

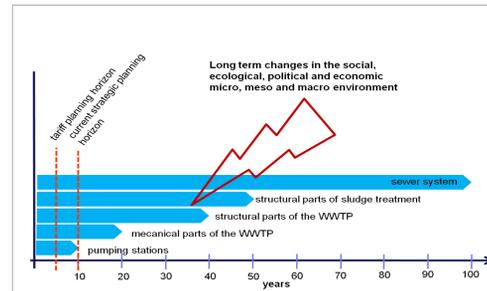
The future of the sanitation sector

Scenario planning as a strategic planning instrument

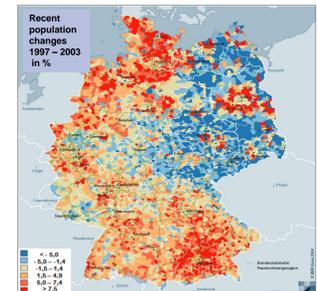
Problem

In Germany, as well as in other European countries, the sanitation sector is expected to face turbulent times: demographic and climate change as well as a decrease of the water demand and an increase of extreme weather events amongst others are challenging the sector, whereas the more than 100 year lifetime of parts of the sewer system infrastructure and its capital intensity are limiting its adaption to these changes.

Path dependency & decreasing population



Datasource: : Bäumer, K. (2000) p. 17, KfW (2006) p. 3

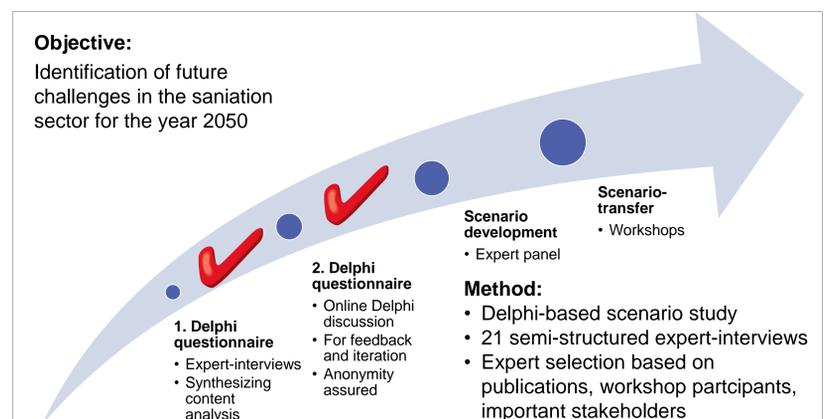


Source: BBR (2005) Raumordnungsbericht

Method

Scenario planning is discussed as an alternative strategic planning instrument that bridges the gap between the long lifetime and the actual strategic planning horizon of less than ten years. In order to identify the most important challenges for the sanitation sector in the year 2050 a Delphi-based scenario study was started. The leading experts of the field were interviewed; the responses were synthesized to Delphi-theses via a summarizing content analysis and could be discussed in the second Delphi round by all participating experts via an online discussion board.

Delphi-based scenario approach



Source: original illustration

Discussion

- The identification of possible future challenges via the Delphi technique turned out to be very effective, especially in regard to the identification of weak signals.
- The transcription of the interviews and the coding are very time intensive, but necessary for a credible and traceable scenario study.
- The online discussion board allows creative synthesis of new ideas and the easy integration of further experts.
- The next step is the consolidation of the ideas within a coherent modeled system.

We seek...

- ... hints on how the scenario development can be supported by fuzzy cognitive maps?
- ... further experts, that want to participate in the Delphi discussion.

We offer...

- ... more information on www.demowas.de.
- ... publications e.g.: Nowack, M.; Endrikat, J.; Guenther, E.: Review of Delphi-based scenario studies, (accepted by Technological Forecasting and Social Change 2011).