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Radical or incremental? Assessing experimental policy-based changes in the Dutch fens

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Once a large-scale low-lying wetland, the fen landscape of the Netherlands is now densely populated and intensively used, including for agricultural purposes; and is facing challenges in the management of its water, soil and space. A study uses the complex environmental challenges of the Dutch fens to test the effectiveness of two types of experiment-based policy approaches over time, considering the value of implementing small and incremental approaches versus synoptic, or radical, changes.

A main land use of the Dutch fen landscape is dairy farming, with the Netherlands being the world's third-largest exporter of dairy products. Key landscape challenges include water and soil management, and competition for space between agriculture, conservation and domestic dwellings — each of which has different landscape needs regarding the water table (which must be deep for agriculture, high for conservation, and somewhere in between for residential purposes). The Netherlands has a dense population, most of which lives in and around the western fens, but also houses important species for conservation — such as the black-tailed godwit, with 40% of the species' European population breeding in the Dutch fen landscape.

A number of shared socioeconomic and biophysical challenges are prevalent across the fen ecosystem, making it a suitable setting in which to compare experiment-based policy initiatives, say the researchers of a new study. The landscape also has a shared policy setting based on frameworks set out by the EU on agriculture (such as the Common Agricultural Policy), nature conservation (such as Natura 2000) and water management (the Water Framework Directive). These include deliberative decision-making and decentralised plan-making processes. Nature conservation is managed by the regional authority, whereas flood-water management is overseen by the water board. The variable need for different water-table levels for different land uses, and involvement of multiple agencies, has made water and soil management complex and often inefficient. Identifying which policy approaches work best in such a setting would be useful not only for this particular ecosystem, but also for other complex multi-level landscapes.

European Commission

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Radical or incremental? Assessing experimental policy-based changes in the Dutch fens (continued)

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The researchers analysed two sets of data across seven case studies from the Dutch fen area, regarding experimental policy-based changes. The first dataset included interviews with key stakeholders, from 2006–2009. The second set consisted of one-hour interviews with an individual from each initiative, held in 2018. The latter focused on how experiments had developed, and any aspects that had a major impact on the case studies. The researchers studied two types of experimental policy change — incremental and synoptic (radical) — relating to how the experiments were designed; they explored three incremental and four synoptic case studies[1].

In policymaking, these approaches primarily differ in terms of goal orientation and decision-making style, with incremental approaches focusing more on small adjustments with decentralised bargaining, concentrated on a feasible, widely-supported solution. In contrast to this, the synoptic method is more centralised, expert-informed leadership approach, working towards a comprehensive 'best' strategy for policy change.

The experiments' success was assessed by four 'success factors': drawing lessons (output), realising policy goals (outcome), enabling diffusion (outcome) and improving environmental status (impact).

Overall, the study found that incremental experiments were able to drive minor changes in land-use management in the landscape, whereas synoptic experiments were less successful. In addition, diffusion of novel practices occurred for three incremental experiments even though this was not a set goal for these projects. The initiators of synoptic experiments had higher ambitions for change at the outset than the incremental projects, but these experiments tended to stagnate and face difficulties in implementation, and consequently were downsized over time. Observations regarding levels of conflict among stakeholders, political ambition and regulatory requirements revealed that, in order for change to happen, it was crucial to deal with stakeholder dynamics at a local scale and to embed experiments in multi-level institutional settings. This would include finding solutions to enable locally developed approaches to travel to other sites within the shared policy framework — as this is something which is rarely observed.

The researchers suggest that their findings present a different, and opposing, view on the potential of experiments to bring about radical innovation, as expressed in environmental governance literature. In this particular context of a multi-functional landscape facing environmental pressures, incremental experimental-based approaches appeared to be more effective at enacting change than synoptic approaches — and this may be similar for other intensively-used multi-agency systems, they posit (although results may differ in less complex contexts).

1. One of the incremental case studies used was Polder-Mastenbroek, in which an intermediate water table level was piloted — in the buffer zone between agricultural land and a natural area — as the ideal for each function is the opposite of the other; impacts were monitored. An example of one of the radical case studies used was Groenblauwe-Slinger, where land use has changed from agriculture to nature, including a drastic increase of the water table.