

Project

Theme 7 | Who Governs Climate Adaptation? Exploring the scope of public and private responsibilities



Research background

Since the late 1990s, adaptation planning is emerging as a new area of public policy across various geo-political scales. Nevertheless, demarcations of responsibilities are often lacking in adaptation policy documents. This is problematic because vagueness of roles and responsibilities is regularly cited as a barrier to the governance of adaptation. Although in practice adaptation planning often appears to be government-led, the involvement of public and private actors in adaptation is widely endorsed by scientists and policy makers. If an explicit allocation of responsibilities facilitates the governance of adaptation, the question arises as to what kind of sharing of responsibilities is feasible and desirable among public and/or private actors for adaptation to climate induced risks. However, the issue of responsibilities is still rather underexplored in the literature on climate adaptation.

Research objective

The research aims to contribute to the governance literature and policy practice on climate adaptation through the development and empirical application of a conceptual framework for the exploration of governance arrangements and the analysis of divisions of responsibilities within them. This will be achieved by:

- *Analyzing* the allocation of responsibilities among public, private and public-private actor constellations
- *Clarifying* these responsibilities in terms of considerations
- *Evaluating* how these governance arrangements perform in terms of effectiveness, legitimacy and fairness
- *Designing* alternative governance arrangements.

Research design

International comparative case study research with cases in the following adaptation themes:

1) Urban water storage (HSRR, 2011)

Green roofs



2) Urban water safety (HSRR, 2012)



Adaptive flood risk management

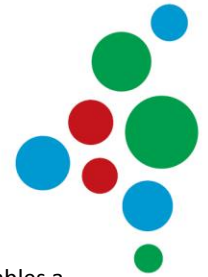
3) Rural fresh water supply (HSZD, 2013)

To be determined



Kennis voor Klimaat

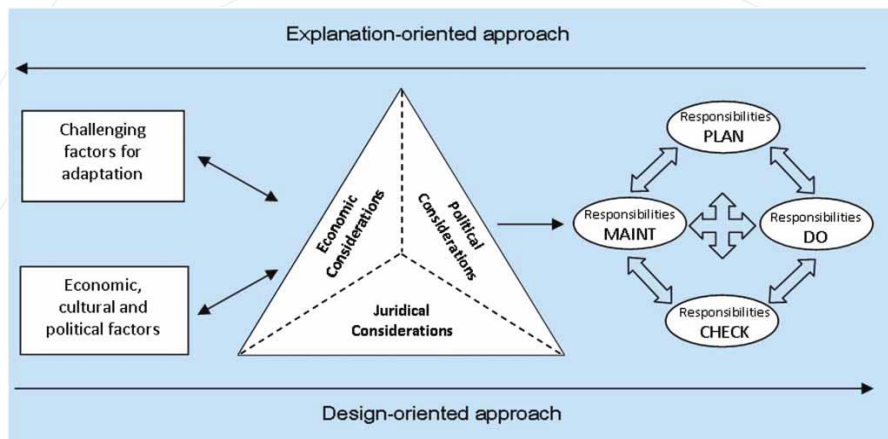
Knowledge for Climate



Scientific result

A conceptual framework (see figure), which helps to explore and analyze divisions of responsibilities in governance arrangements. In particular the framework helps to clarify these divisions in terms of their underlying rationale, i.e. the key considerations that were taken into account as well as how certain challenges to the governance of adaptation might have triggered these considerations. For instance, the consideration of efficiency is a well known rationale for the allocation of private responsibilities.

The benefit of the framework is that it enables a retrospective analysis of existing governance arrangements, as well as a forward-looking analysis for the design of alternative governance arrangements in which case well-informed choices can be made based on the deliberate and conscious application of considerations. An elaboration of the conceptual framework can be found in Mees et al., 2012 (see below).



First empirical results on green roofs (2011)

The theme of urban water storage was addressed by analyzing green roof governance arrangements in five cities: Basel, Chicago, London, Rotterdam & Stuttgart through document analysis (mainly policy documents) and in-depth interviews (58 respondents). The main results:

- All cities show a co-existence of hierarchical and market arrangements. Interactive arrangements hardly exist. In Basel & Stuttgart hierarchical arrangements dominate throughout the process, while in Chicago, London & Rotterdam market arrangements dominate in the later stages of the process.
- Key considerations for public responsibility are 1) securing adaptation action, and 2) rule of law. The key consideration for private responsibility is efficiency.
- The most dominant hierarchical arrangements show a significantly higher performance in terms of proportionate square meters of green roofs installed: public responsibility is salient for getting green roofs off the ground.

More information

See the following publications:

- Mees, H.L.P. and Driessen, P.P.J. (2011). Adaptation to climate change in urban areas: Climate-greening London, Rotterdam, and Toronto. *Climate Law* 2(2), 251-280.
- Mees, H.L.P., Driessen, P.P.J., and Runhaar, H.A.C. (2012). Exploring the scope of public and private responsibilities for climate adaptation, *Journal of Environmental Policy & Planning* 14(3), 305-330.
- Mees, H.L.P., Driessen, P.P.J., Runhaar, H.A.C. and Stamatelos, J. (in press). Who governs climate adaptation? Getting green roofs for storm-water retention off the ground. *Journal of Environmental Planning and Management*.
- Runhaar, H, Mees, H., Wardekker, A., van der Sluijs, J. and Driessen, P.P.J. (in press). Adaptation to climate-change related risks in Dutch urban areas: stimuli and barriers. *Regional Environmental Change*.

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