How to facilitate the transfer of water management knowledge

Lessons from Dutch-Romanian project experiences for project implementers, advisors and financers

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Preface

The Partners for Water programme of the Dutch government stimulates cooperation within the Dutch water sector. Specifically those organisations in the Dutch water sector that have the ambition to promote its methodologies and technologies internationally. The programme is providing co-funding for projects initiated by the Dutch water sector organisations in 26 countries. It has successfully supported over a hundred projects worldwide in diverse fields such as water management, drinking water supply, waste water treatment, water usage in agriculture, etc.

Two of the projects presented in this book have been funded by the Partners for Water programme. The book describes these projects as study cases for more successful knowledge transfer in international project management. Executing a successful international water project and transferring knowledge is a complicated matter as the book explains extensively. The study cases in the book are projects initiated by the Dutch water sector in Romania. However, the book serves as an excellent practical framework for achieving knowledge transfer in international project management in the water field in general. The lessons learned in these study cases are generic and could be applied to water projects worldwide. Matters such as project actor-interaction, governance setting of projects, internal and external project communication are explained in such a way that they offer valuable advice for any water professional intending to set up an international water project.

The book is a must-read for anybody working in water projects in an international context.

I wish you an interesting reading!

Simon Warmerdam

Programme manager Partners for Water

Introduction

Pressing water management problems are experienced by countries around the world. International collaboration and knowledge transfer can help countries to identify new or better ways of dealing with these problems. Countries can learn from the experiences of other countries and thereby prevent reinventing the wheel or solve problems at lower costs. This booklet presents some of the Dutch experiences with transferring knowledge in international collaborative water projects. It particularly builds on research and practice from Dutch-funded projects in Romania. By placing these experiences in a wider perspective, this booklet aims to provide lessons for a wide range of organizations involved in water projects in different countries.

We use the experiences of several cases to illustrate that transferring (innovative) water management knowledge through relatively small pilot projects – as is the ambition of the Dutch water sector – is far from easy. Although the booklet is written on the basis of Dutch experiences and from a Dutch perspective, it also provides valuable lessons for other (international) organizations and project beneficiaries. Our lessons learned are organized around four themes: actor involvement, internal communication, external communication and learning. We also provide key recommendations to project implementers and to project advisors and financers related to different project phases.

*The booklet aims to provide practical guidance to organizations involved in **externally supported knowledge transfer projects** in the water management domain. This includes actors who **contribute to the implementation** of such projects, as well as the wide range of organizations who **finances or otherwise support such projects**, like (international) financing institutions, embassies and network organizations. Thus, the booklet provides advices to government authorities and agencies at the local, regional, national and international level, public and private companies, non-governmental organizations and knowledge institutes.*

The Dutch are well known for their technical and organizational knowledge about a wide variety of water management issues. Over the past centuries, this knowledge was developed by public and private organizations through projects inside and outside the Netherlands (see www.dutchwatersector.com).

The export of Dutch water management is actively supported by the national government and also by water companies and regional water authorities. They provide this support for economic and altruistic reasons.

The dual policy goal of Dutch international water management is: (1) to contribute to the solving of water-related problems, also in relation to global challenges such as climate change adaptation and the achievement of the Millennium Development Goals; and (2) to strengthen the international position of the Dutch water sector (National Water Plan 2009-2015).

This booklet builds on the results of a PhD research (Vinke-de Kruijf, 2013) that examined the effectiveness of recently implemented Dutch-funded projects in Romania. Three case studies that were part of this research are included in this booklet. In addition, the booklet builds on the extensive international experience of the authors. More information about the authors and references to the PhD research can be found at the end of the booklet.

By integrating knowledge from research and practice, this booklet aims to provide practical guidance for those involved in international water projects. The booklet offers a practical translation of a PhD research and the related joint learning process of the authors over the past five years.

The contents of this booklet are divided into three main parts.

Part 1 introduces some of the theoretical starting-points that formed the basis for the research activities. Ideas about social learning, policy implementation, water governance and evaluation are elaborated as a means to understand the course and outcomes of an international water project.

Part 2 concentrates on our experiences with Dutch-Romanian projects. After presenting the context of these projects, we present four case studies. We then reflect on how the Dutch-Romanian collaboration has evolved and present our main conclusions on the presented cases.

Part 3 provides a wider perspective on international water projects. After reflecting on experiences from other countries, it presents our four main lessons learned. Finally, we present several concrete recommendations to those who implement water projects and to those who finance or provide advice to water projects.

Part 1

Theoretical starting-points

Projects as actor-interaction processes

The interactive process of knowledge transfer

Learning through interaction

The governance setting of projects

What makes a project effective?

Projects as actor-interaction processes

The phenomenon of 'knowledge transfer' has been studied extensively by a wide range of researchers from diverse perspectives (see De Boer et al, 2013). In this booklet, the focus is on the interactions that occur between actors (persons) who share, acquire and apply knowledge for a specific purpose within the context of a project. An actor refers to one or more persons acting as representatives of a certain organization.

> *The focus of this booklet is on international water projects in which knowledge is being transferred. Such project is seen as "an interactive process by which actors of different countries share and acquire water management knowledge for the purpose of applying that knowledge".*

The presented understanding of knowledge transfer is inspired by a theory of policy implementation, the so-called Contextual Interaction Theory. This theory asserts that the course and outcomes of a project basically result from the dynamic interaction between the characteristics of actors involved. These characteristics are:
- **Motivations:** objectives, external pressures and other aspects that drive an action;
- **Cognitions:** knowledge held to be true, e.g. about the problem or potential solutions;
- **Resources:** financial, information, human or other resources that provide capacity to act and can be sources of power.

Projects are influenced by the project-specific context, the structural context and the wider context. These contexts have an influence on a project in as far as they influence the characteristics of actors involved.

INTERNATIONAL WATER PROJECT AS ACTOR-INTERACTION PROCESS (DE BOER ET AL, 2013)
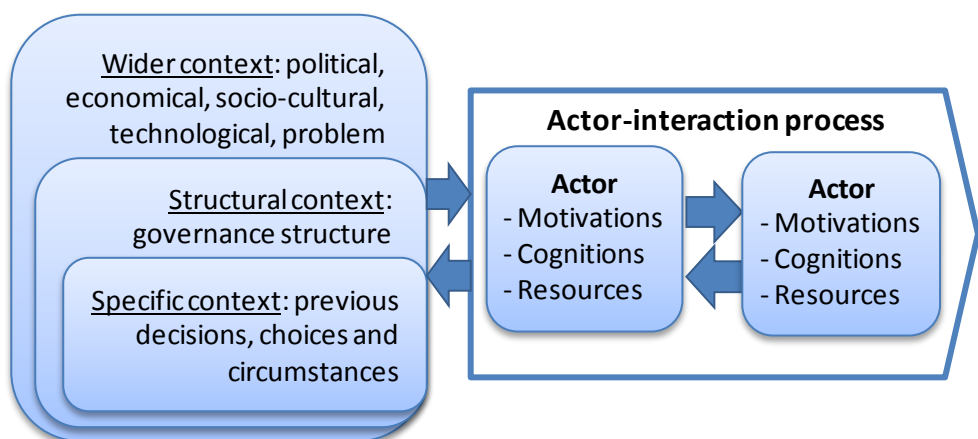
The interactive process of knowledge transfer

International knowledge transfer projects involve actors of different countries. In case of externally supported projects, a distinction can be made between actors of the benefiting country and the transferring country. Actors involved tend to have **diverse socio-cultural, professional and organizational backgrounds** implying that they often have difficulties to really understand each other. Moreover, actors can contribute with different types of knowledge. External experts are usually good at providing general knowledge in the form of concepts or methods, whereas experts and stakeholders of the benefiting country can provide knowledge of specific conditions and practices. While some can provide knowledge on the **substantive aspects** of a project, others may have knowledge related to the **process** or the policy **network**. The latter two types of knowledge are at least as important as more technical knowledge and often embedded in relations with other people. As projects tend to involve persons who are expert on a topic as well as persons who have no knowledge on a topic, they benefit from involving persons who can translate between actors with diverse knowledge levels. Such 'translators' are not expert, but have sufficient knowledge to interact interestingly on a certain topic.

*In international water projects, persons often have difficulties to understand each other. This relates to their **diverse backgrounds**, levels and types of knowledge. Generally, more **intense and direct interaction**, such as workshop settings or personal meetings, are better at transferring 'tacit' knowledge that is hard to express in words or numbers. The transfer of knowledge is easier when a project does not only involve substantive experts, but also actors who have an **interactional level of knowledge** about the project content or diverse socio-cultural settings, actors who **know the policy network** or actors who are **good at developing social relations**.*

SCHEMATIC MODEL OF A KNOWLEDGE TRANSFER PROCESS (VINKE-DE KRUIJF, 2013)
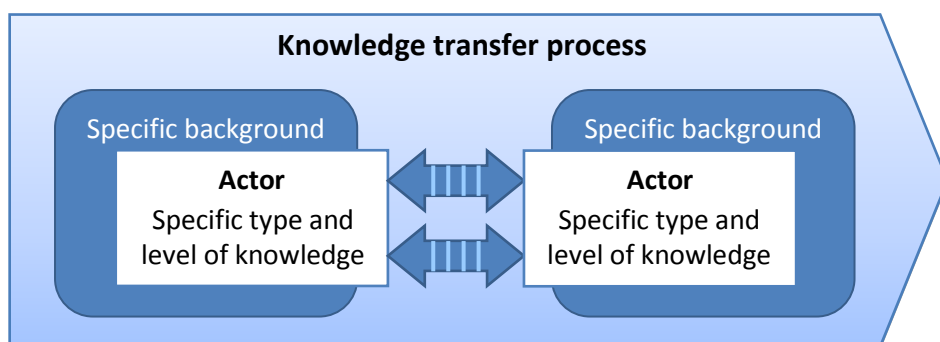
Learning through interaction

Projects bring together actors with diverse motivations, cognitions and resources. Because of their interactions, actors can learn from each other. This means that actors acquire new knowledge and insights as well as increase their capacity to make use of their knowledge, experience and understanding. In natural resources management, learning in interaction with others is widely studied under the heading of 'social learning'.

The learning that occurs through interactions and involves learning by larger groups of actors is called 'social learning'. Social learning may concern substantive aspects (e.g. new insights into problems or solutions) and relational aspects (e.g. knowing or trusting others). Social learning involves changes in the individual motivations, cognitions and resources of multiple actors. When constructive, such learning contributes to the development of collective outcomes on which future collaborative actions (e.g. needed for problem-solving) can be based.

Processes of social learning changes the motivations, cognitions and resources of actors. As a result, actors *may* be brought closer together and develop collective outcomes that form a basis for further collaboration. Such a basis involves that actors develop a joint motivating goal, a negotiated knowledge base (i.e. knowledge that is commonly agreed upon and valid), mobilize necessary resources by pooling them and have positive relational experiences that form a basis for mutual trust.

HOW SOCIAL LEARNING *MAY* CONTRIBUTE TO FURTHER COLLABORATION (VINKE-DE KRUIJF, 2013)
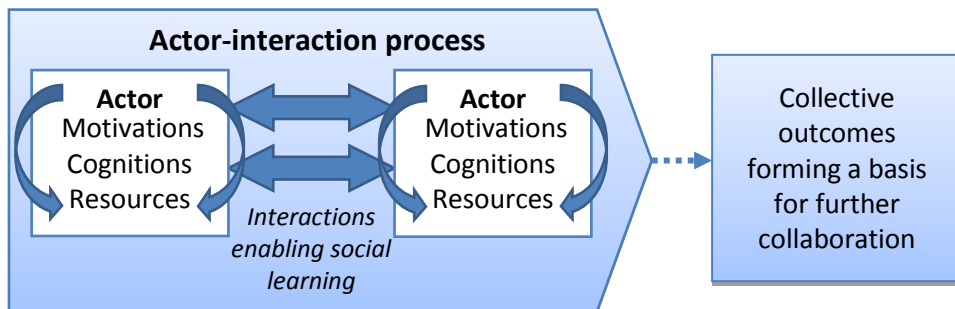
A single project can include multiple, diverse learning processes and be constructive for some and unconstructive for others. Social learning *may* bring actors closer together, but can also drift actors further apart. For example, interactions may produce or confirm negative perceptions of other actors or deepen differences in view. Thus, interactions may also lead actors to the decision to withdraw from any further collaboration.

The governance setting of projects

The structural governance context in which project actions and interactions occur can be (partly) supportive and (partly) restrictive of project implementation.

> *A water governance structure supports the management of water resources and the delivery of water services (and the implementation of projects in these domains) when it regulates all relevant uses and users (high extent) and when various governance dimensions are interconnected and therefore strengthen rather than weaken each other (high coherence).*

Governance reflects the idea that no public authority can implement a project on its own. Due to the fragmentation of resources, authorities need to collaborate with a wide range of actors, both public and private, at different levels of society. These actors have diverse perceptions of reality and can employ diverse instruments.

FIVE DIMENSIONS FOR DESCRIBING A GOVERNANCE STRUCTURE (BRESSERS & KUKS, 2003)
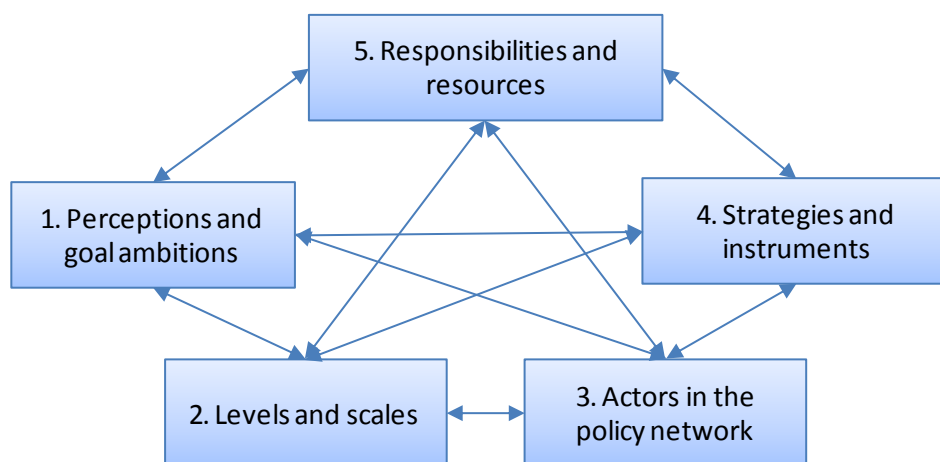
The following questions help to describe the governance structure of a sector:

1. Which levels dominate and are involved?
2. Which actors are included in or excluded from the policy network?
3. Which problem perceptions are taken into account in the formulation of ambitions?
4. What types of instruments are included in the strategies?
5. How are responsibilities assigned and what resources are available?

In addition to these descriptive questions, an assessment of extent and coherence helps to understand how governance may influence project implementation.

What makes a project effective?

Projects are actions that are taken for the purpose of producing certain intended or desired outcomes. Externally supported knowledge transfer projects tend to be relatively small implying that follow-up actions are crucial to achieve the desired outcomes. What such 'desired outcomes' are naturally differs for every project and for every actor involved. Therefore, overall policy goals (for example, as described in national policy documents) are more suitable for a more systemic evaluation of such projects. In most cases, the goals of actors and projects tend to partly overlap with these goals.

> *In the case of **Dutch-funded** international water projects, the desired outcomes are to contribute to: (1) the **solving (or at least reducing) water-related problems** in the benefiting country; and (2) the generation of **follow-up projects** that economically benefit the Dutch water sector.*

Generally speaking, projects are more likely to become effective when actors who have a crucial role in the implementation of a project and its follow-up actions (so-called **users**) are successfully engaged. This means that, persons with relevant resources are somehow involved and understand each other. Moreover, the project is adapted to changing insights or circumstances and follow-up actions are anticipated (pro-active diffusion).

Aspects of an effective knowledge transfer project design and implementation	
Stakeholder involvement	Actors are (depending on their interest in the issue) informed, consulted or actively involved and able to influence the decision-making process.
Institutional embedding	Actors representing the government (i.e. civil servants, executives or politicians) are actively involved or have a role in the process.
Integration of context-specific knowledge	The knowledge of (external) experts is combined with context-specific knowledge of experts and stakeholders of the benefiting country.
Mutual understanding in communication	Actors develop similar understandings of the project scope and content and make use of communication means that enhance mutual understanding.
Proactive diffusion strategy	The project includes an adequate diffusion strategy, which is put in place in an early stage of the project.
Adaptive management	The project is adapted, if necessary, to new insights and changing circumstances and conditions.

Whether the ultimately desired outcomes of a project are likely to be achieved is often not yet visible at the end of a project. Follow-up actions are generally needed to move from immediate outcomes (resulting from the interactions) to these ultimate outcomes.

THE RELATION BETWEEN PROJECT IMPLEMENTATION AND ITS IMMEDIATE AND ULTIMATE OUTCOMES

Wider and structural context

Project implementation → Immediate outcomes → Follow-up activities → Ultimate outcomes
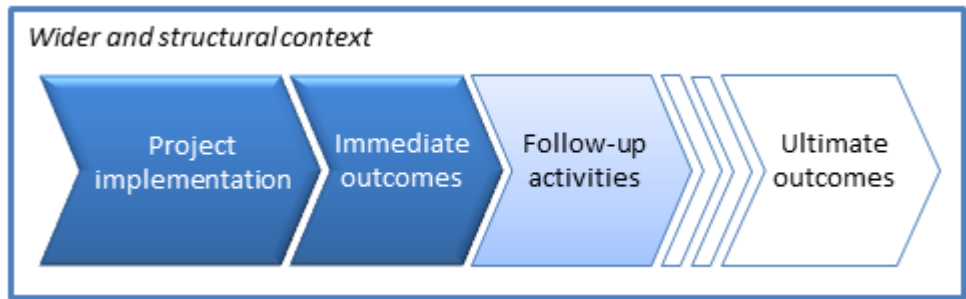
What ultimate outcomes can be reasonably expected, can be predicted on the basis of the process and its immediate outcomes. Ultimate outcomes are more likely to be realized when actors developed a basis for further collaboration. Such a basis is formed when actors develop a common goal, agree upon relevant knowledge, mobilize necessary resources and have positive relational experiences (as a basis for trust).

Immediate outcomes of an effective process	
Motivating goal	Critical actors developed a joint goal that motivates.
Negotiated knowledge	Actors developed a knowledge base that is relevant and agreed upon by the actors involved and by external experts.
Mobilization of necessary resources	Actors mobilized the (financial and human) capacity to act and the power to get things done.
Positive relational experiences	Actors had a positive collaboration experience and have become willing to continue their collaboration.

As explained in the section on learning, a project is not necessarily a constructive process. It may well be the case that actor interests or cognitions are too divergent. Another outcome can be that actors want to change things, but lack the power to do so. Also the interactions between actors can be disappointing making them less willing to engage in any future collaborative process. Only when all the immediate outcomes that form a basis for the desired outcomes come together, the intended purpose of a knowledge transfer project is likely to be achieved.

Dutch-Romanian collaboration on flood risk management

The Dutch water sector contributes to the implementation of water projects around the world. Financial support is provided through various programmes and organizations targeting at specific themes and/or countries. Currently, Romania is not included as focus country in the key programmes. Nevertheless, projects continue to be implemented by Dutch public and private organizations with financial support of the Dutch government.

Romania is one of the countries in which the Dutch water sector has been very active in the past decades. Between 1995 and 2007, over 150 water and environment projects were implemented with Dutch financial support.

Romania and the Netherlands are both member states of the European Union and located downstream of an international river basin. Flood risk management is one of the topics on which both countries collaborate. The Dutch are quite successful in preventing their low-lying country from floods. Also Romania has a long history in flood control. Since the fall of the communist regime in 1989, the frequency and intensity of floods has increased. Hence, the Romanian government is urgently looking for solutions.

MAP OF RECENT FLOOD EVENTS IN EUROPE, INCLUDING THE NETHERLANDS AND ROMANIA (EEA, 2010)
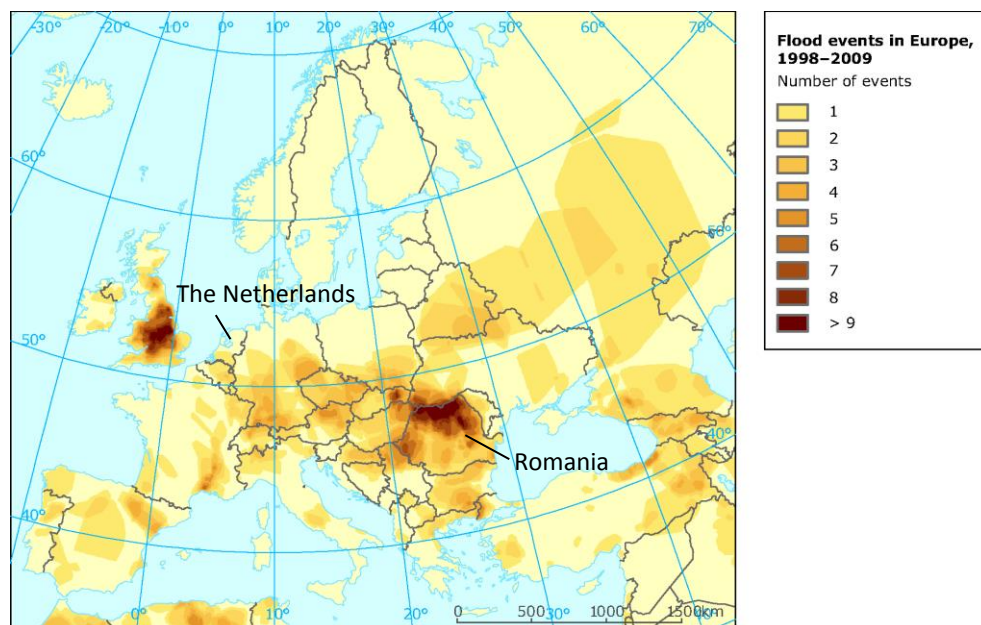
Introduction of four selected cases

Central in this booklet are four Dutch-Romanian water projects in which the reduction of flood risks was an important aspect. As part of a PhD research, three projects were investigated during their implementation period. One project was evaluated about five years after its completion within the context of a BSc research project.

Case A   *Participatory, integrated '**Room for the River**' plan process in Cat's bend region (2009)*

Case B   *Pilot implementation of a Flood Information and Warning System (**FLIWAS**) in Banat region (2009-2010)*

Case C   ***Integrated Water Management** (flood risk management, drinking water and wastewater) planning for the Tecucel river basin (2008-2011)*

Case D   *Participatory planning and implementation for the restoration of the **Ciobarciu wetland** (2003-2006, evaluation in 2011)*

All four projects were financially support by Dutch programmes: cases A and B by Partners for Water, case C by a fund of the Dutch Water Authorities and case D by a pre-accession programme. The projects were implemented through collaboration between Dutch and Romanian actors (experts, stakeholders and authorities). For every project, Dutch experts paid at least five visits to Romania with a length varying from several to ten days.

MAP WITH THE LOCATION OF THE STUDIED PROJECTS (BACKGROUND MAP FROM UNITED NATIONS, 2008)
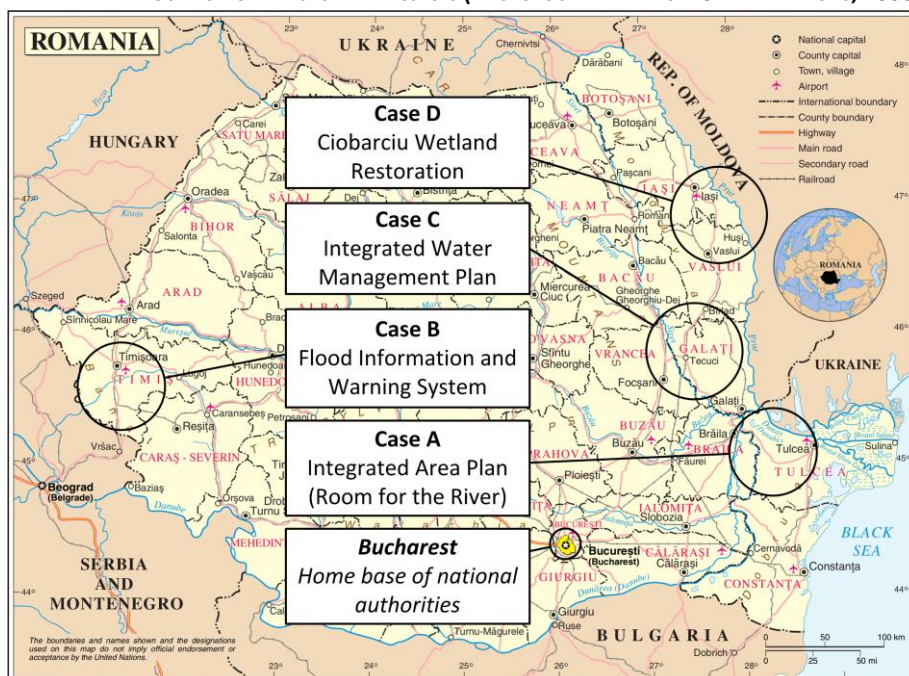
Case study A: 'Room for the River' project

The objective of this project was to develop with local and regional stakeholders an integrated spatial plan, which would contribute to flood risk reduction, for a region located just upstream the Danube Delta. Guiding principle was the 'Room for the River' approach, which was developed in the Netherlands to anticipate on the potential increase of flood risk as a result of climate change. The approach favours measures that create more space for the river. Such measures can improve safety and also benefit nature, water quality, spatial quality and regional spatial developments (see also www.roomfortheriver.nl). The project also built directly on a Romanian study on the future use of the Danube floodplains (the so-called REELD study). The project was implemented in collaboration between two Dutch and four Romanian organizations. The Dutch experts visited Romania five times. The Romanian Ministry of Environment was the formal commissioner of the project.

The project resulted in three directions for solutions: (1) restoration of an old meander of the Danube (the by-pass channel); (2) improvement of agriculture through creation of irrigation channels; and (3) creating more space for the river by relocating a dike on the North bank of the river. Each of these solutions or a combination could reduce flood risks by lowering the water level on the Danube in case of extreme discharges.

THE THREE SOLUTIONS THAT EMERGED FROM THE DESIGN WORKSHOPS **(DLG, 2009)**

CASE A: EVALUATION OF THE PROCESS, IMMEDIATE OUTCOMES AND RESULTS

Process	Immediate outcomes	Result
☺ Involvement of local and regional stakeholders, integration of context-specific knowledge and adaptation to new insights of actors involved.	☺ Actors involved developed a negotiated knowledge base about desired directions for solutions and became motivated to further elaborate these solutions.	☺ Successful application of an interactive design method and the creation of multiple supported scenarios for the reduction of flood risks.
☹ Low involvement of key policy makers, which was related to poor adaptation for political changes and a poor diffusion strategy.	☹ Changes in motivations and cognitions were not shared by decision-makers.	☹ Project results were ignored by decision-makers. Potential follow-up actions got stuck in a lack of resources.

Through their project interactions, local and regional stakeholders developed commonly agreed upon directions for solutions. Further elaboration and implementation of these solutions was desired by the participating actors and would (according to preliminary calculations) considerably reduce flood risks in the region. The use of an interactive design method contributed to these outcomes.

For the development of 'Room for the River' solutions, the Dutch team used an interactive design method (the 'Sketch Match' developed by DLG). The method involves a series of interactive design workshops in which landscape architects visualize (sketch) the ideas of participants on maps. Next, they look for ways to integrate or combine (match) these diverse ideas. The 'Sketch Match' was preceded and followed by plenary sessions with national, regional and local organizations.

Despite its successful implementation, the project had no concrete follow-up. Actors involved pointed towards the Ministry of Environment as the actor who could and should take the lead in organizing follow-up actions. Though the Ministry was the commissioner, its involvement was limited. This related partly to the replacement of executives following elections at the beginning of the project. Moreover, the government had just fallen at the end of the project, making decision-makers boggling to react on the results. While some Romanian organizations made references to potential use of the method in other projects, not concrete follow-up for the Dutch water sector was reported.
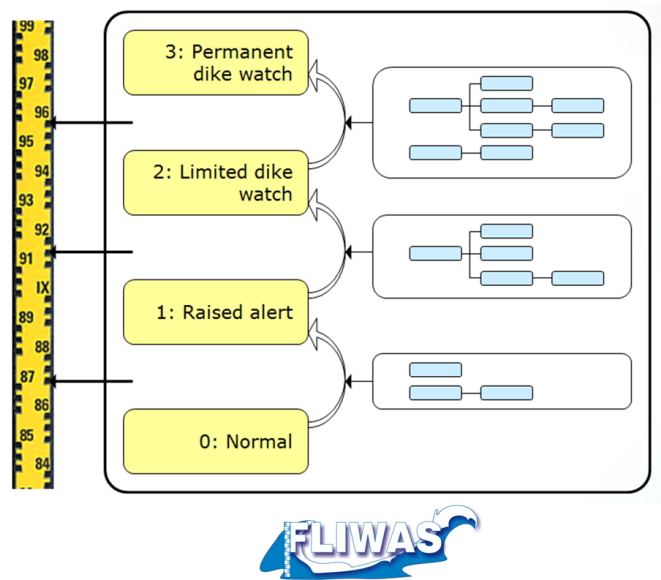
Case study B: Pilot implementation of FLIWAS

The objective of this project was to support Romanian water authorities with the pilot implementation of an internet-based Flood Information and Warning System (FLIWAS), so that they could use, operate and maintain the system independently.

FLIWAS basically collects, structures and presents information that is needed for the management of emergency situations. The system uses hydrological and geographical information available from measurement and forecast systems, emergency plans, scenarios and flood maps.

FLIWAS was implemented at pilot scale at the regional water authority for the Banat region. In addition, Romanian national authorities and institutes were involved in the installation of a server and supported the project implementation. Commissioner of the project was the Ministry of Environment. From the Netherlands, the project involved an organization who developed the system and two consultancy companies who contributed to project implementation. Both consultancies had considerable experience with the implementation of projects in Romania. One of them had been involved before in a Dutch-Romanian project on flood risk management in the pilot area (period 2006-2008). The other consultancy had a small office in Bucharest and was also involved with one of its Romanian employees. Dutch experts paid five visits to Romania of which three visits were to national and regional partners and two only to the regional partner.

SCHEMATIC REPRESENTATION OF EMERGENCY PHASES AND RELATED ACTIONS AND INFORMATION FLOWS

Process	Immediate outcomes	Result
☺ Proactive diffusion of progress and results, active involvement of high level civil servants (national and regional).	☺ Positive relational experiences, training of experts, mobilization of resources for follow-up was started.	☺ Follow-up actions were discussed and prepared.
☹ Misunderstandings between some experts, too little adaptation (e.g. no transfer of data), actual involvement of stakeholders low.	☹ No joint motivation to start using the system at pilot scale, no common view on use and usefulness of the system and incomplete installation.	☹ Follow-up actions were not yet implemented and FLIWAS is not used (yet) in the pilot region.

The installation of FLIWAS at a national server was carried out with remote support from a German consultancy firm. The installation took longer than planned and was only finalized at the end of the project. The reason was that the Romanian and the German actors involved had serious difficulties to understand each other. For the regional pilot implementation, Romanian and Dutch experts worked together to collect and insert relevant information into the system. The implementation was done at the Dutch server. Data were planned to be transferred later to the Romanian server, but this was never done. The collaboration between experts was generally good, although some of them also had difficulties to understand each other.

The pilot implementation of FLIWAS was a rather expert-oriented project. The project illustrates that experts from diverse backgrounds may experience serious difficulties in understanding each other, even when they speak the same language. Persons with a (interactional) knowledge of the content and also of both contexts can help translating in such situations.

The pilot showed that a system like FLIWAS can be implemented in Romania. A successful exercise was organized and potential users were trained. While users at the regional authority could start using FLIWAS, they never did also because there was no connection made between automated measurements and FLIWAS. The project received considerable media attention and the results were disseminated among a wide range of organizations with a role in emergency management. On the basis of the pilot, the Ministry of Environment decided to include a tool like FLIWAS into a European project proposal.
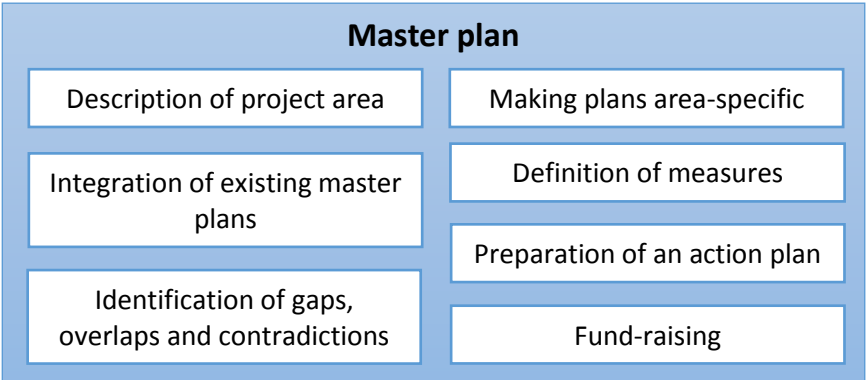
Case study C: Integrated Water Management project

This integrated project dealt simultaneously with flood risk reduction and drinking water and wastewater issues. The objective was to develop an integrated master plan and to establish a basis for the implementation of several no-regret measures for the Tecucel river basin. No-regret measures were defined as measures that would improve the sustainability of the water system and could be implemented relatively easy. The project design was inspired by Dutch approaches for integrated and participatory planning.

In 2007, a flash flood on the small Tecucel River (with a length of ca. 25 km) caused three deaths and millions of economic damage. At that time, a Romanian worked as intern at a Dutch water authority. The same water authority had been involved in another project in a nearby region that was administered by the same Romanian water authority. The authorities agreed to develop a local-oriented, integrated water management project.

The project was implemented in collaboration between a Dutch and a Romanian project team. The Dutch team consisted of six actors from the North Netherlands: a regional water authority, a municipality, a drinking water company, a government agency and two companies. The Romanian team was formed by local actors from Tecuci and neighbouring communities with a role in flood risk management or drinking water and wastewater. Furthermore, a steering group was formed with decision-makers of the Dutch organizations and a consultative committee with national, regional and local decision-makers from Romania. During the project, Dutch experts paid six visits to Romania of which three to the project area and three to regional authorities. The Romanian project team visited the Netherlands once. Also the regional water company – that took over the tasks of the local water company during the project – paid one visit to the Netherlands.

BUILDING BLOCKS OF THE INTEGRATED MASTER PLAN

Master plan	
Description of project area	Making plans area-specific
Integration of existing master plans	Definition of measures
	Preparation of an action plan
Identification of gaps, overlaps and contradictions	Fund-raising

CASE C: EVALUATION OF THE PROCESS, IMMEDIATE OUTCOMES AND RESULTS

Process	Immediate outcomes	Result
☺ Knowledge was provided by local authorities and project adaptations were made. Well embedded at the local level.	☺ Romanians wanted to further collaborate and existing situation became clear and was agreed upon. Two Dutch actors engaged in a partnership with a regional actor.	☺ Indirect contributions were made (and are to be expected) to solving water problems, also within the context of the partnership.
☹ Lower level of involvement than planned, little attention for diffusion, unproductive and late adaptations, little support from regional and national actors.	☹ Diverse views on what should be done, most Dutch partners did not want to further collaborate and actors failed to mobilize resources for follow-up actions.	☹ No direct contribution to water problems and no follow-up with economic benefits for the Dutch water sector to be expected.

Through their interactions, the project teams developed a better insight in the meaning of a master plan in Romania and prepared a list of no-regret measures. As Romanian authorities just finalized one master plan for flood risk management and one for drinking water and sanitation, the teams decided that another master plan would be redundant. The teams concluded that the selected no-regret measures did not have priority in existing plans and were therefore not realizable on the short-term. For the Romanian team, the project and particularly the visit to the Netherlands was very instructive. The main lesson learned by the Dutch team was that the proposed approach was not effective in Romania.

Both Dutch and Romanian actors learned about problems, potential solutions, project implementation, their position in the network and developed new relations that would ease future projects in their own countries. However, the collaboration also made Dutch experts decide to withdraw from further collaboration with their local Romanian counterparts.

The project was instructive for the actors involved, but did result in any concrete measures as was hoped for. The project had spin-off though: the Dutch water authority and water company established a Water Partnership on drinking water and sanitation with a Romanian regional water company to collaborate for three years.

Case study D: Ciobarciu wetland project

The main objective of this wetland restoration projects was to create a wetland in the Prut river basin by restoring a former river.

> *In the second half of the twentieth century, the last 56 km of the meandering Jijia river were cut off and deviated via a channel to the Prut river. This measure was meant to prevent flooding and to expand agricultural land. As the yearly floods disappeared, the quality of the lands gradually decreased and lost their agricultural importance. Ecological restoration of former floodplains reduces flood risks and droughts and increases biodiversity.*

The short term project objectives were to create 250 ha of wetland, exchange knowledge and experiences (related to ecological restoration, interactive planning and stakeholder participation)create partnerships between Romanian regional authorities and share the project experiences with other regional authorities. The project also had long term objectives related to the creation of a network of wetlands, integration and nature and water policies, the implementation of European directives and the strengthening environmental NGOs and education. The project was implemented by a Romanian regional water authority with the support of a Dutch national institute, a nature organization and a water authority. The Ciobarciu project was evaluated at the end of the project by the project team and by a Romanian University, who interviewed 55 inhabitants of villages where the (previous) owners lived. After a period of five years, the project was evaluated again.

CIOBARCIU WETLAND FIVE YEARS AFTER PROJECT COMPLETION (MARK CORNELISSEN, JUNE 2011)

The purchasing of land was an important aspect of the project. Much of the Romanian project team's effort went in the tedious process of identification of land owners, helping them to obtain valid identity cards and land deeds and then getting them to want to sell the land and go through the administrative hurdles. At the end of the project, 75% of the intended 250 ha wetland was either purchased (60%) from the local landowners or was leased with a long-lease contract (15%). The Old Jijia was provided a rather steady flow again and a large part of the area was transformed into a wetland, facilitating the development of interesting flora and fauna. Cooperation between Romanian actors developed. During the project, many meetings with village leaders, schoolchildren and other community members were held and a lot of knowledge on public participation was developed and exchanged. Still, the Dutch team wanted to have spent more time developing the management plan for the area, preferably in a way in which the local inhabitants could have participated more than they had been able so far.

The creation of the wetland project was one of the very concrete outcomes of the project, resulting in improved water management and biodiversity. However, the evaluation after five years revealed that the wetland was not functional afterwards for two years. The evaluation showed that other project objectives were also achieved. Whether these results were directly related to the project was hard to say after five years.

The villagers generally appreciated the project, although some of the people who sold their land found that they had not received enough money. Interestingly enough, 2/3 of the interviewed villagers believed that the project area (still) belonged somehow to the community or village. Only 15 % believed that the Romanian Water Authority was the owner, the rest did not know. The evaluation after five years showed that how the wetland was managed and developed was appreciated differently by various people.

CASE D: EVALUATION OF THE PROCESS, IMMEDIATE OUTCOMES AND SITUATION AFTER FIVE YEARS

Process	Immediate outcomes	Situation after five years
☺ High level of public participation.	☺ Purchase of land, creation of wetland	☺ Functional wetland, improved cooperation, ideas for new wetlands, courses on ecological cooperation at University.
☹ Participation in the management plan was too limited.	☹ Diverse views on ownership and meaning management plan.	☹ No funds for creating other wetlands, wetland had not been functioning for two years.

How Dutch-Romanian collaboration has developed

The previous sections highlighted four Dutch-Romanian projects. These projects are not stand-alone, but implemented against the background of on-going Dutch-Romanian bilateral relations. Since the Romanian Revolution in 1989, the Netherlands has been one of the most active European countries supporting Romania in its transition to a free market democracy. Especially in the late 1990's several Dutch bilateral programs were set up to support Romania in strengthening its institutions and civil society. Many of these programmes supported the development of bilateral projects aiming at the improved management of water resources and flood risks.

> *Dutch-Romanian projects are implemented in the context of an extensive bilateral relation between both countries. Improved water management has always been an important aspect of collaboration programmes that were initiated shortly after the Romanian revolution.*

From 1998 until 2008, the Netherlands Institute for Inland Water Management and Waste Water maintained extensive bilateral relations with the National Administration for Romanian Waters based on a Memorandum of Understanding (MoU). In 2008 these relations were continued by the Netherlands Association of Regional Water Authorities (UvW) under a Letter of Agreement. Several bilateral projects between Dutch regional water authorities and Romanian regional water authorities took place in the areas of drinking water and sanitation, coastal zone management and water management.

> *The Romanian water authority has had a formal relation with a Dutch national institute for a period of ten years, which was succeeded by an agreement with Dutch water authorities. More recently, both countries have established a Netherlands-Romanian panel focusing on water.*

In 2010 a Netherlands-Romanian bilateral panel for water and coastal zone management was established. The panel consists of board members of Dutch and Romanian Water Authorities, Deltares (Dutch research institute for delta technology) and the Netherlands Water Partnership Partnership (public-private network organisation of the Dutch water sector). The panel discusses new developments in water and coastal zone management in The Netherlands and Romania and discusses and reviews ongoing bilateral projects.

Before Romania became a member state of the European Union, many projects received support through programmes for social transformation (Matra) or emerging markets (PSO). Since 2005 the majority of bilateral projects is funded through the Partners for Water programme of the Dutch government. The programme is demand driven and meant for Dutch water sector organisations interested in demonstrating new technologies or methodologies with the goal of applying them on larger scales. Between 2005 and 2010, about 20% of the Partners for Water budget has been allocated to Dutch-Romanian water projects. Since 2005 approximately 20 projects were financed with support of Partners for Water in Romania.

Romania became a member state of the European Union in 2007. Since then, bilateral assistance diminished and is now provided mainly through the Partners for Water programme. This programme particularly aims at creating business opportunities by testing, demonstrating and up-scaling of innovative technologies and methodologies.

The Partners for Water programme is meant to support pilot projects in which innovative methods, tools and solutions are applied in another context. The pilots are expected to lead to a follow-up actions in which the innovative methods, tools and solutions are further applied. This direct follow up was not (yet) reached in the described Partners for Water projects. This does not mean that the projects did not have any spin-off at all. The example below illustrates that creating business opportunities for the Dutch water sector just takes more than being engaged in a single project.

The experience of a Dutch consultant – who was involved in Case A and Case B and active in Romania for more than seven years – is that: "After some time you get to know and understand the different stakeholders. You start to learn about project possibilities not directly related to your own Dutch-funded project. Being present enabled us to meet potential partners and clients and to develop mutual trust and a willingness to work together. This has led us to collaborate with Romanian companies on a large project that is paid for by the Romanian government."

Over the past decades, the Netherlands and Romania have invested a lot in their bilateral collaboration. This has not yet resulted in a large number of commercial projects for the Dutch water sector; the above story is one of the very few success stories. This may change as bilateral discussions continue and Romanians at decision-making positions are increasingly aware of and interested in implementing Dutch solutions.

Conclusions from Dutch-Romanian collaboration projects

Over the past twenty years, the Netherlands has supported a wide range of water projects in Romania. We presented the experiences of four recent projects and provided some insights into the context of these projects. The case studies basically show that solving problems and generating new projects through a single project is difficult, if not impossible. Knowledge transfer in projects tends to remain at the level of sharing and acquiring knowledge (which is included in the project), without moving forward to the actual application of knowledge (which requires follow-up actions).

> *In the absence of follow-up actions, the effectiveness of the studied projects was limited. Only case D had a positive impact on water management. The other three cases did not directly contribute to the reduction of water management problems. Also the economic benefits for the Dutch water sector were limited. The most concrete impacts were that project results were used as input for a new project proposal (cases A and B) and formed the basis for a (partly Dutch-funded) partnership (case C). In addition, project results were used as input for other projects. For example, case C built on some of the relations that were developed in case D and the experiences of case A were used as input for another Dutch-Romanian project.*

The cases illustrate that through their interactions, actors in international water projects learn from and about each other. Learning changes the motivations, cognitions and resources of actors. These changes may bring actors closer together and provide them with a basis for further collaboration. This is the case when actors develop a joint motivating goal, negotiated knowledge, the mobilization of resources and mutual trust. However, interactions do not need to be constructive. They may also drift actors apart making further collaboration less likely. A collaborative project can also be successful, but still remain without effect. In fact, the cases show that follow-up actions easily get stuck in the absence of an actor who is able or willing to coordinate or take the lead in the mobilization of necessary resources. Only when actors at decision-making positions are involved in and committed to a project, follow-up actions are likely to occur.

> *The cases illustrate that learning through interaction may be constructive, but may also have the opposite effect. Thus, a project may lead to further collaboration, but as well lead an actor to the (perfectly legitimate) decision to withdraw from further collaboration. Therefore, to keep key actors interested and aboard, implementers may need to adjust the project scope or theme – even when this implies that other actors leave or join the project.*

On the basis of the case studies, we identified three key obstacles to the effective implementation of knowledge transfer projects.

1. **Misunderstandings**: participating actors have diverse backgrounds and often have not collaborated before. Due to their diverse knowledge backgrounds, actors have difficulties to understand each other making misunderstandings quite common.

2. **Mismatch with local reality**: projects generally aim at applying knowledge that has not been applied in that specific context before. To adequately embed such pilot projects proves to be challenging. External experts and local counterparts both lack relevant context-specific knowledge. Engagement of other actors of the benefiting country may help, but does not prevent problems since these actors often also have limited knowledge of the governance context. Externally supported international water projects therefore easily run the risk of not fitting local realities.

3. **Insufficient or ineffective project adaptation**: insights and circumstances change over time. Projects are often developed and implemented over a period of several years in which a project may become less relevant. Adapting a project to changes and at the same time preventing to end up without any result proves to be challenging.

What than can be expected from international pilot projects, such as the ones that are supported by the Dutch government? As these externally supported projects are relatively small, they can only be successful when follow-up actions – which require additional efforts and investments – are initiated. At the end of a project, impasses are always on the lurk: transferring actors feel that they have done their job and wait for their counterparts to take initiative. In the benefiting country, enthusiastic individuals are usually present, but they either have limited capacity or lack broader support. Whether follow-up actions are feasible and desirable obviously also depends on the project results. Actors may well conclude that the knowledge is less relevant than expected or that the governance context or the wider context does not (yet) support the application of that knowledge.

Even if projects have no concrete result on the short term, they may still have important spin-off on the longer term. Over the past twenty years, Dutch-Romanian projects have increasingly become part of a structural knowledge exchange programme between representatives of the water sectors in both countries. These continued interactions – which were supported by long-term commitment and intensive coordination – have led to a growing appreciation of Dutch knowledge. The Romanian water sector now expresses a clear willingness to incorporate Dutch ideas and solutions into new projects. Thus, even though the short term the impacts of single projects have been limited, the sustained actions and interactions are expected to contribute to the desired transfer of knowledge.

Part 3

Lessons from research and practice

Experiences from other projects and regions

The presented experiences are based on in-depth studies of Romanian projects focusing mostly on water management issues. In addition, the Dutch water sector is internationally active in projects focusing on coastal zone management, dredging, water quality, irrigation, drinking water and wastewater treatment. Are the presented experiences also relevant for projects focusing on other water problems or involving other countries? To answer these questions, we discuss the presented results in relation to other experiences.

> *Projects are shaped by actors and their interactions. However, the motivations, cognitions and resources of these actors are heavily influenced by the **governance setting** of a project. The more governance aspects are involved or challenged, the more difficult project implementation will be. For example, the implementation of an innovative technology at one organization is much easier to achieve than the realization of a flood protection programme or the privatization of water companies.*

Projects focusing on the above topics are often – though not necessarily – implemented against the background of a rather complex governance setting where resources and responsibilities for project implementation are dispersed. This implies that actors at different levels (local, regional, national and sometimes even international) and from different sectors (e.g. environment, agriculture, transportation) need to collaborate. When many governance dimensions are affected, project implementation will be more challenging. This is particularly so when diverse governance dimensions are not coherent with each other (e.g. actors are working against rather than with each other). Therefore, dredging and port development projects that are paid by the private sector or the implementation of a new technology at a water company may be technically complex but may still be relatively easy-going. Much more difficult to achieve are processes that involve institutional changes or cut across organizational boundaries.

> *In Romania, large-scale **reforms to create a more complete and coherent governance structure** are on-going both in the water services sector and the flood risk management sector. A comparison of these reforms shows that the creation of a coherent governance structure is particularly challenging for the flood risk management sector since property rights are so fragmented. Hence, the need for collaboration and coordination, which requires deliberate efforts, is much higher. Plans that are elaborated against the background of such reforms are often difficult to implement further.*

From the case studies, we conclude that the effectiveness of water management projects highly depends on the 'institutional embedding' of a project: the degree to which

decision-makers, executives and civil servants are engaged. In Romania, the commitment of actors at the national level proved to be of crucial importance since they have the best access to national and European funds. This does not necessarily apply to projects in other countries. For example, in many Asian and African countries, water projects are realized with the support of international financing institutions. This does not diminish the importance of institutional embedding, but implies that engagement of different actors needs to be ensured.

> *How to organize **institutional embedding** depends on the project scope and context. For flood risk management in Romania, the involvement of public authorities at the national, the regional and the local level turned out to be important. In other countries, the involvement of international financing institutions may be just as important. For projects that depend less on public resources (e.g. government funds or legislative changes), the engagement of decision-makers, executives or civil servants is less important.*

The applied evaluation framework was also used for a case study focusing on a Dutch-funded polder project in Semarang, Indonesia. The case study confirms the importance of the presented process criteria and the outcome criteria as indicators of an effective process. It also sheds light on some of the specific conditions that may influence a project. Due to the colonial past of the Netherlands and Indonesia, the high-level bilateral relations between both countries are relatively strong, which made the involvement of national authorities relatively easy. Also actors of both countries were more used to work with each other. The Netherlands and Romania, on the other hand, are more similar since they share the same European frameworks for water and environment and are culturally closer. How these kinds of relations, commonalities and differences influence the effectiveness of a project is hard to predict. Collaborative projects between very different countries can be highly successful when the project is strongly supported by the benefiting country. Also collaborative projects between quite similar countries can be unsuccessful as relatively small differences are overlooked.

> *Country-specific factors, such as the functioning of bilateral relations or similar legislative frameworks, do affect project implementation. Contextual differences, including the relatively small ones, should not be overlooked. In any case, to gain the support of actors with the necessary resources will be a prerequisite for the effective implementation of an international project.*

Lessons learned on actor involvement

Knowledge transfer projects often aim at the application of knowledge in a context in which that knowledge has not been applied before. The wider and the structural contexts of such a project may be dynamic, but are unlikely to change as a result of a single project. Thus, actors involved need to work with and within a given context and should know this context. Two criteria of an effective project articulate our lessons learned on actor involvement: institutional embedding and integration of context-specific knowledge.

> *'Institutional embedding' refers to the idea that civil servants, executives and politicians need to be engaged to ensure an adequate connection between the project and formal policy processes. 'Integration of context-specific knowledge' draws attention to the complementary knowledge of benefiting actors (compared to external experts).*

Practical experiences show that it may not be necessary to actively involve civil servants *and* executives *and* politicians at various governance levels. What is needed though is to know who are the 'critical actors' and how to engage these actors. Critical actors refer in this context to actors with a crucial role in the implementation of a project or follow-up actions. This crucial role can be rooted in diverse resources, such as: expertise, financial resources, the capacity to influence or to decide on the mobilization of resources, the capacity to obstruct a project or the ability to promote and push for the adoption of new ideas.

> *How to organize institutional embedding in practice?*
> *Case B was rather successful in engaging diverse actors at the regional and the national level. The project actively engaged potential users, but also invested in communication with directors and policy makers. What contributed to the successful implementation was the involvement of Dutch and Romanian experts who were used to work in a Dutch-Romanian setting. Also a team was formed with experts focusing on communication and dissemination, who also developed a communication plan.*

A specific strength of case B was that several Dutch and Romanian experts involved were previously involved in other Dutch-Romanian projects. This is often not the case. In most projects, external experts have expertise related to the knowledge being transferred, but have little knowledge of how problems are perceived, how interactions are best arranged or how roles and responsibilities are divided in the benefiting area. Beneficiaries can provide knowledge related to the specific context, but often lack a full overview of the governance context. Case C shows how difficult it may be to develop a full understanding of the relevant governance context.

> *What complicates institutional embedding in practice?*
>
> *The Integrated Water Management project (case C) was designed in consultation with a regional Romanian water authority. The project was deliberately designed as a local-oriented project. Using a bottom-up approach, a master plan would be designed for integrated water management. To ensure an adequate connection to higher governance levels, a consultative committee was established. Already at the project start, some of the Dutch and Romanian actors involved knew that regional actors were in the process of developing master plans, one for flood risks and one for drinking water and wastewater. However, they had the impression that their own project would be complementary since it would result in an integrated, local-oriented plan. Others were not at all aware of the fact that master plans were being developed. Only halfway the project all actors involved jointly realized that another master plan would be redundant and would not provide any basis for the solving of water management problems. The underlying problem was that none of the actors had a 'complete picture' of what was feasible in the Romanian context using a bottom-up approach. Romanian actors trusted the 'Dutch approach' whereas Dutch actors trusted Romanian actors to know the governance context. Only towards the end of the project, when many of the project resources had been spent, the complete picture and resulting conclusions were drawn.*

The examples show that to know and to successfully engage the right actors is challenging. The possibilities to completely adapt the scope and/or the actor constellation of a project are often limited. Therefore, to identify and to engage the right actors from the start is the best way to go. Hence, a thorough analysis of the governance context is indispensable for the implementation of an effective project.

> *Key lesson on actor involvement: Identify and involve actors who have decision-making power or knowledge about the project content, process and policy network in project exploration and implementation and use their knowledge to improve the project.*

Lessons learned on internal communication

International water projects involve actors with diverse backgrounds who often did not work with each other before. Through their interactions, these actors can develop a collective basis for further collaboration. However, this is only the case when actors are able to develop a mutual understanding in communication.

> *'Mutual understanding in communication' refers to the degree to which actors are able to overcome language barriers and other differences related to their diverse socio-cultural, organizational and professional backgrounds.*

To really understand each other in an international setting requires rather intense and direct communication. Face-to-face communication has the highest capacity of transferring knowledge in a project context as it allows for feedback and includes body language. Telephone and written communication are useful but of limited value when used as stand-alone means. The underlying reason is that knowledge includes a large portion of 'tacit' knowledge and know-how that is hard to express in words and numbers. Even more supportive is the creation of settings in which actors can really work together over a prolonged period of time. In such settings, actors can develop shared meanings and understandings and mutual trust. Spending time and having fun together should not be underestimated; project exchanges too often consist largely of pre-defined, formal group discussions, which are not fit for transferring knowledge in an international setting.

> *What actions are supportive of creating a mutual understanding?*
>
> 1. *Translation: when actors lack the ability to communicate fluently in the same language, a professional (preferably independent) translator is an absolute necessity.*
> 2. *Visualization: the saying "a picture says more than a thousand words" applies very much to international project settings. Field visits are indeed for a reason part of nearly all international water projects. Also the use of visual communication tools (such as the 'Sketch Match' in case A) are very powerful means of communication.*
> 3. *Working together: joint working processes help to transfer knowledge. This can be achieved through the establishment of small teams or the organization of workshops or exercises.*
> 4. *Having fun together: working together is also about interpersonal relations, which can be strengthened during field visits and also outside work hours. The organization of 'fun' activities (meals, sports, theatre) enhances the development of a common understanding and trust.*

Interpersonal communication supports the transfer of knowledge. Other activities can be important as well. For example, formal meetings may be important for mobilizing support or attracting media attention. The storing of knowledge in databases and documents can help making information available to others and may help developing a deeper and shared understanding of certain data or information.

> *More direct and personal communication in small groups is important to develop a mutual understanding. This does not diminish the importance of other communication means, such as organizing formal consultation meetings or storing knowledge in databases and documents.*

Mutual understanding benefits from the involvement of people with strong intercultural communication skills. Projects need to involve not only actors who are expert on a certain topic, but also actors with specific relational or interactional qualities. Most notably are actors who have 'social knowledge' that is embedded in relations and are good at developing and maintaining social relations and actors with 'interactional knowledge' who can 'translate' between actors with diverse backgrounds and knowledge levels.

> *"One never gets a second chance for a first impression"*
> *The development of good relations with new partners begins at home: reading about the local culture and about what amuses people, for example, by learning the football players of the national team. Bringing small treats can be a good idea as well, but this is not always the case. Most Romanians really love Dutch caramel waffles and appreciate Dutch visitors for bringing them to meetings or as gifts. However, in Ghana, it is highly inappropriate for a guest to offer something to the host. Moreover, the waffles are too sweet to the taste of most Ghanaians. As Ghanaian hosts do not like to refuse, offering caramel waffles brings them into a difficult position.*

In our experience, misunderstandings are always on the lurk. Meanings get lost in translation. Words like 'polder' and 'master plan' are ambiguous and may be misunderstood. Also between actors of the same country, misunderstandings are likely to occur since projects are often implemented by teams consisting of actors with diverse organizational and professional backgrounds. Therefore, 'keep asking' and 'never assume' are important lessons to remember.

> *Key lesson on internal communication: actively support the development of a mutual understanding among actors with diverse knowledge backgrounds and 'never assume'.*

Lessons learned on external communication

International knowledge transfer projects often have ambitious goals. They aim at transferring innovative knowledge within a short period of time and with limited resources. As the presented case studies show, these ambitious goals are unlikely to be achieved through a single project. They require follow-up actions for which actors involved often depend on external resources. Without diminishing the importance of implementing a high-quality project, the proactive diffusion or 'spreading' of the project results is of crucial importance in achieving the desired project outcomes. Thus, be good and tell it!

> *Diffusion involves that pilot project results are used to adjust management practices or policies or lead to new projects at a similar or larger scale. A 'proactive diffusion strategy' defines what actions will be taken to enhance the dissemination of the project results, and thus follow-up actions.*

Actors involved in an international water project have diverse goals, but what generally applies to all of them is that they want to improve water management. To achieve such an improvement usually requires support from a wide range of actors. Projects therefore need to have a strategy describing how the desired outcomes (during and beyond the project) will be achieved, which actors can contribute to the realization of the desired outcomes and what actions will help obtaining the support of these actors. Such a strategy can be part of a project or communication plan or stand-alone. Such a plan should not be a given but adjusted to new insights and changing circumstances.

> *Proactive diffusion is not just about having a sound plan at the project start. It is about the actual implementation of dissemination actions and – if necessary – adjusting the initial plan. The experiences of case A and case B nicely illustrate the diverse approaches and how they lead to different results. Diffusion was clearly described in the project plan of case A. However, the actions were largely planned towards the end of the project. Due to constraints in time and resources almost none of the planned actions were actually taken. Also actions were never adapted to changing circumstances. The project plan of case B plan did not elaborate much dissemination actions. However, actors worked together on a communication plan, organized regular progress meetings, looked for media attention, gave project presentations and so on. The project was – at various points in time – brought to the attention of key decision-makers at various levels. In the end, the 'last-minute' approach of case B proved to be much more effective than the pre-developed plan of case A.*

As the experiences of case A show, to concentrate diffusion actions at the end of a project is a risky approach. Moreover, information about the project is much more likely to retain when actors are informed more than once. A strategy could, for example, take the form of informing external stakeholders about the project during the preparation or exploration phase. Subsequently, progress meetings or written updates can be organized during the project. At the end of a project, something like a seminar or meeting could be organized to further share and discuss the results and follow-up actions. A larger seminar or conference is attractive to disseminate the project results among a wider audience and to get media attention. On top of that, small-scale meetings with key actors are often needed to reach an agreement on follow-up actions (as was done in case B). For example, case D was closed with an end symposium (attended by the ambassador and big shots), a field visit and a barbecue in a neighbouring village. This left participants with the image of a highly successful wetland restoration. Finally, the challenge is to continue dissemination actions once the implementation phase is finalized. This is the more difficult part and generally asks for a more persistent way of looking at projects and project implementation.

> *A 'one-shot' approach in a complex, multi-actor environment is seldom effective. Just to demonstrate the applicability of a certain method or technology is often insufficient to actually improve water management. This asks for a vision regarding the necessary transition, a multi-phased programme that helps achieving the desired outcomes and time so that processes can consolidate.*

A very concrete means of enhancing the spreading of project results is to present them in a very attractive way. This can be a full-colour brochure (as was done in case A), a small film or a website. Obviously, a high-quality process and content are supportive of achieving the desired outcomes. All these aspects are, however, useless when actors involved are not truly committed. Individual actors as well as their organizations need to be dedicated to a project. The involvement of more implementing actors, and thus more organizations, can be an advantage: it creates more mass and more opportunities for pooling resources. It may also be a disadvantage since actors feel less responsible and have more difficulties identifying a joint motivating goal. Not only implementers, but also funding agencies can play an important role in spreading project results. Besides that they can share the results with others, they can also provide clear and strict guidance or reserve part of the project budget for dissemination actions.

> *Key lesson on external communication: prepare for follow-up actions by developing, implementing and – if necessary – adjusting a proactive diffusion strategy before, during and after project implementation.*

Lessons learned on learning

Learning can improve project implementation. Learning plays an important role in adaptive project management. This means that actors involved continuously verify interpretations and expectations and, if necessary, adapt project goals and means to new insights, changing circumstances or other emergent dynamics. In addition, actors involved can learn from the experiences of other projects to improve the design of their own project.

> *Learning is about being receptive to the experiences of other projects as well as to the project environment. 'Adaptive management' involves that project strategies and goals are continuously adapted in response to new information about the dynamic, uncertain and ambiguous context.*

Knowing the project context and to adequately embed in project in this context is a key challenge to project implementers. Besides that the context may be partly unknown, it may also be dynamic. The studied cases show that particularly the political context and the governance context tend to change over time. Also, how a problem is perceived by local or regional actors may change in the period between the preparation and implementation of a project. Adaptation of project goals or means in response to new information may therefore be inevitable and necessary. However, adaptations should always be done with care: they should improve the likely project outcomes and not simply reduce the number of concrete outcomes (as in case C). In addition, to collaborate closely with actors of the benefiting country is an absolute necessity.

> *An adequate assessment of the project setting, including the applicability of the project itself, is indispensable. As transferring and benefiting actors both tend to lack full oversight, a cooperative working environment needs to be created. However, in many cases the transferring actors rather take the role of a teacher with benefiting actors as students. For a project to become effective, actors of both countries should be looking for opportunities to share their knowledge and also to acquire new knowledge, while being receptive and open to other actors and to the project context.*

Projects benefit not only from a 'learning while doing' approach, but also from learning across projects, which preferably starts during project preparations. In our experiences, projects particularly benefit from building upon the knowledge, insights or capacities that were developed through other projects in the same country. Relations that were developed in a preceding project can form a good basis for another project. Also methods

or models that were developed in another project may form a building block for a new project.

> *Case A had no direct follow-up actions. However, many of the lessons learned were used for designing another Dutch-Romanian project focusing on the redevelopment of the Danube floodplains. From the experiences of case A, the implementers learned that local and regional commitment can be enhanced using participatory methods like the 'Sketch Match'. They successfully applied the method again in this new project. They also learned that the involvement of actors at decision-making positions is essential to successfully implement a project and create follow-up chances. Before applying a 'Sketch Match', they therefore discussed the 'Room for the River' concept and related policies and procedures with national decision makers. As a result, the Romanian national government started recognizing the 'Room for the River' concept and also acknowledging public participation as a tool to successfully implement complex infrastructural projects. As a result, the chance of similar projects being formulated and carried out by Dutch experts in Romania has increased.*

The above shows that learning across projects can improve project implementation. In addition, when more projects focus on similar methods or approaches they can have a larger impact. Structural attention is supportive of the gradual transition that is typically needed for innovative knowledge to become accepted. Innovative projects are unlikely to result in quick wins as it takes time, investment and repetition for new approaches to be adopted. Learning across project can happen accidentally, for example, because one person or organization is involved in multiple projects. Moreover, these learning processes can be actively promoted by project advisors or financers. In the case of Romania, this is already done through the appointment of a country coordinator, the establishment of country platform for Dutch experts and a bilateral panel for key organizations. Meetings and activities are organized on a regular basis. More could still be done to enhance learning across projects. For example, by bringing experienced and less experienced actors in touch with each other or by organizing exchanges that focus on specific themes that transcend countries.

> *Key lesson on learning: Be open and receptive to learn about other project experiences and verify and, if necessary, adapt (or allow implementers to adapt) project goals or means to make the project more productive.*

Concluding recommendations for project implementers

The presented findings show that the effective implementation of an externally supported project is far from easy. The successful demonstration of a method or technology is not enough. Building relations and communication and dissemination with an eye on mobilizing the resources that are needed for follow-up actions are just as important. Recognizing the importance of getting to the next step, we drafted key recommendations to project implementers for different project phases.

Exploration: get to know the context and other projects

Knowing the culture and customs of a country is a good start that helps to smooth interactions and relations. Secondly, knowing the governance setting is of crucial importance, also to identify what kind of project is desired from an organizational and policy perspective. Thirdly, being aware of similar projects and – if possible – building on the relations and knowledge that was developed in these projects is supportive.

Process design: get the right actors aboard

Who is involved and engaged largely determines a project's success. With an eye on 'getting things done' and follow-up, having a strategy on how to engage external actors is indispensable. Those with important (general or context-specific) knowledge should be given the opportunity to contribute that knowledge. Substantive knowledge is important, but so are interpersonal relations and knowledge about how to organize and facilitate interaction processes and the policy network. Of great value are persons who are good at developing and maintaining relations and persons who can translate between persons with different professional backgrounds, organizational or socio-cultural backgrounds.

Implementation: create a collaborative atmosphere and be adaptive

Knowledge transfer often involves the acquisition and development of new knowledge. To create settings in which actors can really work together and trust each other is therefore important. Spending time together (not only at work but also having fun together) helps building relations and mutual trust. In many cases, working on an equal basis (rather than having a student-teacher relation) is important. Also one should be aware of any changes inside and outside the project. Adaptations in response to new insights and external developments may be needed, but should be made with care.

Completion: invest in the next steps

Dedication and commitment should not fade towards the end. The implementation of follow-up actions largely depends on the extent to which actors succeed in spreading the project results and in making concrete agreements about how to continue after the project's formal end.

Concluding recommendations for project advisors and financers

Externally supported projects are implemented with the support of institutes, agencies or embassies. These project advisors and financers can play an important role in promoting actions that support the effective implementation of externally supported projects by collecting lessons learned, making connections and providing guidance. Being strict can be part of their role, but should never be mistaken for inflexibility. Below, we provide some key recommendations for project advisors and financers for different project phases.

Exploration: act as knowledge broker

Knowledge brokers are persons with a good overview of who knows what. Advisors and financers usually have a good overview of what projects were implemented and are on-going. They can therefore easily establish contacts between project ideas and experiences. Also they can develop guidance notes for potential project implementers and promote, for example, the execution of a thorough analysis of the governance setting.

Selection: look for thorough preparation and differentiation

In selecting projects, advisors and financers should look for high-quality content that goes hand in hand with high-quality communication plans. An adequate analysis of the governance setting should either be established or foreseen. Individual qualities are important: they make or break the project. Ideally, projects involve persons with general and context-specific knowledge on the content, the process and the network.

Implementation: be flexible and strict

Innovative projects that are implemented in developing or transition countries cannot be cut in stone. Projects actually benefit from including certain aspects that are not pre-defined, but developed during the project in close collaboration with local stakeholders. Flexibility is needed to ensure a high-quality process and content. To stick to a pre-defined plan in a dynamic project environment does not always make sense. To just go with the flow is not recommended either. Adjustment of goals and means should be allowed for, but without losing sight of the ultimate goal.

Completion: evaluate and connect actors and projects

Project advisors and financers can play an important role in collecting the lessons learned – what went well and what could be improved – and disseminating these lessons (e.g. through the development of a best practice document). In addition, they can take the lead in connecting actors and projects. For example, bilateral platform or events can help to bring local or regional projects to the attention of national decision-makers. Network events or organized missions can play an important role in sharing lessons learned, matching actors, developing new projects or creating follow-up actions.

About the authors

The basis for this booklet was laid during discussions between the authors in relation to the PhD research 'Transferring water management knowledge: how actors, interaction and context influence the effectiveness of Dutch-funded projects in Romania'. This research started in 2008 and has now reached its final stage. The project was carried out by Joanne Vinke-de Kruijf under supervision of Professor Suzanne Hulscher (Department of Water Engineering and Management) and Professor Hans Bressers (Twente Centre for Studies in Sustainable Development and Technology), each of them affiliated with the University of Twente. The other authors had an advisory role in this research. They all have extensive experience in international water projects.

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For more information on the international activities of the Dutch water sector, see: www.dutchwatersector.com and www.nwp.nl/en/ and www.partnersforwater.nl

For an overview of environment and water projects of the Dutch water sector in Romania: Royal Netherlands Embassy and Agency for International Business and Cooperation. (2009). Environment and Water Projects in Romania.

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