlands Water Board Bank, which has a separate foundation that supports international projects of Dutch Water Boards. The financing of such projects fits well with the Dutch policy on international water management. In the recently adopted National Water Plan, international water management is an important theme. By supporting international water projects, the Dutch aim: (1) to contribute to the solving of water-related problems (especially mitigation of climate change effects and realization of the Millennium Development Goal on water and environment); and (2) to strengthen the international position of the Dutch water sector (by supporting collaborative projects with potential spin-off in the form of follow-up projects). These objectives are especially realized through the exchange of knowledge and experiences (Min. V&W 2009).

The bilateral contacts between both countries also continue to exist. In 2009, the Dutch Union of Water Boards and the National Administration for Romanian Waters signed a Memorandum of Understanding (RNE & EVD 2009). Through their collaboration, the Dutch Water Boards especially intend to exchange knowledge with Romanian water authorities (UvW, 2005). For the private sector, Romania has also become an attractive market – especially since Romania accessed the EU. Huge investments are currently needed to bring Romania's environmental infrastructure in line with EU standards. In this process, foreign suppliers and experts also play a key role. To strengthen the position of the Dutch water sector in Romania, a dedicated Romanian platform was established by the Netherlands Water Partnership in 2008 (Van Peppen, 2008). During the last years, this platform has been organizing a wide variety of activities to promote Dutch-Romanian cooperation in the water management domain. Since 2009, a Dutch-Romanian panel with high executives and civil servants are also meeting regularly to discuss the challenges related to living in a delta area (e.g. flood risk management, water quality and international river basin management). Within this context, attention is also raised for completed and potential collaborative projects in the flood risk management domain.

4 Dutch-Romanian flood risk management projects

This section elaborates the role of contextual factors in three case study projects: the development of an Integrated Area Plan to create 'Room for the River' (case A); the implementation of a Flood Information and Warning System (Case B); and the development of a Master Plan for Integrated water Management (Case C). The location of the case studies is shown in Figure 2. This section starts with a short introduction of the objective, process and products of the case studies. It then highlights the characteristics – i.e. motivations, cognitions and resources – of the actors involved.

Figure 2 – Map of Romania with the location of the case studies (background map from United Nations, 2008)

4.1 Introduction of the case studies

4.1.1 Case A: 'Room for the River' and People in Cat's bend region

The objective of Case A was to develop, in close cooperation with relevant stakeholders, an integrated plan for the Cat's bend *(Cotul Pisicii)* region. This region is located just upstream of the Danube Delta where two major rivers (the Prut and the Siret) join the Danube river. The project was initiated in 2006 and implemented in the period between September 2008 and December 2009. The project design was inspired by the Dutch 'Room for the River' concept which refers to the idea that safety should be integrated with other functions (e.g. nature and socio-economic development) and that measures that create more space for the river are preferred above further heightening of dikes. The project was also based on a study by the Romanian government in which the uses of the Danube floodplains were reassessed from a flood defense, economic and ecological perspective. For the Cats' bend region, this study recommended to combine water storage with agriculture. For the development of an integrated plan, the project involved a wide range of stakeholders including representatives of local and regional authorities, governmental institutions, the private sector and non-governmental organizations. This participatory process was supported by a team consisting of two Dutch and four Romanian organizations. During the project, the project team had an organizational and facilitative role. They interviewed and invited stakeholders, prepared maps, visualized and

conceptualized ideas, developed project materials, modeled the water system and calculated the impact of measures on the water level. The project resulted in three design concepts that could contribute to flood risk reduction along the Danube. The formal commissioner of the project, the Romanian Ministry of Environment, could have used these results to reduce flood risks but ignored them instead. Local and regional stakeholders wanted to implement some of the outcomes but were lacking resources for this. The project did also not result in any follow-up projects for the Dutch water sector. This means that the project has not been effective from the perspective of the Dutch financers (Vinke-de Kruijf, 2011b).

4.1.2 Case B: Implementation of FLIWAS in Banat region

Case B (2009-2010) aimed to support water authorities with the pilot implementation of a Flood Information and Warning System (FLIWAS). This internet-based application helps to manage flood-related information before, during and after flood risk events. The application was recently developed in a European project and is currently used by Dutch and German partners for the Rhine river basin. The implementation of FLIWAS in Romania was initiated around April 2009 and implemented in the period between September 2009 and April 2010. The project was executed in cooperation between two Dutch consultants and four Romanian governmental organizations that are active in the flood risk management domain. The technical implementation of FLIWAS basically involved the development of a Romanian FLIWAS environment at the national level, the pilot implementation of FLIWAS at a regional water authority and the training of Romanian users and administrators. Specific attention was further given to project communication and dissemination of the project results. There were regular progress meetings at the national and the regional level, the project team prepared press releases and promotion materials and organized a final conference during which the project was presented for regional water authorities and other relevant stakeholders. The project was also presented at other conferences and meetings and received considerable attention in national and regional media. One of the main issues during the implementation process was the installation of FLIWAS on a national server. Various experts were having difficulties to arrive at a mutual understanding. As a result, the server was installed much later than expected. To prevent further delay of the project, collected data were initially inserted on the Dutch server. The plan was to transfer these data to the Romanian server but it was unclear who was able and willing to transfer these data. In the end, data were never transferred and the regional authority never started using FLIWAS. The project therefore did not directly contribute to the reduction of flood risks. The project was still partly effective as the results were used as a basis for the formulation of new projects. The Romanian Ministry of Environment, for example, included the further development and implementation of a system like FLIWAS in a project proposal for the implementation of the European Strategy for the Danube river basin (Vinke-de Kruijf, 2011a).

4.1.3 Case C: Integrated Water Management in Tecucel River Basin

The objective of Case C was to develop an integrated framework (master plan) for the management of flood risks, drinking water and wastewater that would include several “no-regret” measures. This project was initiated by a Dutch Water Board following floods along the Tecucel river in 2007. It established a Dutch project team that also included representatives of two consultants, a water company, a municipality and a governmental organization. The project team collaborated with a Romanian project team that included representatives of three municipalities, two local representatives of the water company and a local representative of the

regional water authority. The project teams were institutionally supported by a Dutch steering group and a Romanian Consultative Committee. The project team visited Romanian several times and the Romanian project team also visited the Netherlands. During joint meetings, the problems in the area and potential solutions were explored further. It eventually appeared that Romanian authorities also developed two master plans which were approved during the project course. The project team therefore decided to focus on the formulation and further development of no-regret measures. Two measures that were selected concern the construction of: (1) a separate system for sanitary sewage and storm water runoff for the City of Tecuci; and (2) a flood retention reservoir for the Tecucel river. Both measures were not implemented as the project team failed to mobilize the required financial resources. The project itself did not result in tangible outcomes but resulted in intangible outcomes, such as, new relations between various Romanian institutions and new insights on working methods and integrated approaches. The project also formed the basis for a Water Partnership between the Dutch water board and water company and the Romanian regional water company (that was established during the course of the project). This partnership will form the basis for further exchange of knowledge and experiences on drinking water and wastewater for the next three years (Vinke-de Kruijf, forthcoming-b).

4.2 Characteristics of actors involved

4.2.1 Motivations: development of a motivating goal

In all Cases, most actors were motivated by the international dimension of the project; they simply enjoyed participating in an international project. The opportunity to transfer knowledge was another common source of motivation. Dutch experts are formally interested both in sharing and acquiring knowledge (i.e. learning from the experiences of other countries) (Min. V&W 2009). However, the Cases show that Dutch experts were especially interested to share their knowledge. What played a role is that they believed that their knowledge could contribute to the solving of flood-related problems. For some actors this was not only important from a personal but also from an organizational perspective. This especially applies to the water board and the water company that participated in Case C. Together with other water boards and water companies, they committed themselves to contribute to the realization of the Millennium Development Goals. Another motivation for sharing knowledge was that it provided experts with the opportunity to further develop and test their existing knowledge. An expert in Case A mentioned that international projects are very useful training for landscape architects as they have to apply their skills in an unknown setting. Experts in Case B were eager to test whether the FLIWAS technology was applicable in another setting. What further played an important role for the private organizations involved was that their participation contributed to their chance of being involved in other international projects. Experts mentioned that their company participated in the project in order to strengthen their international network, position and portfolio.

An important motivation of the Romanian actors (e.g. authorities, experts or other stakeholders) was to reduce flood-related issues in the region under concern. Most of them highly valued Dutch knowledge and believed that the project could contribute to the solving of certain issues. They were therefore interested to acquire Dutch knowledge concerning the application of a certain method, concept or technology or about potential solutions to concrete problems. They were also motivated by the international dimension of the project. The local/regional actors in Case C mentioned that the project was an important means to raise national attention for their local/regional issues. The regional authority in Case B was, for example, very keen to participate

in international projects and to be known as a forerunning authority. At the same time, we also observe that actors in Case A initially doubted whether their ideas would form the basis for the project outcomes and whether these outcomes would influence the decision-making process. Some of them were also skeptical about the role of Dutch experts and the added value of their expertise. When they witnessed that their ideas were taken into account, they also started to support the implementation of the project objectives. Like the regional/local actors in other Cases, they eventually saw the project also as an opportunity to influence decision-making. However, despite that the objectives of all Cases were (eventually) strongly supported by local/regional actors, they were often not implementable. One of the main issues was that the project goals were lacking support at the national level. Case A and B were both initiated, and thus initially supported by, actors at the national level. In Case A, this support diminished especially after the State Secretary was replaced. The Ministry eventually ignored the results and the request of local/regional authorities to support them with the implementation of results. In Case B, the Ministry stayed involved and was also motivated to include an application like FLIWAS in a new project proposal. Case C was designed as a bottom-up process in which the Ministry was asked to have a consultative role. Although local/regional actors were keen to involve the Ministry, they were never able to raise sufficient support to further elaborate the project results.

In all Cases, the motivations of some of the actors involved had also been changing during the course of the interactive process. Although Dutch experts in all Cases remained committed to finalize the project, several experts became less motivated to continue the collaboration. Experts of the Dutch agency for Land and Water Management (involved in Case A and C) explained that their organization was formally committed to international water management but that they discovered that the actual organization support for such projects was limited. This is among the reasons why they became less motivated to continue working on such projects. The collaboration with Romanian partners was also often not as expected. In Case A, several experts were disappointed about the expertise that was contributed by one of the Romanian partners and therefore reluctant to collaborate with them in future projects. In Case A and Case C, experts had doubts whether some of their Romanian partners were actually willing to make an effort to solve their water problems. This is why experts in Case A left the initiative for follow-up to Romanian actors.

4.2.2 Cognitions: creation of ‘negotiated knowledge’

All Cases are based on the recognition that the frequency and intensity of floods are increasing and that the reduction of flood risks and related issues forms a pressing issue. This cognition formed the main input for the project proposals that were prepared by Dutch experts following (some) discussions with Romanian actors. Especially in Case A, the way in which the project was initially framed by Dutch experts did not correspond with the actual problems in the area. Dutch experts expected that floods were a major problem in the region. However, when the project started, it soon appeared that Romanian partners and stakeholders did not share this cognition. In their opinion, the main problems in the area were of a different nature and included unequal access to resources, drought, declining biodiversity and a lack of public participation. Dutch experts therefore decided to broaden the project scope. The resulting design concepts were still largely as expected by the Dutch experts involved. They created more ‘Room for the River’ and therefore contributed to flood risk reduction but also to regional economic development and a better micro-climate. In Case B, floods were also perceived as being an important issue by the

Romanian partners. In this Case, some of the Dutch experts also discovered – to a lesser extent – that the actual problems were different than expected. A Dutch expert explained, for example, that he only realized during the project that FLIWAS could especially reduce the vulnerability of the emergency management system that resulted from an overdependence on individuals and individual knowledge. Case C was also initiated for the purpose of reducing flood risks but the scope of the project was already widened from the beginning to also include problems in the water services sector. Only when the project started, Dutch experts discovered that relevant actors were not yet acquainted with each other. In the opinion of Dutch experts, one of the main project results was therefore that the project created a connection between these actors.
All three Cases were especially about the transfer of 'Dutch ideas' to Romania. As these ideas had not been applied in Romania before, both Dutch and Romanian actors were uncertain whether these ideas could be successfully applied in Romania. While Case A was not very effective, most of the actors involved were very positive about the applicability of the concept and method used. Case B proved to Dutch experts that FLIWAS could be implemented in Romania. Romanian experts only partly shared this cognition. They doubted whether it could be implemented in other parts of Romania and – as they never started using FLIWAS – also doubted its actual usability. The integrated and bottom-up approach in Case C appeared to be rather ineffective. Dutch experts concluded that the integrated approach was of added value but should be reconsidered and that a better balance was needed between bottom-up and top-down. However, several Romanian experts had doubts about whether such approach could ever be effective in Romania.

4.2.3 Resources: mobilization of necessary resources

In terms of financial resources for project implementation, most project expenses were covered by Dutch actors. About 80% of the expenses in Case A and Case B were covered by a Dutch funding agency and about circa 50% in Case C. Most of the remaining project expenses were paid for by the Dutch consortia while Romanian partners mostly contributed in kind. In Case A, Dutch organizations also paid for the involvement of Romanian partners, expenses of the table and meeting locations. In the Cases B and C, Dutch experts collaborated more closely with Romanian authorities who could often arrange such resources for free. One of the critical issues in all Cases was the financing of follow-up steps. All Cases especially involved local/regional actors (e.g. representatives of governmental authorities or non-governmental organizations or other stakeholders). However, the follow-up of the Cases usually required considerable investments that were beyond the capacity of these actors. In Case A and Case C, local/regional actors were motivated to continue with the project results but lacked the capacity to mobilize the resources for this. In Case B, the Ministry was more closely involved and was in the position to integrate a tool such as FLIWAS in a proposal for external funds.
All Cases concerned the transfer of a 'Dutch idea' (e.g. 'Room for the River', 'Sketch Match', FLIWAS or integrated water management) from the Netherlands to Romania. As Romanian actors involved in the project were lacking the expertise to apply these ideas, projects were usually driven by general knowledge and initiatives of Dutch experts involved. Overall project management was also within the responsibility of one of the Dutch organizations involved since projects were funds by a Dutch funding agency. Romanian actors were important sources of context-specific expertise. However, an analysis of which actors or stakeholders should be involved was often still made by Dutch experts as Romanian actors were not familiar with the key concept, method or technology that was transferred. Romanian partners were further often

responsible for the organizational aspects, such as, inviting stakeholders and arranging meeting locations. To manage the involvement of Romanian actors, each project also had a Romanian project coordinator (and a Romanian project secretary in Case B and Case C). It should be noted that especially in Case B, but also in Case C, Dutch experts could also contribute some context-specific knowledge as they had been involved in Dutch-Romanian projects before.
In terms of knowledge orientation, Case A was stakeholder-driven, whereas Case B and Case C were rather expert-driven. Although in the latter Cases, there was also attention for the inclusion of stakeholder knowledge in the project design, most knowledge was eventually provided by professional experts. In Case A, experts had a rather facilitative role and the results were mostly based on knowledge provided by stakeholders. Although Romanian experts were generally valued for their high level of technical knowledge, their knowledge contribution was on several occasions not as expected by Dutch experts. In Case A, the participating institute expressed that it could contribute to the project content (e.g. hydraulic modeling, processing of geographic information and preparing area maps). During the project, the institute appeared to have less substantive expertise than expected by the Dutch experts. It is likely that this was rooted in diverging ideas between Dutch versus Romanian organizations about the specific expertise that was required. Similar problems were experienced in Case B. Dutch experts asked a Romanian experts whether she had experience with the installation of servers. She confirmed that she was used to work with servers but appeared to lack the specific expertise that was required. In Case C, one of the main misunderstandings between Dutch and Romanian experts was the need and availability of a master plan. Dutch experts only realized towards the end of the project that a new master plan would be redundant as two regional master plans had just been approved. In all Cases, mismatches occurred between resources that were attributed or expected versus resources that were required.

5 Results and discussion

This section presents and discusses how contextual factors affected the presented Cases through their influence on the motivations, cognitions and resources of actors involved. It pays attention to the contextual differences between both countries and to the embedding of projects in the dynamic Romanian context.

5.1 The influence of diverging wider contexts

The previous section shows that in all Cases there were major differences between Dutch versus Romanian actors in terms of motivations, cognitions and resources. In general, both actor groups were having an asymmetrical relation with Dutch experts being more resourceful than Romanian actors. In terms of knowledge transfer, both sides perceived the projects as a source for future cooperation and financing. The interest of Dutch experts was especially in sharing knowledge and of Romanian actors in acquiring knowledge. This asymmetry is rooted in contextual differences between both countries. While literature emphasizes that diverging contexts complicate policy transfers, the Cases highlight that such differences are also an important source of motivation. In terms of their wider context, both countries are similar in the sense that they are both a member state of the EU. However, they also differ – among others – in terms of problem, economic and political contexts. In terms of problem context, the Netherlands is a densely populated country with low-lying polders in which floods are extremely dangerous. In practice, floods rarely occur as the country adopted very high safety standards (Van Alphen and Lodder, 2006). In Romania, floods have become a yearly recurring issue during the last decades.

They are not only causing major economic damages, but also caused 13 casualties on average per year between 1969 and 2006 (MEF 2010). These differences in problem context, imply that Romanian actors perceive the Netherlands as one of the most – if not the most – advanced countries in flood risk management. They were further eager to acquire fresh knowledge as the intensity and frequency of floods was increasing. Both countries also differ considerably in terms of recent political and economic developments. While the Netherlands is one of the founding members of the EU, Romania is still in the process of bringing its political and economic system in line with mainstream European systems, after a history of 50 years of communist regime. In economic terms, the Netherlands is one of the richest European countries whereas Romania is the poorest EU member state in terms of purchasing capacity per capita (CIA, 2011). The public opinion barometer of the European Commissions (figures of 2008) shows that while most Romanians (76%) consider their economic situation being worse than the average of EU countries, most Dutchmen (82%) consider their situation being better than average. The statement "economic growth must have priority, even if it affects the environment" was agreed upon by 52% of the Romanian population versus 21% of the Dutch population (European Commission, 2008a, European Commission, 2008b). Being a relatively rich and export-oriented country, international assistance has a high priority in the Netherlands. This created the opportunity to also pay for the transfer of knowledge to less developed countries. This is attractive for Romania, which depends also on external funds for the implementation of flood risk projects. To gain access to funds is especially challenging for local/regional actors who are therefore eager to participate in any project. Romania's wish to 'catch up' with other EU member states (Rose, 1993) also played a role in this. In Case C, for example, actors perceived the project also as a means to learn from one the EU founding members how to apply for EU funds.

Being a member state of the EU generates an important similarity between both countries. However, there were also differences in the structural context for water management which formed an incentive for knowledge transfer. Especially in Case A, actors were very eager to learn about the application of the 'Room for the River' concept or the interactive design method as tools for integrated and participatory water management. The Netherlands is known for these ideas and experimenting with them for years (van Ast, 1999, Mostert, 2006). For the Romanian society, the historical record of 50 years of communism had a tremendous impact on destroying the participatory approach. However, there is currently a great interest, especially among non-governmental organizations, to implement such approaches. Participation is required by various EU directives and therefore also receives the attention of governmental actors but is often poorly implemented (Teodosiu, 2007, Teodosiu et al., 2003, Teodosiu et al., Submitted). Dutch actors perceived the sharing of their knowledge in these domains also as one of their tasks as more experienced country.

The above emphasizes that contextual differences can enhance knowledge transfer as it has a positive effect on the motivation of actors involved. At the same time, the Cases also show that contextual differences often challenge the effectiveness of such transfers as this implies that actors have different cognitions and resources. In Case A, Dutch actors framed flood risks as an urgent problem that was rooted in a lack of space for the River. This cognition was not shared by many of the Romanian actors involved. Only after adjusting the project scope, they could arrive at a common goal. The diverging problem contexts of both countries provide an explanation for these differing cognitions. While this did not affect the effectiveness of the Case, differences in terms of structural context were influential. In the Netherlands, 'Room for the River' projects are part of the implementation of a decision and program of the national government (Min. V&W

2006). In Romania, such program did not exist and the proposed measures did also not have sufficient support at the national level. As a result, there were also no resources for implementation. What especially affected the implementation and outcomes of Case B was the delay in the implementation of the server. The underlying problem was that Dutch and Romanian actors had different perceptions of what expertise was available and required. These differences were also rooted in specific differences in the technological contexts. In Case C, Dutch actors expected – on the basis of their own structural context – that Romanian actors were used collaborating with each other. Later it appeared that in the Romanian structural context, there is a lack of communication and cooperation at the level of actors involved in water resources management due to organizational problems and due to the lack of coordination between governmental organizations (Teodosiu, 2007; Teodosiu et al., Submitted). These differences explain why some information only became available once the project was already halfway completed. The late discovery of these facts had a considerable impact on the effectiveness of the project.

5.2 Embedding in the dynamic Romanian context

Analysis of the Cases shows that projects that involve the international transfer of knowledge are often less effective than planned. None of the projects contributed directly to the reduction of flood risks and only Case B generated a potential follow-up project for the Dutch water sector. One of the main explanations for these differences is that in Case A and Case C, there were no powerful players 'pulling-in'. In other words, resourceful actors were not convinced about the need to implement or to elaborate the project results. In Case A, a powerful actor (the State Secretary for Water) was involved in project preparations and supporting the project idea. However, this national support faded when – following elections – this person was replaced. Also at the regional level, several key actors were replaced following elections. These political changes would not have had such a negative impact on the project if the 'Room for the River' concept would have been widely supported. This was not the case since the concept was rather controversial, which made it difficult to raise support for the project among executives and politicians. This was especially the case as the project was finalized in the middle of an election period. A mismatch between the project results and the political context thus explains why resourceful actors would not support the project. What is quite remarkable is that the process was initially also not supported by regional/local actors. This related to a combination of contextual factors, such as, distrust in the government, negative experiences with participation and high dependence on the national government for resources. This negative motivation eventually altered and therefore had no negative impact on the projects' effectiveness.

Case B was implemented in a relatively short period of time, which is one of the reasons that it was not affected by any changes in the political context. What contributed to the effectiveness of this Case, was that powerful actors (at the national level) supported the project from the beginning until the end. Improvement of information and warning systems was one of their key priorities and they therefore deliberately looked for ways to integrate a tool like FLIWAS in one of their project proposals. This confirms the suggestion that transfers are likely to be supported by policy makers – and thus more likely – when they are consistent with political consensus (Rose, 1993). In this case, it was also less difficult than in the other Cases to embed the project as the project involved several Dutch experts who were familiar with the Romanian context and policy network due to their extensive project experience in the country. However, whether the tool will eventually be effective is still to be seen. Experts explained that its actual use may

become problematic, among others, as data and modern information and communication means are lacking. In other words, it is still uncertain whether the tool fits Romania's technological context.

In Case C, the process and its results were both less successful than expected. One of the issues during the process was that the project team was lacking insight in relevant policy processes, which was rooted in the lack of interaction between Romanian actors with a role in water management. This confirms that incoherent governance may indeed affect project implementation as it leads, among others, to more uncertainty and a failing capacity to recognize win-win situations (De Boer and Bressers, 2011). When information became available, the initial project objective – a master plan – became redundant. However, there were also no project resources to develop a completely different project. Besides this, the local/regional project team also failed to mobilize financial resources for the implementation of their common goal. This failure closely relates to the mismatch between the Romanian context and the integrated and bottom-up project approach. After the communist period, a process of decentralization began in Romania. However, this process developed in an uncoordinated and inconsistent manner. This implies that competences were often transferred without transferring power or finances. Besides this, public administration is also highly fragmented and local officials often lack expertise and training (Bădescu et al., 2004). What also plays a role is that Romania is highly dependent on European funds. These funds are meant for specific purposes (such as infrastructure or human resources) and do not enhance integrated solutions. Besides this, the funding programs that were relevant for this Case were only accessible for regional and national authorities. For these actors, the problems in the region under concern did not have a high priority. What also plays a role in this Case and in Case A is that the national funds have been decreasing considerably since the global economic crisis also started to affect the Romanian economy in mid-2009.

6 Conclusions

The aim of this paper was to provide insight in the mechanisms through which contextual factors influence the effectiveness of projects that involve an international knowledge transfer. Such projects can be understood as actor-interaction processes that are embedded in a wider, structural and specific context. The 'Contextual Interaction Theory' shows that these contexts only exert an influence on such processes – and their effectiveness – via their influence on the motivations, cognitions and resources of actors involved. To better understand the influence of specific contexts and circumstances, we analyzed three Dutch-funded projects that involved the transfer of knowledge about flood risk management from the Netherlands to Romania. Due to contextual differences, there were major differences between Dutch versus Romanian actors in terms of motivations, cognitions and resources. These differences are, on the one hand, an important source of motivation and, on the other hand, sources of diverging cognitions and mismatches between attributed versus actual resources. A further analysis of the embedding of the projects in the Romanian context highlights that the effectiveness of the cases were correlated with the involvement and support of national actors. The cases confirm that effectiveness is especially determined by powerful players 'pulling-in'. They also confirm that transfers are more likely when they are consistent with the political consensus. What further especially affected two of the cases was the fragmented governance setting of Romania.

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