Paper IV-10

INSUFFICIENT INTEGRATION BETWEEN SECTORS HINDERS REACHING WFD OBJECTIVES IN THE NETHERLANDS

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ABSTRACT

The Water Framework Directive (2000/60/EC; WFD) requires an integrated approach to water management. In the Netherlands three ministries, all the provinces, waterboards and municipalities have been appointed 'competent authority' for the WFD. In theory, this would ensure an integrated, cross-sectoral approach. In practice, however, the water sector appears to be most responsible for the implementation of the WFD. The water management organisations (DG Water, water-boards and RWS) have had the initiative during the planning process.

Cooperation between the three ministries involved (Public Works, Transport and Water Management (V&W), Housing, Spatial Planning and the Environment (VROM), Agriculture, Nature and Food Quality (LNV) for implementing WFD was limited. Land-use policies, manure policies and other related policies have not been under discussion in the WFD planning process, though the major challenges for the implementation of the WFD in the Netherlands are the hydro-morphological situation of the water bodies and eutrophication. Many measures to improve these two aspects require cross-sectoral cooperation. However, with some exceptions the measures decided upon were only in the water management sector. The lack of integration of the sectoral policies will hinder reaching the WFD objectives.

INTRODUCTION

The Water Framework Directive (2000/60/EC; WFD) is one of the most important European water directives of the past years. The WFD requires an integrated approach on the basis of river basins. The key question addressed here is whether the WFD promotes integrated management in practice? To answer this question, this paper describes the implementation of the WFD in the Netherlands, focusing on the issue of integration of policies between different levels of government and between different sectors.

This article is based on research conducted as part of the European I-Five project which comprised of three case studies on the effectiveness of innovative instruments and institutions for implementing the WFD in France, Germany and the Netherlands. For the Dutch case study policy documents were analysed and 14 in-depth interviews were conducted. In addition, scientific literature on the WFD was used. More information on the project and the full case study report can be found on the project's website (www.I-five.eu).

The paper first introduces the WFD and discusses the need for coordination in the implementation of the WFD. Next, it describes the institutional setting for the implementation in the Netherlands, the authorities involved, the political setting, and the river basin management planning process, focusing on the issue of national coordination and the integration of policies. Finally it discusses the results of the coordination processes.

THE WATER FRAMEWORK DIRECTIVE AND THE NEED FOR INTEGRATION

The Water Framework Directive (2000/60/EC; WFD) entered into force on 22 December 2000. Purpose of the WFD is to prevent deterioration of the 'water status' and achieve a 'good water status' by 2015, meaning both its chemical and ecological status are good. The 2015 deadline may be postponed to 2021 or 2027 if it is technically not feasible, or disproportionately expensive, to reach the objectives in 2015. For the same reasons Member States may set lower objectives. Key component of the WFD is development of river basin management plans (RBMP), the first of which had to be finished 22 December 2009. In trans-boundary basins these plans have to be international or at least internationally coordinated. While doing all this, Member States have to 'encourage active involvement of all interested parties' (WFD, art. 14).

River basin management entails dealing in an integrated manner with issues such as upstream and downstream effects, water quality and water quantity, and water and adjacent land-use (Mitchell 1990; Moss 2004; Mostert et al., 2008). In most countries, water management institutions do not operate on river basin scale. Related policy sectors such as spatial planning, agriculture and nature protection certainly have no corresponding institutions at the river basin level. River basin management can be established by organising water management according to hydrological units or by ensuring integration of management practices through extensive coordination processes (Mostert 1998). The first option is often not politically feasible and could create new boundaries between the new river basin management units and the existing institutions (Mostert, 1998; Biswas, 2004; Moss, 2004; Cash et al., 2006). Hence, there will always be a need to coordinate across boundaries.

The need for coordination has been recognized in many integrated approaches that have developed in the past thirty years, such as integrated environmental management (Margerum and Born 1995; Margerum 1999), Integrated Coastal Zone Management (ICZM) and integrated water resources management (Mitchell 1990; GWP, 2000; Mitchell, 2005; Mostert et al., 2008). As stated by Cash et al. (2006), 'evidence is accumulating that supports the hypothesis that those systems that more consciously address scale issues and the dynamic linkages across levels are more successful at (1) assessing problems and (2) finding solutions that are more politically and ecologically sustainable'.

The WFD itself calls explicitly for integration at the European level of different policy areas relevant to water (consideration 16):'Further integration of protection and sustainable management of water into other Community policy areas such as energy, transport, agriculture, fisheries, regional policy and tourism is necessary.' Implicitly, the WFD requires coordination between government levels because the environmental objectives have to be established at the river basin level, but the measures to reach them will often be local. It also requires coordination between sectors because the programme of measures has to be cost-effective (CIS, 2003), and measures in the field of agriculture or land use may be more cost effective than water management measures. Finally, as discussed, the WFD requires that active involvement of all interested parties is encouraged, which can be seen as a form of coordination too.

THE WFD IMPLEMENTATION PROCESS IN THE NETHERLANDS

Institutional setting

Water management in the Netherlands is organised at three administrative levels: national, provincial and local. At the national level national water policy is formulated and the legislative framework is established. Many operational powers are, however, delegated to local authorities. The lower level authorities can formulate their own policies and regulations within the framework established by the higher level authorities.

Until recently, at the national level, three ministers were most important for water

management: the deputy minister for water management, who functions under the Minister for Transport, Public Works and Water management (V&W), the Minister of Housing, Spatial Planning and the Environment (VROM) and the Minister of Agriculture, Nature and Food Quality (LNV). October 2010, VROM and V&W merged to form the Ministry of Infrastructure and the Environment while LNV merged with the Ministry of Economic affairs. The deputy minister of V&W coordinated water policy. She conferred with the other two ministers and political representatives of the associations of municipalities, waterboards and provinces in the National Water Commission (NWO).

Regional surface water management in the Netherlands is the responsibility of 27 waterboards. The waterboards are directly elected by the inhabitants of their area and raise their own income through the waterboard taxes. Recently, they also became responsible for regulating most groundwater abstractions. The state waters (the large rivers, the sea, the estuaries and large lakes) are managed by Rijkswaterstaat, a department of the Ministry of V&W. Rijkswaterstaat is funded through the national budget. The collection of waste water is a responsibility of the municipalities. The 12 provinces supervise waterboards and municipalities, regulate the largest groundwater abstractions and have important competencies in the field of spatial planning and nature protection.

The WFD requires the designation of a competent authority or competent authorities for the implementation of the WFD. In the Netherlands all councils of waterboards, provinces, and municipalities have been designated as competent authorities. The Minister of V&W has been designated as ‘coordinating competent authority’, ‘when needed together’ with the Minister of VROM and the Minister of LNV. All these authorities keep the competencies that they had and are accountable for their part in the implementation of the WFD.

As said in the previous section, the WFD requires coordination at river basin level. The Netherlands are at the end of four international rivers: the Rhine, the Meuse, the Scheldt and the Ems. The Rhine basin in the Netherlands is split up into four sub-basins, making a total of seven river basin units (Figure 1).

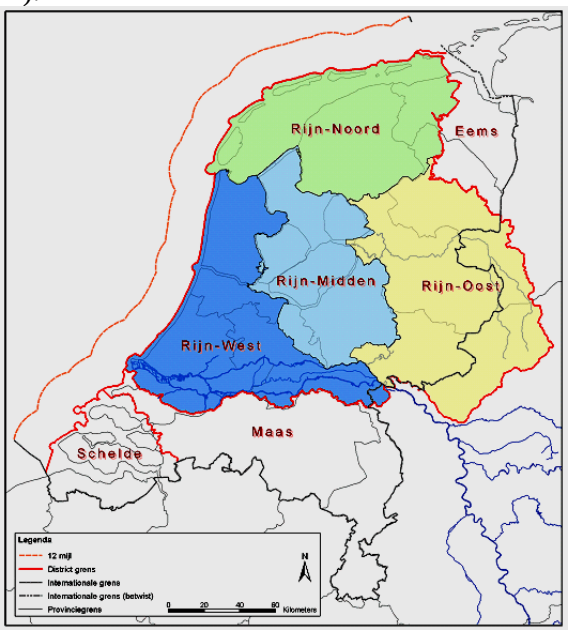

Figure 1. River basin (sub)districts (www.kaderrichtlijnwater.nl, accessed September 12, 2007)

For each of these seven units, the political representatives gather in a river basin commission, RBO, which is supported by the RAO, consisting of staff members (senior policy makers or technical experts) from the same organisations. The Minister of V&W is represented by civil servants of the regional branches of Rijkswaterstaat. The RBOs have a purely coordinating function. They discuss the regional issues, where possible, develop common goals

and avoid conflicting ones. Decision making and implementation of the decisions is done within the different institutions, and agreements reached in the RBO will have to be ratified by each organisation individually.

For each river basin unit, a river basin coordinator is appointed to keep the process on track. A national coordinating river basins desk, staffed by the ministry of V&W, supports national government and the individual RBOs and RAOs (Coördinatiebureau Stroomgebieden Nederland, CSN). The chairmen of the RAOs cooperate closely with the CSN. In addition, they meet with the NWO three times a year. The authorities in the river basin districts established local staff support for the RBO, RAO and corresponding sounding board group.. In each river basin unit a sounding board group was formed to provide a platform for other organised stakeholders. In addition, a sounding board group was set up at the national level.
The institutional structure for implementing the WFD in the Netherlands is depicted in Figure 2.

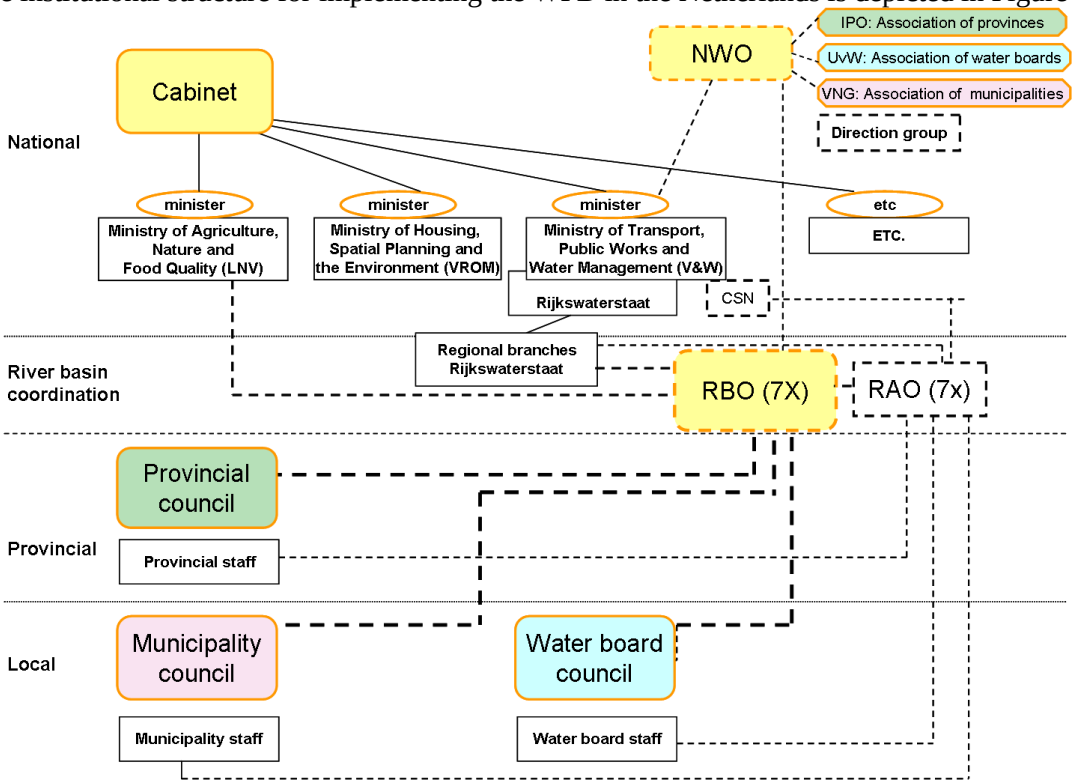

Figure 2. Institutional structure for implementing the WFD in the Netherlands

Political setting

An important event that influenced political attitudes towards the WFD was the publication of the Aquarein study in December 2003 (Bolt et al., 2003). Many interviewees refer to this study as a turning point in the WFD implementation. The study had been requested by LNV and explored the consequences of the WFD for agriculture, nature, recreation and fisheries. It concluded that, to reach a good ecological status, it might be necessary to reduce the agricultural area by two-thirds. Even then it would be impossible to reach a good ecological status in some areas, because of the time-lag in releasing chemical substances that have accumulated in the soil.

The Aquarein study caused a lot of debate and especially farmers and farmers associations were highly concerned about the possible impact of WFD on their livelihood (Huitema and Bressers, 2006; Mostert, 2008). Already before the publication of the study, the Deputy Minister of V&W had promised a brief on the level of ambition in the implementation of the WFD, but this brief had not yet been presented. Furthermore, Parliament had criticised the nature of the implementation of the WFD up to that point: stakeholders had not yet been

involved. The Aquarein study put extra political pressure on the debate. As a result, parliament postponed the discussion of the WFD Implementation Act that would transpose the WFD into Dutch law.

The ambition brief was presented on 23 April 2004 and expressed government's intentions to take a 'pragmatic' or 'realistic' approach to the implementation of the WFD (Staatssecretaris van Verkeer en Waterstaat, 2004). The Netherlands would do what is 'reasonable', but would not go to the very limit to achieve a good status for all waters. The current use land use would be the basis of the measures: no changes in land use would be considered. Moreover, no new restrictions on manure use would be introduced on top of those already required by the new manure act. This act was passed after the Netherlands had been condemned by the Court of Justice of the EU for failing to fulfil the obligations under the European Nitrates Directive (91/676/EEC). Pragmatic and realistic would be the key words for the process.

Planning process

The River Basin Management Plans have been developed in three parallel tracks. The first track is the deliberations between the various authorities and with organised stakeholders at river basin level in the RBO, RAO and sounding board group. In each basin the process was organised differently.

The second track is called the 'gebiedsproces', or area process, and took place at the sub-basin level. In the area process, authorities and organised stakeholders, such as farmers' organisations, drinking water companies, industries depending on water supply and environmental organisations, discussed the objectives and measures that are considered for their area. In some cases, authorities and organised stakeholders deliberated together, in same case separately. These processes were led by the waterboards (Dekker, 2008).

The third track is the development of the different water management plans. The waterboards, for instance, develop an operational water management plan every 6 years. The measures for reaching the environmental objectives of the WFD would have to be included in that plan, but other aspects are included as well, such as safety and water quantity. Of course, the results of the different tracks need to be interchanged. Furthermore, the individual plans have to be coordinated with the plans of the other authorities (Uitenboogaart et al., 2009).

Figure 3 depicts the planning process: the different types of plans and how they are inter-connected. First, a loop goes from area process to the RBO (1) and the specific plans of the competent authorities (2) and then back to the area processes (3). This loop was followed several times. The end results are area process reports, which are formalised in the plans of each institution individually (4). The plans include the environmental objectives and measures for which the organisation is responsible. These plans are decided upon by the elected council of the responsible institution and the institutions are subsequently legally obliged to implement the measures in the water plans. The (draft) plans are input for the RBMPs, which are drafted at the Ministry of V&W (5). In addition, the RBOs made a summary of the objectives and their justification and of the programme of measures for their basin, which also provided input for the RBMPs (6). Finally, a writing team at the Ministry of V&W ensured that the different RBMPs have a similar structure and style. The RBMPs do not include costs and benefits. The costs and benefits were analysed in a separate document, called the 'Ex Ante Evaluation', written by the Netherlands Environmental Assessment Agency (Planbureau voor de Leefomgeving, 2008).

Coordination processes

Coordination across levels

At the national level, guidelines and timetables for the WFD process were drawn up, which drew upon consensus by the authorities and organised stakeholders involved. In practice, the

initiative for the planning process was with the waterboard. Their proposals were sent to the Provinces, who generally accepted them and drew up their own plans accordingly. The plans of the Provinces would go to the national government, which would then draw up their plans. This process is called 'going up the ladder'. Where necessary, the whole process would go down the ladder again, to resolve possible disagreements (Uitenboogaart et al., 2009).

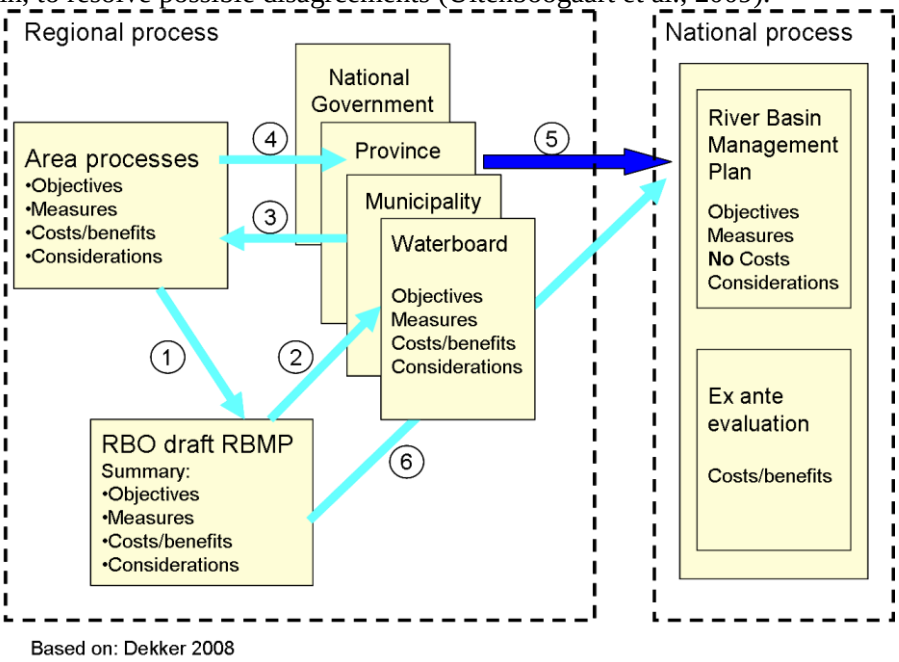

Figure 3. planning cycle for development river basin management plans

After a period of informal consultations, going 'up and down the ladder', a Cabinet Order was issued that formalised the good chemical status and defined the 'good ecological status' for natural surface water bodies. The ecological objectives for heavily modified and artificial water bodies were established at provincial level. Based on those objectives, the waterboards could derive operational objectives for each water body in their area. Subsequently, measures were developed and chosen in coordination with other involved parties through the area processes and the RBO coordination process as described before.

Coordination across sectors

As discussed, many authorities have been appointed 'competent authority' for the WFD. In theory, this would ensure an integrated, cross-sectoral approach. In practice the water sector feels most responsible for the implementation of the WFD and, with some exceptions, only water management measures have been considered for inclusion in the programme of measures.

The major challenges for the implementation of the WFD in the Netherlands are the hydro-morphological situation of the water bodies and eutrophication. Many modifications of hydro-morphology are perceived to be irreversible, but even so, measures can be taken to improve connectivity and living conditions for aquatic life. Many of these measures, however, require space, and space is scarce. In each case negotiations have to take place to acquire the necessary land on a voluntary basis. No provisions were made by VROM to ease the acquisition of land.

Eutrophication is caused to a large extent by nutrients from agriculture, regulated by LNV. Yet, although LNV is a competent authority for the WFD, it did not consider revising its manure policy in order to facilitate the attainment of WFD objectives, as the manure law had only recently been put into force. Present land use was also not to be changed to accommodate the WFD requirements (Staatssecretaris van Verkeer en Waterstaat, 2004). The costs and effects

of changing agricultural or land use policies have not been compared with other possible measures to judge what would be the most economically sound option, as the WFD requires.

Coordination between waterboards and municipalities

The waterboards and the ministry of V&W saw cooperation with municipalities as important for reaching WFD objectives. Although the municipalities are a competent authority for WFD, they were not always aware of what this meant. Until 2006, they had little dealing with water quality issues and were hardly informed by the national authorities about the WFD. This provided room for unfounded negative perceptions on the WFD.

To increase the municipalities' awareness of water management issues in general and the WFD requirements in particular, a water ambassador was appointed in each waterboard-area. They were in nearly all cases staff members of one of the municipalities in the area of the waterboard. They informed their colleagues in their own and in other municipalities on the WFD, stimulated the active participation of municipalities in the area processes, and promoted support for the plans that were developed. Moreover, they stimulated municipal councils to adopt measures, which could then be included in the RBMPs.

Coordination with organised stakeholders

The WFD calls for the 'encouragement of active involvement of al interested parties' (art. 14 WFD). 'Interested parties' covers both members of the general public and organised stakeholders, such as agricultural and environmental organisations, drinking water companies, and industries that depend on clean water (CIS, 2002; Wolters et al., 2006). The general public was informed and consulted both on a national, river basin and regional level, but their active involvement was limited to a few local processes.

Organised stakeholders were represented at the national level in a sounding board group and in the working groups supporting the NWO. At river basin level they were represented in the sounding board groups connected to the RBOs.

Some stakeholders stated that it was impossible for them to attend all meetings of all platforms in the River Basin Area, because there were simply too many. ((Smit et al., 2009); (Behagel and Arend forthcoming)). Another problem was the high level of technicality and complexity concerning the process of setting objectives and choosing measures. This meant that active participation required a lot of expertise and time. For this reason, some organised stakeholders could not keep up with the process (Smit et al., 2009; Behagel and Arend forthcoming). The regional sounding boards could not formally give advice that had to be taken into account, but they did influence decisions. Some participants remarked that they could not see the results of the participation process in the official plans. This is partly due to the high level of aggregation in the plans: individual measures are no longer visible.

The farmers have definitely taken a keen interest in the KRW. A large proportion of the farmers are represented by LTO, which is a highly professional interest group. It employs well-educated staff to represent the farmers' interests and also to advise their members on every aspect related to agricultural production. LTO has drafted a position paper on the WFD, published in June 2006. It was published as a brochure and sent out to the authorities involved in the WFD process as well as to their own members. The accompanying letter expressed LTO's concern that too stringent restrictions would severely harm the sector, hereby referring to the Aquarein study. In 2007, another position paper was published, stating that they were pleased to see that the objectives were toned down, but these were still considered too ambitious (LTO, 2007).

LTO representatives were active in basically all the different sounding board groups and the area processes. They lobbied on all levels of decision making and sent in written responses to the various draft plans. The LTO organised meetings for farmers, provided information on their website and through newsletters and brochures. Whether it was caused by the active

lobbying by the farmers organisations or not, the impact of the WFD on agriculture appears to be limited.

Results of the process

In December 2009, four RBMPs were published and four programmes of measures had been developed. The RBMPs form part of the National Water Plan and constitute the Dutch part of the international RBMPs for the Rhine, Meuse, Scheldt and Ems. They moreover contain a summary of the programme of measures. The measures themselves can be found in the management plan for the State waters and in the management plans of the waterboards. Furthermore, 51 municipalities – out of a total of 430 – have officially adopted measures for implementing the WFD (Ministerie van Verkeer en Waterstaat, 2009).

For 86% of the surface water bodies the deadlines of 2015 for reaching the objectives will be extended (Ministerie van Verkeer en Waterstaat et al., 2009). According to the Ex-Ante evaluation, only between 40 and 60% of the water bodies will have reached a good status or potential by 2027 if all planned measures are implemented (Planbureau voor de Leefomgeving, 2008). Lowering of objectives will not be considered until the third round of RBMP development, between 2018 and 2021 (Ministerie van Verkeer en Waterstaat et al., 2009).

Measures have been chosen on the basis of their assumed effectiveness. Because in many instances the effect of measures is uncertain, the RBMPs propose to conduct more research. As hydro-morphology is seen as one of the major problems, many measures will be taken to adapt the physical properties of water bodies to a more natural state: 2500 km of banks will be made more nature-friendly (soft banks, gradual change from land to water) and 635 fish ladders will be constructed (Ministerie van Verkeer en Waterstaat et al., 2009).

Nutrients are the other main obstacle to reaching a good status or potential. Although agriculture causes about two thirds of the nutrients in the water (Planbureau voor de Leefomgeving, 2008), no national policies were adopted to reduce these emissions. Instead, improving the efficiency of waste water treatment plants is proposed as a (not very cost effective) measure. This is a measure that the water management sector can take on its own. It will be hard to reach the required limit values for phosphates because of leaching out from agricultural soils for decennia to come. With the present manure policy, build up of phosphates in the soil even continues (Planbureau voor de Leefomgeving, 2008), while the WFD requires that deterioration should be avoided.

DISCUSSION

In the Netherlands, the WFD has been implemented while keeping the existing legal, financial and institutional framework intact as much as possible. An advantage of this arrangement is that policy development, implementation of measures and funding are well tuned to each other which creates good conditions for the implementation of the programme of measures. A downside is the complexity of coordination.

The implementation process appears to have been effective in establishing coordination across levels. Objectives were set on national (natural waters) or provincial level (highly modified or artificial waters), based on proposals from the waterboards and local Rijkswaterstaat divisions. In this way there was both attention for local tailoring and for coordination at a higher level. Hence, the Netherlands seem to have found a ‘middle path’ between ‘top-down approaches, which are too blunt and insensitive to local constraints and opportunities’ and ‘bottom-up approaches, which are too insensitive to the contribution of local actions to larger problems’ (Cash et al., 2006).

The waterboards, in most cases, cannot implement the measures without the support of others, so they used the area process, the RBO-process and the sounding board groups to organise support for the measures they proposed and hope to implement in cooperation with

others. In addition, the provinces have taken on a coordination role in the RBO-process. The number of participatory processes and the sheer technical complexity of the deliberations hindered the active participation of organised stakeholders. Only the professionally organised stakeholders could handle the complexity. Still, according to several interviewees, the main result of the area processes was increased support for WFD measures both from municipalities and from organised stakeholders, facilitated by the many opportunities to discuss different points of view.

In theory, the institutional arrangement should also promote the integration of sectors, at least at the national level, but in practice it did not. Measures were mainly planned in the water sector. As the ambition brief from the cabinet excluded claims of land use change or changes in national manure policy at the national level no policy was developed to support the implementation of WFD. Agriculture is an important economic sector and the interest of the farmers, their position in the competition with farmers in other (European) countries was not to be impaired (Uitenboogaart et al., 2009). The actors at a regional level, predominantly the waterboards, have no authority to take measures in these sectors. This makes it hard to develop measures dealing with, for instance, nutrients at the regional level: farmers simply point out that they comply with the EU Common Agricultural Policy and national policies and no more can be required. Therefore, it may come as no surprise that the measures in the programme of measures mainly concern the water management sector.

Diffuse pollution by agricultural is generally seen as one of the largest problems to be solved within the requirements of the WFD: 'integration of water management with the agricultural sector is not sufficiently established, either at the European level or at the national level. This has severe consequences for water pollution caused by agriculture. As Wiering (2009, p232) put it 'It is not, however, something that can be solved at the decentralised level or by water management alone' Agriculture is an important economic sector and the interest of the farmers, their position in the competition with farmers in other (European) countries was not to be impaired (Uitenboogaart et al., 2009).

CONCLUSION AND OUTLOOK

The aim of this paper was to discuss whether the WFD in practice promotes an integrated approach to water management in the Netherlands. The answer to this question is mixed. Cross-level coordination appears to have worked well. Integration of stakeholders in the implementation process was limited because the highly technical character of this process in fact excluded certain stakeholders. Cross-sectoral coordination, however, was limited because of conflicting interests which were not integrated at the national and European level and could not be integrated at the regional level. Considering the fact that nutrients are seen as a major obstacle to reaching a good status, the lack of policy integration between sectors is a hindrance to reaching WFD objectives.

The issue of coordination between water management and other sectors needs to be addressed at both the European and the national level. A key issue at the European level is the common agricultural policy. At the national level, closer cooperation between different sectors is called for. In the end, implementing the WFD in the Netherlands is not the responsibility of the Dutch water sector, but of the Netherlands as a whole.

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