

Towards a legal strategy fitting today's challenge of reducing impacts of subsidence in the Netherlands

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Abstract

This abstract is an update of an accepted paper in the TISOLS 2020 proceedings (<https://doi.org/10.5194/piahs-382-825-2020>). The paper describes how the legal framework might be improved, so that it can contribute to the development of effective policies to reduce (the impacts of) soil subsidence. The update provides a concise overview of the paper and further elaborates on its findings, based on new research. The paper best suits the theme **measures and coping strategies: mitigation and adaptation** and is linked to the societal foci of **strategies & pathways** and **peatlands & GHG emissions**.

Introduction

Reducing the impacts of soil subsidence is one of the main societal challenges for the physical environment in the Netherlands (Rli, 2020). In order to reduce (the impacts of) subsidence, either by mitigation or adaptation, governments should develop effective policies in various policy domains, implemented by financial, legal and factual measures. Policies are changing – a good example is the reduction of CO₂ emissions from peatlands by 1 Megaton laid down in the National Climate Agreement – but the change is often too incremental to effectively address the challenge of soil subsidence. That is not surprising: there are various governance and legal obstacles for effective policy change to reduce (the impacts of) soil subsidence, often flowing from the cross-sectoral nature of the challenge of soil subsidence and the fragmented nature of the Dutch legal system.

Methods

The paper and the update are based on a review of legislation, jurisprudence and legal and governance literature. References to these sources are included in the paper as published in 2020. The update is based on new research, including publications by the authors, to which references are included in this update.

Results

Subsidence as a legal challenge

Soil subsidence is not only a societal challenge, but also a *legal* challenge. First, to fulfil international, EU and national obligations for the reduction of greenhouse gas emissions, the CO₂ emissions from peatlands must be reduced drastically in the (near) future. These reduction targets are enacted in the

Paris Agreement and the Dutch Climate Act. Furthermore, EU Regulation 2018/841 (LULUCF Regulation) obliges member states to ensure that emissions from land use, including emissions from managed peatlands, do not exceed removals from other land use sectors. Second, in so far soil subsidence has or could have significant effects on protected species and habitats in protected nature areas, the Birds and Habitats Directives require that appropriate steps are taken. These legal requirements do not address subsidence as such but do require governments to reduce some of its negative impacts. That in turn means that the underlying processes, most importantly peat oxidation, must be (strongly) mitigated in certain areas. That entails drastic policy changes with considerable societal impact.

Obstacles for effective policy- and decision-making

There are, however, various governance and legal obstacles for such policy changes, which often flow from the cross-sectoral nature of soil subsidence as well as the fragmentation of the Dutch legal system, characterized by a sectoral division of responsibilities over different governments (Van Gils a.o., 2020; Van den Ende, 2022). Soil subsidence intersects with various policy domains, most importantly spatial planning, nature protection and water management. Reducing (the impacts of) subsidence therefore requires policy changes in different policy areas, for which different governments are responsible in the Dutch legal system. Municipalities are primarily responsible for spatial planning, provinces are responsible for nature protection; the governments mainly responsible for water management are the regional water authorities (RWAs) for regional waters and the national government for national waters, whereas municipalities are responsible for some aspects of water management in the built environment (an overview is provided in the paper).

The fragmented nature of the legal system provides obstacles for effective policy change: for example, since RWAs can only make decisions aimed at water-related interests, they cannot reduce drainage in peatlands to reduce CO₂ emissions for the reason of mitigating climate change (Van Gils & Groothuijse, 2021). Even if the legal system does not directly provide such obstacles, its fragmentation could still pose obstacles related to the governance of subsidence, such as a lack of procedural and substantive coordination of policies.

Conclusion: improving the legal framework

What is needed are legal mechanisms or the strengthening thereof that enable effective policy change within the fragmented legal system. Such strategies should not, or not mainly, be aimed at reducing the fragmentation of the legal framework as such. The sectoral division of responsibilities is an integral part of the Dutch legal and constitutional system. Furthermore, different policy domains will always require different policies and these conflicting interests cannot be resolved by institutional changes alone. Possible legal mechanisms that might effectuate policy change are the establishment of a goal regarding the reduction of soil subsidence or CO₂ from peatlands, either in national or provincial legislation or as an environmental value and changing sectoral environmental legislation so that it requires that soil subsidence and its impacts are taken into account in all relevant public decisions, especially spatial planning.

References

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