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# 'Show that it works' – lessons learned from facilitating Building with Nature experiments

Working Paper

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# Abstract

# 'Show that it works'!

In multi-actor governance systems, experimenting is believed to be essential to enhance the adaptive capacity by learning about alternatives. 'Show that it works' is an essential step en route to 'make it happen'. The key challenge for innovators then becomes finding opportunities to show that it works.

Building with nature is an innovative strategy for designing and developing projects at the interface between land and water. Its goal is to reconcile social-economic and ecological goals of water infrastructure project and especially to make productive use of the natural processes like wind, tide, current, waves as well as the interaction between the biotic and abiotic systems.

The Ecoshape Building with Nature program organized several pilot projects in the Eastern Scheldt, South Holland coast and lake IJssel in the Netherlands as well as abroad to show that building with nature works. These experiments all came with substantial and uncertain impacts on the physical environment and/or were embedded in political sensitive plans and areas. So connecting to the relevant agendas, finding support, concerting actors and resources present key issues for success.

Two interacting lines of analysis will be presented in this paper:

- Assessment of each experiment with regard to the process by which the experiments were successfully embedded in the governance system and decision making, high-lighting the hindrances encountered, and the strategies applied to overcome them.
- Assessment of how the governance of the Building with Nature program itself hindered or helped realizing experiments in practice.

The unrolled arguments lead to:

- Lessons learned on how to experiment smartly and smoothly in society, preparing and realizing pilots with spatial and political impacts.
- Lessons learned on how to shape an effective innovation program that facilitates experimentation through pilot projects.

#### 1. Introduction

This paper is the result of empirical research on governance issues in the Markermeer/IJsselmeer area in the period 2009-2012. As such, this paper is of an empirical nature – demonstrating and illustrating what is necessary in order to experiment using innovative concepts within a crowded socio-political arena. As such, we make limited use of scientific literature in this paper, preferring instead to work with empirical data and real-world processes.

We present and elaborate on what we can learn from the efforts to experiment with Building with Nature in the IJmeer-Markermeer-IJsselmeer area. We connect to the core of the work-shop by raising and answering the following questions:

- 1. What can be observed concerning how experiments are connected to windows of opportunity in multi actor- multi scale systems of policy-makers and stakeholders?
- 2. What can be observed with regard to lessons and best practices in how to experiment in multi actor- multi scale systems of policy-makers and stakeholders?

The story in this paper unfolds as follow. In § 2 we explain the characteristics of Building with Nature, the area involved and the realized pilots. The efforts to connect the pilots to the Markermeer area are described in § 3, followed by the subsequent efforts to connect to a window of opportunity in the IJsselmeer area are described in § 4. Final answers with regard to the structuring questions can be found in section 5.

## 2. Building with Nature

*Building with Nature (BwN)* is geared towards the next step in hydraulic engineering: moving away from defensive design approaches with the aim of minimizing negative effects and moving forward to design approaches and designs that target the maximization of system potential.

This approach is based on three elements: analysis of the eco-system and the included natural mechanisms, using the natural mechanisms for realizing human ambitions as much as possible and maximizing the potential quality of the eco-system (which implies not conservation of the actual quality but realizing the systems inherent potential). For society there are clear advantages connected to this approach. *'Building with Nature'* (ecodynamic development and design) gives society the opportunity to build while drawing on the dynamics of the natural

system. During that process, we use the forces of nature to produce hydraulic engineering infrastructure and to create new opportunities for nature at the same time. Using this method, the usual debate about deterioration of ecosystems by negative side-effects and the required measures for compensation can be avoided.

## 2.1. Building with Nature in the IJmeer-Markermeer-IJsselmeer area

Ecodynamic Development and design or Building with Nature (BwN) originally popped up in policy discussions on coastal safety in the mid-80s, in the last decade it was embedded in some policy documents after being discussed by politics (see Smit and Lulofs, 2010). The context included discussions on Dutch water management in the 21th century. These references toward BwN concerned the Dutch coast and not the closed estuary, IJmeer, Markermeer and IJsselmeer area that was monitored in this project. BwN is on national level meanwhile embraced as a principle that should be considered, leaving the outcome of case wise decision-making on pros and cons.

This implied that Building with Nature at the moment of the monitor was in mostly absent in policies and decision-making in the area studied. In the period of the monitor this changed drastically, due to activities in the Mij case of the Ecoshape Building with Nature case (this monitor, the established community of practice, the pilots at the Frisian IJsselmeercoast and numerous ad hoc activities toward policy arenas such as the Deltaprogram). BwN is nowa-days (spring 2012) considered one of the promising options for further developing the region in the context of the Delta program.

In between 2008 and 2012 Building with Nature developed into an approach that embeds ecology as prominent as it already embedded hydrology, morphology and physics in its interdisciplinary approach. Applied within regions also the governance aspects of BwN were integrated in the integral approach.



Figure 1. The IJmeer, Markermeer and IJsselmeer area. The turbidity in the Markermeer is easily recognized

## 2.2. The Building with Nature pilots

The mission of the Ecoshape BwN research and innovation program was 'to show that it works'. Therefor pilots were organized in varying environments. The BwN MIJ case covered the IJmeer, Markermeer and the IJsselmeer and represents a low wave, no tide freshwater context. The IJsselmeer is a former embayment turned into a lake, by a closure dam finished early 1930s (*Afsluitdijk*). The embayment is split up by the dike Lelystad-Enkhuizen (*Houtribdijk*): the Markermeer is south of the dike, the IJsselmeer is north of the dike.

The aim of the BwN MIJ Case was to demonstrate that it is possible to develop hydraulic engineering infrastructure for human ambitions while also creating opportunities for nature at the same time and by using natural mechanisms. This implied initiating, preparing, constructing and monitoring appropriate experiments in a real life setting. Where and when was not at forehand clear. First attempts were to link to the Markermeer (compare figure1). In the end the pilots were realized in the Ijsselmeer at the Frisian Coast.



Figure 2. The BwN pilots at the Frisian coast. Source: Van Slobbe et al 2012

## 3. Connecting to the Markermeer area

The early initiatives focussed on the Markermeer area. Given the limited time horizon of the program it made sense to seek for opportunities where things were on the move already so the experiments could be embedded in the current program. This was presumed to be efficient in terms of the required time needed for preparation and construction.

In this area things were on the move. The most prominent policy areas were TMIJ (Future Vision Markermeer and IJmeer / Toekomstbeeld Markermeer IJmeer) and NMIJ (Nature Based Markermeer and IJsselmeer). In TMIJ relevant public authorities and NGOs participated to figure out how to realize human ambitions in this area in a time horizon of several decades. The Randstad Urgent national policy program planned new infrastructure in the area and also multiple municipalities wanted to build houses outside the existing dikes. These ambitions were connected to three major interrelated issues:

- The wet areas outside the dikes are designated habitat areas were due to the European birds- and habitat regulations including Natura 2000, strict rules apply with regard to safeguarding ecological quality.
- 2. Ecological quality in the area is deteriorating due to previous measures such as the Afsluitdijk (the Enclosure Dam that dammed off the estuary), the dike Lelystad-Enkhuizen and some other measures that led to a strongly decreased level of hydrolog-ical dynamics and increased turbidity and a mud problem. Especially in the Marker-meer this presented a problem since in this area ecological deterioration is most prominent and the governors have building ambitions.
- The emerged societal concern about the Randstad Urgent program and the plans to build outside existing dikes – which had already been politicized issues for a long time.

Improvement of ecological quality was a condition in order to realize human building ambitions. The program Natuurlijker Markermeer IJmeer (NMIJ) was created as an arena for designing and testing measures to increase the ecological quality of the Markermeer. The situation was rather tensed: the central government was determined to realize infrastructure, on the other side there was a decentralized initiative to develop a future vision for the area. The provinces of Flevoland and Noord-Holland asked for an assignment for this, which they got in 2006 and they presented in April 2008 the first draft to the State Secretary. Right at that moment she initiated the 'Natuurfabriek' (Nature Factory) that later was renamed into NMIJ. In NMIJ proposed ecological measures were evaluated, among others by some pilots, in order to determine if, taken all ecological measures together, this would provide enough ecological space to realize the human ambitions in the area. The future vision of TMIJ (Toekomstvisie Markermeer IJmeer) was then presented in September 2009.

Efforts to hook on the Ecoshape BwN pilots to NMIJ did not find fertile soil. The situation was complicated already, as well as political sensitive within TMIJ. Given the existing cooperation between parties in fragile coalitions, the NMIJ floor was not prepared to open up to new actors, activities and especially concepts, like building with nature. The program within NMIJ and the ecological sub program within was settled. The development philosophy was labeled Nature Inclusive Design. This at first sight might seem a simple battle between two design discourses, however in reality the NMIJ arena was locked up because letting in new

ideas and initiatives was believed to jeopardize the progress in the politically sensitive TMIJ arena.

After TMIJ presented the ecological sub-program a leading politician was interviewed. In 2010 he acknowledged that building with nature as discourse shows strong resemblances with nature inclusive design, the dominant concept and discourse in TMIJ and NMIJ. The most prominent difference is that building with nature explicitly includes efforts to identify natural processes and then use these processes in order to (1) realize human ambitions and (2) establish a positive trend in ecological quality. After discussing it in a relaxed atmosphere on a calm Friday morning, to a large extent in a rather intellectual and reflective manner, the resemblances were acknowledges and in the steering group of TMIJ Building with Nature was on the agenda. This in order to assess whether measures developed by the Nature Inclusive strategy could be improved by adding the principles of Building with Nature (Smit and Lulofs, 2010).

#### 4. Experimenting in the IJsselmeer area

Meanwhile the Dutch national Delta commission on safety, the committee Veerman, presented a long term vision with regard to Dutch coastal defense policy. The report, initiated by climate change and a perceived need to adapt to climate change, also included an outlook for the IJsselmeer. It was suggested that future decisions could include the water level of the IJsselmeer.

The Frisian part of the IJsselmeer is used for water storage (freshwater), agriculture, recreation, nature and some fishery. The water storage function implies that the lake level is regulated between sea level -0,4 meter in wintertime and -0,2 meter in summertime. This created substantial areas of land outside the remaining dikes that previously were in use for coastal protection in old times. Since the Delta Commission programmed suggested a needed rise in lake level up to 1.5 meter these areas and major activities are potentially threatened. This could easily affect the coastal wetlands and the economic functions vested in them. These include recreational facilities reaching from camp sites, holiday homes to harbours, nature and agriculture. Depending on the decision with regard to the regulated lake level in the future, this land might be drowned and the level of coastal safety could decrease. This created a sense of urgency that provided a venue for building with nature pilot projects. The advice of the Veerman commission with regard to the water level led to commotion in regional and local politics. All relevant regional political actors were rather outspoken against a rise of the lake level at forehand. This created a firm advocacy coalition against the national coastal safety plans.

In this context of tensed relations between national and regional (semi) public organizations an opportunity for BwN pilots emerged. During a meeting at the ministry, a civil servant suggested to focus on the Frisian Ijsselmeer Coast. The idea was to line up with regional actors and to initiate BwN pilots at the Frisian Lake-Ijssel.

For the content, the aim was to connect to Atelier Fryslan. Atelier Fryslan was an initiative of the province to develop ideas and concepts to boost spatial quality. This included an initiative regarding the future of the Frisian IJsselmeer coast. These plans included major elements of building with nature philosophy. A follow-up, however was not yet on the agenda. As always the step from futuristic policy concepts to policy proved a huge one.

The building with nature pilots could prove to be the catalyst, an opportunity to experiment and find out how well it really works and get grip on the potential. For the regional politicians it also provided an opportunity to profile themselves as being keen on innovations.

Participation in the pilots was considered important in the region: in order to enhance knowledge and experience and to demonstrate a constructive attitude to the national government. Also an argument was to hook again to the issues of management of the lake, a domain of governance that was not prioritized for a long time. To some extent Atelier Fryslan was no more than a space to experiment with new concepts and approaches for the involved professionals and governors. Direct implementation certainly was not a core concern in Atelier Fryslan.

It did however not change the position of regional authorities as far as being in a coalition against the planned lake level rise. For this at first sight paradoxical situation, the explanation is that participating in the process would facilitate regional strategies to influence the lake level discussion. Playing in different arenas was considered a good strategy. Just opposing the safety challenge was considered not feasible given the huge impact of the committee Veerman report (2008). Regional actors think that participation in multiple processes in the region and at higher scale levels will pay off. The idea is that this will lead to new options, will broaden the discussion and in the end will lead to better outcomes.

## 4.1. Persuasion through video

The regional civil servants hesitated to cooperate and develop the pilots. For them, somehow the ideas seemed not to fit in political discussions, they needed political empowerment. It was decided by the Building with Nature initiator of the experiment to produce a small movie<sup>1</sup> and to include high level regional politicians and professionals in the movie, in order to speed things up by offering political empowerment. The initiator of the pilots contacted a group of authorities: the deputy of the province of Friesland, the chairman of the Water Board Wetterskip Fryslan and the director of the NGO It Fryske Gea. Wetterskip Fryslan covers the entire area of the province of Friesland, It Fryske Gea manages designated nature protection areas and culture heritage of the province. The movie presented the climate challenge and ecodynamic design as a promising policy strategy.

The movie was presented in November 2009 and uploaded on Youtube. This waved the political empowerment flag to the workfloor. It was expressed that the regional water board, the executive office of the ministry of Infrastructure and Water Management for the IJsselmeer area, It Fryske Gea and the province of Friesland would join forces. The video prepared the ground for Ecoshape-BwN to connect to other relevant actors and resources. The entrance ticket to the deliberation process with stakeholders to specify the exact location and details of the pilot was in the pocket of the BwN case manager.

## 4.2. Political Agreement

With shelter and support of expressed political preference for eco-dynamic principals in order to adapt to climate change issued, the momentum increased. Shortly after new deliberations with predominantly civil servants led to an informal decision to move forward. Early 2010 discussions on how to organize a steering and project group at the province of Friesland slowed things down. Renewed high level deliberations led to support; however no acceptance of financial responsibilities was yet established.

For the experts, having the entrance ticket in their pocket, the practical issue under study was finding the right spot and designs in order to prepare experiments and find out which constraints should be met. This in order to prove that the water, wind, waves, soil and ecobuilders' interactions as expected by models would really appear. In this task the work done in the context of Atelier Fryslan proved a good starting point. In the end three pilots were de-

<sup>&</sup>lt;sup>1</sup> http://youtu.be/Mo3kFBH3y5Y

veloped. All make use of the predominantly south-westerly wind and waves. Each pilot includes a nourishment of a planned 20,000 m<sup>3</sup> sand some distance from the shore.

#### 4.3. Pilot Workummerwaard

In pilot 1, at Workummerwaard, a semi permeable row of piles is built to promote sedimentation. It Fryske Gea wanted to revitalize its natural coasts by initiating dynamics of sedimentation and new ecological successions. The coasts were paralyzed after the damming stopped the tidal motion eighty years ago. In this pilot It Fryske Gea lined up as the building with nature 'champion' among the building with nature champions, really motivated to experiment and learn how well this might work. To some degree even not related to the conflict between national and regional governments about the future increase of the of lake level, which of course is crucial for the nature areas outside the dikes. After studying morphological and ecological processes a plan was made and the impacts on nature values were predicted. Afterwards a carefully designed monitoring plan was made, including a network of several kilometers fibre optic cables. This led to some complexity in procedures due to the fact that additional information was necessary since this infrastructure had to be included in the permitting process. In a public information session it became clear that the public had no objections regarding this pilot.

#### 4.4. Pilot Mirdummerklif

A second pilot was planned at Mirdummerklif, where the pilot aimed at natural sedimentation in order to avoid dike strengthening. The Frysian water board was interested because creation of shallow foreshores could potentially be a relatively cheap alternative for dike reinforcements. Also in this pilot up to this moment – construction still has to start in 2012 – no serious objections were presented. One of the interesting aspects is that the jury is still out whether the nourishment of sand is really necessary or whether a simple design to enhance the sedimentation process locally, is sufficient.

#### 4.5. Pilot Hindeloopen

The third pilot at Hindeloopen connected to recreation. The pilot quickly ran into severe opposition. Inhabitants such as recreational entrepreneurs of Hindeloopen and a harbour manager opposed the plans. Based on previous experiences they doubt whether nourished sand will be transported by natural processes to the beach. Instead they believe that this will not happen and the additional sand will hinder leisure activities such as swimming and shipping because it will contribute to sand shoals. They referred to disappointing experiences in the past with efforts to improve the coast. The knowledge and models of the BwN experts were discussed by the opponents. The BwN manager skilfully succeeded in getting the people that participated in an information meeting in a seemingly more open discussion. This was done by expressing the principle that the pilot will only be realized in consent with the local stakeholders. The debate on the future of the coast develops into an exchange and brainstorm session. It was decided upon that the plan would be revised and then presented again. Afterwards it proved that also this revised plan did not encounter enthusiastic reactions. After some further efforts the initiator of the pilot came to the conclusion that consent could not be found. An innovative pilot that uses the local natural processes and at the same time is welcomed by the local stakeholders was therefore not found. The local stakeholders perceive that they experienced too much disappointing experiences with coastal measures, that they were not willing to experiment with their coast, they feared that from their perspective the situation would become worse. So only measures with almost no uncertainty were acceptable. Realizing such a not so innovative project was not an option for the initiator of the pilot.

### 5. Discussion

Prudently one might suggest, as will be concluded below, and is also concluded elsewhere (Van Slobbe and Lulofs in Terra et Aqua, 2011) that an alternative strategy might have increased the change of connecting to the Markermeer are: the chosen route was to connect to professionals and not to the politicians. Connecting to both proved essential for project success. NMIJ and TMIJ connected with regard to the chosen design discourse. NMIJ was not open for alternatives at that time. There was no political support for an alternative. The connection with the Frisian IJsselmeer coast also depended heavily on explicit political support (connecting).

At the level of capable professionals in TMIJ the perceived space to maneuver given the perceptions of involved actors with regard to complexity, uncertainty, risks and political pressure, was just too small. The coalitions were too busy connecting the national level with the decentralized level, connecting the administrative ambitions with the NGOs and stakeholders and dealing with the challenge of regulations. A prominent leading governor explained this as a pressure cooker: when the pressure builds up, at some time it becomes impossible to open the cooler, this refers to timing: being in before the discussions and plans become inert for some time, only when the debated decisions are taken and accepted, there might be possibilities to participate from the outside. The pilots realized at the Frisian coast were introduced in a relatively fresh policy process, there were relatively few lock-ins and coalitions were still seeking for ideas, arguments and teammates (timing).

The resemblance between Nature Inclusive Design and Building with Nature principles was in early 2010 acknowledged by a leading politician, however also it was discussed how much the situation was politicized, complex and risky before, if building with nature would have chosen to approach him earlier, in order to connect to NMIJ through TMIJ, it was uncertain whether that would have made a difference. However one also has to realize that meanwhile Ecoshape BwN consortium developed itself, implemented pilots, among which the pilot Ijsselmeer and became a more prominent and respected coalition (reputation).

## 6. Conclusions

Wrapping up our analysis we answer the two structuring questions as follows:

1. What can be observed concerning how experiments are connected to windows of opportunity in multi actor- multi scale systems of policy-makers and stakeholder?

From the Mij pilots it became clear how much the TMIJ and NMIJ processes were locked up because of how the actors framed their problem definitions and perceived potential solutions to facilitate chosen policies. The window of opportunity had already passed at the moment building with nature arrived – and was filled with a different initiative. With regard to the Frisian coast a more or less similar situation was encountered: the potential lake level rise, the conflict between national and decentral governments opened up a window of opportunity that was not already taken like in the TMIJ/NMIJ case. And more than this, the solutions sought after were already predeveloped in the Atelier Fryslan venue. The only real intervention that was needed was to mobilize explicit political support to connect emerging problem definitions to the preferred solutions, application of building with nature principles. This was done by presenting it as a joint learning process that might provide stepping stones towards policies. In the case of the Mij pilots it is clear that attempts to connect to NMIJ failed due to the lack of openness. There was a process of joint learning going on in TMIJ and NMIJ, however this focussed strongly on the concept of Nature inclusive Design.

In TMIJ and NMIJ BwN development and design principles played not really a role. Certainly it is true that there are similarities between BwN and Nature Inclusive Design principles, however in NMIJ, due to political issues in TMIJ, the program of developing measures to enhance the ecological quality was developed separately from the other human ambitions.

At the Frisian coast there was already a venue for joint learning created: Atelier Fryslan. Initiated by the province, however also other relevant organizations participated. Due to the fact that there was no immediate political ambition connected to Atelier Fryslan it acted as an open arena for joined learning. One has to observe that due to the fact that there were no immediate consequences in terms of programs and policies, the involvement of stakeholders and citizens was limited. The BwN pilots were presented as a follow up of Atelier Fryslan. Whereas these pilots had immediate consequences political support for them was necessary in order to create the setting in which connections could be made. And indeed actors lined up, there was political support to innovate, civil servants became interested and joint learning with regard to the potential of building with nature principles started, also from the perspective of connecting to regional and local issues and problems.

2. What can be observed with regard to lessons and best practices in how to experiment in multi actor- multi scale systems of policy-makers and stakeholders?

In order to realize pilots one has to connect to an area and stay connected. This unfolds in four basis issues of attention:

(1) Seeking for and finding windows of opportunity. For the Ecoshape BwN pilots at the Frisian coast a connection was made to an existing venue for joint learning called Atelier Fryslan. Initiated by the province, however also other relevant organizations participated.

(2) Political support is important for connecting. For the Ecoshape BwN pilots this was done by producing a video in which influential governors expressed their support and expectations, a video that was exploited wisely to mobilize others. Visits of high ranking officials can create an atmosphere of support, if exploited properly.

(3) Finances have to be sought after. For the Ecoshape BwN pilots this was not an easy job, funds for blue nature are hard to find, finally a financial patchwork was created (See Smit and Lulofs, 2012).

(4) Stakeholder management is crucial: This refers to process management aspects such as management of expectations, communication on effects and risks, argumentation on content and necessity, juggling and integrating interests and dealing with opposition as well as and adequate stakeholder management. For the Ecoshape BwN pilots this in the end resulted in two successful pilots and one initiative that was reframed.

Unwrapped into greater detail the following observations and lessons are derived from monitoring the Frisian Building with Nature pilots Workummerwaard, Hindeloopen and Mirdummercliff and perceptions of governors and influential experts:

- Determine the location and scale of Building with Nature experimental areas carefully. Avoid the risk of discussions of potential damage by choosing spots with a low ecological quality and value. This might suggest small scale initiatives in order to avoid resistance and proof the value of the approach. However the natural mechanisms in eco-systems are often if not always not small scale. The effects of small scale initiatives might be hard to prove. For instance mud/sludge models suggest large scale initiatives. So experiment on as large a scale as possible; however large initiatives attract resistance and require substantial finances.
- Experiment in an environment in which no socio-economic vulnerability is connected to the outcome of the experiment relevant. And if there are, building with nature pilots should connect to existing problems as they are perceived in the area. Uncertainty by the stakeholders whether the pilot improves the situation endangers the pilot.
- At least assess carefully the ownership and user rights, stakes and positions and assess
  the history of the area. Not investing in scanning actual socio-economic characteristics, actor relations and conflicts in the past is very tempting in building with nature.
  Building with nature is based on assessment of complex hydrological, morphological
  and ecological characteristics of eco-systems and the interaction between these characteristics. That is a demanding task as it is. Early participation of stakeholders is however also on the building with nature agenda in order to integrate with human ambitions (socio-economic characteristics and history of area).
- In situations in which no opposition from stakeholders is expected a so called participatory model is sufficient, this implies building a coalition that consists of governors (bestuurders) and civil servants (beleidsambtenaren). Connect to both. Additionally in

situations where there is a vulnerable socio-economic system a participatory model should be considered including companies (bedrijven), interest/sector organisations (belangenorganisaties), citizens (burgers) and administrators (beheerder).

- Be aware of the multi-level fallacy: On a larger geographical scale often the participation of interest organizations at a sector level is sufficient; however at local level it proves that individual stakeholders often in no way feel represented by their sectororganizations. Having the province committed to the coalition by no means implies that the municipality is also cooperating. Connecting to the municipality by no means implies that local recreational entrepreneurs will not oppose.
- Be aware that dynamics in eco-systems are controllable and amendable. For support it is important that the message is not that it is up to the forces of nature and we will see what happened, the message has to be that careful well underpinned interventions steer and manager the natural mechanisms and processes.
- The public and governors are skeptical about models; visual results such as the Sandengine provided the best marketing.
- Support from powerful politicians was gained by the making of a video. The impact of the video, which showed the support of authorities, was used.
- One of the issues that was debated regularly is whether the level of dynamics in the eco-system in the area will uphold the ambitions of Building with Nature. Interviewees have varying opinions on this for this area. The pilots have to clarify this issue that is clearly linked to the recommendations with regard to scale above, the jury is 2012 still out on this, though monitoring of the pilots indicate that the expected patterns occur, however also unforeseen dynamics are observed.
- The impact of applying multimedia can be large. For the Ecoshape pilots a video was produced that expressed political commitment. It proved necessary and essential as entrance ticket to start cooperation with others and it facilitated cooperation continuously. In fact in this video two essential strategic factors were combined: influential advocates, the involved governors, expressed their support and a repetitive instrument was available to boost support. Also organizing visits of influential people, the 'champions' can make the difference.

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