

Panel 3: Knowledge confrontation in water governance

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Proposed panel theme

This panel worked on two different, yet connected, points. On Day 1 we discussed the papers of the colloquium on 'Connective Capacity in Water Governance' of the 2010 NIG Conference. These papers have been rewritten into chapters for an edited volume on connective capacity in water governance. On Day 2 we discussed new papers on water governance, with an explicit emphasis on knowledge confrontation.

In water governance many uncertainties exist. These uncertainties exist on aspects of the physical system (for instance the precise effects of climate change), but also on aspects of the social system (for instance on how to organize water management in the future). Knowledge is often sought to handle this uncertainty. However, although knowledge can attribute to dealing with changes and problems in the physical and social water system, it can also increase uncertainty (Koppenjan & Klijn 2004; Hommes et al. 2008).

In complex, wicked, issues such as water governance knowledge cannot provide 'the truth', as the value of knowledge lies in the perceptions and stakes of those involved (Hommes et al. 2008). These perceptions and stakes therefore have to be integrated into the decision-making process for knowledge to play a meaningful role. Knowledge then expands from just expert knowledge to include practical knowledge of stakeholders.

Expert knowledge concerns knowledge based on scientific research. Practical knowledge (or: lay knowledge) is based on the practical and situational experiences of people (Hommes et al. 2008). The involvement of lay knowledge in decision-making processes means that the previously uncontested role of experts and expert knowledge is changing (Edelenbos et al. 2010: 78). Experts and stakeholders (for instance citizens) become interconnected (*ibid.*).

Next to expert and stakeholder knowledge a third form of knowledge can be distinguished: bureaucratic or professional knowledge (Edelenbos et al, 2010). Bureaucratic knowledge is heavily intertwined with administrative and governmental practices. They stress the political and strategic use of knowledge, and less the substance or intrinsic value of knowledge (Kingdon 1984). However, bureaucratic knowledge has also a professional and scientific ground, but has a less strict checks and balance system as the scientific peer review (Lintsen, 2002). This involvement of bureaucratic knowledge raises another problem in interconnecting different knowledge domains. The literature on science-policy interfaces is an attempt to build bridges between science and policy (Van Buuren and Edelenbos, 2004).

The interconnectivity of scientific, bureaucratic and stakeholder knowledge has large potential for increasing applicability of knowledge, and enriching the developed knowledge and ideas (Edelenbos et al, 2010; Van Schie 2010). This may create better chances for impact of knowledge in policy making. Furthermore, the support base for decisions can be enlarged when stakeholders have been active in the decision-making process.

However, stakeholder involvement in knowledge development and policy planning also brings challenges to the table. Experts may fear the loss of their previously not debated position. Citizens may be disappointed in the entire decision-making process when they have the feeling that their knowledge has lesser value than expert's knowledge. Bureaucrats do not see knowledge of very useful for their daily work. Knowledge confrontation may arise.

Tensions between expert knowledge and lay knowledge can for instance arise out of difference in observations. Experts base their judgment on models and schemes, whereas stakeholders base their knowledge on observations, interpretations and experiences, and bureaucrats approach knowledge from a strategic decision-making point of view (Edelenbos et al, 2010; Van Buuren et al. 2010: 176). The conclusions of these different tracks may not always be the same.

In this panel we discussed these confrontations and the way these confrontations can be dealt with. Through this discussion we hoped to further develop insights on the role of multiple knowledge in water governance. We invited papers that address theoretical discussions as well as empirical analyses.

Link between panel theme and conference sub-themes

Of the three defined overall themes we see much correspondence with the 'citizens and governance' theme. Our panel contributed to this theme due to its emphasis on water governance as a research field, and stakeholder involvement in knowledge development as a topic. Citizens are among the most notable practice-stakeholders in

the knowledge confrontation between expert knowledge and lay knowledge, as described above. We investigated what roles citizens and other stakeholders play in water governance processes, and how their participation can contribute to enriched and well-supported knowledge. We explored the obstacles these actors come across, and we invited panel participants to reflect on how to deal with these obstacles.

Expected type of papers and topics in the panel

We expected papers with a focus on integrative water governance, interactive decision-making, policy-science interfaces, knowledge confrontation and knowledge integration/synchronization. These papers likely included case studies on a variety of governmental levels, from local to international.