

# T07P02 / Public Policy and Uncertainty

**Topic :** T07 / Policy Design, Policy Analysis, Expertise and Evaluation

**Chair :** Joost Buurman (Institute of Water Policy, Lee Kuan Yew School of Public Policy, NUS)

**Second Chair :** Olivia Jensen (National University of Singapore LKY School of Public Policy)

## GENERAL OBJECTIVES, RESEARCH QUESTIONS AND SCIENTIFIC RELEVANCE

Policies are continually being designed for contexts about which policy-makers often have incomplete or no information at all. For example, in the process of design and formulation of water policy, policy-makers grapple with uncertainties owing to a lack of complete understanding of the complex biophysical, social, economic and political systems affecting and being affected. In addition to addressing current challenges, policy-makers and resource managers need to consider how current and plausible new stressors are likely to change/evolve and impact water resources over longer time horizons in the future, in order to undertake effective anticipatory policy design. In a world that is characterized by increasing uncertainty policy-makers need new approaches and tools for policy design and decision making.

The objective of this panel is to review the state-of-the-art in theoretical and empirical research on policy-making under uncertainty.

Some examples exist of application of tools and methodologies to support policy-makers in dealing with uncertainty. However, application and demonstration of various tools to address uncertainty in a policy context often have a rather technical angle and these have yet to be adopted as mainstream tools for policy formulation under uncertainty. A review of the state-of-the-art in theoretical and empirical research in the public policy community can contribute in crossing the bridge from isolated, technical applications to inclusion of uncertainty tools and approaches in the broader policy-making context and theories.

Organizing a panel on this topic holds high relevance as developing policies under uncertainty is become a matter of considerable urgency in Asian deltaic megacities, which face multiple pressures in areas such as water, energy and human development, and is also relevant for other developed and developing urban and rural areas: in deeply inter-connected systems extreme events can easily cascade.

ICPP 2017 in Singapore provides an excellent opportunity to connect regional research and practice in policy-making under uncertainty with the global research community .

## CALL FOR PAPERS

Policy-makers are faced with an increasingly uncertain future, shaped by rapid and potentially dramatic non-linear changes in climate, demography, economy and security. In addition, research on extreme events such as floods and droughts increasing points towards large underestimations of risk and flawed decision making. In public policy, uncertainty is made more pervasive by politics and the policy process itself. The aim of the panel is to review the state-of-the-art in theoretical and empirical research on policy-making under uncertainty. The panel will focus on water, energy, infrastructure, natural resources and climate change but papers focusing on theory and other policy domains are also welcomed. Papers that are comparative in nature, either across sectors or jurisdictions, are of particular interest, as well as papers on urban and Asian contexts.

Some of the important questions that papers might examine include:

- How does uncertainty affect the policy-making process?
- What effect does the political cycle have on policy-makers' ability to address uncertainty effectively?
- What methods are available to policy-makers to choose optimal policies under uncertainty? Are existing methods adequate?
- Are different modes of governance or new evaluation approaches needed for policies in domains characterized by pervasive uncertainty?
- To what extent is knowledge on the nature of policy-making under uncertainty generally applicable across policy domains, countries and governance levels?
- Which groups face the greatest potential costs from uncertainty and how does this influence policy choice?

The Institute of Water Policy hosted a panel at the International Political Science Association 2016 conference in Poznan, Poland, to explore different dimensions of policy-making under uncertainty. The panel was part of IWP's ongoing research on dealing with uncertainty in water policy-making. This panels continues the discussion.



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## Session 1

Thursday, June 29th 10:30 to 12:30 (Block B 2 - 1)

### **The nine lives of uncertainty in decision-making about complex governance issues**

Dewulf Art (Wageningen University)

Robbert Biesbroek (Wageningen University)

### **A framework to analyze the complex dynamic delta system for adaptive decision making in Bangladesh**

Bhuiya Md Tamim Al Hossain (Utrecht University)

umme Kulsum (Delft University of Technology, The Netherlands and Institute of Water and Flood Management, Bangladesh)

Jos Timmermans (Delft Unniversity of Technology)

### **Sea-level rise a game changer for public policy?**

Judy Lawrence (NZ Climate Change Research Institute, Victoria University of Wellington, New Zealand )