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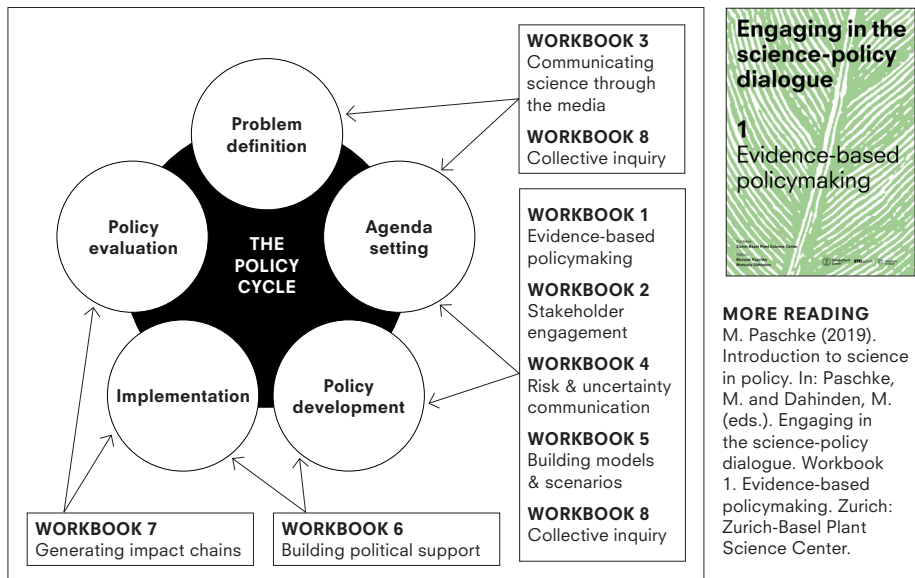
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Editorial

Communication of uncertainty is an important component of the broader practise of risk communication. Risk and uncertainty communication has a long tradition. Previous attempts focused on increasing the public understanding through more information and education about risk and uncertainties. Current practise emphasizes the importance of building trust through a two-way dialogue and deliberative formats while integrating stakeholders and the public in the processes of risk and uncertainty judgement and the decision how to manage a risk.

This workbook is the fourth in a series of eight workbooks exploring the role of scientists in the science-policy dialogue. In workbook 4 we discuss risk and uncertainty communication and the use of different deliberative formats to generate a high level of responsiveness and accountability of scientists toward the needs, values and expectations of the public and policymakers.

FIGURE 1 — The policy cycle.



Guide to workbook 4

The aim

Workbook 4 introduces on the concepts of uncertainty, ignorance and risk in science. It explains risk perception. It offers guidelines for scientists to communicate risk and uncertainties to policymakers and to the public. It explains the theory of deliberation at the science-society interface and explains the design of a public engagement process.

Competencies

- You will understand definitions and concepts of uncertainty, ignorance and risk.
- You will develop effective strategies for communicating risk and uncertainty.
- You will become aware of biases in risk perception, including your own.
- You will understand how deliberative systems can help to structure risk and uncertainty dialogue with the public.
- You will know the phases and deliberative formats for a public engagement process.

How to read this workbook

THEORY

Setting the scene

We will introduce you to definitions and concepts of uncertainty, ignorance and risk and sources of uncertainty in scientific data and models.

Understanding your own and society's risk perception

We introduce you to the factors that influence individual risk perceptions.

Key principles for risk and uncertainty communication

We introduce you to examples and to guidelines for effective risk and uncertainty communication.

Design of a public engagement process

We will introduce you to the practice of public engagement for issues where uncertainties and decision stakes are high. In cases of uncertainty and risk, deliberative systems can help to build consensus and legitimate decisions.

TOOLS

In this section we introduce methods of public engagement. This includes the controversy matrix for assessing concerns at the beginning of a public dialogue, citizen jury, consensus conference, focus group and future workshop.

EXAMPLE

We will introduce you to one example of a successful public engagement process.