

Planning never finishes, soil is a continuum

Fransje Hooimeijer

The Spatial Planning and Design with Soil (SPADES) project aims to make European planning systems more soil-inclusive. A planning system includes legislation, regulations, policy, institutions and practices at different levels. But planning is not just about rules on paper – informal practices, traditions, and public trust also shape how space is used. Different scales work together, influence each other and determine the planning conditions for urban (re)development. The term 'planning system' refers to the formal planning processes (Nadin and Stead, 2003), but recognizes that professional planning structures do not consist only of formal, written procedures and regulations. There are also unplanned territorial interventions, unwritten assumptions, traditions and (cultural) concepts, informal roles of residents, changing trustworthiness of government, and different perceptions of importance that shape planning culture (Reimer, Getemis and Blotevogel, 2014). When relating planning to soil, both formal and informal influences must be taken into account.

A Dutch tradition rooted in soil

The dynamics of the sediments in the system of rivers and sea, soil and rainwater and the surface water in the Dutch delta have been crucial for the process of reclamation and urbanisation of the Netherlands (Hooimeijer, 2014). In the Netherlands, the tradition of spatial planning is deeply linked to managing groundwater and soil systems. The term 'polder culture' (a polder is a hydrological unit) is about the necessary collaboration, or spatial planning, in keeping the Dutch territory dry and habitable. Spatial planning has a long tradition as something that the government takes care of. The result of this tradition are many spatial designs (landscape and urban) in which the water and soil have played a role.

The tradition of national spatial policy documents started in 1958 with the policy document "Westen des land" which allowed the formation of the city in the Randstad to grow in a controlled manner by means of a series of successive policy documents (van der Cammen and Klerk, 2012). The 'Spatial Policy Report' (Nota Ruimte) in 2004 was the last one in this tradition because the land by the right-wing government was considered finished, no more guidance was needed, so the core of this policy document is the decentralization of spatial policy. This is about a 'shift of power'. The responsibility for the elaboration of the policy is placed with parties other than the central government: market parties (companies), civil society organisations, citizens, local authorities. Deregulation is the trend, and private developers are invited to participate in urban development through public-private partnerships. Citizens are invited to develop initiatives to form the so-called 'participation society' (Heurkens et al., 2014). This marked a major shift from centralized planning to decentralization and deregulation.

From central control to local integration: The Environment and Planning Act

The Nota Ruimte (2004) has also led to the new Environment and Planning Act (National Government, 2021). The aim of this law is to simplify, merge and modernise the rules for spatial development in order to achieve a good balance between the use and protection of the physical living environment. The Act supports both deregulation and an integrated, multi-level approach to planning - from national to local. The Act provides for the instruments like the environmental vision at the level of the national government, provincial and municipal; a municipal environmental plan that replaces current zoning plans. The municipality environmental plans are 'more integrated and flexible' so that it offers a wide scope of room for initiatives. It can contain rules that apply to the entire physical living environment, such as the allocation of functions and activities.

Embedding the subsurface in planning: The National Environmental Vision and beyond

On the national level the Environmental Act resulted in the National Environmental Vision (NOVI), it is a vision in development that already shows an understanding of the importance of many subsurface topics such as archaeology, cables and pipelines, stable soil, water, energy, fertile soil, ecology and minerals (MBZK, 2020). However, some key topics like underground construction, thermal energy storage, fossil energy reserves and clean soil are still underrepresented. The new NOVI is a huge step forward in embedding subsurface topics in the above-ground spatial planning of the Netherlands. The NOVI also sets a framework for the Provincial Environmental Visions, these differ per province: some have already adopted them in 2018 – by a simple translation of their structural vision, and others are still in the consultation phase. An interesting example of involving the subsurface on this scale is the province of South Holland. There, subsurface is a structural part of all relevant spatial planning processes, first laid down in a Soil and Subsurface Policy Vision (2013) and later in the province's new Environmental Vision (2019).

The new municipal Environmental Vision sets out the long-term ambitions and policy goals for the physical living environment. The vision must guarantee the coherence between space, water, the environment, nature, landscape, traffic and transport, infrastructure and cultural heritage, and is free of form in this: the municipal council determines the level of detail, areas, sectors and themes. At the urban level, there are a number of frontrunners such as Arnhem and Maastricht. In Arnhem (2009), the vision on the subsurface was the basis for the structural vision, the soil energy master plan and the groundwater management plan.

Maastricht already had a soil strategy exploration in 2005 and in the structural vision (2012) the subsurface is an important space for sustainable and gradual urban development. A 'subsurface database' supports integration by translating data into information (COB, 2012). The municipalities have until 2033 to draw up the environmental plans.



SPADES



Policy brief Soil and Water steering

The disappearance of national control and decentralisation of spatial planning has meant that it has not been possible to anticipate major challenges. Without control over space, you cannot be smart about land use and sustainability in a small country like the Netherlands. This awareness has led to the writing of a new Spatial Report (2024) and revive the spatial planning tradition. At the same time, the soil and water professional lobby managed to have the national government write a policy letter which set the whole country in motion to take soil and water as a guiding principle in spatial planning. The letter is not top down but reflects a bottom-up need for direction from the national level. Many questions that come up about how to make soil and water steering are being answered in the SPADES project. Especially the pilot Green Heart which is the contra-form of the Randstad: a ring of (larger) cities has emerged in the western Netherlands, since the 17th century. In 1958, the first spatial plan for the Randstad was published: The Development of the West of the Country. The ring-shaped structure of cities formed the starting point for accommodating urbanization in the west side of the Netherlands. The rural area within it had to remain rural as much as possible. To this day, this concept is still leading in working on the Randstad and secured by the Memorandums that followed with various other concepts. These concepts are all aimed at an efficient land-take and a no-net land-take entirely on the line that started in the 17th century.

The challenges in the pilot Green Heart are.

- soil quality: the agricultural soils are degrading,
- soil quantity: even though the no-net landtake policy has been in place for decades some expansions need to be made to meet the need for housing,
- soil performance: in the relation to soil subsidence, and consequently output of CO₂, climate adaptation in relation to floods and draughts and increasing biodiversity in the area.

Soil and water have always been guiding in the Netherlands, as history shows, and it has also made us prosperous. Until the 2000s, soil was hidden in its physical characteristics under the legend unit green or agricultural area. Now there are projects to give the soil its own expression in maps, how to draw it to capitalize on its qualitative, quantitative and above all performance quality in dealing with the challenges of subsidence, climate, ecology and urbanization. This is a complex matter for which research like SPADES is needed.

Literature

- Burke, Gerald L. (1956) The making of Dutch towns. A study in urban development from the tenth to the seventeenth centuries London
- Cammen H van der and Klerk L de (2012) The Selfmade Land. Culture and evolution of urban and regional planning in the Netherlands. Uitgeverij Unieboek | Het SPECTRUM BV., Houten – Antwerpen, Belgium.
- Ministerie van Binnenlandse Zaken en Koninkrijksrelaties (MBZK) (2020) Nationale Omgevingsvisie, Duurzaam perspectief voor onze leefomgeving. MBZK: Den Haag
- Heurkens E, Hoog W de and Daamen T (2014) De Kennismotor, Initiatieven tot faciliteren en leren in de Rotterdamse gebiedsontwikkelingspraktijk (The knowledge motor, Initiatives to facilitate and learn from practice of area development in Rotterdam). TU Delft, Delft, Netherlands.
- Hooimeijer FL (2014) The making of polder cities: a fine Dutch tradition. Jap Sam Books, Heijningen, Netherlands.
- Nadin V and Stead D (2003): European Spatial Planning Systems, Social Models and Learning. *disP The Planning Review* 44(172): 35–37.
- Reimer M, Getimis P and Blotevogel HH (eds) (2014) Spatial planning systems and practices in Europe. A comparative perspective on continuity and change. Routledge, New York / Oxon, USA.
- Rijksoverheid (2021) Omgevingswet. <https://www.rijksoverheid.nl/onderwerpen/omgevingswet>

