Applying the Adaptive capacity wheel on the background document of the Content Analysis

IC12 Instutions for Adaptation, Working Document 5

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Citation remark: Please note that this document describes work in progress. For citation, please refer to our article in Environmental Science and Policy;

Gupta, J., K. Termeer, J. Klostermann, S. Meijerink, M.van den Brink, P. Jong, S. Nooteboom and E. Bergsma (2010). Institutions for Climate Change: A Method to Assess the Inherent Characteristics of Institutions to Enable the Adaptive Capacity of Society, Environmental Science and Policy, doi:10.1016/j.envsci.2010.05.006.

Report number: W-10/008 June 14, 2010 This report was commissioned by: Klimaat voor Ruimte

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Abstract

This document aims to link the IC12 Content Analysis Background Document (IC12 Working Document 5) with the final and official IC12 Content Analysis working document (IC12 Working Document 5). The background document provides an overview of all relevant policy documents concerning adaptation in the Netherlands in general and adaptation in the four sectors of agriculture, nature, water and spatial planning, that together form the official Dutch institutional structure for land use. On the basis of this document, in the final Content Analysis we aim to assess the adaptive capacity of the formal Dutch institutional framework. To bridge the gap between describing all relevant policy documents and assessing them all together to say something about the level of adaptive capacity in the Netherlands as a whole, this document applies the Adaptive Capacity Wheel to a number of policy documents treated in the Content Analysis Background Document.

1. Introduction

1.1 This document builds on the detailed assessment of the 93 policy instruments that are relevant to a study of adaptation strategies in the Netherlands in four key sectors - agriculture, nature, water and spatial policy (see Working Document 3). It applies the Adaptive Capacity Wheel (developed in Working Document 2 and Gupta et al. 2010) to 23 selected policy instruments. In the final Content Analysis, we will perform an evaluation of all these assessments on an aggregated level. This document first explains the Adaptive Capacity Wheel and how it is applies, before discussing the application to different sectors. What is the Adaptive Capacity Wheel?

The adaptive capacity wheel has six dimensions, which are each subdivided into 21 criteria. These criteria are based on the literature on adaptive capacity and institutional change. The adaptive capacity wheel is designed to assess whether institutions such as laws and policy plans can promote the adaptive capacity of society.

The adaptive capacity wheel reflects on the quality of institutions. The purpose of this instrument is to examine an institution in terms of its strengths and weaknesses and opportunities for improvement. Every person that uses it may come to a slightly different judgment, because his or her norms and views will differ from the next person. Certain elements in an institution lead to a score, for example, if an institution prescribes regular evaluations, this will lead to a positive score on the dimension 'Learning Capacity'. We cannot give a limitative list of elements that can lead to a positive score, however, because human ingenuity will forever come up with new, innovative institutional elements that can enhance adaptive capacity. To give a limitative list would be against the very idea of adaptive capacity. Therefore, the judgment of institutions must also remain flexible and open-ended. Still, the instrument has proved to be a robust tool for a first diagnosis and for creating discussion about the adaptive capacity of institutions.

The adaptive capacity wheel shows the inherent capacity of an institution to respond to change, and not the effectiveness of the regime or whether the climate change problem is addressed well or not in technical terms (e.g. 'are the dikes built high /strong enough with this institution?' 'will this institution safeguard biodiversity of the Wadden Sea?'). It is not possible to create one instrument that addresses the multitude of questions around adaptation to climate change, and for each problem/sector there often are other ways to evaluate effectiveness already. The Adaptive Capacity Wheel is of a more generic nature, judging only if an institution enables or inhibits adaptation to change, once ineffectiveness of the regime has become apparent.

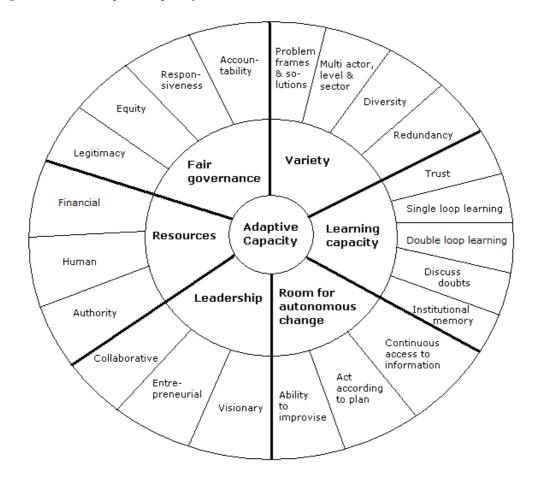


Figure 1.1 The adaptive capacity wheel

1.2 Methodology: how do we apply the Adaptive Capacity Wheel?

Assessing adaptive capacity with the Wheel involves normative judgments on whether the researcher thinks a criterion is met or not. We use a scale of six categories to judge the policy document on the different criteria. The six-category scale can help to create a transparent and structured approach to evaluate the different policy documents. The six scores and their explanation are shown beneath. There is no 'unknown' category; the assumption is that even when a policy document does not specify anything on, for example, financial resources – the implications of not mentioning financial resources on adaptive capacity can be assessed.

green	lime	light yellow	light orange	red
Institutional	The struc-	Neutral	Gap that	Institutional
structure en-	ture exists,	score (posi-	needs to be	structure ob-
hances adap-	and could	tive nor	filled to	structs adap-
tive capacity	but is not	negative ef-	counteract	tive capacity
for adapta-	(yet fully)	fect ex-	negative ef-	for adapta-
tion	applied to	pected)	fect on adap-	tion
	adaptation		tive capacity	
Score 2	Score 1	Score 0	Score -1	Score -2

Table 1.1 The colour-scheme of the Adaptive Capacity wheel

Our research methodology emphasizes the advantages of not aggregating the information in one number – the criteria are not obviously additive. However, in order to be able to assess how different policy documents score against each other, we have chosen to apply the Adaptive Capacity Wheel in a quantitative manner as well. This analysis should be seen as complementary to the more substantive analysis in Working Document 3. An advantage of using a numerical scale lies in the good foundation it provides for the aggregated analysis in the final Content Analysis. The figure below shows such an aggregated picture.

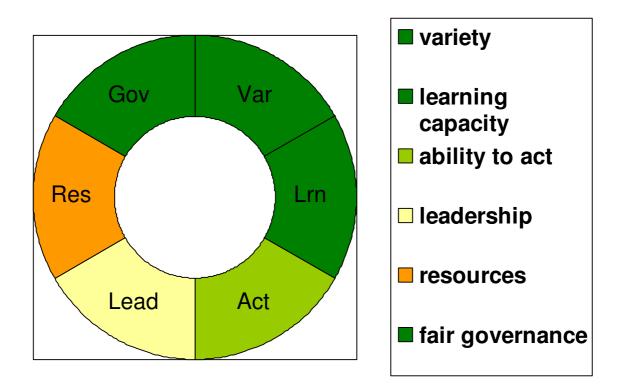


Figure 1.2 An example of a possible outcome of the Adaptive Capacity Wheel at the level of the six dimensions

In the adaptive capacity wheel, not every criterion can be applied alike. This is caused by a difference in underlying assumptions. Consider, for example, in the dimension - Learning Capacity - the criterion of trust. The fact that there are no institutional incentives that stimulate trust between parties does not directly obstruct adaptive capacity nor enhance it. The assumption is that when there is nothing in place to enhance trust in institutional arrangements, this does not necessarily mean that parties distrust each other and therefore it would get a neutral score of 0.

Now consider the example in the dimension Resources the criterion of financial resources. The fact that the institutional structure does not allocate any financial resources to adaptation does counteract adaptive capacity. Here, the assumption is that no institutional arrangements (or in other words a gap) counteract adaptive capacity and it would therefore get a negative score of -1. The category that is even more negative (with a score of -2) is reserved for situations in which the existing institutional structure actually obstructs adaptive capacity.

In the table below our interpretation of scores 0 and -1 are shown.

Dimensions	Criteria	Explanation
Variety	Variety of problem frames and solutions	Nothing in place = neutral (0)

Table 1.2 Explanation of scores 0 and -1

	Multi-actor, level and sector approach	Nothing in place = neutral (0)
	Room for diversity	Nothing in place = neutral (0)
	Redundancy	Nothing in place = neutral (0)
Learning Capac- ity	Trust	Nothing in place = neutral (0)
	Double loop learning	Nothing in place = neutral (0)
	Discuss doubts	Nothing in place = neutral (0)
	Single loop learning	Nothing in place = negative (-1)
	Institutional memory	Nothing in place = negative (-1)
Room for autonomous change	Continuous access to information	Nothing in place = negative (-1)
	Act according to plan	Nothing in place = negative (-1)
	Capacity to improvise	Nothing in place = neutral (0)
Leadership	Visionary leadership	Nothing in place = neutral (0)
	Entrepreneurial leadership	Nothing in place = neutral (0)
	Collaborative leadership	Nothing in place = neutral (0)
Resources	Authority	Nothing in place = negative (-1)
	Human resources	Nothing in place = negative (-1)
	Financial resources	Nothing in place = negative (-1)
Fair Governance	Legitimacy	Nothing in place = negative (-1)
	Equity	Nothing in place = neutral (0)
	Responsiveness	Nothing in place = neutral (0)
	Accountability	Nothing in place = negative (-1)

As mentioned before we cannot avoid normative assessments. Therefore, next to 'scoring' the different elements of a policy document with a number and a colour, we add a column to explain why we scored the element in such a way. Even if this assessment is qualitative in nature, it makes our reasoning transparent. This also ensures that any misinterpretations caused by treating the criteria as additive can perhaps be avoided in the interpretative phase.

For aggregated scores we also have to decide what count gets what colour. The reasoning used for the total score for each criterion is that between 1 and 3 it is considered slightly positive and 4 points or higher is positive. For the total, only a score of exactly 0 is light yellow. The reasoning is to work more or less with averages; and to rule out the effect of having more than 3 criteria for some of the dimensions.

For the overall score, a score of 5 or lower is light yellow, because less than 6 points overall is considered too weak even for a slightly positive score. An overall score above 18 is outright positive (dark green). The reasoning behind this way of aggregating is that when on average 3 criteria per dimension are slightly positive (6x3), this opens a lot of possibilities that the institution will be adaptive; in such a case there are enough openings that people can use, even if it is not perfect.

Table 1.3 Explanation of aggregated scores

Effect of institution on adaptive capacity	Score	Aggregated scores for dimensions and adaptive capacity as a whole
Positive effect	2	1,01 to 2,00
Slightly positive effect	1	0,01 to 1,00
Neutral or no effect	0	0
Slightly negative effect	-1	-0,01 to -1,00
Negative effect	-2	-1,01 to -2,00

1.3 Selection of institutions

The selection of the 23 laws and policy documents from the total of 93 discussed in the background document (Working Document 3) is based on one or more of the following criteria:

- Whether the document is seen as influential (e.g. it is often referred to);
- Whether the document has an overarching character / national level;
- Whether it is the most recent version / near future version;
- Whether it covers an unlimited time frame; and
- And we limited the documents to 3 to 5 documents per sector.

Applying these criteria results in this selection:

International:

- UNFCCC, 1992; Kyoto Protocol 1997
- Convention on Biological Diversity
- EU Framework Directive on Water
- EU Directive on Flood Risks
- Common Agriculture Policy (CAP)
- Natura 2000 and the Birds and Habitats Directives
- EU Whitepaper on adaptation

National:

- National Adaptation Strategy: Make Space for Climate!
- Strategy National Safety and National Risk Assessment

Agriculture:

- Agenda for a Living Countryside Multi-year program 2007-2013
- Law on Land Use in Rural Areas
- New agrarian insurances

Nature:

- Ecological main structure
- Law for the Protection of Nature
- Flora and Fauna Law

Water:

- National Agreement on Water
- National Water Plan 2008
- Policy Guideline Large Rivers
- Water Law
- Water Test

Spatial Planning:

- National Spatial Strategy
- Spatial Planning Act
- Strategic Environmental Assessment

In the next section, we will show the results of our assessments.

2. International and European institutions

2.1 UNFCCC, 1992; Kyoto Protocol 1997

The United Nations Framework Convention on Climate Change of 1992 has a focus on both mitigation and adaptation.

Dimen sion	Criteria	Score	Explanation
Variety	Variety of problem frames and so- lutions	2	The Climate Convention sees the importance of adap- tation, although mitigation gets more emphasis. It dif- ferentiates between the needs of different geographic countries. It allows all countries to make their own policies taking into account their specific circum- stances.
	Multi-actor, level and sec- tor	1	The Climate Convention has a multi-level, actor and sector structure. The Convention is to be applied by states and states can further subdivide responsibilities to lower authorities and social actors. NGOs and other actors have an observer role in the Climate Ne- gotiations.
	Room for di- versity	2	The general goal of adaptation is stated, without specifying specific adaptation goals. This leaves a lot of room for actors to define goals and instruments themselves.
	Redundancy	-1	Cost effectiveness is a guiding principle
	Total	1	
Learn- ing Ca- pacity	Trust	2	The structure of the convention, with its annual COPs and meetings of the subsidiary bodies, might be seen as an opportunity to build trust
	Double loop learning	2	The complex structure of discussing implementation bottlenecks in the subsidiary body on implementation provides room to generate potential solutions and for double loop learning.
	Discuss doubts	1	In the negotiations, doubts and uncertainties are ar- ticulated. The meetings of the subsidiary bodies and the COPs provide room to discuss doubts; at least

Table 2.1 Application of the ACH to the UNFCCC

			they are not specifically excluded.
	Single loop learning	2	The obligatory national communications are a source of information and best practices of local adaptation are available online, therefore they are a vehicle to stimulate learning.
	Institutional memory	2	The obligatory national communications create insti- tutional memory; the discussions in all the different for are recorded and are also part of the institutional memory.
	Total	1.8	
Room for autono mous change	Continuous access to in- formation	1	The Climate Convention and its subsidiary bodies provide general information on the kinds of adapta- tion measures to be taken by countries and a structure on how the reporting should take place.
	Act according to plan	0	The Climate Convention has commitments for all countries. Each country is allowed to make its own judgement as to what is needed in the domestic con- text. In subsequent years, it called on the poorer countries to make a National Adaptation Plans of Ac- tion.
	Capacity to improvise	0	The Climate Convention and its follow-up agreements do not hamper or enhance autonomous adaptation
	D 1		
	Total	0.33	
Leader- ship	Total Visionary leadership	0.33	UNFCCC states that the developed countries must provide leadership but provides no incentives that stimulate or hamper visionary leadership
	Visionary		provide leadership but provides no incentives that
	Visionary leadership Entrepreneu-	1	provide leadership but provides no incentives that stimulate or hamper visionary leadership UNFCCC calls on parties to develop appropriate market and non-market mechanisms including insur-
	Visionary leadership Entrepreneu- rial leadership Collaborative	1	provide leadership but provides no incentives that stimulate or hamper visionary leadership UNFCCC calls on parties to develop appropriate market and non-market mechanisms including insur- ance. UNFCCC calls on parties to collaborate with regard
	Visionary leadership Entrepreneu- rial leadership Collaborative leadership	1	provide leadership but provides no incentives that stimulate or hamper visionary leadership UNFCCC calls on parties to develop appropriate market and non-market mechanisms including insur- ance. UNFCCC calls on parties to collaborate with regard
ship Re-	Visionary leadership Entrepreneu- rial leadership Collaborative leadership Total	1	 provide leadership but provides no incentives that stimulate or hamper visionary leadership UNFCCC calls on parties to develop appropriate market and non-market mechanisms including insurance. UNFCCC calls on parties to collaborate with regard to adaptation. No mechanism introduced however. UNFCCC is a widely known and accepted international policy. Most nation states have committed themselves to specific policies on mitigation. This au-
ship Re-	Visionary leadership Entrepreneu- rial leadership Collaborative leadership Total Authority Human re-	1 1 1 2	provide leadership but provides no incentives that stimulate or hamper visionary leadership UNFCCC calls on parties to develop appropriate market and non-market mechanisms including insur- ance. UNFCCC calls on parties to collaborate with regard to adaptation. No mechanism introduced however. UNFCCC is a widely known and accepted interna- tional policy. Most nation states have committed themselves to specific policies on mitigation. This au- thority could be used for adaptation. The Climate Convention calls on parties to develop education, training materials and public awareness on

	sources		nism, which has in recent years been empowered to fund adaptation activities in the developing world. However, there is little money in this fund.
	Total	1	
Fair Gov- ernance	Legitimacy	2	Participation in the UNFCCC and its protocol are voluntary. Decisions are taken in accordance with the democratically decided rules of procedure. The formal negotiating process is open to those who register. The international negotiations are available on-line have a high degree of transparency.
	Equity	1	There are many equity assurances included in the Convention for adaptation. However, implementing these is more complicated.
	Responsive- ness	2	The formal negotiating process is open to those who register. The international negotiations are available on-line have a high degree of transparency.
	Accountability	-1	The UNFCCC has no accountability mechanism for adaptation.
	Total	1	
Overall		1.02	

2.2 Convention on Biological Diversity

Dimen sion	Criteria	Score	Explanation
Variety	Variety of		By employing the integral ecosystems approach, in
	problem frames and so- lutions	1	which sustainable growth is important, multiple prob- lems frames are possible and multiple solutions are even stimulated. Not aimed at adaptation however.
	Multi-actor, level and sec- tor	1	The Convention officially only involves nation states. However, there are mechanisms to link up with other treaties and actors.
	Room for di- versity	2	The Convention mainly prescribes an approach. Goals and means should be decided at the level of an ecosystem. Thus, it allows much diversity
	Redundancy	0	Not specifically addressed

	Total	1	
Learn- ing Ca- pacity	Trust	1	COP structure could be seen as a mechanism to build trust. Also, equitable sharing of goods of environ- mental resources though mutually agreed agreements is one of three aims of the convention.
	Double loop learning	1	Under the Convention, the subsidiary bodies provide scope to discuss different problems, assumptions, so- lutions and technologies
	Discuss doubts	1	There is room to discuss doubt in the subsidiary bod- ies
	Single loop learning	2	The Convention itself sets up discussion meetings. Also a technological expert group on biodiversity and climate change is installed. Furthermore, the Clearing House Mechanism (CHM) is introduced: an internet- based information-sharing instrument for different ac- tors in different nation states. Stimulates nation states to implement research and educational programs, and information campaigns, themselves. Does not specifi- cally address adaptation however.
	Institutional memory	2	Through the CHM, institutional memory is created. Moreover, parties are obligated to submit national communications.
	Total	1.4	
Room for autono mous change	Continuous access to in- formation	1	Somewhat provided for through national communica- tions and CHM. Parties should identify and monitor components of biological diversity, identify processes that influence those components.
	Act according to plan	-1	No blue print
	Capacity to improvise	1	With the ecosystems approach together with the sus- tainable growth approach, the Convention argues for finding integrated solutions in which several actors together find the best solutions/strategies.
	Total	0.33	
Leader- ship	Visionary leadership	1	The Convention states that the proposed approach asks for leadership from nation states. The ecosys- tem/sustainable growth approach also leaves room for visionary leadership.
	Entrepreneu- rial leadership	0	The ecosystem/sustainable growth approach neither encourages nor discourages entrepreneurial leader- ship.

	Collaborative leadership	1	The ecosystem/sustainable growth approach stimu- lates collaborative leadership.
	Total	0.67	
Re- sources	Authority	2	The Convention is legally binding and is an authorita- tive document.
	Human re- sources	1	Does enhance human resources
	Financial re- sources	1	The Convention has a financial mechanism operated by the Global Environment Facility; implicitly also for adaptation.
	Total	1.33	
Fair Gov- ernance	Legitimacy	2	The treaty has been negotiated in accordance with the rules of procedure and is a legitimate document. It has used input from bottom-up processes.
	Equity	1	The Convention includes equity principles and states that the sovereignty of nations to exploit their own re- sources but also have the duty to make sure activities within their jurisdiction have no detrimental effects in other countries. Moreover, it is stated that parties should make sure that access to environmental goods is fairly distributed, especially taking the position of developing countries into account: this should be achieved through mutually agreed agreements. Still these are only statements: no actual mechanisms to ensure equity are introduced.
	Responsive- ness	1	Allows for strategy adjustments, but does not provide incentives for this
	Accountability	-1	No accountability mechanisms introduced.
	Total	0.75	
Overall		0.91	

2.3 EU Framework Directive on Water

The European Union adopted a Framework Direction on Water in 2000. This table scores this document on the basis of our criteria.

Table 2.3 Application of the ACS to the EU WFD

Dimension	Criteria	Score	Explanation

Variety	Variety of prob- lem frames and solutions	2	The Directive has a broad scope. It leaves room for the regional level to define their own problems and solutions, so it leaves room to define adaptation goals
	Multi-actor, level and sector	2	It is a multilevel institution: general goals are formu- lated at the European Union level and area specific goals and policies on how to reach them is delegated to national and sub national levels. The Directive promotes participation of local actors in developing the river basin management plans.
	Room for diver- sity	2	As the Directive prescribes only general goals and no specific measures, the institution promotes diversity
	Redundancy	-1	The Directive aims for efficiency of measures in a river basin
	Total	1.25	
Learning Capacity	Trust	2	The river basin management approach encourages ac- tors in the water field from different countries to work together
	Double loop learning	0	No mechanism to stimulate double loop learning
	Discuss doubts	0	No explicit room created to articulate doubts
	Single loop learn- ing	2	Progress in different EU countries is evaluated regu- larly to compare approaches and find best practices
	Institutional memory	1	Progress in the implementation process is monitored and made available on website (but not explicitly part of the directive)
	Total	1	
Room for autonomous change	Continuous ac- cess to informa- tion	-1	Public information on local water quality or quantity is not made available
	Act according to plan	2	No EU-wide blueprint set out, but prescribes regional plans
	Capacity to im- provise	2	Explicitly leaves room for local water actors to ma- noeuvre
	Total	1	
Leadership	Visionary leader- ship	2	Promotes an attractive vision of good water quality on the medium term
	Entrepreneurial leadership	0	Does not hamper or promote entrepreneurial leader- ship
	Collaborative	2	Allows for establishing regional networks

	leadership		
	Total	1.33	
Resources	Authority	2	EU member states have committed themselves to the Directive. It is accepted by actors in the water field as an important directive
	Human resources	1	The Directive encourages regional experts to decide for themselves and calls for local participation
	Financial re- sources	-1	No extra financial resources available from the EU level for achieving the aims.
	Total	0.67	
Fair Gov- ernance	Legitimacy	2	The Directive is established using the rules of proce- dure of the EU and also tries to stimulate a bottom- up approach.
	Equity	1	One of the aims of river basin management is to limit the transfer of water problems from upstream to downstream countries
	Responsiveness	-1	Once the targets have been set, no discussion or learning is possible anymore. However, these targets can be changed at later date.
	Accountability	2	Once a river basin management plan has been devel- oped, member states have an obligation to achieve specified aims.
	Total	1	
Overall		1.04	

2.4 EU Directive on Flood Risks

The European Union has adopted a Directive on Flood Risks in 2007.

Dimension	Criteria	Score	Explanation
X 7			
Variety	Variety of prob- lem frames and solutions	2	Several causes of floods are identified: natural and human. At the level of the EU, only the aspiration of reducing the risk and impacts of floods is set. No explicit solutions are pre- scribed to enhance local-specific solutions.
	Multi-actor, level and sector	1	The practical interpretation is left to national governments and subnational regions: it is multilevel, but not multi-sector.

Table 2.4 Application of the ACW to the Direction on Flood Risks

	Room for diver-		
	sity	2	Only sets out general aspirations which allows for diversity
	Redundancy	-1	The Directive aims for efficiency of measures in a river basin rather than for redundancy
	Total	1	
Learning Capacity	Trust	2	Because of the river basin management ap- proach, actors in the water field from different countries are encouraged to work together
	Double loop learning	2	The management plans will be assessed every six years in the light of new climatic circumstances.
	Discuss doubts	0	No mechanism to articulate doubts
	Single loop learning	2	The management plans will be assessed every six years.
	Institutional memory	1	Documents are kept and there is basic institu- tional memory.
	Total	1.4	
Room for autonomous change	Continuous ac- cess to informa- tion	2	The Directive commits member states to map areas that are prone to flood risk
	Act according to plan	2	The Directive commits member states to de- velop a flood risk plan to prevent floods and minimize the impacts of floods
	Capacity to im- provise	0	The Directive neither encourages or discour- ages the use of local competencies
	Total	1.33	
Leadership	Visionary leader- ship	1	Taking measures to prevent floods is not new; international cooperation is more or less vi- sionary
	Entrepreneurial leadership	0	The market is not involved, it is a governmen- tal domain
	Collaborative leadership	2	Allows for establishing regional networks
	Total	1	
Resources	Authority	2	The European Union directive has authority in itself. EU member states have committed themselves. When the EU thinks a member state does not take sufficient measures to deal with floods, it can install the necessary meas-

			ures itself.
	Human re- sources	-1	No educational programs or involvement of the public
	Financial re- sources	-1	No extra financial resources
	Total	0	
Fair Gov- ernance	Legitimacy	2	Directive has been adopted in accordance with rules of procedure, although not many EU citizens will be aware of its existence
	Equity	2	Solidarity and no shifting of responsibilities are important principles: measures may not have detrimental effects on other countries.
	Responsiveness	2	The management plans should be assessed every six years in the light of new climatic cir- cumstances.
	Accountability	-1	No accountability mechanism
	Total	1.25	
Overall		1	

2.5 Common Agriculture Policy (CAP)

In 1962, the European Union adopted the Common Agricultural Policy.

Table 2.5 Application of the ACW to the CAP

Dimension	Criteria	Score	Explanation
Variety	Variety of prob- lem frames and solutions	-1	Its main aim 40 years ago was to encourage farmers to produce enough food for Europe and enhance farmer income. Now it aims only at income support. At the moment the Cap is under reconstruction. In the coming years it may also aim at other societal values, such as landscape, vital rural areas, animal welfare, cli- mate. It tries to stay within GATT agreements of reducing market distortion through gov- ernment subsidies.
	Multi-actor, level and sector	1	It is multilevel, but not multi-sector or multi- actor.
	Room for diver- sity	1	The general goals leave ample room to decide on situation-specific solutions and procedures. Moreover, with the Treaty of Luxembourg

			support to farmers has moved away from pro- duction towards income support, which may lead to the search for alternatives to the most cost-effective production method, and diver- sity is stimulated.
	Redundancy	1	With the above mentioned income support in- stead of subsidy based on production (quanti- ties), a tendency away from cost-effective solu- tions is initiated and this increases redundancy.
	Total	0.5	
Learning Capacity	Trust	1	The CAP provides income support, which provide a basis for trust between the actors.
	Double loop learning	-1	The CAP does not facilitate double loop learn- ing
	Discuss doubts	0	Not intentionally aimed at due to the closed agricultural community
	Single loop learning	-1	No institutionalised learning mechanism. Slow learning process as Luxembourg treaty shows
	Institutional memory	0	There may be institutional memory available to a close community of actors, but this is not available for outsiders.
	Total	-0.2	
Room for autonomous change	Continuous ac- cess to informa- tion	-1	No open, structural evaluation
	Act according to plan	1	The CAP provides income support on a struc- tural basis, farmers know to a certain extent what to expect from CAP and can act on this knowledge.
	Capacity to im- provise	2	With the LEADER approach, and income support to farmers, autonomous adaptation is stimulated
	Total	0.67	
Leadership	Visionary leader- ship	0	Not intentionally aimed at. Leadership de- pends on the leadership of EU actors. Will they dare to really reform CAP?
	Entrepreneurial leadership	2	Entrepreneurial leadership is stimulated.
	Collaborative leadership	0	Not intentionally aimed at

	Total	0.67	
Resources	Authority	2	EU member states have committed themselves to the Luxembourg treaty.
	Human re- sources	-1	No research programs or training programs
	Financial re- sources	1	Farmers get subsidized, but large amounts are contested.
	Total	0.67	
Fair Gov- ernance	Legitimacy	1	This is a legal process, and farmers interests are also represented by politicians
	Equity	0	No equity mechanisms
	Responsiveness	0	Not specifically aimed at.
	Accountability	-1	No accountability mechanisms
	Total	0	
Overall		0.38	

2.6 Natura 2000 and Birds and Habitats Directives

In 2000, the European Union adopted the Birds and Habitats Directive.

Table 2.6 Application of the ACW to Natura 2000 and the the Birds and Habitats Directive

Dimension	Criteria	Score	Explanation
Variety	Variety of prob- lem frames and solutions	-2	The Directives offer little space for multiple problems and solutions: the Directives lays down which habitats and species should be
	Multi-actor, level and sector	0	Protected at what location. Although the national and sub-national level have influence through drafting regional man- agement plans, they do not have a say in which species should be protected. No other sectors other than the nature sector are involved.
	Room for diver- sity	-2	The Directive set out very specific and static goals. Little room is left for decision making at the lowest level.
	Redundancy Total	0 -1	Neither prevents nor encourages redundancy

Learning Capacity	Trust	0	No incentives that stimulate trust
	Double loop learning	0	No incentives that stimulate double loop learn- ing
	Discuss doubts	-2	By specifying aims very specifically, no room is left to discuss doubts
	Single loop learning	0	No educational, research or information cam- paigns are set up. Does provide that manage- ment plans be revised every six years.
	Institutional memory	-1	No institutional memory created
	Total	-0.6	
Room for autonomous change	Continuous ac- cess to informa- tion	-1	No monitoring
	Act according to plan	1	People do know what to do and how: which species and habitats to protect following the regional management plan. No attention paid to adaptation however.
	Capacity to im- provise	-2	Because of the static and specific goals, little room is left for local actors to autonomously adjust
	Total	-0.67	
Leadership	Visionary leader- ship	-2	Because the policy is quite rigid and top-down, little room is provided for visionary leadership
	Entrepreneurial leadership	-2	Little room is provided for entrepreneurial leadership
	Collaborative leadership	1	Regional management plans provide some room for collaboration.
	Total	-1	
Resources	Authority	2	EU member states have committed themselves to binding goals. Moreover, EC itself has the authority to designate areas that should be pro- tected if member states have not added them to their list.
	Human re- sources	-1	The EU has experts in place and has chosen regional development plans – but there is not much policy to encourage the use of local expertise.

	Financial re- sources	0	EU has made several funds available for pro- tection of nature. It is left to member states to decide which subsidies are used for which ob- ligations.
	Total	0.33	
Fair Gov- ernance	Legitimacy	1	The Directive has been made in accordance with the rules of procedure but is top down. Does have clear rules and procedures.
	Equity	0	No equity mechanisms
	Responsiveness	-2	The static character of the protection obliga- tions, reduce the adaptability of goals and pro- cedures.
	Accountability	1	Although not specifically aimed at adaptation, protection goals are obligatory.
	Total	0	
Overall		-0.49	

2.7 European Whitepaper on Adaptation

Table 2.7 Application of the ACW to the Whitepaper on Adaptation

Dimension	Criteria	Score	Explanation
Variety	Variety of Vari- ety of problem frames and solu- tions	0	Taps into the IPCC related consensus among EU climate scientists. "The framework is de- signed to evolve as further <i>evidence</i> becomes available." (emphasis by us): the document builds on the notion of scientific facts and not on the notion of different problem frames.
	Multi-actor, multi-level and multi-sector ap- proach	2	EU recognizes that measures are taken at local, regional and national level and aims to support these. Main sectors foor coordination at EU level are agriculture, water, biodiversity, fisher- ies and energy infrastructure. Aims also at pub- lic-private partnerships. A Steering group is set up involving Member states, civil society and the scientific community.
	Room for diver- sity	2	Due to regional variability most adaptation measures will be taken at national, regional or local level. (EU can strengthen this)

	Redundancy	-1	Aims at efficient and cost-effective adaptation
	Total	0.75	
Learning Capacity	Trust	1	Trust is not mentioned in the Whitepaper. The procedure of issuing a greenpaper for discus- sion, then a whitepaper and so on is implicitly meant to build trust.
	Double loop learning	2	The framework is designed to evolve as further evidence becomes available. Aims at develop- ing the knowledge base for development of appropriate policy responses. Also an educa- tion policy. Expects a long and continuous process of adaptation.
	Discuss doubts	1	More knowledge is needed on climate impact and vulnerability. Uncertainties are lightly touched upon: look for no-regret options.
	Single loop learning	2	The Commission will regularly review progress in implementing the first phase of the frame- work for action.
	Institutional memory	1	Suggestion to establish a Clearing House Mechanism as an IT tool and database on cli- mate change impact
	Total	1.4	
Room for autonomous change	Continuous ac- cess to informa- tion	1	A Clearing House Mechanism and sharing of best practices among member States, so meas- ures aiming at scientists and governments. Not for businesses, farmers or citizens.
			for businesses, farmers of cluzens.
	Act according to plan	1	By publishing a Greenpaper in 2007 and a Whitepaper in 2009 the EU shows some ca- pacity to act according to plan
	plan Capacity to im- provise	1	By publishing a Greenpaper in 2007 and a Whitepaper in 2009 the EU shows some ca-
	plan Capacity to im-		By publishing a Greenpaper in 2007 and a Whitepaper in 2009 the EU shows some ca- pacity to act according to plan Whitepaper states that autonomous adaptation is only possible for some individuals and busi- nesses, and may be mal-adaptation for example
Leadership	plan Capacity to im- provise	0	By publishing a Greenpaper in 2007 and a Whitepaper in 2009 the EU shows some ca- pacity to act according to plan Whitepaper states that autonomous adaptation is only possible for some individuals and busi- nesses, and may be mal-adaptation for example

			based instruments are explored.
	Collaborative leadership	2	Aims at collaboration and coordination be- tween EU member states, for example for mi- gration of species across borders or river basin management. A Steering group is set up in- volving Member states, civil society and the scientific community.
	Total	2	
Resources	Authority	1	An EU whitepaper is taken seriously, but is no law. An EU adaptation strategy will be devel- oped before 2013.
	Human re- sources	0	Not mentioned
	Financial re- sources	1	Climate change is a priority for the EU multi- annual financial framework 2007-2013, if funds reflect this priority still has to be ensured. Revenues from European GHG emissions
			trade may be used for adaptation.
	Total	0.67	trade may be used for adaptation.
Fair Gov- ernance	Total Legitimacy	0.67	The procedure of a Greenpaper for discussion and then a whitepaper has created support
			The procedure of a Greenpaper for discussion
	Legitimacy	1	The procedure of a Greenpaper for discussion and then a whitepaper has created support Aims at sharing knowledge and best (policy) practices between member states of EU. Health and social policies to distribute burdens equitable. Also attention for vulnerable farmers
	Legitimacy Equity	1	The procedure of a Greenpaper for discussion and then a whitepaper has created support Aims at sharing knowledge and best (policy) practices between member states of EU. Health and social policies to distribute burdens equitable. Also attention for vulnerable farmers and for developing countries. The greenpaper was responsive; the white-
	Legitimacy Equity Responsiveness	1 2 0	The procedure of a Greenpaper for discussion and then a whitepaper has created support Aims at sharing knowledge and best (policy) practices between member states of EU. Health and social policies to distribute burdens equitable. Also attention for vulnerable farmers and for developing countries. The greenpaper was responsive; the white- paper does not invite any comments. For each of the objectives actions are formu- lated, often with deadlines (e.g. develop guide-

3. Institutional framework in the Netherlands

3.1 National Adaptation Strategy: make space for climate!

Dimension	Subcriteria	Score	Explanation
Variety	Variety of prob- lem frames and solutions	0	The document seems mostly oriented towards convincing others of the new problem frame that climate change makes spatial adaptations necessary. Maybe the term 'tailormade solu- tions' offers some space to negotiate different problem frames.
	Multi-actor, level and sector	2	It tries to involve many actors in planning for the future, especially at other governmental levels but also private companies and citizens.
	Room for diver- sity	2	There is openness to a diversity of solutions; it is the start of a process and research and de- velopment are explicitly planned in a diversity of directions.
	Redundancy	2	The idea is to improve prevention of flooding, and improve reactions if the prevention meas- ures fail. Water safety is the only area in which redundancy is seen as necessary.
	Total	1.5	
Learning Capacity	Trust	1	Trust is mentioned as an important factor; however, there are no measures taken for building trust
	Double loop learning	0	There is no mechanism to reflect on the basic assumptions of this strategy
	Discuss doubts	2	The NAS sees climate change as an unavoid- able source of uncertainties and therefore deal- ing with uncertainties must become part of any adaptation strategy
	Single loop learning	2	The main strategy is to do more research and develop adaptation strategies for all parts of society in an ongoing process of learning.
	Institutional memory	0	The strategy seems project based and is not supported structurally yet. This is in an early

			stage of institutionalization
	Total	1	
Room for autonomous change	Continuous ac- cess to informa- tion	0	There is uncertainty in the information avail- able; no plans yet to keep citizens updated.
	Act according to plan	-1	The strategy basically is an agreement among governments to continue their cooperation; it is more visionary than a plan.
	Capacity to im- provise	1	Adaptation is seen as an opportunity to inno- vate, also for the commercial sector
	Total	0	
Leadership	Visionary leader- ship	2	The adaptation strategy proposes a policy change in many sectors and introduces several concepts for governmental policy: robustness, flexibility and using natural processes
	Entrepreneurial leadership	2	Climate adaptation is presented as an opportu- nity for innovation and international entrepre- neurship in climate adaptation. The NAS pro- poses Public Private Partnerships (PPP) to implement the NAS.
	Collaborative leadership	2	The strategy is meant to involve other parties, mainly other governments but also citizens and the private sector
	Total	2	
Resources	Authority	2	The document is signed by four ministries, and by the associations of lower governments VNG, Unie van Waterschappen and IPO
	Human re- sources	0	Nearly everyone involved is working on adap- tation as an extra task, project based
	Financial re- sources	0	No explicit funding yet apart from research budgets
	Total	0.67	
Fair Gov- ernance	Legitimacy	2	The document was made in a cooperative process with four ministries and with several other parties involved
	Equity	0	No equity mechanisms or principles included
	Responsiveness	2	Inputs of other parts of society are welcomed
	Accountability	-1	Although there is a clear goal, there is much uncertainty about how to achieve this. No ac-

			countability measures
	Total	0.75	
Overall		0.99	

3.2 Strategy National Safety and National Risk Assessment

Dimension	Subcriteria	Score	Explanation
Variety	Variety of prob- lem frames and solutions	-1	Striving to create one vision on safety to en- able hierarchical control, post 9/11; but allows room for input from think tanks.
	Multi-actor, level and sector	2	Involves everyone: governments, private sector and citizens
	Room for diver- sity	-1	The aim is not to be comprehensive in its as- sessment. Rather, the strategy hopes to in- clude the most likely risks, which need to be updated based on experiences.
	Redundancy	2	Combines prevention, preparation and re- sponse. Redundancy is not an explicit goal
	Total	0.5	
Learning Capacity	Trust	-2	Distrust is a main assumption (terrorism) and a reason to seek control; trust in government is mentioned but few ways to achieve this are mentioned apart from a respectful tone in edu- cation on disaster responses
	Double loop learning	-1	There is limited opportunity for questioning the assumptions.
	Discuss doubts	2	Scenario's are the way to deal with uncertainty in a structural way; however, they may be hy- pothetical.
	Single loop learning	2	Large scale analysis to learn more about coor- dination and cooperation between govern- ments and other social actors
	Institutional memory	1	National risk analysis at regular intervals.
	Total	0.4	
Room for autonomous	Continuous ac- cess to informa-	2	Helping citizens and companies to be prepared

change	tion		is an important part of the strategy
	Act according to plan	2	The plan follows certain steps and is reviewed on a yearly basis.
	Capacity to im- provise	1	Autonomous improvisation is supported, mainly with education, not with infrastructural changes
	Total	1.67	
Leadership	Visionary leader- ship	-2	A reactive, but visionary strategy, mimicking international developments. Does explicitly encourage visionary leadership.
	Entrepreneurial leadership	1	Mainly a governmental issue; but pushes citi- zens to action during an emergency
	Collaborative leadership	2	Collaboration between governments and with other agencies is important
	Total	0.33	
Resources	Authority	2	Supported by cabinet, parliament and so on. Strict authority arrangements in case of a crisis
	Human re- sources	0	Not clear who has to perform the tasks
	Financial re- sources	-1	No budgetary consequences for implementing this policy in the documents
	Total	0.33	
Fair Gov- ernance	Legitimacy	2	Supported by cabinet, parliament and so on; implemented top down, no consultation of citizens
	Equity	2	Includes everyone, children, elderly and so on; and does differentiate between actors
	Responsiveness	-2	Top down, no mechanisms for addressing complaints
	Accountability	-1	No system of accountability, no concrete goals
	Total	0.5	
Overall		0.62	

4. Agriculture

4.1 Agenda for a Living Countryside - Multi-year program 2007-2013

Dimension	Criteria	Score	Explanation
Variety	Variety of prob- lem frames and solutions	2	Striving for diversification of agriculture and for multifunctional landscapes, which provides opportunities for many different points of view. It is a policy of region-specific imple- mentation, which means space for different problem frames.
	Multi-actor, level and sector	1	The programme aims to involve many differ- ent parties; however, apart from agriculture, nature and provincial governments the in- volvement may still be limited
	Room for diver- sity	2	The programme uses a location-specific ap- proach which generates opportunities for local diversity and variation;
	Redundancy	-1	Aims to achieve national targets/goals as effi- ciently as possible.
	Total	1	
Learning Capacity	Trust	0	The document reflects cooperation and trust between central and local governments. How- ever, there are no instruments to accomplish this, against several instruments (e.g. de visita- tions to evaluate if provinces are able to real- ize national goals.) that may lead to distrust.
	Double loop learning	0	Double loop learning is only lightly touched upon and then only by external developments, not internal discussion between the parties of the contracts.
	Discuss doubts	-1	The document has goals for 2013, and holds provinces accountable for them.
	Single loop learning	2	Single loop learning is organized in a strong way through goals, criteria and monitoring. The monitoring and evaluation is in itself well organized. A process evaluation is planned, and effect indicators will be developed during the process. There is a research budget and

Table 4.1 Application of the ACW to the MP

			help with process facilitation which may lead to regional learning.
	Institutional memory	2	Processes are evaluated and these results are also publicly available.
	Total	0.6	
Room for autonomous change	Continuous ac- cess to informa- tion	-2	Very little information on climate change; lightly linked to the ARK programme;7 year contracts (2007-2013) between national gov- ernment and provincial government have been established. In 2010 there is a mid-term evalua- tion
	Act according to plan	2	It is a second generation plan and it is imple- mented. Very structured with negotiations, contracts, lists of budgets and so on.
	Capacity to im- provise	1	The decentralized approach improves bottom- up input and therefore also potential innova- tion.
	Total	0.33	
Leadership	Visionary leader- ship	1	This document allows for visionary leadership at decentralized level, but not necessarily with respect to climate change.
	Entrepreneurial leadership	1	The document formally supports agricultural entrepreneurs and also the recreation sector (vitality of the rural areas). Supports public- private partnerships lightly. Is, however, mainly an agreement between central and provincial governments.
	Collaborative leadership	2	The document promotes regional collabora- tion. Central-provincial cooperation is also im- portant.
	Total	1.33	
Resources	Authority	2	It is a formally approved programme and is based on negotiations between central and provincial governments.
	Human re- sources	2	Dedicated personnel at the ministry of agricul- ture, at provinces and also many researchers are involved on a medium term basis. A DLG workforce is dedicated to implementation.
	Financial re- sources	2	There is a significant budget for implementa- tion (even though it may not be enough to achieve all goals)

	Total	2	
Fair Gov- ernance	Legitimacy	1	It is a negotiated outcome between central government and provincial government. Whether local actors support it remains to be seen
	Equity	0	Generally supportive, does not exclude any- one; however, does not either support or dis- courage
	Responsiveness	1	It is a process with internal feedbacks
	Accountability	2	Main goals have been made specific / SMART and are extensively monitored
	Total	1	
Overall		1.04	

4.2 Law on Land Use in Rural Areas (Wet Inrichting Landelijk Gebied - WILG)

Table 4.2 Application of the ACW to the WILG

Dimension	Criteria	Score	Explanation
Variety	Variety of prob- lem frames and solutions	2	It is a process-oriented law that allows for ex- change of different problem frames between governmental levels and land owners.
	Multi-actor, level and sector	1	Involves all land owners and governments in a region. People who do not own land are not involved.
	Room for diver- sity	2	Region-specific and innovative solutions are possible.
	Redundancy	-1	It is a zero sum game: space is limited. Infra- structure may improve, but efficiency is the norm
	Total	1	
Learning Capacity	Trust	0	The document promotes trust implicitly be- cause it allows parties to come together. Con- tract-style and quantitative targets with finan- cial consequences may reduce trust.
	Double loop learning	0	Double loop learning is not part of Long-term plans; it can be part of land exchange proc-

Image:	Room for	Single loop learning Institutional memory	-1	Contract style of long-term programmes and land exchange programmes limits learning to the preparatory stage, and then fixes it for many years. Knowledge on land exchange processes is well
learning-1land exchange programmes limits learning to the preparatory stage, and then fixes it for many years.Institutional memory2Knowledge on land exchange processes is w developed and DLG is structurally involved.Total0.4Room for autonomous changeContinuous ac- cess to informa- tion-1No information on climate change yet. De- tailed maps are part of land exchange proc- esses so may be easily to implement.Act according to plan1Detailed plans are made, but implementation dependent on many factors and actors, is slo and is often overhauled by a new processCapacity to im- provise1In principle it can enhance opportunities for involved parties to reach their goals (agricul- ture, nature, water, recreation). However, mostly oriented towards safeguarding vested interestsLeadershipVisionary leader- ship1The document allows for visionary leadershi at decentralised levels in terms of approach	Room for	learning Institutional memory		land exchange programmes limits learning to the preparatory stage, and then fixes it for many years. Knowledge on land exchange processes is well
memory2developed and DLG is structurally involved.Total0.4Room for autonomous changeContinuous ac- cess to informa- tion-1No information on climate change yet. De- tailed maps are part of land exchange proc- esses so may be easily to implement.Act according to plan1Detailed plans are made, but implementation dependent on many factors and actors, is slo and is often overhauled by a new processCapacity to im- provise1In principle it can enhance opportunities for involved parties to reach their goals (agricul- ture, nature, water, recreation). However, mostly oriented towards safeguarding vested interestsLeadershipVisionary leader- ship1The document allows for visionary leadershi 	Room for	memory	2	0 · ·
Room for autonomous changeContinuous ac- cess to informa- tion-1No information on climate change yet. De- tailed maps are part of land exchange proc- esses so may be easily to implement.Act according to plan1Detailed plans are made, but implementation dependent on many factors and actors, is slo and is often overhauled by a new processCapacity to im- provise1In principle it can enhance opportunities for involved parties to reach their goals (agricul- ture, nature, water, recreation). However, mostly oriented towards safeguarding vested interestsLeadershipVisionary leader- ship1The document allows for visionary leadershi at decentralised levels in terms of approach	Room for	Total		developed and BEO is structurally involved.
autonomous changecess to informa- tion-1tailed maps are part of land exchange proc- esses so may be easily to implement.Act according to plan1Detailed plans are made, but implementation dependent on many factors and actors, is slo and is often overhauled by a new processCapacity to im- provise1In principle it can enhance opportunities for involved parties to reach their goals (agricul- ture, nature, water, recreation). However, mostly oriented towards safeguarding vested interestsLeadershipVisionary leader- ship1The document allows for visionary leadershi at decentralised levels in terms of approach	Room for		0.4	
plan1dependent on many factors and actors, is slop and is often overhauled by a new processCapacity to im- proviseIn principle it can enhance opportunities for involved parties to reach their goals (agricul- ture, nature, water, recreation). However, mostly oriented towards safeguarding vested interestsTotal0.33LeadershipVisionary leader- ship11The document allows for visionary leadership at decentralised levels in terms of approach b		cess to informa-	-1	tailed maps are part of land exchange proc-
provise1involved parties to reach their goals (agricul- ture, nature, water, recreation). However, mostly oriented towards safeguarding vested interestsTotal0.33The document allows for visionary leadership at decentralised levels in terms of approach b		\smile	1	Detailed plans are made, but implementation is dependent on many factors and actors, is slow and is often overhauled by a new process
Leadership Visionary leader- ship The document allows for visionary leadership 1 The document allows for visionary leadership			1	mostly oriented towards safeguarding vested
ship1at decentralised levels in terms of approach 1		Total	0.33	
not in terms of goals.	Leadership		1	The document allows for visionary leadership at decentralised levels in terms of approach but not in terms of goals.
		÷	2	Leaves a lot of initiative to a region; legal pos- sibility of a commission may improve leader- ship
Collaborative leadership2Cooperation is the basis of the law			2	Cooperation is the basis of the law
Total 1.67		-leadership-		
		<u>.</u>	1.67	
Resources Authority -1 Authority is delegated to provincial level, no lot of hierarchical power and dependent on charisma of local people.	Resources	Ť		1 1
-1 lot of hierarchical power and dependent on charisma of local people.	Resources	Total Authority Human re-	-1	lot of hierarchical power and dependent on charisma of local people. DLG structurally involved in process and also
-1lot of hierarchical power and dependent on charisma of local people.Human re-22DLG structurally involved in process and also	Resources	Total Authority Human re- sources Financial re-	-1 2	lot of hierarchical power and dependent on charisma of local people. DLG structurally involved in process and also at state level

Fair Gov- ernance	Legitimacy	2	Accepted law, in which several older and tested laws are integrated (e.g. reconstruction, agricul- tural nature management, investment pro- gramme rural areas)
	Equity	1	The law aims at fair results. Non-landowners may be excluded
	Responsiveness	1	Process oriented development stage; after clo- sure of contracts, no change is possible for the specific contract but not for future contracts.
	Accountability	2	Contract between state and provincial level is very detailed and quantitative. Land exchange chapter is also detailed. Provinces are obliged to achieve their targets.
	Total	1.5	
Overall		0.98	

4.3 New agrarian insurances

Table 4.3 Application of New Agrarian Insurances

Dimension	Criteria	Score	Explanation
Variety	Variety of prob- lem frames and solutions	1	New agrarian insurances allow for as many problem frames as there are insurance compa- nies; however, right now there are only two.
	Multi-actor, level and sector	1	Insurance companies, farmers, LTO and na- tional government involved. LNV supports this development with a special subsidy for in- surance companies.
	Room for diver- sity	0	Not a lot of diversity yet as the development of new insurance is in its infancy
	Redundancy	-1	The farmers generally receive only a part of their lost income e.g. 70%
	Total	0.25	
Learning Capacity	Trust	1	The insurance arrangement encourages busi- ness transactions and this only works well when there is trust between actors and the transaction also builds trust between actors
	Double loop learning	1	As the instrument is in its infancy, it will be tested and compared to similar institutions in other countries

	Discuss doubts	-2	The instrument does not allow for doubts to be discussed.
	Single loop learning	2	The instrument is being researched and studied and this may indirectly lead to a learning proc- ess. The investors are likely to audit their re- sults and draw conclusions.
	Institutional memory	-1	Statistics unavailable and this causes hesitation at insurance companies
	Total	0.2	
Room for autonomous change	Continuous ac- cess to informa- tion	-1	Little information available
	Act according to plan	2	When a transaction is made, it has the status of a contract
	Capacity to im- provise	1	Contracts are adapted to user needs by the in- surance companies
	Total	0.67	
Leadership	Visionary leader- ship	0	It is a reactive instrument
	Entrepreneurial leadership	2	The instrument encourages entrepreneurial leadership, because it offers opportunities for the insurance companies, although the present ones have no commercial goal
	Collaborative leadership	1	In principle, an insurance is a collaborative fund.
	Total	1	
Resources	Authority	1	The arrangement is supported by LNV, Rabo- bank and LTO.
	Human re- sources	0	Little human effort, not a large market yet
	Financial re- sources	-1	Low margin in sector, government guarantee may help
	Total	0	
Fair Gov- ernance	Legitimacy	2	Fits within existing insurance structures, sup- ported by several organizations
	Equity	2	In principle open to everyone and without aim of profit
	Responsiveness	-1	Insurance organization decides on the rules
	Accountability	2	Easily retracable how the instrument has
		1	1

			worked because all financial streams are re- corded
	Total	1.25	
Overall		0.56	

5. Nature

5.1 National Ecological Network (Ecologische Hoofd Structuur)

 Table 5.1 Application of the ACW to the National Ecological Network (NEN)

Dimension	Criteria	Score	Explanation
Variety	Variety of prob- lem frames and solutions	-2	The NEN problem frame is defined by a rela- tively small group of experts. It is being re- framed with 18 nature types and 58 subtypes.
	Multi-actor, level and sector	-1	The NEN covers different administrative lev- els but it is almost entirely within the nature sector; some overlap is now being created with agriculture and water.
	Room for diver- sity	0	There is limited diversity in instruments and solutions. Biodiversity conservation is the main goal.
	Redundancy	-1	The NEN aims at a minimum protection of nature in the Netherlands.
	Total	-1	
Learning Capacity	Trust	-2	The strategy is mostly defensive towards other sectors of society ('no, unless-regime')
	Double loop learning	-2	The principles behind the NEN are not open for discussion, even when its limits are clear within the nature sector itself for example the difficulties for naturally dynamic nature types
	Discuss doubts	-2	It is preferred to wait with discussing doubts until the territorial goals of NEN are achieved in 2015/ 2018
	Single loop learning	1	There is a lot of research going on for improv- ing the quality of NEN territory.
	Institutional memory	2	There is a lot of monitoring and evaluation
	Total	-0.5	
Room for autonomous change	Continuous ac- cess to informa- tion	1	The NEN provides information , also through the internet
	Act according to plan	1	The EHA is a plan with more or less clear goals. There is a slow progress towards achiev-

			ing the goals of NEN however.
	Capacity to im- provise	-1	Once the territory is acquired, borders and goals seem pretty fixed.
	Total	0.33	
Leadership	Visionary leader- ship	1	The NEN is in itself a vision, but does not dis- courage or not encourage visionary leadership
	Entrepreneurial leadership	0	The NEN allows for private sector participa- tion but implementation is difficult
	Collaborative leadership	1	Some collaboration with water sector and farmers
	Total	0.67	
Resources	Authority	1	The NEN has authority: it is an established plan, supported broadly by governments at na- tional and provincial level
	Human re- sources	1	Several organizations are specialized in manag- ing nature (national nature organizations, pro- vincial landscape organizations etc), small but stable directorate Nature at national level
	Financial re- sources	-1	There are some reservations but always a lack of funds; land acquired for nature goals imme- diately loses its economic value
	Total	0.33	
Fair Gov- ernance	Legitimacy	2	In principle, broad support in society and for- mally approved at national level
	Equity	0	Is neutral on equity issues.
	Responsiveness	-1	No procedure for debate
	Accountability	2	Structural monitoring and evaluation proce- dures
	Total	0.75	
Overall		0.08	

5.2 Law for the Protection of Nature (Natuurbeschermingswet)

Table 5.2 Application of the ACW to the Law for the Protection of Nature

Dimension	Criteria	Score	Explanation

Variety	Variety of prob- lem frames and solutions	-2	Framing of the problem is limited to the ex- perts from the nature sector working at differ- ent organizations
	Multi-actor, level and sector	1	All levels and sectors that are planning activi- ties in nature have to deal with this law. Every- one is informed in the phase of the implemen- tation plan.
	Room for diver- sity	2	Biodiversity is the goal of the law; nature parks are also diverse. The rule of compensation is unspecific so leaves room for diversity.
	Redundancy	-2	Nature's resources are limited and declining; the goal is to save what can be saved and noth- ing more
	Total	-0.25	
Learning Capacity	Trust	-1	Nothing is allowed in nature parks, and if someone wants to do something he/she has to prove first that it has no damaging effect
	Double loop learning	-2	Goals are fixed and not open for discussion.
	Discuss doubts	2	There is room to discuss doubts even up to the Council of State.
	Single loop learning	2	There are several mechanisms for learning: the Nature policy plans can be adjusted; progress of policy and status of nature are regularly re- ported, and the 'appropriate assessment' can also be a source of learning.
	Institutional memory	2	The regular reporting activities and the under- lying monitoring represents a large institutional memory
	Total	0.6	
Room for autonomous change	Continuous ac- cess to informa- tion	1	There is considerable information available and is probably accessible??
	Act according to plan	1	There is a detailed planning cycle in the law. For every nature territory there will be a plan; if plans are feasible is not assessed beforehand
	Capacity to im- provise	-2	No room at all for autonomous improvisation or innovation
	Total	0	
Leadership	Visionary leader-	-2	It is a reactive instrument to safeguard nature

	ship		rights and to implement EU regulation
	Entrepreneurial leadership	-2	The legal and bureaucratic approach stifles all entrepreneurship
	Collaborative leadership	-1	In the first phase of deciding on the goals, only a limited number of actors is involved, in the implementation phase many actors are in- volved.
	Total	-1.67	
Resources	Authority	2	It is formally approved at the national level and supported at the EU level; the ministry of LNV has a lot of power according to the law.
	Human re- sources	1	Some human resources are reserved for pro- ducing the national update reports
	Financial re- sources	-2	Costs have to be covered by landowners and provincial government
	Total	0.33	
Fair Gov- ernance	Legitimacy	2	It is formally approved at the national level and based on EU directives
	Equity	0	Equity is not an issue
	Responsiveness	-2	The top down decision making process leaves little opportunity to amend.
	Accountability	0	Accountability is <i>only</i> arranged in regular reporting as well as policy implementation
	Total	0	
Overall		-0.16	

5.3 Flora and Fauna Law

 Table 5.3 Application of the ACW to the Flora and Fauna Law

Dimension	Criteria	Score	Explanation
Variety	Variety of prob- lem frames and solutions	-2	The Flora and Fauna law is based on the defi- nition of valuable species by a small group of experts and decided by the Ministry of LNV. Climate change is not explicitly taken into ac- count.
	Multi-actor, level	-1	A limited number of actors is involved, mainly

	and sector		nature sector and spatial plan- ning/construction sector
	Room for diver- sity	0	The law offers a minimum of diversity in in- struments
	Redundancy	-1	As soon as a species becomes abundant, the protection is cancelled
	Total	-1	
Learning Capacity	Trust	0	There is no explicit mechanism to enhance trust
	Double loop learning	-2	The ideal state of nature is a static concept, based on the state of nature in the past. No mechanism to check assumptions.
	Discuss doubts	0	No mechanism to discuss doubts
	Single loop learning	1	There is a fauna fund that has research and education among its tasks
	Institutional memory	1	Provincial governments have to enforce and monitor the policy; the institutional memory exists in the government records
	Total	0	
Room for autonomous change	Continuous ac- cess to informa- tion	-1	The law does not cover data on climate effects
	Act according to plan	1	There is a fauna management plan that gives some guidance when to do an intervention
	Capacity to im- provise	-2	The law is mostly restrictive, does not enhance innovation
	Total	-0.67	
Leadership	Visionary leader- ship	-1	This instrument based on international obliga- tions does not allow visionary leadership
	Entrepreneurial leadership	-2	Does not stimulate the private sector or civil society to come up with activities
	Collaborative leadership	0	Does not stimulate collaboration but does not prohibit it either
	Total	-1	
Resources	Authority	2	It has the authority of law.
	Human re- sources	-1	No real workforce committed to this law apart from some committees
	Financial re-	1	The Fauna fund provides some resources for

	sources		damage recovery, research and education
	Total	0.67	
Fair Gov- ernance	Legitimacy	2	It is an approved law with backup from the EU level; there is little bottom-up input
	Equity	0	There are no provisions on equity
	Responsiveness	-1	Mostly fixed rules, few feedback possibilities, only for protected living areas
	Accountability	-1	Monitoring of species is taken into account but no steps are taken in the event of policy failure.
	Total	0	
Overall		-0.33	

6. Water

6.1 National Agreement on Water / Nationaal Bestuursakkoord Water (NBW)

Table 6.1 Application of the ACW to the National Agreement on Water

Dimension	Criteria	Score	Explanation
Variety	Variety of prob- lem frames and solutions	-1	The main problem frame is that of water safety. The document seems to be made to create one shared problem frame, not to create room for more problem frames
	Multi-actor, level and sector	1	Certainly multi-level (although water boards and municipalities are only represented by their associations); also linkages with other sectors; mostly government and little influence of citi- zens and private sector
	Room for diver- sity	1	A diversity of policy instruments related to wa- ter is addressed
	Redundancy	2	The NBW encourages redundancy as uncer- tainty about the climate is a reason to take more robust measures - better safe than sorry
	Total	0.75	
Learning Capacity	Trust	2	The document builds on the trust between parties
	Double loop learning	2	New climate scenarios are taken into account allowing for challenging the assumptions
	Discuss doubts	0	There is no explicit mechanism to discuss doubts
	Single loop learning	2	There is a knowledge platform and innovation programmes have been started. Every 4 years the agreement is evaluated.
	Institutional memory	2	Monitoring and evaluation is well developed: results are monitored and evaluated on a struc- tural basis.
	Total	1.6	
Room for autonomous change	Continuous ac- cess to informa- tion	1	A public campaign with general information is continued

	Act according to plan	2	It is an explicit plan with tasks divided between parties; evaluation shows that most aspects have been realized and the all should be achieved by 2015. Moreover, the National Agreement on Water, and the National Agreement on the Water Chain are sometimes incompatible.
	Capacity to im- provise	2	Innovation programmes have been started / continued
	Total	1.67	
Leadership	Visionary leader- ship	1	The document provides a comprehensive vi- sion for the medium term although it does not change the existing paradigm; it allows for vi- sionary leadership
	Entrepreneurial leadership	1	Oriented to acting: specifies tasks for actors; mostly governmental however and not so much the private sector
	Collaborative leadership	2	Collaboration is the main goal of the docu- ment
	Total	1.33	
Resources	Authority	1	Most important governments are involved; municipalities and water boards are indirectly involved via their collective organizations; not legally binding
	Human re-	2	Many people are working on realization of this
	sources		accord
	sources Financial re- sources	1	accord Mostly regular budgets but some extra 'synergy budget' is made available by the state level
	Financial re-		Mostly regular budgets but some extra 'synergy
Fair Gov- ernance	Financial re- sources	1	Mostly regular budgets but some extra 'synergy
	Financial re- sources Total	1 1.33	Mostly regular budgets but some extra 'synergy budget' is made available by the state level Approved by all governments; not legally bind-
	Financial re- sources Total Legitimacy	1 1.33 1	Mostly regular budgets but some extra 'synergy budget' is made available by the state level Approved by all governments; not legally bind- ing There are no provisions on equity in this
	Financial re- sources Total Legitimacy Equity	1 1.33 1 0	Mostly regular budgets but some extra 'synergy budget' is made available by the state level Approved by all governments; not legally bind- ing There are no provisions on equity in this document Not much interaction outside of the govern- ments: only an information campaign and a

Overall 1.16

6.2 National Water Plan 2008 (NWP)

Table 6.2 Application of the ACW to the National Water Plan

Dimension	Criteria	Score	Explanation
Variety	Variety of prob- lem frames and solutions		The National Water Plan allows regional de- velopment processes which enable other prob- lem frames, but it is not clear if this is the in- tention of the plan
		1	A new approach in the NWP is that not only the spatial planning authority has to take the water requirements into account (short term en long term water requirements), but that the water manager also has to anticipate on spatial- economic development.
	Multi-actor, level and sector	2	The plan involves a broad range of levels, sec- tors and actors. After the instalment of the NWP, regional water plans will be made for specific areas.
	Room for diver- sity	2	A three layer approach to safety includes a large number of solutions
	Redundancy	1	For water safety at national level redundancy is allowed; for regional water problems and water quality, efficiency is leading
	Total	1.5	
Learning Capacity	Trust	2	The National Water Plan encourages parties to work together and thereby creates more trust
	Double loop learning	-2	Basic assumptions are not open for discussion
	Discuss doubts	2	Uncertainties about climate change are dealt with
	Single loop learning	2	A lot of research, progress monitoring and evaluation is planned
	Institutional memory	2	Monitoring, modelling and evaluation reports are widely available
	Total	1.2	
Room for	Continuous ac-	1	The Plan is making information available to

autonomous change	cess to informa- tion		the public
	Act according to plan	2	It is a feasible plan with clear goals and mile- stones
	Capacity to im- provise	1	Innovation is stimulated, improvisation not
	Total	1.33	
Leadership	Visionary leader- ship	1	The Plan allows for visionary leadership by en- couraging the development of regional plans that leave room local interpretation of aims and means.
	Entrepreneurial leadership	-1	The Plan does not actively engage the non- governmental sector.
	Collaborative leadership	2	The plan established collaboration, especially between governments
	Total	0.67	
Resources	Authority	1	The NWP has some authority
	Human re- sou rc es	2	A large number of people available for imple- mentation
	Financial re- sources	2	Sufficient resources at state level
	Total	1.67	
Fair Gov- ernance	Legitimacy	0	Not formally approved yet; is also a structural decision according to the spatial planning law
	Equity	0	The Law does not say anything about equity.
	Responsiveness	2	The draft plan allows for feedback and re- sponses. NWP still is a draft. Everybody is in- vited to give feedback on this concept (during 6 months, up to June 2009). Responses on the concept plan can have influence on the final plan.
	Accountability	2	Clear, quantitative goals and milestones
	Total	1	
Overall		1.23	

6.3 Policy Guideline Large Rivers

Table 6.3 The ACW applied to the Policy Guideline Large Rivers

Dimension	Criteria	Score	Explanation
Variety	Variety of prob- lem frames and solutions	0	This policy document is not concerned with other frames, only with solving concrete con- flicts.
	Multi-actor, level and sector	1	Several actors and levels involved
	Room for diver- sity	1	Some experiments to create diversity of op- tions
	Redundancy	2	Redundancy of options for extreme water flows is the main goal
	Total	1	
Learning Capacity	Trust	2	The document calls on parties to cooperate and there is room for creating trust.
	Double loop learning	1	The previous guideline has been evaluated and this has led to a less rigid approach
	Discuss doubts	1	Double loop learning implies that doubts are taken into account
	Single loop learning	2	The process will be evaluated on a structural basis; learning also takes place for technical measures
	Institutional memory	1	Evaluations will be reported
	Total	1.4	
Room for autonomous change	Continuous ac- cess to informa- tion	0	The policy does not provide a disaster man- agement information system. However, this will be arranged in a related document (ROR).
	Act according to plan	0	The guideline has no clear end goal, it supports open planning processes under the spatial planning law. There are 15 experiments with building in riverbeds, not clear how they will end
	Capacity to im- provise	2	Local stakeholders are encouraged to come up with their own plans and solutions; and to get their own insurance
	Total	0.67	
Leadership	Visionary leader-	1	As the document allows for experiments, there

	ship		is room for visionary leadership.
	Entrepreneurial leadership	1	Initiative from local actors, including private sector, is lightly encouraged
	Collaborative leadership	1	The guideline was made in cooperation with municipalities, water boards and so on: only governmental actors are included
	Total	1	
Resources	Authority	1	The process is directed from the national level, but not in a rigid top down way; public sup- port exists.
	Human re- sources	1	Some people will be working on monitoring and evaluation of the guideline
	Financial re- sources	-1	No extra budget
	Total	0.33	
Fair Gov- ernance	Legitimacy	1	Formally approved guideline; the document is not legally binding.
	Equity	0	The policy does not provide any equity provisions.
	Responsiveness	1	The document allows for comments and for responses to the comments
	Accountability	1	The documents makes provisions for account- ability
	Total	0.75	
Overall		0.86	

6.4 Water Act

 Table 6.4 The ACW applied to the Water Act

Dimension	Criteria	Score	Explanation
Variety	Variety of prob- lem frames and solutions	2	Although the law mainly integrates existing water laws, it does introduce some new elements that can enhance the adaptive capacity in the water sector, for example: 1. Integrated water management is a new perspective (quality and quantity of water, ground water and surface water,
			etc.);

			 Water system' is a new legal concept, which includes: a connected set of one or more bodies of surface water and groundwater, with associated storage areas, flood defence structures and an- cillary structures; One of the purposes of the act is: "al- lowing water systems to meet society's needs". In potential this new purpose can be a link between the need of soci- ety to adapt and the Water Act. National and regional water plans also constitute a structure plan. This is the legal basis of an important link be- tween water law and spatial planning law.
	Multi-actor, level and sector	1	Multilevel cooperation is strengthened by the option of water agreements.
	Room for diver- sity	1	The major goals are preventive water safety and better water quality, for a diversity of func- tions
	Redundancy	0	Not an issue
	Total		
Learning Capacity	Trust	1	The regional water plans can be seen as a vehi- cle for building trust
	Double loop learning	1	Norms for water safety will be revised every 12 years
	Discuss doubts	1	Double loop learning implies room to discuss doubts
	Single loop learning	1	Water plans are revised every 6 years, primary dykes are checked every 6 years
	Institutional memory	2	Norms, plans and agreements are made explicit quantitatively in a detailed way
	Total	1.2	
Room for autonomous change	Continuous ac- cess to informa- tion	0	The Water Act doesn't provide in an informa- tion system.
	Act according to plan	2	Strong planning cycles
	Capacity to im-	0	Not an issue

	provise		
	Total	0.67	
Leadership	Visionary leader- ship	0	The law does not encourage nor discourage vi- sionary leadership.
	Entrepreneurial leadership	0	The law does not encourage nor discourage entrepreneurial leadership. It is dominated by governments
	Collaborative leadership	1	Importance of cooperation with other gov- ernments is recognized
	Total	0.33	
Resources	Authority	2	The law has authority. It is backed by a strong ministry with license to operate and ability to do so
	Human re- sources	2	Sufficient workforce (including water boards)
	Financial re- sources	2	Sufficient resources
	Total	2	
Fair Gov- ernance	Legitimacy	2	The law is accepted and thus legally binding
	Equity	0	The law provides no equitability mechanisms.
	Responsiveness	1	Integration of water laws into one law was open for discussion; discussion is not an inte- gral part of the law.
	Accountability	1	Goals are clear (quantitative) and are measured and evaluated on a regular basis. Accountabil- ity mechanisms are not included.
	Total	1	
Overall		1.03	

6.5 Water Test

Table 6.5 The ACW applied to the Water Test

Dimension	Criteria	Score	Explanation
Variety	Variety of prob- lem frames and solutions	2	Two problem frames meet: the municipality's spatial planning decisions and the water board's water tasks.

	Multi-actor, level and sector	-1	Municipalities and Water Boards apply the wa- ter test in an interactive process. On strategic regional level the water test is being applied by the provincial government (provincial spatial plans and decisions). External actors (civilians, etc.) don't have a formal position in this proc- ess. Diversity is not a goal, only an efficient and ef- fective water management for new develop- ments
	Redundancy	0	Mostly a low cost strategy for both water board and municipality. Does give an incentive to search for alternative options.
	Total	0.5	
Learning Capacity	Trust	2	The test stimulates collaboration between wa- ter boards, municipalities and project develop- ers and thus stimulates trust.
	Double loop learning	0	No reflective mechanism
	Discuss doubts	2	Discussing doubts is what the instrument is about.
	Single loop learning	1	Learning is not an explicit goal but may be the result of the instrument
	Institutional memory	-1	The process is fragmented across the Nether- lands, there is no mechanism to learn from ex- periences in previous situations or other loca- tions
	Total	0.8	
Room for autonomous change	Continuous ac- cess to informa- tion	1	The outcome of the debate is publicly available
	Act according to plan	-1	The outcome is not legally binding, it is often unclear what happens with it
	Capacity to im- provise	0	No incentives for innovation
	Total	0	
Leadership	Visionary leader- ship	0	The instrument does not enhance nor encour- age visionary leadership
	Entrepreneurial leadership	0	No involvement of the private sector

	Collaborative leadership	2	Collaboration between governments is the main goal of the instrument
	Total	0.67	
Resources	Authority	2	It has been formally agreed to use the instru- ment in the National Agreement on Water, the Spatial Planning law and the National Water Plan. The instrument is accepted in society.
	Human re- sources	-1	No extra workforce available
	Financial re- sources	-1	No extra funding; the two parties have to ne- gotiate who pays for what
	Total	0	
Fair Gov- ernance	Legitimacy	1	The process is an obligation but the outcome uncertain and not binding
	Equity	1	One of the goals is to balance the interests of citizens with those of project developers, mu- nicipalities and water boards. To prevent that houses are built in an irresponsible way leaving households with wet premises or water boards with high costs.
	Responsiveness	1	The responsiveness between water board and municipality is enhanced; the test allows for re- sponsiveness because it obliges to re-evaluate building projects with respect to water impacts.
	Accountability	1	Legally both parties (spatial planning agency and the water manager) are accountable. They are obliged to lay down the outcome of the water test in the spatial plan (water paragraph). The test provides no obligation to act upon the outcome however.
	Total	1	
Overall		0.49	

7. Spatial Planning

7.1 National Spatial Strategy (Nota Ruimte: Ruimte voor Ontwikkeling)

Table 7.1 The ACW applied to the National Safety Strategy

Dimension	Criteria	Score	Explanation
Variety	Variety of prob- lem frames and solutions	2	Sets a new paradigm of development-oriented spatial planning processes which leaves room for multiple problem and solution frames
	Multi-actor, level and sector	2	All levels and sectors are involved in the plan- ning process
	Room for diver- sity	1	With a more decentralized approach, there will be more diversity
	Redundancy	0	The document does not promote or discour- age redundancy
	Total	1.25	
Learning Capacity	Trust	2	The policy allows for the building of trust be- cause it encourages decentral collaboration.
	Double loop learning	0	There is no mechanism described to reflect on the norms of the Nota Ruimte itself
	Discuss doubts	2	The assumption is that the central government does not have all the knowledge, and is there- fore open to discuss plans with lower level governments. On the long term, uncertainty is also considered
	Single loop learning	2	There is learning involved through two-yearly updates. Moreover, learning processes with re- gard to the implementation of the new steering philosophy are stimulated through the designa- tion of several exemplary projects and the ap- pointment of a national advisor for integrated area planning (adviseur gebiedsontwikkeling). The central aim of the exemplary projects and the committee for integrated area planning is to 'stimulate learning by doing'.
	Institutional memory	1	Memory is mainly organized in the form of maps. Prescribed spatial plans at central, pro- vincial and local level are also a way to create institutional memory

	Total	1.49	
Room for autonomous change	Continuous ac- cess to informa- tion	0	Lack of concrete climate info; intention to make info available through the internet
	Act according to plan	-1	It is open ended and complicated to have a controlled implementation
	Capacity to im- provise	2	Innovation and autonomous development are encouraged
	Total	0.33	
Leadership	Visionary leader- ship	2	The document allows for visionary leadership A paradigm change from more centralized permission planning to more decentralized de- velopment planning
	Entrepreneurial leadership	2	The document merely provides general guide- lines for spatial planning: the actual and con- crete spatial planning decisions are left to ac- tors at the regional level.
	Collaborative leadership	2	Promotes regional planning processes in which many actors work together
	Total	2	
Resources	Authority	-1	The document has authority. The decentraliz- ing strategy reduces its authority.
	Human re- sources	0	Human resources are not mentioned in the document
	Financial re- sources	-1	Budget is limited, developments have to fi- nance themselves, no transferring of budget from central to decentral level accompanying the decentralization of decision-making
	Total	-0.67	
Fair Gov- ernance	Legitimacy	2	Formally approved by Senate in 2006 and ac- cepted in society
	Equity	1	Giving everyone a chance to take initiative in spatial developments; intention to prevent so- cial exclusion, but no instruments to achieve this
	Responsiveness	2	Openness creates maximum opportunity for discussing spatial planning ideas. The devel- opment approach allows for responsiveness.
	Accountability	-1	Lack of preset goals makes evaluation of its success and accountability more difficult

	Total	1	
Overall		0.89	

7.2 Spatial Planning Act (Wet Ruimtelijke Ordening)

Table 7.2 The ACW applied to the Spatial Planning Act

Dimension	Criteria	Score	Explanation
Variety	Variety of prob- lem frames and solutions	2	More development planning leaves more room for different approaches
	Multi-actor, level and sector	2	All sectors and actors and levels are participat- ing in the process
	Room for diver- sity	1	Decentralization creates more diversity
	Redundancy	0	Not aimed at
	Total	1.25	
Learning Capacity	Trust	0	No mechanism to increase trust.
	Double loop learning	0	Double loop learning does not seem to be an issue: Wro is about rules how people should deal with each other
	Discuss doubts	0	No mechanism to discuss doubts
	Single loop learning	-1	No learning mechanisms: no evaluation, no monitoring, no research
	Institutional memory	1	All plans have to become publicly and digitally available in the form of maps.
	Total	0	
Room for autonomous change	Continuous ac- cess to informa- tion	0	The WRO does facilitate information supply but in an unspecified way
	Act according to plan	-1	The open process makes it more difficult to act according to plan (who is in charge?). The planning process also becomes more fluid: everyone is making visions and plans all the time.
	Capacity to im- provise	2	There is a lot of room for new ideas and initia- tives

	Total	0.33	
Leadership	Visionary leader- ship	2	The Act with its development approach allows for visionary leadership.
	Entrepreneurial leadership	2	Entrepreneurship is encouraged
	Collaborative leadership	2	Collaboration is a prerequisite to get anything done in the new law
	Total	2	
Resources	Authority	1	The act has a degree of authority: the law is widely known among people in the planning sector. The WRO leaves a lot of decision room for decentral levels, but at the same time guar- antees that the central government can have a final say in decision procedures.
	Human re- sources	1	Some supportive agencies are part of the law: Spatial Planning Office and spatial planning committees
	Financial re- sources	1	Land exploitation chapter of the law improves financial arrangements in favour of the mu- nicipality who had to pay for all infrastructure in the past
	Total	1	
Fair Gov- ernance	Legitimacy	2	Is formally approved since 1 july 2008, other law is still active on the background for 10 more years.
	Equity	0	No equity mechanisms included
	Responsiveness	2	The development approach allows for responsiveness.
	Accountability	-1	No specific goals which make it hard to evalu- ate the outcome. No accountability proce- dures.
	Total	0.75	
Overall		0.89	

7.3 Strategic Environmental Assessment (MER & Strategische Milieubeoordeling (SMB)/plan-m.e.r.)

Dimension	Criteria	Score	Explanation
Variety	Variety of prob- lem frames and solutions	1	The instrument demands to incorporate at least three perspectives and evaluate all of them
	Multi-actor, level and sector	-1	A limited number of actors is involved: the ini- tiator of the plan, the government and some experts
	Room for diver- sity	1	The procedure generates a (limited) diversity of ideas
	Redundancy	1	Redundancy of SBM procedures
	Total	0.5	
Learning Capacity	Trust	-1	Trust between parties does not play a role, the procedure is often put in the hands of experts and more or less bureaucratic
	Double loop learning	1	The plan MER is at a higher (strategic) level compared to a project MER and can lead to reflection on norms
	Discuss doubts	1	No explicit mentioning of doubts. Doubts about different options can be discussed, knowledge gaps are identified
	Single loop learning	2	The goal of the procedure is to learn about more sustainable alternatives
	Institutional memory	2	Usually the process is well-documented; moni- toring of effects is part of the procedure
	Total	1	
Room for autonomous change	Continuous ac- cess to info r ma- tion	-1	The instrument does not facilitate information supply
	Act according to plan	2	The procedure supports the planning process and prevents legal barriers
	Capacity to im- provise	-1	The instrument does not encourage initiative or improvisation and is highly bureacratic
	Total	0	
Leadership	Visionary leader-	1	The instrument provides room for visionary

Table 7.3 The ACW applied to the Strategic Environmental Assessment

	ship		leadership
	Entrepreneurial leadership	-1	The bureaucratic character does not appeal to entrepreneurs
	Collaborative leadership	1	Involving other actors is part of the procedure
	Total	0.33	
Resources	Authority	2	A formally approved and often used institution with a firm legal status
	Human re- sources	1	A certain amount of people is working in this area; MER committee installed
	Financial re- sources	-2	No funding organized in the law; project de- velopers and planners must pay for the proce- dure
	Total	0.33	
Fair Gov- ernance	Legitimacy	2	Formal legislation, several steps for fair gov- ernance such as public announcement and par- ticipation
	Equity	0	Equity is not an issue
	Responsiveness	0	No responsiveness issues
	Accountability	2	Well reported and documented process; moni- toring of effects is part of procedure
	Total	1	
Overall		0.53	

8. Overall scores

8.1 Conclusions on the Dutch institutions

In this table, the international and national levels are divided over the sectors.

Table 8.1 Overall scores per document

Climate /general	UNFCCC, 1992; Kyoto Protocol 1997	1.02
	EU Whitepaper on adaptation	1.12
	National Adaptation Strategy: make space for climate!	0.99
	Strategy National Safety and National Risk Assessment	0.62
Nature	Convention on Biological Diversity	0.91
	Natura 2000 and the Birds and Habitats Directives	-0.49
	National Ecological Network	0.08
	Law for the Protection of Nature	-0.16
	Flora and Fauna Law	-0.33
Water	EU Framework Directive on Water	1.04
	EU Directive on Flood Risks	1.00
	National Agreement on Water	1.16
	National Water Plan 2008	1.23
	Policy Guideline Large Rivers	0.86
	Water Act	1.03
	Water Test	0.49
Agriculture	Common Agriculture Policy (CAP)	0.38
	Agenda for a Living Countryside - Multi-year programme 2007-2013	1.04
	Law on Land Use in Rural Areas	0.98
	New agrarian insurances	0.56
Spatial planning	National Spatial Strategy	0.89
	Spatial Planning Act	0.89
	Strategic Environmental Assessment	0.53

The general picture coming out of this assessment is that the institutions are the most adaptive in the areas of climate policy and water policy. Apparently, thinking about climate change has already led to alterations in these institutions towards more adaptive capacity. The highest score in these two categories is 1.23, on a scale from -2 to +2. This suggests that even for the institutions in the water and climate sectors there are still a lot of possibilities for improvement towards adaptive capacity.

The sectors agriculture and spatial planning have relatively good scores, especially when we consider that integration of climate change has not yet taken place in the institutions of these policy fields. The reason for this is that the institutions for agriculture and spatial planning often have an *enabling* character: they open up space for development and innovation. Therefore, by their nature, these institutions open possibilities for adaptation to climate change. Similar to the remark made above, in these sectors there also is a lot that can be improved.

The sector that comes out most negatively is nature. In this sector the institutions often have a limiting character. The two main problems in this sector are that a) conservation is the main goal, and this is contradictory to adaptation; and b) the decision-making procedures in this sector are not open to others than ecological experts. To solve the problem of inherent contradiction will not be easy: this implies no less than a total change in the paradigm for the nature sector, which may take one or two decades of debate. To open the debate to more stakeholders, however, should be an easier step to make, since it (apparently) already has been made for the Convention on Biological Diversity.

8.2 Conclusions on the method

After several iterations the results of the analysis have become robust. These iterations included:

- scoring by 2-3 researchers, commenting on each others scores
- reviewing the meaning of each criterion and reformulating where necessary
- horizontal analysis with comparison of arguments for each score, and correcting scores where necessary

Without earning much points in the soft categories such as variety and learning, an institution can still score a lot of points in the more 'solid' elements such as authority, accountability etc. It is also a matter of national effort, if the Dutch authorities want to do something, they have the budget for it.

It also confirms that cooperation, learning and variety somehow do not combine well with leadership and resources. Is it because different phases of a process? Does it signal a step from unstructured towards structured problems?