# CASE STUDY

# CO-PRODUCTION AND PARTICIPATION: TWO MAGIC WORDS?

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- Consequences of co-production In this era of growing challenges and shrinking budgets, governments are tempted to redefine some of their responsibilities. Fortunately for these institutions, the call for more public participation is answered by societal actors such as citizens, companies and societal organisations aspiring to step in. Co-production occurs, when governments work together with societal actors to find policy solutions. The final decision-making authority in such cases is still with the governments, but they are committed to the solutions developed with the societal actors.1 However, within these co-production processes, either governments or societal actors can be in the lead. Starting from the assumption that governmental institutions and societal actors have different interests and drivers, this article explores the consequences of societal actors taking the initiative in terms of involved actors, interaction and cooperation. In this contribution, we elaborate some of the consequences of such a shift in governance by examining a societal initiative resulting in a pilot at the Houtribdijk. This pilot investigates sandy strategies in low energy water systems for their potential for flood protection. This pilot is in contrast with the government-led dike reinforcement project at the Houtribdijk.
- In this case study setting, especially two questions are explored:
- a If civil society takes the initiative, and that initiative is managed by co-production, what are the consequences in terms of involved actors, interaction and cooperation?
- b How do civil society initiatives perform, when it comes to stakeholder management in the preparation of a water infrastructure project, in comparison to the standards that governmental institutions have set for themselves when carrying out water infrastructure projects?

The focus of this article, thus, chooses to discuss what happens, if a government withdraws, a societal initiative emerges, civil society takes the lead and includes other governmental institutions for realization. The reason for this focus on societal initiatives is that governmental institutions are legally bound to rules and procedures granting fair inclusion of stakeholders and interests. Of course, they also have to adhere to rules emphasising budget control and outcomes useful for all. However, citizens and companies have different interests and priorities; in general, they tend to perceive much smaller-scale problems and pursue their own interests. Furthermore, societal actors are less subject to accountability. Hence, the degree to which societal actors target large-scale societal problems and subject themselves to strict accountability criteria is low. So they might not only take initiatives but also do things differently. Whether this pattern appears with regard to stakeholder participation might be an appropriate strategy to signal the consequences of the described shift in governance.

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### Experimenting at the Houtribdijk

This case study considers a water infrastructure project in which civil society takes over and government is just one of the stakeholders. As an example the Dutch case of the pilot Houtribdijk is taken. The construction of the Houtribdijk was finished in 1976. This dike was supposed to form the first part of the reclamation of the Markermeer, a part of the IJsselmeer. When it turned out that the Netherlands did not need more agricultural soil, the land reclamation plan was dismissed again. Nevertheless, the dike remained in place and is nowadays an important traffic connection between Lelystad and Enkhuizen. As a result, the Markermeerside of the Houtribdijk which was dedicated to be reclaimed is not flood proof. Hence, a large dike reinforcement project has been launched to fix the situation. The figure "Location of the project" shows the Houtribdijk separating the IJsselmeer and the Markermeer and zooms in on the concrete location (Figure 1).2,3 It

also shows the exact location of the sand deposit. The case concerns an infrastructural pilot project – started by a consultancy – to increase the knowledge of innovative sandy solutions in low energy water systems. This pilot case was initiated as a result of the discussions that took place in the government-led dike reinforcement project Houtribdijk. Both projects are not formally related, though. Although sand does play a role in the dike reinforcement project, it does so to a lesser extent than the advocates of innovation by sandy strategies suggested. The follow up pilot can be considered as a societal initiative. Below, the pilot case is described. The case description is followed by an account of how several interviewees perceived stakeholder involvement in the case at hand. For the purpose of this case study we have interviewed project managers from Arcadis and Rijkswaterstaat, the project's contract manager and employees of the funding and dike management organisation of Rijkswaterstaat.



Figure 2: Work in progress

## Origins of the Houtribdijk pilot

The origin of the idea to explore the safety performance of a sand deposit at the Houtribdijk is uncertain. However, the evidence points towards the consultancy Arcadis as the first to come up with the idea. When studying the wave dynamics at the Markermeer side of the Houtribdijk, Arcadis experts wondered what the effect would be of a sand deposit at that location on the safety performance of the dike. Arcadis then suggested building a dam wall as a lockup construction, putting an amount of sand on one side and examining the wave effect on this sand body. The dam wall as well as construction activities may be seen in the figure "Work in progress" (Figure 2).4 The opportunity to carry out this idea opened up, when the dike reinforcement project for the Houtribdijk searched for feasible dike reinforcement solutions. During the initial phase of that project, large uncertainty about the costs of a sandy solution for this project persisted. At this point in time, the Corporate Innovation Programme of the Dutch public works agency Rijkswaterstaat got involved. A member of staff of this Programme contacted the Ecoshape Consortium<sup>5</sup> – of which Arcadis is a member – and suggested to research the costs and benefits of sandy solutions in this type of environment. According to the pilot project manager, there was also a desire at the national level to carry out such an experiment to gain more insight in low energy water systems.

Specifically, the two main aims of the experiment at the Houtribdijk were:

- Showing that sand really works as an option for flood protection
- Reducing the existing uncertainties about sandy flood protection solutions

For example, the latter concerns the frequently reported potential cost advantages. But there are also other additional values that are inherently or can be intentionally linked to sandy flood protection options. Last but not least, another envisioned outcome of the pilot could be the formulation of assessment criteria for sandy flood protection options in low energy water systems.

#### From idea to realisation

Next, Arcadis took the lead to develop the idea together with the dredging companies Van Oord and Boskalis, both members of the Ecoshape Consortium. At the time, the flood protection programme (HWBP) at the Dutch public works agency released funds for innovations. These funds fall under the funding programme 'Naturally more favourable' ('Natuurlijk Goedkoper').<sup>6,7</sup> The resulting proposal concerned an amount of €3.7 million. However, the total project

budget for the pilot project amounted to €4.4 million, because the Ecoshape project partners also contributed €0.7 million. This total budget is rather small compared to full-scale infrastructural projects in the Netherlands. Due to its experimental character and size, the project did not qualify for an obligatory environmental impact assessment with its criteria for public participation and stakeholder management.

From the start, the innovation department of the flood protection bureau was captivated by Ecoshape's idea. Nevertheless, it took the flood protection bureau a lot of effort to move Ecoshape to develop the idea into a concrete project plan. It must be said that Ecoshape had a hard time forming an effective project organisation, also because the personnel capacity was low at the public works agency and Ecoshape had to invest time and work in advance.

The project organisation's initial vagueness was also noticed by the dike manager8 at the regional office of the public works agency. Hence, the dike manager took up a wait-and-see attitude towards the pilot project. In the end, Ecoshape succeeded in forming a project organisation, which roughly aligned with the integrated project management approach (IPM). The definitive project organisation was composed of staff from the public works agency and the involved Ecoshape parties. Due to this cooperation of public and private parties, the project manager sees the pilot project as a classic example of co-creation. In the final plan, the division of tasks was as follows. From Ecoshape, the dredging company Van Oord/Boskalis is the contractor, the consultancy Arcadis deals with the work-plan and consultancy Deltares is concerned with monitoring. There are two parties to be distinguished at the public works agency: the dike manager at the regional agency and the flood protection programme as funding organisation.

#### **Construction & monitoring**

On 20th May 2014 the building contract was signed by the public works agency and Ecoshape. All the preparations – research, reports and permits – took eight months to be completed. The project organisation intended to realise the project within a timespan of six weeks and before the construction industry holiday began.

The location of the pilot is about halfway along the dike at Trintelhaven. As mentioned, the final plan contains the construction of a 150m long dam wall. The dimension of this dam wall is based on underground measurements. Besides, calculations have been made for estimating the effect of the pile-driving for the dam wall on the dike. The location has also been examined for explosives and archaeological relics. The pilot will include the deposit of 100.000m3 of sand with 30.000m3 as reserve. The sand is divided into four stretches of 100m. Two stretches will have a steeper slope than the other two. In both segments, one stretch is planted artificially, while the other stretch is allowed to grow over at random. By this setup, the project organisation wants to research the relationship between plant coverage and waves. The location is monitored on several aspects: meteorology, hydrodynamics, morphodynamics and vegetation growth. Monitoring will continue until 2018.

# Public participation & stakeholder management

For a number of reasons, the pilot project was reactive in its stakeholder management. Firstly, no participation requirements were set by the funding organisation and the dike manager. Secondly, the pilot is a small-scale, technical experiment where a small project organisation suffices. That is, only the applicant (Ecoshape) and the public works agency (dike manager, flood protection programme) are involved in the project. Thirdly, the intended location of the pilot is far away from cities and other potential stakeholders. It seems that the project organisation assumed that no other stakeholders exist who need to be involved in the project.

The project organisation is aware of the importance of the dike manager in the process. It is stated that intensive consultation is needed to come to a better result. Also, other stakeholders are assumed to be convinced and enthusiastic. On the contrary, in reality the dike manager feels too little involved in the preparation of the pilot project. He states that he has adopted a conservative and wait-and-see attitude, because in his opinion he was confronted with settled facts and a vague project organisation.

#### **Conclusions**

In this empirical case, "co-production" and "stakeholder participation" cannot be labelled magic words. Contrary to the requirements set for government, the stakeholder management applied by Ecoshape was reactive and only focused on realisation. Funding and permitting was handled by connecting to two stakeholders only. The societal initiative did not connect to all relevant stakeholders sufficiently. Some of the relevant governmental agencies were not amused by the lack of communication and stakeholder management by the private initiative. Nevertheless, the fragmentation and lack of communication that emerged between relevant governments themselves is also apparent and could also be highlighted.

# SAMENVATTING

In de Pilot Voorlandoplossing Houtribdijk experimenteert het Ecoshape Consortium met innovatieve zandige strategieën. Daarbij staat centraal hoe zandige oplossingen ook in binnenmeren aan de waterveiligheidseisen kunnen voldoen. Daarvoor is onder meer ontwikkeling van de nog ontbrekende toetsingscriteria noodzakelijk. In deze case study besteden wij aandacht aan een aantal aspecten van governance van dit project, en vergelijken deze met overheidsgestuurde coproductie van natte infrastructuur. Vooral wat betreft betrokkenheid van actoren, communicatie, afstemming en samenwerking is er een ander patroon aangetroffen. De casus suggereert namelijk dat privaat geleide coproductie afwijkt van de participatiestandaards van de overheid: Ecoshape paste een realisatiegericht en reactief type omgevingsmanagement toe. Gezien deze casus kunnen coproductie en participatie niet als magische woorden bestempeld worden in privaat geleide coproductie.

#### **ACKNOWLEDGEMENTS**

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- 3 Steetzel, H., Ouwerkerk, S., & Fiselier, J. (2013). Proefsectie Voorlandoplossing. Toepassing voor Houtribdijk (p. 76). Zwolle., p.32
- 4 https://beeldbank.rws.nl, Rijkswaterstaat/Harry van Reeken
- 5 This consortium of universities, commercial consultancies and dredging companies aims at developing the wet infrastructure while creating opportunities for nature.
- 6 Lenselink, G., Beumer, V., & De Wit, S. (2014). "Kansen zien, kansen pakken": Verkenning kennis- en innovatieprogramma Eerste Fase MarkerWadden. Delft.
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- 8 The dike manager is responsible for keeping the dike in order and has to give permission for projects such as the Houtribdijk pilot.
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