

# The Dutch Delta Approach

## The Successful Reinvention of a Policy Success

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### Introduction

Many foreigners are amazed when they visit the Netherlands and are told that 26 per cent of this country is below sea level and 60 per cent of the country is susceptible to flooding. And, to make it even worse, the flood-sensitive area is densely populated: the main cities of the Netherlands (The Hague, Amsterdam, Utrecht, and Rotterdam) all are located in the part of the country that is below sea level. However, after the disastrous flooding of 1953, the Dutch produced an unparalleled success story in protecting their delta against flooding. They established a legal framework of high norms for flood protection and realized a series of massive infrastructural works. A powerful institutional regime of a semi-autonomous national implementation agency (Rijkswaterstaat, the executive agency of the Ministry of Infrastructure and the Environment), dedicated regional water boards, and a well-developed expert community maintained this framework. It turned the Netherlands into one of the best protected delta areas of the world and the international benchmark for effective delta management.

More recently, the Dutch successfully reformulated their ‘delta approach’ in order to adapt to the possible but uncertain impacts of climate change. There were no apparent policy failures as a trigger for this policy reform, but the necessary trigger for this ‘policy update’ was deliberately invented by installing a high-level, independent advisory committee that advised the Dutch government about how to deal with climate change. Their advice was used to initiate a new national Delta Programme under the stewardship of an independent national Delta Commissioner. As part of this programme quite a few important elements of the current policy were revised. Most importantly a paradigm shift was realized from a prevention-oriented policy towards a more risk-based orientation. In the international community the Dutch delta approach is seen as a hallmark of quality, effectiveness, and robustness.

The reinvention of the Delta approach is an exercise in *policy maintenance* (Hogwood and Peters 1982): reinventing a policy in order to enhance its lifespan. The case of the new Dutch Delta Programme is remarkable in part because it went

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one step beyond maintenance: it successfully reformulated the paradigm behind the Dutch delta approach before the existing paradigm had demonstrably failed. And so it is also an example of an anticipatory policy style (Bovens et al. 2001). The case raises the question how we can explain that already efficacious policies are successfully reinvented before their initial success has been exhausted. After all, reinventing successful policies is not self-evident. Path-dependent incremental adjustment is the much more likely long-term trajectory of a successful policy regime. Moreover, a policy network's core competencies (ways of working in which it is highly experienced and thus very good) can easily become so deeply institutionalized as to narrow the scope for adaptation, learning, and innovation of current routines.

In this chapter we demonstrate how the Dutch Delta Programme—devised as an external driver injected into the existing policy sector to come to a revision of the Dutch delta approach—can be seen as a successful device to combine exploitation (sustaining the successful elements of the former flood management regime) with exploration (developing new strategies and avenues to deal with new challenges related to climate change).<sup>1</sup> First, we assess the case as one of successful reinvention. We then delve deeper into the way in which the Delta Programme accomplished this reinvention and look for possible explanations why an already successful policy could be successfully reinvented. In the final part of the chapter we probe these potential explanations more deeply and articulate a set of lessons for policy reinvention that might be drawn from this case study.

### **Reinventing a Success Story**

The basis for the successful Dutch delta approach can be traced back to the major flood of 1953. This flood resulted in more than 1,800 casualties, 100,000 people lost their homes, and 150,000 hectares were flooded. Total damage was estimated at 1 billion Dutch guilders. Twenty days after the flood the Dutch government installed the Delta Committee tasked with advising the government on how future catastrophic flooding could be avoided. This committee—mainly composed of civil engineers—presented a Delta Plan with proposals to close off all major sea arms and to shorten the coastline by 700 kilometres. Alongside the plan new flood norms for the whole country were proposed.

During the half century that followed, Dutch water management was remarkably effective in preventing new floods from occurring. In 1993 and 1995 two 'near-miss' riverine flood events took place during periods of extreme water levels triggered by a confluence of weather events and erosion impacts upstream. In 1995 more than 250,000 people had to be evacuated (Rosenthal and 't Hart 1998). These near floods constituted a wake-up call. Past success could not be allowed to breed complacency, and the result was a new law to hasten the implementation of

dyke enforcements along the main rivers (Delta Law Main Rivers), because many necessary enforcement projects were overdue. This law was followed by a programme 'Room for the River', consisting of thirty-nine projects aimed at enhancing the discharge capacity of the rivers. This programme again was a success. On time and within budget (2 billion euros) the thirty-nine projects were implemented to enlarge the discharge capacity by giving the rivers more room. In addition, a couple of innovative and multifunctional projects were realized and new nature development was accomplished (Van Buuren et al. 2013).

Until 2008 the main focus of the Dutch flood policy was on guaranteeing a high level of flood protection. The norms for flood protection were linked to the probability of flooding. This is quite a unique characteristic, because it is more logical to base such norms on the risk (probability and consequences) of flooding. The First Delta Committee had proposed such risk-based norms, but they were never developed due to the technical complexity of formulating them. The strong prevention-oriented focus, however, fits well in the Dutch culture of keeping the water at a distance: most Dutch people feel themselves safe behind the dikes and are convinced that the dikes prevent flooding. Their risk awareness is low, especially because of their strong belief in the quality of flood prevention.

Until now the Dutch have been perceived as very successful with their flood protection policies although it is quite difficult to prove just how successful. The Dutch delta approach is regarded as a world-leading example of keeping dry feet in low-lying delta areas, but we only know whether it performs well when a super-storm (around once in 10,000 years—the norm for the water defences in the Netherlands) hits the Dutch coast. Nevertheless, the Netherlands is seen as an international hallmark for delta management. And the societal support for the yearly investments in flood protection is quite strong, although local enforcement projects were sometimes quite time-consuming due to resistance from local residents.

But even successful policies need maintenance and adaptation as their operational and socio-political environments change, or—as in this instance—when 'events happen' that have a game-changing significance. Following a wave of alarming reports about the scope and possible impacts of climate change, in 2008 the Second Delta Committee was installed and presented a highly influential report. The committee reminded the government and the public at large that the Netherlands could not assume that in the decades to come its post-1953 infrastructures and governance arrangements would suffice to maintain current levels of safety. It called for a concerted approach to discover what was needed and advised the installation of an independent national authority to coordinate the effort. It also called for setting up a national fund for the purpose of safeguarding the availability of enough financial means to cover the presumably significant costs of infrastructure updating and other new measures that might be deemed necessary. Due to effective boundary work with the national cabinet and a powerful media

campaign, the government accepted the committee's recommendations within a week of their presentation. It prepared the Delta Act that called for an annual presentation of a Delta programme, a new authority (the 'Delta Commissioner'), and the instatement of the Delta Fund.

In 2010 the first Delta Commissioner took office. Following a four-year fact-finding, community-building and collaborative policy design effort, Kujiken—a three-time department head and one of the most experienced public sector chief executives in the country—presented five important 'Delta decisions' that would shape the fifty-year programme that was to follow. These decisions articulated new norms for flood risk and devised policy ambitions for spatial adaptation that were to be implemented through regional water governance networks. They were ratified by the Dutch parliament and have since begun to be implemented (see section 'Design and Governance of the Programme' for a more detailed account).

### **Assessing the Dutch Delta Approach**

When we examine the Dutch delta approach in general and the Delta Programme in particular with the PPPE framework for policy assessment used throughout this volume, a picture of fairly comprehensive success emerges (see Table 11.1).

Within the Dutch public sector the second delta approach is often mentioned as a success story and parts of its institutional architecture and programme management philosophy have percolated to other government portfolios and the governance of other 'national challenges' (for example the drafting of the National Energy Strategy or the National Coordinator for Security and Counter Terrorism). The Dutch approach has also received accolades from international institutions like the OECD and others, who hail the Dutch delta's record as amongst the safest worldwide (OECD 2014).

In addition, the Dutch delta approach has become a successful export product. With the help of deliberate policy branding and marketing, the Dutch government sold its approach to a couple of other delta areas (both in developed countries like the United States and in less developed countries like Vietnam, Bangladesh, and Indonesia). A special 'water envoy' was appointed to 'spread the word' and market Dutch knowledge and experience with regard to delta management everywhere in the world. The Delta Programme in other words became a global brand name that clearly contributed to the already strong international reputation of Dutch water management (Minkman and Van Buuren, 2019).

Flood risk safety affects so many people in the Netherlands that there is unwavering public support for robust flood risk safety standards. The entire country has a lot riding on the success of the Delta approach; should it fail, the damage on so many levels would be immeasurable. In short, it is difficult to say who loses or does not benefit from the flood policy. Although the Dutch flood

**Table 11.1** Assessing the success of the Dutch Delta approach

Programmatic assessment	Process assessment	Political assessment
<ul style="list-style-type: none"> <li>• The value proposition is about keeping ‘dry feet’ by safeguarding a high standard of flood protection. This proposition is undisputed.</li> <li>• The policy is based upon the solidarity principle which means that all parts of the Netherlands pay an equal part in flood protection.</li> </ul>	<ul style="list-style-type: none"> <li>• The way in which the Delta Programme arrived at the delta decisions and the regional implementation strategies is valued by the great majority of the involved stakeholders and local and regional authorities.</li> <li>• Decision-making about dyke enforcement is embedded in adequate procedures, although the regional water boards faced difficulties with implementing the necessary measures in time and within budget.</li> </ul>	<ul style="list-style-type: none"> <li>• There is a broad and deep political <i>coalition</i> that supports the policy’s value proposition that sustaining high flood norms is necessary to safeguard economic prosperity.</li> <li>• The Dutch Delta Programme, the national agency Rijkswaterstaat, and the regional water board authorities do have a strong organizational reputation (both within the public domain and among citizens).</li> </ul>
<ul style="list-style-type: none"> <li>• The implementation of dyke enforcement is embedded in intensive participation processes in which the negative external effects are compensated for. The procedures are highly effective to deliver the necessary measures in time.</li> </ul>		
<p><b>Endurance assessment</b></p>		
<p>The focus of the Dutch Delta Programme is upon the long term and measures have a lifespan of at least 50 years. While no assessment is possible at present, at least the programme is explicitly ‘built to last’, and contains important provisions designed to ensure it is adaptive and able to accommodate further changes in the environment.</p>		
<p>The value proposition is broadly supported among the Dutch people and this support is quite stable. The strong reputation of the Dutch Delta approach contributes to the legitimacy of the broader political system.</p>		

risk approach has some distributional effects (people from areas that are not flood-prone pay also for the defence of the flood-prone areas; people that live in the areas directly surrounding rivers have to accept dikes in their backyard although they are mainly designed for people in the hinterland), overall, flood risk is perceived as an issue of collective survival.

The most frequently heard criticisms with regard to the Delta Programme are twofold. One is that the more fundamental decisions are postponed (for example to close off with sluices the Nieuwe Waterweg River, the access to the port of Rotterdam), on grounds that they can be considered in the future, when some of the persistent uncertainty about local manifestations of climate change will be reduced. The philosophy of adaptive delta management is espoused to legitimize a stepwise approach in which small, no-regret measures are prioritized above more fundamental measures which are not necessary yet.

Second, the consensual character of the Delta Programme means that measures that are opposed by some stakeholders are not implemented even though there are serious indications that they need to be adopted. One such example concerns the question whether project developers and land owners involved in spatial development initiatives should be made responsible for taking mitigating measures to reduce flood risk. Until now, the responsibility for managing the water management consequences of construction projects has been shifted onto the water authorities, who however have no veto powers over spatial developments in flood-prone areas and thus are left to pick up the pieces once these developments have been approved. The Delta Programme has yet to address this incongruence.

### **Design and Governance of the Programme**

The Delta Commissioner has been positioned as an independent ('honest') broker between the national government (including between its different departments, e.g. Public Works and Environment, Agriculture and Nature, and Internal Affairs) and the various layers of subnational government (provinces, regional water boards, municipalities). The Delta Commissioner was never designed to become a 'czar'-like figure who can coordinate from the top-down and relies on an expansive bureaucratic fiefdom. The Commissioner was not given any decision-making authority ('hard power'), but instead has to rely mainly on three sources of influence: the power to convene, facilitate, and broker ('soft skills'), the power to report directly to parliament (and thus the possibility to publicly shame non-cooperative parties), and the power to draft the yearly investment programme regarding flood protection and climate adaptation (up to 1.2 billion euros annually). At approximately 15 fte (full-time equivalents), the Commissioner's staff was deliberately kept small and organized as an autonomous team outside the national departments. The overall aim was for the Commissioner and the programme to be

seen as truly ‘national’ interventions instead of as a ‘central government’ takeover of delta governance: a boundary-spanner and bridge-builder among the various governmental layers and domains.

Subsequently, the Delta Programme was deliberately split into regional as well as functional (fresh water, flood risk safety, and spatial adaptation) programmes. Each of these was managed by a programme manager. A Steering Group with broad representation of all relevant government actors was installed to take the necessary strategic decisions. In addition, each programme also has an Advisory Committee on which the main societal stakeholders are represented. This structure contributed significantly to the development of an active ‘delta community’, with annual conferences and network meetings both at the regional and national levels, frequent newsletters, and other forms of communication and interaction.

The Delta Commissioner decided at the start of his activities to work towards five strategic delta decisions that would set norms and directions for the Delta Programme moving forward. Each region had to draft a ‘preferential strategy’ on how to implement these decisions. This regional strategy must be focused on the long-term (2050) and be ‘adaptive’: the possibilities for changing the path had to be explored and possible tipping points and step changes taken into account.

A meticulous iterative approach was used to arrive at the five Delta Decisions and the preferential strategies. Each year one step in the exploration was set. Each sub-programme started with a problem exploration phase. After that, an array of possible strategies was considered and then reduced by selecting the most promising ones. In the final year of the cycle, the preferential strategy was chosen. This approach thus provided a comprehensive, inclusive, and grounded method to first open and then gradually close the strategy development process. It had the twin features of promoting wide search and robust analysis as well as engendering trust and commitment among the parties involved. This was achieved by a strong emphasis upon joint fact-finding (including actively seeking out local knowledge in the regions), inclusive deliberation, and consensual decision-making. The entire process took four years but ultimately the results were widely accepted.

The Delta Programme also kick-started a wide variety of *local and regional pilot projects*. In 2011 a first series of pilot schemes was initiated to explore the idea of multi-layered safety, a new—more risk-based—approach to flood management focused upon the integration of flood protection, spatial planning, and emergency management. Various pilots were undertaken to explore the consequences of new norm settings for flood risk safety. Subsequent pilots started to explore more in-depth the possibilities of using spatial measures and flexible responses to flood emergencies as an alternative to rigid and highly costly protective measures. Regional delta programmes started their own pilots in order to test and adapt their preferred regional strategies.

In 2014, the Delta Commissioner presented the five Delta Decisions which were then ratified by the national government and the parliament. One decision was about the new flood risk norms. Another was about spatial adaptation, also referred to as ‘water-robust planning’, designed to arrive at more risk-neutral forms of spatial development. The Delta Decision on flood risk safety mentioned the possibility of ‘smart combinations’, to provide the opportunity for exceptional situations in which dyke enforcement can be replaced by a combination of measures (by elevating the land, or by realizing waterproof buildings and improving the possibilities for evacuation). Three pilot cases were selected to further explore the possibilities of these combinations. They examined the opportunities for certain areas to opt for a programme of (spatial, infrastructural, and crisis and disaster management) measures instead of only dyke enforcement. The implementation process of the Delta Decisions has a number of defining characteristics that epitomize the Dutch delta approach.

First of all, the implementation path has a really long-time horizon. The new flood risk norms have to be settled in 2050. The new norms guarantee everyone the same level of flood protection. For everyone the risk of flooding (based upon the probability of flooding and the consequences in a certain area) has to be 1 in 100,000 years. That means that there is ample time for making the investments that are necessary for their achievement. Simply put: there is much work to do, but there is also enough time to do it. The new norms have to be translated in new regulations, standards, working methods, and organizational routines. All (primary) dikes in the entire country (with a total length of 3,600 km) have to be reassessed so that actual rather than statistical risk determines whether and how reinforcement measures have to be implemented.

Second, the implementation is planned in an adaptive way: its progress is monitored in relation to the evolution of the impact of climate change and alternative pathways continue to be explored, so that when external circumstances necessitate a change of strategy the system does not have to begin from scratch. The concept of Adaptive Delta Management was coined to underpin this gradualist, learning-oriented approach to implementation.

Third, the more innovative part of the Delta Programme—with regard to adaptive planning and risk and disaster management—is accompanied by soft policy instruments focused upon knowledge development within regional pilot projects, e.g. by providing some seed money to municipalities for hiring expertise and developing communicative steering instruments. Most of the implementation of this ambition was translated into developing a ‘Stimulation Programme Climate Adaptation’ focusing on showcasing best practices, information sharing, and networking.

Fourth, the implementation of the Delta Decisions has been put ‘back in the line’. In other words: while the policy development phase of the Delta Programme was an inter-organizational effort to come to a set of broadly shared policy



proposals, in the implementation phase responsibility has been cast back onto the individual organizations to discharge their own responsibilities by leveraging their own competencies. That means for example that the implementation of dyke reinforcements is not the responsibility of the Delta Programme or the regional sub-programmes, but of the regional water board authorities. To make sure that their activities continue to align with what has been termed ‘the spirit of the programme’, they are obliged to consult provinces and municipalities before they finalize their planning.

Finally, even after the Delta Decisions were formalized, the Delta Commissioner remained in office and became responsible for monitoring the implementation of the Delta Programme. Each year the Commissioner prepares a formal progress statement about the implementation of the Delta Programme for discussion in the national parliament—a ‘soft’ but nevertheless powerful way of ensuring accountability across the system.

### **The Road to Policy Reinvention**

The seminal work of Hogwood and Peters (1982) is most frequently cited when it comes to the question of what can happen when policies are at the end of their lifespan. They distinguish between policy termination, policy maintenance, and policy succession. They observe, as others would do in great detail later, that public programmes are hard to terminate; many of them persevere for a long time (Rose and Davies 1994), sometimes well beyond the point of marginal returns. Ideally such policies are abolished and succeeded. With regard to policy succession Hogwood and Peters (1982: 299) observe: ‘policy succession is conceived of as an instance in which a previous policy, program or organization is replaced by a new one directed at the same problem and/or clientele. Policy succession occurs as a result of a process in which the issue of replacing is put on the relevant political agendas, a coalition is mobilized to authorize the replacement, and the replacement is successfully implemented.’

Policy maintenance, in contrast, is about continuing a current policy. According to Hogwood and Peters, maintenance occurs for several reasons: because the policy is essentially not broken and there are no alternatives to replace it wholesale; because the current policy regime is inert; or because actors failed to terminate the current policy or failed to organize for it to be succeeded with another policy. Their overall interpretation of policy maintenance is thus quite negative. It is a second-best option.

In the decades of research that followed this publication, many have questioned this interpretation. Real-life cases do not match this typology and policies are multifaceted which means that in every case of policy evolution, we can discern elements of maintenance and succession. Furthermore, in the case of policy

maintenance or succession, the main trigger is the fact that current policies no longer suffice. However, many instances of policy change are not triggered by failure. The drivers for change or evolution can be more political and thus can result from changing power positions of different actor coalitions (Sabatier 1988). They can also be more cognitive. In that case, changing insights about the effectiveness of a policy result in policy change. And finally, they can be more ideational: new ideas or discourses enter the political arena, become hegemonic and lead to policy change (Schmidt 2011).

In this chapter we asked ourselves how in the domain of Dutch flood risk management we can explain this case of successful policy reinvention (which can be seen as somewhat more far-reaching than maintenance, but not as dramatic as the invention of a completely new paradigm). The question of how to explain this case of successful policy reinvention (in the case of an already successful policy) is relevant for two reasons. First, most instances of policy succession involve policies that are widely seen to have failed. In the case of the Dutch delta approach, this was certainly not the case: the post-1953 response has widely been hailed as a major success. Also, policy change is more difficult when the policy and its institutional context are strongly path dependent (Pierson 2000; Weaver 2010). The Dutch water domain is often referred to as featuring strong path dependencies, not only when it comes to its institutions and policy ideas, but even in its physical infrastructures and the geography that resulted from centuries of building dikes and dams (Gerrits and Marks 2008; Van Buuren et al. 2016). That makes policy innovation and renewal even more difficult when the status quo is not perceived as problematic.

So, neither condition applied and yet the second Delta Programme constituted a major innovation in this deeply institutionalized sector. There are at least five mechanisms that can explain why this could occur.

*A triggering event overseas was leveraged locally*—When the awareness of the consequences of climate change grew and after the devastation wrought by Hurricane Katrina in New Orleans in the United States, people became convinced that the Dutch delta approach had to be reinvented to prevent a future disaster. As we have seen, in 2008 the Second Delta Committee was installed and presented its highly influential report. This led to the creation of an independent national Delta Commissioner and a Delta Fund to safeguard the availability of sufficient financial resources. The various proposals of the Delta Committee were adopted by the Dutch government.

Verduijn et al. (2012) convincingly argued that the Delta Committee did a very good job in framing their key messages. Even though no crisis occurred, the Committee was highly successful in creating awareness for the urgency of climate change. They were able to put the revision of flood risk policy and management high on the political agenda. This success can be explained when we look at the way in which the Delta Committee framed its narrative, using the story of a

‘common delta identity’ and creating a sense of urgency and collectiveness. To enhance the sense of urgency the Committee successfully constructed a crisis narrative (with the help of historical examples, recent examples from abroad, and by illustrating the potential impact of future disasters).

*The policy arena was successfully opened and operated in a collaborative fashion*—The Dutch Delta Programme was highly successful in mobilizing a broad range of actors to discuss the future of Dutch flood risk management. It invested in a large number of venues that allowed for participation of all kind of actors that previously were not strongly involved in flood risk policy or management: provinces, municipalities, the private sector, interest groups, and others). Some of them were invited to enter the inner circle of the Delta Programme (for example the provinces and municipalities). Others were invited to enter the second ring (such as the regional safety authorities and private interest groups). Those were invited to join advisory committees at the regional and at the national level. The participation of these actors contributed to a more ‘spatial’ and ‘ecological’ perspective on flood risk management. Especially the participation of regional and local authorities contributed to a policy paradigm in which the spatial consequences of flood management are put more central. The strict focus on prevention (deeply embedded in the existing, closed policy community) was broadened and replaced by a wider perspective on risk management.

*Multiple niches were organized as a seedbed for promising ideas*—The Dutch Delta Commissioner was a convinced proponent of exploring new ideas at a distance of the formal policy regime in pilots and other experimental contexts. With the help of some additional budget, external expertise and provisions for positive exposure, many regional governments were facilitated to explore promising ideas and concepts. These pilots were organized in a collaborative way and in close interaction with experts. The yearly Delta Congress was used as a venue to present these pilots and to enable interaction among them. Many of these pilots resulted in promising ideas that were used as arguments for new policy ideas in the yearly Delta Programme.

*New policies (and their authors) were perceived as authoritative*—The piecemeal approach (from problem exploration to drafting the preferred strategy) contributed to the quality and thus the authority of the ultimate Delta Decisions. Joint fact-finding was the common method that was used to establish consensus about the scientific knowledge used. For the Delta Decisions and the regional strategies broad support was made visible (with formal advice, scientific reviews, and so on). The coalition that supported the Delta Programme also possessed authority. It was a broad community in which many representatives of the different public authorities were visible. The national Steering Group was composed of representatives from national ministries, regional and local governments, and water boards. And finally, the person of the Delta Commissioner significantly added to the authority

of the proposals of the Delta Programme. The Commissioner is a very senior and experienced public manager with a broad political and administrative network and an independent position.

*The approach respected and built upon valuable existing institutions*—The Delta Commissioner was quite keen to prevent resistance and alienation among the traditional policy community. His strategy to organize room for policy change can be characterized as a threefold approach. First of all, the existing institutional structure and the existing ways of working were maintained and were used to implement the Delta Decisions. Second, most of the changes were relatively small and most of the time not obligatory (although the new norms of course were!). For example programmes on spatial adaptation were based upon the idea of communicative steering, knowledge governance, and ‘leading by example’. And finally, a really long-time horizon was chosen to implement the Delta Decisions, which gives the involved actors enough time to translate these decisions into their own procedures and routines. By opting for an adaptive approach it is possible to adjust its implementation when new insights make that necessary.

### **Conclusions: The Strength of Consensual Incrementalism**

Many policies are path-dependent and successful policies even more so. Policymakers like to retain and emulate ‘what works’, and perceived success thus is one of the most powerful, self-reinforcing mechanisms that brings about path dependency. The Dutch flood approach focusing on prevention is highly path-dependent and the presence of the many hard flood defences (dikes, dams, and so on) contributes to this path dependency (Van Buuren et al. 2016). This being the case, the Delta Programme’s reinvention of the Dutch approach to flood risk can be seen as an even more remarkable achievement. The gentle break with long-held professional monopolies and their technocratic-paternalistic policy styles in effect constituted an attempt to initiate a process of ‘path creation’ that over time leads towards another direction in Dutch flood management—one that takes a more balanced approach to flood risk in which not only protective measures and big civic engineering projects are important but also spatial policies to reduce impact as well as measures to enhance community and business resilience. This approach is based upon the idea that initiating alternative, complementary pathways for flood management can lessen the dominance of the current path and possibly can lead towards a more resilient balance between prevention and adaptation. The new flood norms form the ‘enabling context’ for such a new approach and are designed to prevent the system falling back into old routines. The new norms legally secure a risk orientation in flood protection. They ensure that not only are the consequences of flooding taken into

account explicitly when programming dyke enforcements, but also that spatial developments that could lead to increased flood risks appear on the agenda of the various governments early on, so they are able to discuss their necessity, consequences, and possible mitigating measures.

From our case we can learn that constructing the wake-up call is really important to open the possibility for reflecting upon an already successful policy and to organize the possibility to change the existing path. There has to be a sense of urgency that the current policy has to be revisited, despite there being no apparent failure. The interesting thing in the Delta Programme case is that the sense of urgency to reconsider the successful existing policy had to be created. This was successfully done by the blue-ribbon Veerman Committee, which provided catalytic leadership through its well-timed use of framing techniques to raise the salience of issue and convince the national government to seriously consider the need for policy revision.

The Delta Commissioner in turn deliberately reframed this urgency. In the first publication of the Delta Programme (2011) the economic importance of safeguarding flood protection in the long run was emphasized in combination with the so-called Dutch sobriety. The need for policy revision was not framed in relation to the quality of the existing policy, but with reference to the future. Revising the current policy was deemed necessary in order to ‘protect future generations against flooding’ ([www.deltacommissaris.nl](http://www.deltacommissaris.nl)).

Reinventing hitherto successful policies might well be more difficult than repudiating and terminating failed policies. The bar creating a credible rationale for it is high, because why would anyone change a winning proposition? In the absence of a self-evident ‘burning platform’, there is a strong need for solid scientific underpinnings and a broad-based, collaborative approach to fact-finding, analysis, and advocacy. The Delta Programme showed many indicators of collaborative innovation (Van Popering and Van Buuren 2017). Through dozens of pilots, novel ideas were explored and tested locally without being threatening for the existing regime. The Delta Programme became a breeding ground for new solutions, many of which were scaled up to the Programme’s policies and practices.

Second, the Delta Commissioner created new venues that provided a much wider array of actors than had been customary the opportunity to influence the revision of flood risk policy and management. The integration of these new actors led to a broadening of the existing policy community, increasing its operational capacity for developing and implementing alternative policy pathways.

The choice for a broad-based consensual approach, one that emphasized gradualism (no rush into big infrastructural works) and joint fact-finding, puts the Delta Programme’s approach into the mainstream of the so-called ‘polder politics’ which has long characterized Dutch water management as well as many other domains of public policy (Hendriks and Toonen 2001). Combined with

the incremental, step-by-step approach to implementing the policy changes, the Delta Commissioner created a safe environment for piecemeal, risk-averse policy innovation. The fact that the trigger for the entire process—the (possible) long-term consequences of climate change—was framed as highly important but not urgent, gave this approach its credibility. It is highly unlikely that in this cultural context another, more top-down and crash-through approach would have achieved similarly good results faster or more cheaply. At the same time, it is also questionable whether this incremental approach to policy reinvention is suitable when the need to adjust flood policies is far more serious and urgent, as is the case for flood-prone communities in less resourceful countries.

It is difficult to predict whether the Delta Programme's success will prove sustainable across the programme's projected lifespan, yet on current indications its prospects are good. Measures have been taken to guarantee the long-term availability of resources. The new flood risk norms have been written into law. Stakeholder support for the philosophy of adaptive delta management—which institutionalizes periodic (every six years) revision of the norms and the measures in order to keep them up to date in the face of changing geophysical and socio-economic conditions—is broad and deep. All this bodes well for the programme's robustness.

The case of the Dutch Delta Programme suggests the importance of an authoritative 'honest broker' supported by a lean but high-quality staff performing catalytic, facilitation, and stewardship roles designed to energize and empower an existing governance network in tackling major new challenges that cannot be effectively addressed using only existing repertoires. It also suggests that there is merit in taking the time and making the effort required to activate and involve a wide and diverse suite of actors; this may be critical in forging a policy community that is willing and able to engage in a collaborative innovation process. Third, the case shows the power of small steps even when tackling complex and large-scale problems (Collingridge 1992). Fourth, making explicit choices early on to preserve those elements of existing practices that function well can contribute significantly to increase support for innovation efforts. Finally, the Delta Programme case suggests there is indeed wisdom in Rahm Emanuel's maxim that policy-makers should 'never let a good crisis go to waste': by 2010, climate change was still a 'creeping' crisis—high threat, major potential impact, massive uncertainty, but no immediate time pressure—allowing for a proactive yet piecemeal, learning-oriented response strategy. There was enough pressure to 'get going' but not enough pressure to generate impulses to go for the kind of dramatic gestures and quick fixes that arise in acute crises. Moreover, the source of the threat was exogenous to the system that had to respond to it, so there were no blame games to dilute the problem-solving energy.

### Additional version of this case

The case study outlined in this chapter is accompanied by a corresponding case study from the Centre for Public Impact's (CPI) Public Impact Observatory—an international repository of public policies assessed for their impact using CPI's Public Impact Fundamentals framework. CPI's framework provides a way for those who work in or with government to assess public policies, to understand why they were successful, so key lessons can be drawn out for future policy work. The case can be easily located in the CPI repository at [www.centreforpublicimpact.org/observatory](http://www.centreforpublicimpact.org/observatory).

### Note

1. This chapter is based upon two different sources of empirical material. First of all, a secondary analysis is made of many different research projects in which the Dutch Delta Programme was analysed. I also used existing descriptions of the Dutch Delta Programme (Van Twist et al. 2013) and a couple of scientific articles (Verduijn et al. 2012; Van Alphen 2016). Secondly, as a researcher, evaluator, and adviser I was involved in a couple of research projects related to the Dutch Delta Programme (Van Buuren and Teisman 2014; Van Buuren et al. 2013; Ellen and Van Buuren 2014; Van Buuren et al. 2015).

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