Utilization of Ecotoxicological Knowledge in Environmental Policy; 
the case of standards for soil quality in the Netherlands

Given the omnipresence and complexity of environmental problems, the pressure on policy and science to work together and to develop strategies to manage these problems has increased. The close relation between science and policy makes the inherent differences visible between these two domains. Because of these differences, the utilization of scientific knowledge in environmental problems is not a straightforward process. In this project this process is analyzed by studying the utilization of ecotoxicological knowledge in the development of soil standards.

Standards for soil quality
Standards for soil quality are important instruments in soil policy. The formulation of what the standards refer to as well as the actual figures are the result of decision making process in which scientists and policymakers play a role and subsequently these standards must be consistent with general environmental policy principles and at the same time be consistent with scientific practices.

Approach and aim
Policymaking and knowledge utilization take place in a policy subsystem, that is, the set of actors with an interest in the developments of the standards for soil quality. Actors in a policy subsystem do not operate in isolation; they are interconnected in several possible ways: (1) connections based on shared beliefs with respect to normative policy principles, which makes these actors 'speak the same language'. (2) connections enforced by rules and procedures, based on an organizations' task. (3) connections based on the membership of the scientific or policy community.
Depending of the type of policy development, a specific type of interconnectedness becomes most visible and determinant of the actions undertaken by the different actors. This results in different structures of the policy subsystem that may eventually lead to typical types of knowledge utilization. The aim of the project is to clarify the relation between type of policy development, structure of the policy subsystem and the type of knowledge utilization.

Case-studies

- Three macro-level case studies are conducted:
  - The development of reference values for soil quality (1979-1985)
  - Ecotoxicologically based risk assessments (1990-present)
  - Land-use related standards for soil quality (1997-present)
- In addition two meso-level case studies are included:
  - Standards for zinc (1985-present)
  - The operationalisation of the added risk approach (1993-1996)

Duration:

5 years (1997-2002)

Participants:

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